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"Accelerating the Knowledge Revolution via Research Culture"

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FACULTY OF  
ENTREPRENEURSHIP  
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## **PREFACE**

Entrepreneurship, as the mindset and process needed to create and develop economic activity, blending risk taking, creativity, and/or innovation within a new or existing organization, is very depending on the ecosystems to make it flourish in each organization, institutions, nations, and the world. It has been the ventures; yet the change is needed is not just what is thought but how it is taught in the right environment.

The FKP Postgraduate Colloquium 2021 was held in Kampus Kota, Universiti Malaysia Kelantan on 9 and 10 August 2021. It was a delightful event with 54 participants, consists of students and lecturers, had many fruitful discussions and exchanges that contributed to the success of the colloquium. 54 papers have been successfully presented during the colloquium.

The main objective of the colloquium is to be a platform for students to present and publish their works as well as to share their research progress with their colleagues and experts. The theme of “Accelerating the Knowledge Revolution via Research Culture” was chosen to represent the power and strength of entrepreneurship and business in the advancement of a society. It is a suitable theme considering the nature of Universiti Malaysia Kelantan that has always been promoting entrepreneurship throughout Malaysia.

All in all, the FKP Postgraduate Colloquium 2021 was very successful. The editors would like to express their gratitude to all participants and the committees that have helped in ensuring the smooth sailing of making the colloquium into a reality.

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# The Implementation and Shariah Views on Cryptocurrency in Malaysia: A Survey Study

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## ABSTRACT

In the Fourth Industrial Revolution era, Fintech has created a new phenomenon for Islamic Finance industries, particularly in Malaysia. To guarantee the safeguard of the new technology with the existing traditional practices, the Shariah regulation is necessary to govern the potential risk throughout the financial activities. In Malaysia, Islamic Financial Service Act (IFSA) 2013 is the guideline framework for the Shariah Advisory Council (SAC) members to monitor the Islamic Fintech activities. However, some Fintech products do not meet the shariah regulation requirement. As an example, the most famous is cryptocurrency. It has gained attention among the SAC members and other Islamic expertise related to their transaction which is said does not comply with shariah requirements in Malaysia. The cryptocurrency was decentralized network by the Blockchain. The cryptocurrency was considered to disrupt many sectors such as the financial, retail market, global monetary policy, and law. Expertise criticized the cryptocurrency because of some reason including illegal activities, exchange rate volatility, and the vulnerability of the underlying infrastructure. This issue was debate among the scholar and the Islamic finance sector regarding their validity to use cryptocurrency as another channel for money exchange in this country. Therefore, the purpose of this paper is to review the implementation and shariah views on cryptocurrency in Malaysia.

**Keywords:** Fintech; Cryptocurrency; Islamic Finance; Shariah Views; Malaysia.

## INTRODUCTION

Fintech is the combination of two words of financial and technology. These words determine the emergence of the financial sector with information technology (IT). Previously, the expertise refused to implement fintech in the financial sector. Fintech was considered to disrupt the traditional practices of finance transactions. However, the evolution of industrialism has obliterated the views of traditional financial professionals toward the deficiency of fintech. Fintech was described to be concerned about the building system as an example, model, value, and process financial product such as bonds, stocks, money, and contracts (Rabbani et al., 2020).

He (2018) explained that fintech was divided into three categories which are white-label, direct, and gold label. White label is the type of product that delivers to the end-user of a financial institution. It is not issued by that financial institution itself but purchased by the fintech vendor who developed them. The second product is direct. Direct means this product is directly

delivered to the consumers or business from the fintech platform. Last but not least, gold-label is the product that works between the white label and direct. The gold label has unique features that come out with the solution to reduce the users' problems. Examples of gold-label products are ApplePay, Dwolla, and Kasasa.

In this global, we have passed three stages of the industrial revolution era. The first stage was in the 1780s until the end of the eighteenth century where the mechanical manufacturing facilities were introduced the first water- and- steam-powered. Next stage in 1870 the start of the twentieth century, electric-powered mass production based on the division of labor was introduced. The third stage of the industrial revolution is in 1960-1970. At this stage, the usage of electronics and IT was increased to achieve further automation of manufacturing. Finally, from 1970 until now we are in the fourth industrial revolution era which is the world to introduction of a cyber-physical system (Rabbani et al., 2020).

Cryptocurrency technologies are now worldwide trending among the banking and finance industries. This technology was discussed widely in the financial industry. The general definition of cryptocurrency is defined as a digital or virtual currency that has been secured by cryptography (Limba et al., 2019). Most of them are decentralized networks based on Blockchain technology. This decentralized structure was allowed them to exist outside the control of the governments and central authorities. Blockchains are the organizational method to ensure the transaction data are an essential component of many cryptocurrencies (Heidari et al., 2020). Cryptocurrency is considered to disrupt the financial sector, retail market, global monetary policy, and law. Most of the financial sector and law was criticized cryptocurrency because some reason including illegal activities, exchange rate volatility, and the vulnerability of underlying infrastructure (Limba et al., 2019).

Satoshi Nakamoto (2008) made the first appearance of cryptocurrency in the white paper known as Bitcoin. The concept that introduced by Nakamoto was "the payments to be sent directly to the third party without going through the financial institution". At first, Bitcoin seems to be just a game, but later the finance sector recognized that it is not just a game. According to Kaplanov – "Bitcoin is the world's first digital, private cryptocurrency exchanged over the internet through a use of a peer-to-peer network" (Limba et al., 2019).

In Islamic finance, cryptocurrency was an ongoing debate about its legality and permissibility. The potential of this technology to be as a future currency and maybe even backed by the government in the long run. Despite that to be accepted in Islamic finance, it has to overcome the negative sentiments surrounded by the excess volatility and the fraudulent activity and should be well regulated by both banking law and Shariah law (Nawang et al., 2021).

According to the majority of Muslim experts around the world, the existing bitcoin, as a cryptocurrency, does not satisfy the valid qualities of currency in Islam. As a result, for the time being, the use of the term "bitcoin" is strictly prohibited to protect the public interest. To govern cryptocurrencies and all initial coin offerings (ICOs) in Malaysia, the Securities Commission (SC) enacted subsidiary legislation in 2019 called the Capital Market and Services (Prescription of Securities) (Digital Currency and Digital Token) Order 2019 (Laldin & Furqani, 2018). Cryptocurrencies and digital tokens are two types of securities. Cryptocurrencies are widely seen as the most divisive example of Fintech in Islam. This circumstance necessitates the clarification of legal, regulatory, and Shariah problems with Fintech applications. Unfortunately, no Shariah-compliant regulation to oversee the Islamic Fintech business has been introduced yet (Nawang et al., 2021).

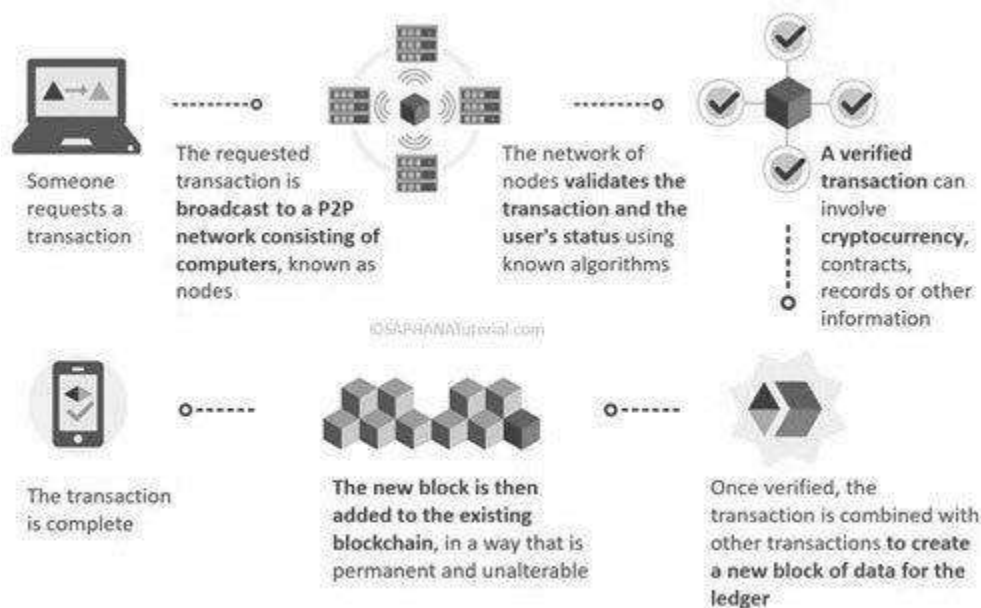
The Islamic Financial Services Act (IFSA) 2013 is now one of the most important branches of the Malaysian Central Bank's Shariah governance structure (BNM). By enacting this Act, Malaysia hopes to improve the Islamic financial services sector's Shariah governance and Shariah compliance efforts. It emphasizes the Islamic banking industry's entire Shariah compliance commitment across multiple dimensions, including the Shariah governance framework, Shariah standards for each contract used in Islamic financial transactions, proactive measures to address issues of concern within Islamic Financial Institutions (IFIs) that may affect depositors' and policy holders' interests, and the effective and efficient operation of Islamic financial transactions. In a nutshell, the Act's main goal is to ensure that all IFI operations, undertakings, businesses, affairs, and activities are conducted by Islamic law principles at all times. The holiness, righteousness, and legitimacy of Islamic financial transactions would be ensured if IFIs strictly adhered to Shariah standards required for such contracts (Rabbani et al., 2020).

The Islamic Financial Services Act of 2013 (IFSA) is designed to strengthen the foundation of a strong and transparent supervisory and regulatory framework to develop a financial system that is competitive and resilient to future challenges. However, the rise in popularity of Fintech and Islamic Fintech is a sudden and unexpected development. There is no doubt that the current law is comprehensive enough to cover a wide range of traditional banking and finance activities. In the Islamic finance sector, however, present Shariah governance does not include contemporary modern financial activities including technology such as cryptocurrencies, blockchain, big data, crowdfunding, artificial intelligence, insurtech, and robo-advisory (Laldin & Furqani, 2018).

When it comes to Fintech solutions in Islamic finance, Shariah compliance is critical, and they should be held to the same standards as commercial activity. The Shariah Advisory Council (SAC) could serve as a cornerstone for the industry's growth. The SAC should be given a larger role in promoting the use of Fintech solutions in this field. Even though SAC's engagement in the Islamic finance market occasionally causes controversy, Section 51 of the Central Bank Act of Malaysia (CBMA) 2009 established the Council as the apex body for determining Islamic financial problems. When it comes to Islamic finance, the legislation affirms the Council's highest standing by requiring that any reference to the SAC is followed and that its judgment be obeyed in any case. Existing laws in the Islamic finance market appear to be insufficient to accommodate Fintech-related operations. It is strongly advised that authorities consider implementing Shariah-compliant regulations to oversee any Islamic financial activity that uses Fintech. Otherwise, this issue would be left unaddressed, resulting in financial and economic losses for the country. Given the current state of affairs in this Muslim-majority country about Fintech's favorable reception in Islamic finance, now is the appropriate time to enact the aforementioned legislation (Laldin & Furqani, 2018).

## THE APPLICATION OF CRYPTOCURRENCY

Blockchain and cryptocurrency are inextricably linked. Many people are not realized that blockchain has a wider application beyond cryptocurrency networks. Blockchain is distributed databased for the cryptocurrency. In 2009, Bitcoin was introduced as the first cryptocurrency-based distributed payment protocol (Ali et al., 2019). Blockchain is the foundation of cryptocurrencies. The innovation of blockchain is to dominate the public transaction record of integrity without a central authority (Todorof, 2018). Blockchain technology is for the person that has no trust in middleman and the transactions are not have to go through a neutral central authority. It is a mechanism to create particular trust. The open ledger system of blockchain helps to inherent the level of trust, eliminate the middleman in the transaction, and diminishing the risk of human error in every transaction (Mohamed & Ali, 2019). The data is totally protected and cannot be changed and modify the cryptocurrency secretly. Figure 2.1 shows how the blockchain works based on cryptocurrency protocol.



**Figure 2.1: How the blockchain works based on cryptocurrency protocol.**  
(Source: <http://saphanatutorial.com/introduction-to-blockchain-for-beginners/>)

In this transaction, users are known as the 'miner'. First of all, the miner requests the transaction to involve cryptocurrency. Next, the requested transaction will be broadcast to the P2P network known as nodes. After that, the nodes will validate the transaction and the user's status. Before the transaction is accepted, the miner has to show the proof of work using the cryptography hash function called the special algorithm, it is to ensure a high level of data protection. The verified transaction can use the cryptocurrency contract, records, or other information. The transaction will combine with other transactions to create a new block of data. Then the new data of the block will be added to the existing block. Finally, the transaction is completed (Ali et al., 2019).

Bitcoin is the way of selling and buying things over the internet network without using cash. The value of coins and tokens is determined by the market. The important element in this cryptocurrency is users' address, a private key, and wallet software (Mohamed & Ali, 2019).

The cryptography is infinitely duplicable, and there is no way to confirm that the batch of digital cash has not been spent without a central intermediary. The coin ownership is recorded in a public ledger and confirmed by cryptocurrency protocol. A 'trust-free concept of bitcoin lets the particular unnecessary trust the third party or central intermediary, but have to trust the system of blockchain itself (Ali et al., 2019).

Blockchain respectfully can tackle the main issue of the individual banks that involves the high complexity of the payments network. Due to the fragmentation itself, it is impossible for the individual banks to directly deal with all the banks around the world. Other than that, cryptocurrency can provide efficiency in international trade invoicing and payments. The liquidity of the local currency is the key factor to make the international transaction more reliable.

## **THE SHARIAH VIEWS ON CRYPTOCURRENCY**

Shariah compliance of cryptocurrency is a contentious issue among Muslim experts. Some well-known experts, such as Egypt's Grand Mufti Shaikh Shaki Alam, have categorically denounced cryptocurrencies, claiming that it breaches Islam's fundamental precepts and is thus haram. It must follow the Maqasid al shariah in order to be deemed halal. Those experts or Mufties who declare cryptocurrency to be haram do not understand how the phrase works. There are around 2800 cryptocurrencies, none of which are currencies, instead, they are referred to as crypto assets. Crypto assets do not all come in the form of coins. To be classified as a currency, crypto assets must meet the criteria of a store of value, a unit of account, and a means of exchange. Bitcoin cannot be accepted by a shariah expert since it allows for transactions that are forbidden by the Islamic law (Rabbani et al., 2020). The bitcoin transaction contains an element of gharar since the real worth of the currency is unknown, prices are very volatile, and there is variation in the store of value and method of value. Gharar is characterised as uncertainty, dishonesty, and risk because the fundamental principles of finance state that it is against the shariah and haram. It's an Arabic word for selling something that hasn't yet been created. Another study on Bitcoin and cryptocurrencies came to the conclusion that because bitcoin has no fundamental value and is not regulated by a central bank, it can be readily abused. Bitcoin is also believed to be against shariah and should be outlawed since it breaches the primary premise of Islamic economics, namely, social fairness. For these reasons, bitcoin is considered to be against shariah and should be prohibited (Rabbani et al., 2020).

According to other researchers, however, Bitcoin cryptocurrency is a Nobel idea in society, with ever-increasing acceptance and demand. There is no proof that bitcoin breaches Islamic sharia norms. Bitcoin's record-breaking price (20k USD on December 12, 2018) does not imply that it violates sharia principles. It simply implies that people are becoming more interested in bitcoin and cryptocurrency. Rather than risk shifting, Bitcoin may be discussed in two distinct ways: maslaha (societal benefits) and risk sharing (Limba et al., 2019). When it comes to the maslaha, millions of muslim adults with only a mobile phone and an internet connection benefit from it, and when it comes to risk sharing, millions of muslim adults with only a mobile phone and an internet connection benefit from it. Bitcoin is based on the Islamic idea of Musharakah, in which two or more people join forces to conduct a company and share the risk. Because there is a big pool of people in the case of Bitcoin, the risk is mitigated (Rabbani et al., 2020). When determining whether a cryptocurrency is haram or halal, each transaction must be examined separately. It's difficult to declare Bitcoin to be haram in its entirety. Using Blockchain technology, it is possible to construct a digital currency that is compatible with Islam. It will be a huge revolution in the realm of finance and technical advancement if we are able to develop a digital currency that adheres to the ethos and principles of shariah. Because



blockchain and cryptocurrencies are financial innovations that have the potential to improve the lives of Muslims, experts should reconsider their decision to declare them haram (Abu-Bakar, 2017).

There is a clear insufficiency of Islamic regulations for cryptocurrency use in any type of transaction, necessitating the development of an Islamic digital currency model and infrastructure. There are arguments for classifying cryptocurrency as illegal, such as violations of the government's constitution and implementation uncertainties, as disclosed in several fatwas and asserted by many researchers. Another reason why cryptocurrencies are considered illegal is the unpredictability of their value, which can fluctuate due to a variety of factors such as a system hack or a technological problem, among others (Abu Bakar et al., 2017).

Cryptocurrencies, on the other hand, are more dependable, transparent, decentralised, limited in production, and less likely to be hacked (forgery and abuse). Some experts believe that some countries are not connected to the global economy, and that blockchain technology and cryptocurrencies can help them bridge this gap by giving people control over their own wealth and ensuring its security without relying on a central authority. However, many individuals around the world are unable to access the internet due to the digital divide, which means that many people will be unable to access money or a medium of exchange (Albayati et al., 2020). In certain instances, such as currency exchange or making payments for services or goods, cryptocurrency such as Bitcoin may be considered acceptable. It is not, however, legal to acquire cryptocurrencies for the aim of accumulation or investment due to the extreme volatility in their exchange value. The method of obtaining cryptocurrency is also a significant factor in determining whether it is permissible or not. It is permissible to acquire cryptocurrency for the purpose of settling payments for goods or services; however, if the cryptocurrency is mined for the purpose of saving and the miner expects a high return in the future, it is nothing but speculation (maysir) and excessive risk (gharar) and is prohibited (Abu-Bakar, 2017).

Finally, bitcoin can be halal or haram depending on the situation. According to additional studies, certain countries have outlawed cryptocurrencies due to security concerns, and most Islamic countries have prohibited cryptocurrency in part due to some elements that do not fit with shariah law. However, the goal of collecting the cryptocurrency is a significant component in determining whether it is permissible or not. The majority of scholars believe it is prohibited to own cryptocurrency if the sole intention is to use it as a medium of exchange, while the majority of scholars believe it is allowed if the sole purpose is to use it as a medium of exchange. To summarise, cryptocurrency is not permitted due to a violation of the government constitution, and its implementation is fraught with uncertainties. Cryptocurrency cannot be used to make a profit such as investment. However, because of its nature and principle, it can be regarded lawful. This channel can be used in some transactions, such as making payments for services and goods (Siswantoro et al., 2020).

## CONCLUSION

Banking disruptions are forcing all banks (conventional and Islamic) to make more explicit strategy decisions. As the industry's economics have been put under strain by new technologies and non-traditional entrants with disruptive business models, many banks have realised that they need a truly distinct strategy. Customers' expectations for better digital tools and quick, convenient service have been raised as large nonfinancial technology corporations have moved into industries such as payments. Regulators' increasingly stringent capital and liquidity requirements have reduced banks' own balance sheet leverage. Low interest rates and slow economic development exacerbate the stress they are under.

Within the already worldwide economy, the promise of blockchain and fintech presents the prospect of coordinating our transactional activity through a multi-strength system of trust and transparency. As we move from personal to impersonal transaction without the use of an intermediary, blockchain is the technology that will operationalize the trust mechanism. Through the proliferation of cryptocurrencies, smart contracts, full-reserve lending platforms, multicurrency money transfers, public registries, document consolidation, and other yet-to-be-imagined processes, we believe that the blockchain technological backbone will be commonplace in four to six years.

The legal status of such a currency under current laws, as well as the regulatory method used to control cryptocurrencies in the country. A careful examination of the history of cryptocurrencies from 2012 to present reveals that the currency's enormous potential has yet to be realised by the Malaysian public. A number of factors may have contributed to the sluggish adoption of various cryptocurrencies, the most of which were around security and consumer protection concerns.

To cope with and understand the digital revolution, all segments of society, including consumers, governments, financial institutions, and investors, must establish a new strategy. To fully grasp the concept of Blockchain and cryptocurrencies, more in-depth information is required. A shariah scholar's ultimate goal should be to identify ways to help all members of the Muslim community who are interested in this financial revolution. Because digital currency can be used to fund a variety of long-term and diverse enterprises. Cryptocurrency investing can not only make individuals money, but it can also alter their life for the better. Some scholars have looked into the possibility of developing an Islamic digital money utilising blockchain technology (Siswantoro et al., 2020).

At this time, there are a large number of cryptocurrencies in use. These cryptocurrencies can come in a variety of shapes and sizes, and they may use a variety of algorithms. However, for the cryptocurrency's long-term viability, it must adhere to all legal standards; currently, there is no operating mechanism or standard system in place to ensure compliance with legal criteria. This is a drawback of cryptocurrencies in the market, according to which consumers will lose money because there is no oversight. To be a long-term cryptocurrency, each cryptocurrency must adhere to and maintain all legal criteria. Abu-Bakar (2017) found that the creation of an Islamic digital money is doable.

## SUGGESTION

From my perspectives, fintech will overtake traditional banking, finance, and insurance in the coming years, and Islamic economies who do not embrace it and establish their own technological ecosystem will miss out on a once-in-a-lifetime opportunity to close a 450-year financial gap that has long stifled them. Islamic banking will be able to adapt to the shifting terrain of modern economic transactions and carve out its own role in the future digital economy if all forms of financial technology are used. The legal status of cryptocurrencies has now been settled, as digital currency has been statutorily recognised as a type of digital asset that falls under the SC's jurisdiction. Any cryptocurrency-related financial transactions are illegal. Cryptocurrencies such as Bitcoin and Ethereum can be used to buy products and services from merchants who accept them as a form of payment, or they can be exchanged on recognised digital asset exchange (DAX) platforms. In terms of the government's current regulatory approach to cryptocurrency, it is argued that the administration has taken a minimalist approach so as not to stifle innovation and future development of cryptocurrency in the country.

In Islam, every innovation is welcome as long as it does not contradict the Quran's and Sunnah's essential principles. Islamic Fintech has a bright future in the Islamic world and among Muslim users of financial services since it allows for innovation and can deliver financial services at a low cost. FinTech in Islamic Finance, often known as Islamic FinTech, presents a number of obstacles as well as various potential. Islamic FinTech can help startups grow because it is transparent, accessible, and simple to use, and it can quickly win client confidence, which is crucial for entrepreneurs. In comparison to traditional finance and banking, FinTech solutions are more cost-effective in providing financial services. Islamic FinTech will emerge as a lifeline for Islamic Finance and Banking institutions due to its cost-effectiveness and reach into communities. Islamic FinTech may easily gain the trust of both Muslim and non-Muslim communities due to its transparency. However, tremendous prospects come with enormous obstacles, such as a lack of strong and accurate research in Islamic FinTech, a shortage of qualified human workers, trade-offs between government and Shariah compliance, cyber-attacks, and investor confidence as Islamic FinTech is still in its infancy.

Last but not least, in terms of Islamic FinTech, Blockchain technology provides a more secure and innovative means of doing business. The Blockchain transactions are more transparent and visible to all users. Furthermore, smart contracts can be a beneficial mechanism in all financial transactions, and the process of monitoring and regulation can be reduced to simply writing a smart contract. Cryptocurrency has been a revelation, and Muslim countries must conduct further research and establish a cryptocurrency that is totally compliant with the shariah principle. No Muslim country currently allows cryptocurrencies to be used for legal transactions.

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# Logistics Factors Influence the Logistics Performance in Thailand: A Conceptual Framework

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## ABSTRACT

Logistics service becomes an important function in expanding to the globalization. Many countries have to improve the logistics service operation business to achieve the satisfaction of customer and improve the firm performance. Three of the important components in Thailand logistics activities are service quality, technology and long-term relationship that are the key factors to develop the new conceptual model of service performance in logistics section. The objective of this study is to explore the service quality, technology and relationship that influence to logistics service performance in Thailand. This issue added value to relationship between buyer and supplier to raise the importance of relational resource in logistics activities to improve the logistics performance. Therefore, the study proposes a conceptual framework in which service quality, technology and relationship are pretend to improve the logistics performance of logistics service provider in Thailand.

**Keywords:** Logistics Service Providers; Effected Factors; Logistics Performance; Service Quality; Technology.

## INTRODUCTION

The global logistic market is growing, with revenue anticipated to reach 1,020 trillion dollars in 2020 and 1,094 trillion dollars in 2021. In Asia Pacific, revenue is expected to reach 396 trillion dollars in 2020 and 430 trillion dollars in 2021 (Bandittayarak, 2021). In the international economy, particularly the advanced economies have illustrated the growth volumes in industrial production and transportation in twenty first century and the logistics business is expanding due to increased e-commerce demand, then logistics service providers (LSPs) are investing heavily to increase production capacity. Meanwhile they are attempt to reduce the supply chain cost of their suppliers and service providers (Tomi Solakivi et al, 2018). These changes put pressure on LSPs from a variety of directions, LSPs should be developed logistics performance that consist of efficiency, effectiveness and differentiation (Fugate et al., 2010). Moreover, fulfill logistics technology to improve their growth and profit, also still leader in the market. Then the development has come to be the most important driven of logistics performance in economies.

There are many components that influence the performance such as logistics service quality, logistics technology, and logistics relationship between clients and firms. Leuschner et al., (2013) describe that the result of excellent logistics services quality will lead business performance to the successful, for example, increased customer satisfaction and financial success. Zuraimi et al., (2016) studied the numerous empirical researches, the illustrated how is the technology and innovation capability importance for greater performance. Moreover, there is a strong relationship between LSPs and their clients, the LSPs may deliver logistical

services in a more coordinated manner and improve the quality and performance of logistics services (Panayides & So, 2005). On-demand delivery and real-time data are becoming standard client expectations. In addition, because consumer behavior has changed, prompt and speedy response are required. Moreover, information technology (IT) is rapidly being employed to meet the needs of customers in terms of supply (Wollschlaeger, 2017). Industry 4.0 is already being utilized to achieve client goals, enhance operations, and improve production. This advancement extends to the logistics business, such as on-demand delivery, which provides customers with a quick response (Da Silva, 2018).

In Thailand, the transport and logistics industry worth USD 61.87 billion in 2020, and it is anticipated to exceed USD 100 billion by 2026, with a growth rate of 6% between 2021 and 2026 because the growth of e-commerce business (Mordor, 2020). LSPs have become challenged to logistics business operation as well as knowledge and honesty of LSPs operation can lead the high value and high logistics service quality in their business. In addition, to improve the domestic logistics service, the country has to improve the logistics performance to meet the need of customers (Council, 2020). Logistics and supply chain operations must obtain a degree of awareness and expertise that evolve efficient, particularly middle and high management level who are responsible for developing logistics plans and strategies for their businesses. To improve logistics competitiveness, support must be provided for the implementation of "digitized" logistics and supply chain systems using cutting-edge technology (Siam, 2019). As a result, LSPs must innovate and develop new services in order to satisfy these client specific demands. Some of researchers have studied in logistics service quality model of logistics service providers in Thailand and found that behavioral loyalty was strongly impacted by the logistics service quality and satisfaction (Nunthong, 2019). However, little of the previous study has examined the relationship logistics factor effected to logistics performance and competitive advantage.

This study purpose to investigate the significant logistics factors which focus on conceptual framework that influence the logistics performance in Thailand such as service quality, relationship and technology that would be beneficial to logistics business operation companies and their customers.

## LITERATURE REVIEW

### Resource-based view

The resource-based view (RBV) proposes that organizations achieve better performance by leveraging competitive advantages derived from specialized organizational resources and skills (Wernerfelt, 1984; Barney, 1991). If a company's resources are valuable, scarce, difficult to duplicate, and non-substitutable, they serve as a source of competitive advantages (Barney, 1991). On the other hand, having these resources available, does not always imply that the company will gain a competitive advantage. Capabilities refer to a company's capacity to use its resources to success specific goals (Amit & Schoemaker, 1993). They allow the company to increase resource productivity and generate economic rent at a faster rate than its competitors. Capabilities are difficult to duplicate because they are firmly established in the firm's organizational procedures and routines. They allow the company to gain and sustain a competitive advantage over its competitors (Grant, 1991; Makadok, 2001).

In the existing literature, the RBV has been used in logistics research. Logistics unique capacity, as established by Olavarrieta and Ellinger (1997), is a key strategic source of competitive advantages for 3PL providers. Lai (2004) recognized four distinct categories of



3PL providers based on their service competence. Liu et al. (2010) identified 13 qualities that are crucial to Chinese 3PL providers' competitive advantages. In the 3PL business, some research used the RBV to empirically assess the influence of resources and competencies on business performance (Liu & Lyons, 2011). Liu and Lyons (2011) compared the performance of British and Taiwanese 3PL providers based on their service capabilities.

Therefore, this study has adapted the RBV to examine the relationship between logistics service quality, relationship of logistics, logistics technology with logistics performance that focus on the conceptual framework only.

## **Logistics Performance**

There are many indicators to measure logistics performance, previous study stated that logistics performance consists of efficiency, effectiveness and differentiation (Fugate et al., 2010). In accordance with Mentzer and Konrad (1991) identified the measurement of logistics performance as effectiveness and efficiency of logistics activities. In addition, Langley and Holcomb (1992) defined by including differentiation as a critical component of logistics performance and using customer value generated from logistics operations as an indicator. For example, customer service component may be used to create value through timeliness of delivery, service availability and relieve of order placing. Krauth et al. (2005) stated that there are four logistics business performance perspectives namely: effectiveness, efficiency, satisfaction, and IT and innovation. However, people frequently confound the phrases effectiveness and efficiency.

Fugate et al., (2010) have adopted the measure of effectiveness as how successfully the resources are expenditure use wisely. Whereas efficiency is a measure of a firm's capacity to achieve outcomes while taking into the resources it uses. In terms of efficiency, the increase in on-time delivery, number of deliveries, and overall loading capacity are monitored. In contrast, firm efficiency will be determined by the reduction in total transportation costs, total delivery fees (Krauth et al., 2005). Logistics performance must be comprehended the differentiation to competitors in the similar sector or compare the result of logistics activities with other firms (Williamson et al., 1990, Langley and Holcomb, 1992).

There are many factors to measure the performance of logistics, Zawawi (2014) stated that information technology is the factor that should be determined the effective and efficiency of logistics performance. Moreover, Mentzer et al. (2001) illustrated that logistics performance is the important component that drive the logistics service provider.

## **Logistics Service Quality**

In order to maintain a strategic competitive edge through greater customer satisfaction, delivering logistics services has become an essential component of any business industry today. Bottani and Rizzi, (2006) investigated the five key characteristics of logistics service providing. Firstly, recognizing the needs and expectations of the consumer in regard to the logistics service. Secondly, evaluate the customer's service perspective. Thirdly, identify the viable elements that have an impact on improving provider service performance of a gap between service offering and customer requirements. Fourthly, determine the costs and benefits of each service interaction. The last is using a cost-benefit analysis to determine the most efficient action to boost customer satisfaction.



In competitive scenarios, Pirttila and Huiskonen (1996) stated that logistics service differentiation attempts to maximize the gap between customer value and the expenses of producing. A variety of service aspects combine to produce the logistics services required for value generation. In this regard, a company's internal differentiation may be based on the number and quality of different logistical services it provides, while value-added logistics services are being viewed as a typical important outward logistical differentiation component (Caro, 2007).

Consumers have used the pricing of services or service prices as a barometer for the quality of service that customer received, as a result of the firm's internal differentiation, which generates multiple logistical service choices of varying value to the customers. In agreement with Hong (2007) state that previously, service providers were primarily focused on a low-cost approach that emphasized price competition alone, and there was a lack of customisation in service delivery. On the other hand, customers demand more complete value-added in logistics services that may produce greater customer levels and the customer ready to pay more for these value-added or differentiated logistics services. Consequently, Bo Enquist (2007) recommended that while evaluating logistics service quality, the price of the service or the service expenses component be considered.

Moreover, the Council of Logistics Management (CLM) have identified quality management strategies influence to logistics performance and customer satisfaction. On the other hand, many of these quality principles have been operationalized by the Malcolm Baldrige National Quality Award into seven measurable criteria that serve as the foundation for quality evaluation in the logistics sector. Nevertheless, some argue that service quality may be determined by combining the expectations of customer for the services given with the impression of the service received (Munusamy et al., 2010).

Due to service quality is an amorphous term, it is impossible to deduce the real items only based on their appearance. Different judgements of the service's quality will be formed when discrepancies in a customer's subjective perceptions are combined. Because of these requirements must be fulfilled, logistic services must be able to retain regularity in service provision performance in order to preserve consumer confidence (Rahayu, 2018). Based on the previous research review, it can be examined the hypothesis following.

H1: Logistics service quality has a positive relationship with logistics performance.

### **Logistics Technology**

By incorporating technological, it would assist businesses in becoming more profitable. For many firms, technological innovation is also a vital source of growth and a fundamental determinant of competitive advantage (Azubuike, 2013). The backbone of information technology is data collecting. In logistics Acquisition technologies such as the bar code system and radio frequency identification (RFID) can help in logistical data gathering and interchange. Because of its ability to identify, trace, and monitor information along the supply chain, these types of technologies play a significant role in supporting logistics and supply chain procedures. For logistics, supply chain management, and fast response systems, technological innovation holds a lot of promise (Zhu et al., 2012). Lin and Ho (2007) recognized the second category of technological innovation as information, communication, and technologies (data communication technologies). Information technology is seen by many logistics managers as a key source of increased efficiency and competitive advantage.

Despite the fact that businesses know the value of supply chain innovation, they nevertheless find it challenging to innovate on their own. As Sumo et al., (2016) illustrated that to incorporate innovation into businesses, partners must collaborate, which entails integrating and exchanging data with others. Furthermore, according to Wang and Wu (2016), enterprises in developing countries face a number of extra obstacles as a result of poor institutions, poor security, and a lack of suitable infrastructure. Consequently, organizations in developing countries must incorporate innovative techniques into their processes, which will lead to more effective delivery of products and services to their consumers (Wadhwa and Chaudhry, 2018). In smart logistics, it is a management strategy for developing, creating, managing, and implementing transition systems of product movements (e.g., products, information, and values) based on data analytics. The use of new technology and innovative services enables pattern identification, generalization, and self-organization (Wehberg, 2016). Furthermore, Ardito et al. (2019) identified a selection of fourth-industrial-revolution enabling technologies that are most significant for effective firm supply chain integration in their analysis. Moreover, Strange and Zucchella (2018) examined how the extensive use of new information technologies and services (such as Big Data analytics, robotic systems, and additive manufacturing) reflects the company operations within global value chains in their research study. As a result, it is reasonable to conclude that the adoption of novel technology brings both benefits and disadvantages to supply chain players and stakeholders (Dallasega et al., 2018).

Nowadays, which increasingly complicated global market, firms look towards to supply chain innovation as a vital aspect in remaining competitive in their sector and adapting their business strategy appropriately. Despite the crucial relevance of innovation in the supply chain, the link between supply chain technology with performance has yet to excite scholars' interest. Based on the previous research review, it can be examined the hypothesis following.

H2: Logistics technology has a positive relationship with logistics performance.

## **Relationship**

In the logistics literature, the importance of cooperative partnerships between LSPs, suppliers, and consumers has been highlighted (Panayides & So, 2005). Close ties with trading partners, cooperation, collaboration, information sharing and trust, relationship orientation, and connection networks are all referred to as relational resources in the logistics literature. Relationship should be viewed as an LSP's capacity to develop tight bonds with customers and suppliers through collaboration and communication in order to coordinate, exchange important information, and comprehend client demands. These help LSPs to boost their company's performance and gain a competitive advantage. It helps other authors by allowing LSPs to coordinate business operations with trading partners for example, suppliers, manufacturers, distribution centers, customers, and logistics service providers using relationship (Sanders & Premus, 2005).

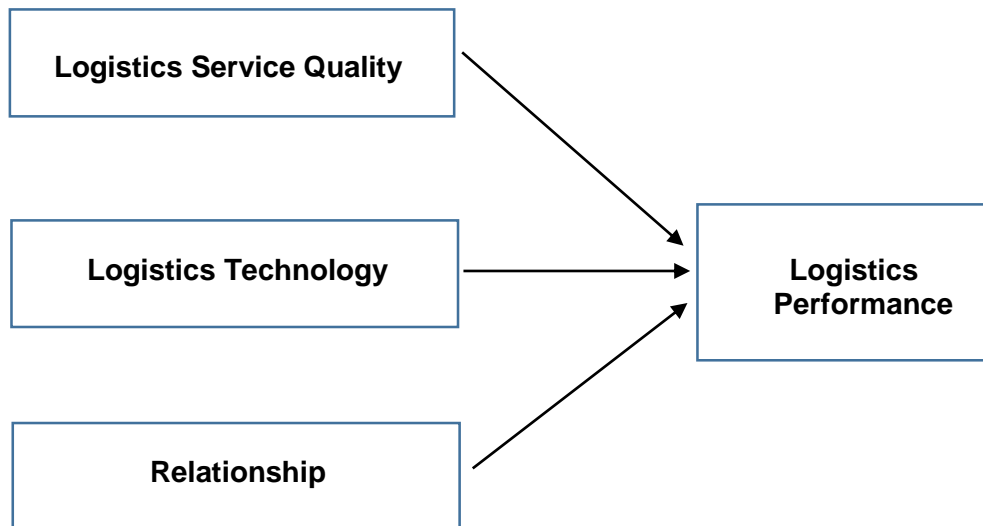
Others researchers argue that a firm's focus on customer demands necessitates creating relationship networks to acquire a full understand of the buyer's value chain (Chapman et al., 2003). Murphy and Poist (2000) suggested that enterprises should collaborate amongst stakeholders in order to anticipate client demands and clarification to problems. Service providers and users may maintain successful and continuing communication through the exchange of ideas, information, mutual understanding, and teamwork. In addition, Chen and Fung (2013) demonstrated that in managing supply networks, the necessity for the ability to manage relationships within the supply chain network is essential. The previous supply chain literature has placed a strong emphasis on integrated supplier relationships. A well-integrated

supply chain may boost and increase overall supply chain performance by establishing and maintaining high-quality relationships with suppliers (Tsai & Hung, 2016) because of suppliers play a key role to improving supply chain efficiency and responsiveness.

The relevance of supply chain performance monitoring has grown in step with the role of suppliers in a company's commercial success. Due to the complexity of linkages and relationships between enterprises, corporations find it difficult to oversee the performance of their suppliers and supply chain (Maestrini et al., 2017). Based on the previous research review, it can be examined the hypothesis following.

H3: Relationship has a positive relationship with logistics performance.

There is the framework of logistics factors that influence the logistics performance that consist of logistics service quality, logistics technology and relationship of logistics as shown as Figure 1.



**Figure 1: Conceptual framework of logistics factors influence the logistics performance**

## **CONCLUSIONS**

There are many components which used to examine the logistics performance such as service quality, technology and relationship. Moreover, the logistics performance can be variety in financial and non-financial component. In addition, technology, quality of service and relational between supplier and customer are become the most important component in all business. One of the business is logistics service process that apply those constructions to the business that can be improve the effectiveness, quality service, timeliness that the source of logistics performance, this is the reason that the factors can support the logistics companies to improve their performance and competitive advantage (Tangpong et al., 2015; Rahayu, 2018; Wadho and Chaudhry, 2018; Jaaskelainen, 2021). As a result, the study identified to measure the logistics performance by three factors consist of logistics service quality, logistics technology and relationship of logistics for perspective in Thailand.

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# **The Effectiveness of Interpersonal Skills Relating Entrepreneurship Competency and Business Success For Selected Cases of Bumiputera Wholesale SMEs in Terengganu**

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## **ABSTRACT**

To become a competent entrepreneur, every entrepreneur needed in having excellent interpersonal skills with experts in social cognitive theory in order to sustain their business. Interpersonal skills are very important in order to maintain and upgrade the business profit and sustainability either small and medium business enterprises area. It focuses on the important of research basics. The entrepreneur is needed to having expertise in terms of interpersonal skills, entrepreneurship, entrepreneurship competencies in order to reap the business success with integrating of social cognitive theory for small and medium enterprises (SME) in Terengganu. This article focus more the effectiveness of Interpersonal Skills relating entrepreneurship competencies and business success for wholesale SMEs Bumiputera in Terengganu by verifying the Interpersonal Skills as one of factor to achieve competencies and lead to business success.

**Keywords:** Entrepreneurship; Interpersonal Skills; Social Cognitive Theory; Competencies; Business Success, SMEs.

## **INTRODUCTION**

In Malaysia, the evolution and performance of SMEs also in positive movement which is the performance of Malaysian economy in 2017. For record, 98.5% business establishments in Malaysia are SME. SMEs in Malaysia recorded a higher economic growth of 7.2% in 2017 (2016: 5.2%), driven by strong domestic demand, led by both consumption and investment activities, higher SME exports as well as continued growth in employment and income. (SMEECorp Annual Report 2017/2018, page 16) Thus, this means SMEs' contribution to growth in value added and employment exceeded what would have been expected on the basis of their relative importance in the economy. In Terengganu, total of SMEs establishments are 3.2% compared to Selangor 19.8% of 907,065 SME establishments for entire Malaysia (Economic Census, 2016). By looking at statistic record, Terengganu still omission compared to high living cost state like Selangor. Even though in Terengganu, we have many entrepreneurs but they are still categorized as small and micro enterprises with low profitable. This is due to less of manufacturing industries involving high impacted mass productions.

Interpersonal skills are very important skill in order to possess the good relationship between both parties and more. It also stressed for maintain and upgrade the business profit and sustainability either small and medium business enterprises area. Interpersonal skills are also known as human skills and social skills which are any competence facilitating every day interaction and communication with others, both individually and in group. It includes not only

how you communicate with others, but also your confident and ability to listen and understand. It also takes into account problem solving, decision making and personal stress management skills. Entrepreneur needs to polish these skills to stand out from the crowd (Ingou The People University 2020). Strong interpersonal skills are essential for succeeding in today's workplace. (Alison Doyle, 2020).

Elizabeth Chell (1985, 1999), a social psychologist, has examined numerous psychological trait-based approaches and concluded that, whilst psychological aspects such as 'entrepreneurial intention' and the 'ability to recognise opportunities' are strongly linked to entrepreneurial behaviour, the context in which the entrepreneur operates is also very important. Entrepreneurship reflects complex interactions between the individual and the situation, which has to be dynamic because business situations are always changing. Others also concerns this issues like personality, leadership and skills of individual business pioneer (J.Robert Baum & Edwin A. Locke, 2004). Confidence and independence (Hisrich & Gracher, 1995). High-self efficiency, Optimistic, resilient and social skills (Markman & Baron, 2003) also entrepreneurship competencies (Hazlina Ahmad, 2007). Most of the research in this field is aimed at solving these problems. For example, the present study applies the Theory of Entrepreneurial Competency to describe the link between the behaviours and attributes of the business owner and business success. (Bird, 1995; Man & Lau, 2005), arguing that those who hold key positions in the organisation have a significant influence on the organisation's success or failure. Markman (2007) argues that entrepreneurs are those who possess the knowledge, skills, and abilities to be a strategic leader for their ventures, in which their actions influence the ventures' success. Successful entrepreneurs are often observed to possess a high level of confidence in their ability to achieve the goals they set (Mitchell, Hutchinson & Quinn, 2013). They are believed to be goal and action-oriented and possess a high need for achievement (Lee & Tsang, 2001).

According to many studies, the entrepreneur's psychological and behavioural, demographic characteristics, managerial and technical skills are the most important determinants for the performance and success or failure of small and medium sized enterprises (Rasmussen et al., 2011; Man, Lau, & Snape, 2008; Man, Lau, & Chan, 2002; Chandler & Hanks, 1994). The entrepreneurs must be competitive enough to develop successful relationships with their suppliers and customers. Only than the sustainable competitive advantage can be achieved which will ensure the long term success of SMEs businesses.

A classic social theory by Max Weber (1864 – 1920 ) outlines two dimensions that play a role triggering civilization i.e. the religious dimension and the material dimension. Social cognitive theory (SCT) is a psychological perspective on human functioning that emphasizes the critical role played by the social environment on motivation, learning, and self-regulation (Schunk & Usher, 2019). Because there are different social cognitive theoretical perspectives, to focus this article the discussion is limited to the social cognitive theory proposed by Bandura (1986), Bandura (1997) and Bandura (2001). This theory has seen wide applicability within psychological disciplines, as well as in other fields such as education, business, and health. The theory's predictions have been tested in many research studies in diverse contexts. Although the terms "social cognitive theory," "Bandura's theory," and "Bandura's social cognitive theory" are used in this article, there are other persons who have helped develop, test, and expand the theory in significant ways including Zimmerman, Schunk, Pajares, and Usher.

## RESEARCH METHODOLOGY

The research methodology method used in this research is Qualitative Research method. It is organized into several sub-topics namely aspects of the research paradigm, rational why qualitative is used as a research method, technique data collection, respondent selection, data analysis, validity, and data reliability. This research uses qualitative methods for four reasons; first, it is able to understand something that is studied in depth (Merriam, 1998). In the context of this research, qualitative methods are capable answer research questions involving aspects of skills ability, strategies and issues of competitive advantage among Bumiputera entrepreneurs in Terengganu. Second, qualitative methods are able to get a lot of in-depth information empirically. Third, qualitative methods should be used because they are effective for helps to understand a situation that is unclear and confusing (Eisner,1991), and fourth; qualitative or flexible qualitative research provide opportunities and space for researchers as interviewers with entrepreneurs based on the themes found in the study highlights and the same some arise or are produced through discussion. We use in-depth interview as tool to gain the data from our participants. Individual in-depth interviews have been found to generate more and higher quality ideas than focus or mini groups. A key initial consideration in the success of interviews is to set objectives that are clear to both interviewer and interviewee. Training and preparation are essential. Potential interviewees can first be contacted by telephone to ascertain their credibility. A letter can then be sent to outline the topics to be covered and ensure confidentiality. The interviews should be conducted at the respondent's convenience; openness is more likely if the surroundings are comfortable and familiar. The use of a tape recorder appears to be the preferable way of ensuring error-free data capture. From this interview, the data needed are pure and fresh. So, the researcher can diagnose the information gained immediately and has more chance to ask more related questions on the spot without miss one of them.

## CONCLUSION

We believe that the interpersonal skills is very important ant for every entrepreneur in order to getting more competencies and lead to business success. By implementing the SCT and integrated with skills of quality and efficient entrepreneurship, the Terengganu Wholesale Bumiputera SMEs would be an excellent and successful entrepreneur and of course it will harvest an maximum profit for business for business success.

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# The Factors Influencing Online Impulse Buying Behaviour in Malaysia

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## ABSTRACT

Using the SOR model, this study examines the effect of utilitarian-based online store attributes, hedonic-based online store attributes, and online review towards online impulse buying behaviour among Malaysian online consumer who aged 18 to 39. Data was collected through online questionnaires using a convenience sample method. After data filtering, 364 replies were used out of 400 total. The data for this investigation were analysed using SMART-PLS 3.3.2 and a Structural Equation Modelling (SEM) methodology. Two (hedonic-based online store attributes and online review) of the three direct hypotheses tested were found to be supported. The findings help determine online impulse buying behaviour. Online retailers, online marketers, and online purchase platform providers can use these insights as they plan future efforts to increase sales profits for sustainable the e-commerce industry.

**Keywords:** Hedonic-based online store attributes; Online impulse buying behaviour; Online review; Utilitarian-based online store attributes.

## INTRODUCTION

According to the Malaysian Communication and Multimedia Commission (MCMC), 88.7% of Malaysians use the Internet in 2020, up 1.3 percent from 2018. This indicates that while Malaysia's e-commerce development is impressive, Malaysians are more inclined to buy offline since online platform purchase suppliers have merely become information search channels, particularly for price among Malaysians. As a result, this explains why Malaysian internet shoppers have a different mindset when it comes to online shopping. Impulse buying is a creative tactic used by online purchase platform providers to encourage customers to make purchases online. According to statistics, impulse buying can increase sales by 30 to 80 percent. In other words, consumers' impulse purchases are an important source of revenue for online businesses, and they are worthwhile to investigate.

Through empirical study (Hasim, Shamsudin, Menon, & Yazid, 2018; Rezaei, Ali, Amin, & Jayashree, 2016; Zhang, Xu, Zhao, & Yu, 2018), previous studies revealed that characteristics including online environment, website personality, and online review are essential factors determining customers' online impulse buying behaviour. Although past studies used empirical evidence to explain online impulsive buying behaviour, most prior studies used the Stimulus-Organism-Response (SOR) model to identify single components that influence online impulse buying behaviour (Chan, Cheung, & Lee, 2017; Wang, 2015). As a result, this study begins by presenting a conceptual model that includes three independent variables: utilitarian-based online store features, hedonic-based online store attributes, and the dependent variables of online review and online impulse buying behaviour. This is because the researcher is convinced that the favourable effects of utilitarian-based online store qualities, hedonic-based online store attributes, and online reviews will have a good impact on online impulse buying behaviour.

## LITERATURE REVIEW

### STIMULUS-ORGANISM-RESPONSE (SOR) MODEL

The SOR model, often known as a model, was developed by Aragoncillo and Orus (2018) and provides a key explanation of how stimuli influence individuals' internal appraisal and, as a result, their behaviour. Originally, the SOR model was based on the Stimuli-Response (SR) paradigm, which was criticized for being appropriate for humans with a black box worldview. According to Aragoncillo and Orus (2018), stimulus consists of two components: external stimulus (object stimulus) and internal stimulus (social-psychological stimuli), both of which directly influence individuals' internal emotional responses, known as organism and as a result, behaviour responses, which are defined as the response in this model.

As a result, two systematic literature studies Chan et al., (2017) and Wang (2015) suggested that the SOR model may be used to forecast online impulsive buying behaviour among consumers, and both past researchers explained that online environmental characteristics are the most important predictors, followed by online review elements.

### ONLINE IMPULSE BUYING BEHAVIOUR

Aragoncillo and Orus (2018) defined impulse buying as irrational behaviour that first appeared in the 1940s. Because of this illogical behaviour, many previous researchers began to explore impulse buying behaviour in survey studies (Aragoncillo & Orus, 2018). As a result of the survey data, it was discovered that impulse buying increased the percentage of sales in retail stores by a significant amount. Based on the explanation from Chan et al., (2017) and Aragoncillo and Orus (2018) and Sarah, Goi, Chieng and Taufique (2021) added impulse buying behaviour may be divided into four types, as illustrated in the table below:

**Table 1: The various types of impulse purchases**

Constructs	Concept
Pure impulse buying	After meeting the goods and eliciting their emotional response, individuals exhibit atypical buying behaviours.
Reminder impulse buying	When consumers are alerted to particular situations, such as low stock in the home, they make a purchasing decision.
Suggestion impulse buying	When buyers recognise that a product is required at first glance, they make a purchase.
Planned impulse buying	A purchasing choice influenced by external cues such as promotions, even though individuals have their shopping list.



## **UTILITARIAN-BASED ONLINE STORE ATTRIBUTES**

Utilitarian attributes are characteristics that connect to an individual's impression of an object's utility and functionality, and they have a direct influence on decision making since they are related to an individual's goal achievement (Moon & Attiq, 2018). Consumers want to attain certain goals based on website design and functionality hence utilitarian-based online store qualities categories are high-tasked environmental cues (Moon, Khalid, Awan, Attiq, Rasool, & Kiran, 2017). As a result, utilitarian-based online store qualities were classified in this study as features from an online store that were based on usefulness and functioning in an online platform (Moon et al., 2017).

Hayu, Surachman, Rofiq, and Rahayu (2020) identified relevant information quality, a high usefulness system, and dazzling system design as criteria of a successful e-commerce website. A user-friendly website design given by online shopping platform providers or online shops is more likely to be visited by online shoppers (Akram, Hui, Khan, Saduzai, Akram, & Bhati, 2017; Lo, Lin, & Hsu, 2016). Lo et al. (2016) and Akram et al. (2017) stated that if consumers grasp the value of a user-friendly website, they are more likely to make impulse purchases. In conclusion, utilitarian-based online store qualities such as superb information quality, brilliant system performance, and design that create a high sense of utilitarian benefits can trigger online impulse buying behaviour. As a result, the following hypothesis emerged:

H1: Utilitarian-based online store attributes positively influence online impulse buying behaviour.

## **HEDONIC-BASED ONLINE STORE ATTRIBUTES**

Individuals that are concerned with hedonic qualities frequently seek emotional fulfilment in the purchasing environment. As a result, hedonic qualities are described as the attribute that connects people's sensory appeals situations with their emotions and enjoyment (Moon et al., 2017). In an internet buying environment, Moon et al. (2017) appended individual capable of evaluating product benefits based on the emotions induced by hedonic qualities. As a result, hedonic qualities were linked to the happiness felt by individuals while shopping online (Moon et al., 2017; Wu, Ke, & Nguyen, 2018). Hence, in this study, the hedonic-based online store attributes were appended as online store attributes based on sensory appeals experiences supplied in an online platform (Moon et al., 2017).

In truth, one of the keys to e-commerce success is the website atmosphere, as Hayu et al. (2020) noted that the atmosphere set on a website has a substantial impact on consumer behaviour and pleasure. The beautiful layout, colours, logos, content, themes, and slogans can give a website an exciting personality, and it is necessary to create a lively environment (Rezaei et al., 2016). Dey and Srivastava (2017) argue that the pleasant experience is a key motivation for internet behaviour, particularly among young people. As a result, the following is the hypothesis between hedonic-based online store features and online impulse buying behaviour:

H2: Hedonic-based online store attributes positively influence online impulse buying behaviour



## **ONLINE REVIEW**

Electronic word of mouth (eWOM) is a term that refers to the notification of good or negative statements about a company's product or services and the dissemination of those statements through electronic platforms. According to Yan, Zhou, and Wu (2018), there are two types of eWOM: content created by marketers versus content created by consumers. Yan et al. (2018) went on to say that consumer-generated content is more potent than marketer-generated content since a statement from a previous customer provides valuable product feedback after a person has used the product. As a result, in this study, an online review is defined as the perceived value derived from online reviews submitted by previous online consumers about specific items, services, and/or sellers on an online platform (Zhang et al., 2018).

Online shoppers are willing to spend time searching for and reviewing previous customer reviews based on their objectives (Zhang et al., 2018), which can considerably influence their impulse buying behaviour. Some consumers are screening and searching the online review to lessen their anxiety while browsing a website, while others are reading the online review for entertainment. When reading the internet remarks left by previous customers, consumers may perceive specific values, such as hedonic and utilitarian. This may be demonstrated that consumers' impulse buying behaviour can be influenced by online reviews and that online reviews can help consumers achieve their goals. As a result, the hypothesis is as follows:

H3: Online review attributes positively influence online impulse buying behaviour.

## **RESEARCH METHOD**

### **SAMPLING METHOD AND DATA COLLECTION**

Because the sampling frame was unavailable, a non-probability with convenience sampling method was used. Respondents were subjected to two new inclusion criteria. Firstly, they had to be shopped online in the e-commerce platform Malaysia. Next, they had to be at least 18 years old to 39 years old. The data collection through online surveys by forming Google Form. The date for data collected occur from the beginning of March until the end of May and 400 responses were collected. Before being answering the online questionnaire, respondents were authority to withdraw before or within during the answer session as willing to participate in the study. This was done to guarantee that the data was willing and of good quality. However, only 384 responses were used for data analysis since 16 respondents were filtered out due to straight-lining responses. Males made up 35.2 percent of the 384 responders, while 53.6 percent were between the ages of 20 to 24. A degree was the highest qualification held by 70.6 percent of them, and 88 percent of them stated Shopee are the main platform to shop online.

### **ANALYSIS AND FINDING**

To make data analysis easier, the authors used software. To begin, G-power was utilized to calculate the study's minimum sample size. The authors used the Statistical Programme for Social Science (SPSS) to deal with descriptive and common method variance issues. Smart Partial Least Squares (PLS) was chosen to assess the study's measuring and structural model because it aligned with the study's goal since the study's predictive nature validates the use of Smart PLS as stated by Hair, Page, and Brunsveld (2019). The predictive nature of the investigation also necessitated the use of structural equation modelling (SEM) with Smart PLS. Finally, WebPower analysis confirmed Mardia's multivariate skewness ( $\beta = 5.9252$ ,  $p = 0.00$ )

and multivariate kurtosis ( $\beta = 59.592$ ,  $p = 0.00$ ), indicating that the data was slightly anomalous and thus affirming the applicability of Smart PLS for this investigation.

Before proceeding with the model analysis, it is crucial to address the study's usage of a single source of data. According to MacKenzie and Podsakoff (2012), the study may have had a common method variance problem. As a result, the authors used procedural and statistical methodologies to confirm that CMV was not a significant issue in this study. The authors employed distinct anchor scales to quantify the study's external and endogenous variables for the procedural technique with a 7-point Likert scale. The authors used full collinearity analysis for the statistical method. When utilising comprehensive collinearity analysis, a value for the variance inflated factor (VIF) more than 3.3 suggests that the study has a common method variance issue according to Kock (2015). Fortunately, all VIF values were less than 3.3 at the factor level model estimate, indicating that the study was free of the common method variance issue.

**Table 2: Full Collinearity Testing**

Utilitarian-based online store attributes	Hedonic-based online store attributes	Online Review	Online Impulse buying behaviour
1.703	2.091	2.246	1.390

Before submitting to the structural model, the authors needed to construct the measurement model. The convergent and discriminant validity of the measurement model was confirmed. To guarantee that the many items are assessing the same constructs, convergent validity must be established (Hair, Hult, Ringle, & Sarstedt, 2016). If the loading and average variance explain (AVE) values are both greater than 0.5, and the composite reliability value is greater than 0.7 hence convergent validities are established (Hair et al., 2016). All loading, AVE, and CR values reached the threshold levels, as indicated in Table 3 of the measurement model analysis, indicating that the measurement model for the study could be confirmed.

**Table 3: Measurement Model**

Constructs	Item	Loading	CR	AVE			
Utilitarian-based online store attributes	UBOSI1	0.679	0.923	0.521			
	UBOSI2	0.709					
	UBOSI3	0.810					
	UBOSI4	0.720					
	UBOSI5	0.793					
	UBSOI8	0.650					
	UBOSI10	0.648					
	UBOSI11	0.700					
	UBOSI12	0.790					
	UBOSI13	0.704					
	UBOSI14	0.719					
	Hedonic-based online store attributes	HBOSI1			0.717	0.909	0.503
		HBOSI2			0.675		
		HBOSI3			0.611		
HBOSI4		0.605					
HBOSI5		0.535					
HBSOI7		0.798					
HBOSI8		0.801					

	HBOSI9	0.799		
	HBOSI10	0.772		
	HBOSI11	0.723		
Online Review	OR1	0.639	0.878	0.508
	OR2	0.629		
	OR3	0.693		
	OR4	0.687		
	OR5	0.785		
	OR6	0.779		
	OR7	0.763		
Online Impulse Buying Behaviour	OIBB1	0.808	0.927	0.717
	OIBB2	0.804		
	OIBB3	0.854		
	OIBB4	0.860		
	OIBB5	0.870		

According to Franke and Sarstedt (2019), if a study used Smart PLS, the heterotrait-monotrait (HTMT) ratio is a better way to confirm discriminant validity. The HTMT ratio is confirmed, if the values of all variables in the study are less than 0.85 according to Franke and Sarstedt (2019). Because all of the HTMT values were less than 0.85, it was clear that the study's discriminant validity had been proven. The findings of the HTMT ratio study are shown in Table 4.

**Table 4: Discriminant Validity (HTMT Ratio)**

	HBOSI	OIBB	OR	UBOSI
HBOSI				
OIBB	0.506			
OR	0.738	0.436		
UBOSI	0.668	0.253	0.748	

It was required to check that the structural model did not have a multicollinearity problem before moving on to the next step. According to Diamantopoulos and Sigauw (2006), the model's VIF values must be less than 3.3 to ensure that multicollinearity was not an issue in the study. Because the study's VIF values were less than 3.3, it was determined that multicollinearity was not a significant issue.

A bootstrapping technique with resampling of 5000 was used to evaluate the study's hypothesis, as proposed by Hair et. al. (2016). The following values for the association between Utilitarian-based online store attributes to online impulse buying behaviour ( $\beta = -0.138$ ,  $t=2.119$ ,  $p=0.017$ ); hedonic-based online store attributes to online impulse buying behaviour ( $\beta = 0.340$ ,  $t=4.755$ ,  $p=0.000$ ); and online review to online impulse buying behaviour ( $\beta = 0.320$ ,  $t=4.466$ ,  $p=0.000$ ). As a result, H2 and H3 were found to be supported. However, H1 has been rejected since the beta value showed negative as the hypothesis stated positively. Table 5 showed the hypothesis testing result.

**Table 5: Path Coefficient**

Hypothesis	Relationship	Beta	t-value	p-value
H1	UBOSI > OIBB	-0.318	2.119	0.017
H2	HBOSI > OIBB	0.340	4.755	0.000
H3	OR > OIBB	0.320	4.466	0.000

## DISCUSSION AND FINDING

Two of the three direct effect hypotheses were found to be supported in this study. First and for, hedonic-based online store attributes have significant and positively towards online impulse buying behaviour based on the finding. This indicated that target respondents in this study indicated the greatest of hedonic-based online attributes which increase the rate to do online impulse buying. The finding supported with a study from Rezaei et al., (2016) stated that beautiful layouts, colours, logos, content, themes, and slogans can give a website a vibrant personality, and it is vital to consumers during browsing a website and increase the percentage to purchase impulsiveness. Hence, this indicated that target respondents appended attractiveness website design such as beautiful layouts, colours, logos, content, themes, and slogans become determinants point to appear hedonic feeling which increases their chance to buy impulsiveness.

Next, the online review has significant and positively towards online impulse buying behaviour. This appended online review provided from past online consumers capable to trigger to buy impulsiveness in the e-commerce platform. Hence, this finding aligned with the study from Zhang et al., (2018) appended consumers are likely to buy impulsively if the online review capable to give pleasure and entrainment to a website. This can explain that target respondents in this study indicated hedonic-based online review capable to bring joy during browse e-commerce website and increase the chance for buy impulsiveness.

Last but not least, utilitarian-based online store attributes significant towards online impulse buying behaviour. Although the finding appended significantly the beta showed negative value which indicated utilitarian-based online store attributes significant and negatively towards online impulse buying behaviour. Hence, H1 been rejected in this study. Although the finding from Akram et al., (2017) and Lo et al., (2016) stated that consumers are more likely to make impulse purchases if they understand the benefits of a user-friendly website provided by online shopping platform providers or online stores. However, Bilgihan and Bujisic (2015) stated that consumers who think logical normally consider website functionality which reduces to trigger the urge to buy impulsively. Thus, this can explain that some target respondents considered website functionality especially search feature of product information which unable to trigger their online impulsiveness buying.

## CONCLUSIONS

In conclusion, online impulse buying behaviour is vital to be studied since online impulse buying is the greatest way to earn profit among online retailers, marketers as well as online platform providers. There were three direct effect hypotheses been tested but hedonic-based online store attributes and online review were significant and positively towards online impulse buying behaviour. Hence, this study capable to give awareness regarding hedonic-based online store attributes and online review capable to trigger online impulse buying behaviour among online consumers to develop an effective strategy to sustainable in the e-commerce industry.

Although this study provided several significant insights, there are several limitations been identified and suggestion can be provided for future study. First and for, this study consists of the target respondents who experienced shops online at any e-commerce platform in Malaysia. Therefore, this can be considered not a complete explanation regarding online impulse buying behaviour although this study been carried out. Thus, future studies can specific to certain e-commerce platforms such as Shopee and Lazada Malaysia since the target respondents in this study indicated both platforms are the main concern for doing online

shopping. Next, this study does not consider product categories because consumers perception can be different if the interaction of product categories occurs. Hence, the future study can focus on target respondents on a website that sold specific product categories such as Hermo and Sephora that sold health and beauty products. Lastly, this study does not indicate mediating variable or moderating variable for testing online impulse buying behaviour. Hence future studies can indicate browsing as mediating variable as well as sales promotion indicated as a moderator.

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## Halal Supply Chain in Nusantara Fishery Port

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### ABSTRACT

This study was conducted at the Nusantara Fisheries Port (PPN). This study focuses on halal supply chain activities for fishers at the Nusantara Fishery Port by looking at fraud in fishing activities. Furthermore, this study will identify the activities of fishers and the Nusantara Fisheries Port from the halal supply chain aspect by using a qualitative approach by using source triangulation to answer the problems that arise. This study contributes further to the significant areas of the halal supply chain for fishers and fishing ports, such as preparation for the departure of fishers, the process of unloading fish at the pier, determining fish prices, and product delivery to factories. The study results show that many fraudulent supply chain activities in fishers cause the product to become *subhat*/unclear. The aspects that give rise to fraud are the administration process from departure to docking, which is considered a normal fishers' habit. In addition, in determining the price of fish at the port, fraud often occurs between fishers and buyers; some agents/suppliers play the price without a basis to measure it.

**Keywords:** halal supply chain; fishers; Nusantara Fisheries Port.

### INTRODUCTION

Along with the growing awareness of the need for halal products and services in Indonesia by Muslims, the number of halal industries in the country is also increasing. This encourages the importance of developing the Indonesian Halal Supply Chain ecosystem. Halal products and services are in high demand globally and in Indonesia, and the need for halal items is not restricted to food. Food, tourism and travel, clothing and fashion, cosmetics, finance, pharmaceuticals, media and recreation, fitness, education, and cultural arts are among the ten halal industries contributing significantly economically and commercially to the halal sector (Katadata.co.id, 2020). The halal product sector in its development is increasing along with public awareness of hygienic products, quality, following the dosage, rules/permits, and guaranteed safety. This is closely connected to the world's growing Muslim population, where the more extensive the world's Muslim population, the greater the demand for halal products and services. According to (Noordin, Md Noor, Hashim, & Samicho, 2009), the global Muslim population in 2012 was 1.8 billion people; in 2030, it is projected that the world's Muslim population will reach 2.2 billion. In addition, awareness of halal products is no longer loved by only Muslims. Even non-Muslims are currently enjoying halal products for consumption and use in their daily lives.

This phenomenon is in accordance with Ibrahim and Adinugraha (2020) that the global halal product industry is not only surrounded by countries with a majority Muslim population, such as Indonesia and Malaysia. Companies from China, Thailand, the Philippines, the UK, and Luxembourg are also scrambling to produce halal goods. For non-Muslim consumers, the



halal logo represents a symbol of cleanliness, quality, purity, and safety. Thus, the halal logo becomes the world's new standard and barometer that determines the quality of the products.

Halal logistics has its own set of challenges in Indonesia, particularly the perception among the general public and consumers that halal logistics is not a need. This is different from other nations where halal logistics are required. This occurs because the current state of halal products in Indonesia only focuses on the substance of a specific foodstuff or ingredient rather than the method through which the product reaches customers, such as warehousing and transporting or shipping. When it comes to government regulations, Indonesia has regulated halal logistics under Law Number 33/2014 concerning Halal Product Guarantee, which covers everything from the initial process until the product delivery to consumers is guaranteed halal.

Halal Supply Chain is viewed as an innovation in logistics operations for logistics agents. However, to ensure Halalan – Toyibban on food products, several improvements must be made along the supply chain for Halal products. The renewal from conventional logistics operations to halal logistics operations can be considered as an improvement. Apart from logistics agents providing good logistics services, they also offer better logistics services for halal products. However, to offer good logistics services for halal products, several factors need to be considered.

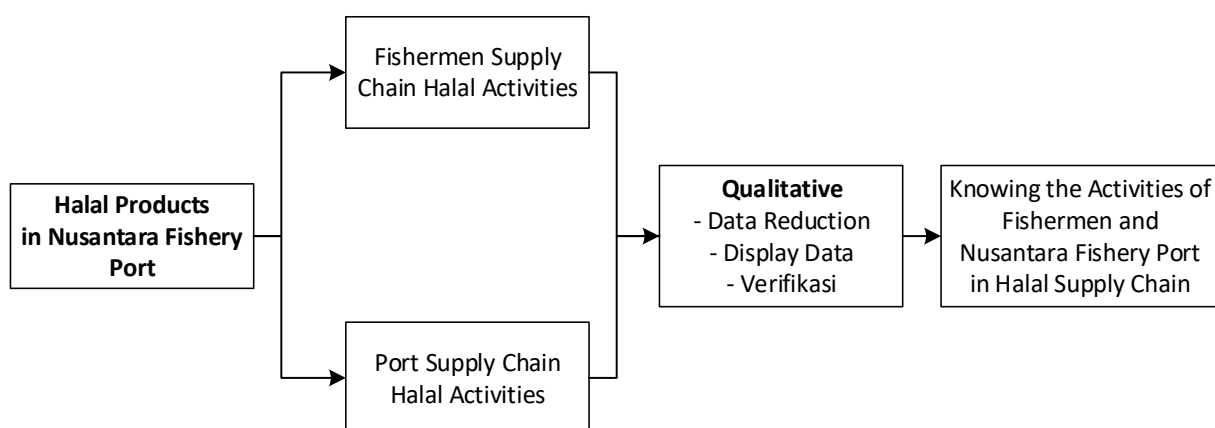
Indonesia is a large country, 68% of which are islands with wider waters than the land (Maula, 2019). So then, the fishery and marine industry became the main livelihood of the majority of Indonesian people. To control fishery and marine activities, the Indonesian government pays special attention to fishers to create superior and competent fishers who can become the driving force of the country's economy. The government assists fishers by establishing the Ministry of Maritime Affairs and Fisheries (KKP). The Ministry of Maritime Affairs and Fisheries oversees several fishing ports in Indonesia. There are four types of fishing ports in Indonesia, which is (1) Ocean Fishing Port or Type-A port, (2) Nusantara Fishing Port or Type-B port, (3) Coastal Fishing Port or Type-C port, (4) Landing Base Fish Port or Type-D port. The types of fishing ports are distinguished from the intensity of fishing at the port.

Indonesia has 8 Type-A fishing ports, 14 Type-B fishing ports, 28 Type-C fishing ports, and 526 Type-D fishing ports. Compared to 2018, there is an increase in the number of Type-B and Type-D fishing ports, by one port for Type-B and five ports for Type-D (Badan Pusat Statistik Indonesia, 2017, 2019, 2020). Out of 576 fishing ports in Indonesia, 69% have Fish Auction Place – *Tempat Pelelangan Ikan* (TPI), while 31% do not. The Type-A fishing port is the type of port with the least TPI number based on its category. On the other hand, Type-D fishing port has the most TPI (Badan Pusat Statistik Indonesia, 2020)

By distinguishing the type of port from the pattern of fishing and port activities, there are also many supply chain activities at each port where many stakeholders also participate in these activities. This means that there will be cultural and ethnic diversity in Indonesia that will participate in the supply chain activities and cause each region to have its characteristics before and after sailing. From the many supply chain activities in ports and the background above, the researcher focus on 1) how the supply chain activities in the Indonesian fisheries ports are, 2) how the supply chain activities of fishers are carried out whether they have led to the halal supply chain. Therefore, this study aims to determine supply chain activities at the Nusantara Fisheries Port and how the fishers' supply chain activities are halal. Through this study, the researcher tries to prove that by looking at the impacts and opportunities on developing halal products, Indonesia should become a halal pioneer for fishery and marine products in particular.

## RESEARCH METHOD

This study used a qualitative case study method and was conducted in Nusantara Fishery Port (PPN). The data include primary and secondary data: 1) primary data is obtained through direct observation of various activities carried out at the port. In addition, interviews were conducted with the Head of Port, Staff, fishers, fish traders, suppliers, and exporter companies. 2) secondary data was obtained from related agencies/institutions, including Nusantara Fishery Port, Central BPS, and literature studies in the form of collecting information from both printed and electronic media. The case study research method was carried out to explore the supply chain activities of fishers at the Nusantara Fisheries Port by looking at the halal supply chain aspect. Through a case study approach, it is hoped that this research will provide an overview of halal supply chain activities for fishers and halal supply chain at the Nusantara Fisheries Port. This study involves several qualitative research data collection methods, including unstructured interviews and observation. Miles & Huberman in Sugiyono (2015) argues that the effectiveness of qualitative data analysis is carried out interactively and continues until it is complete so that the data is saturated. This study uses data analysis techniques that refer to the concept of Milles & Huberman, namely an interactive model that classifies data analysis into three steps, namely data reduction, data display, and conclusion drawing or verification. In order to validate the data, an examination technique is needed. The implementation of the inspection technique is based on several certain criteria. There are four criteria used: degree of trust, transferability, dependence, and certainty.



**Figure 1: Conceptual Framework**

According to Moleong (2018), triangulation is the best way to eliminate differences in the construction of reality in the context of a study when collecting data about events and relationships from various perspectives. In this study, triangulation was carried out through source triangulation. Although there are 14 Nusantara Fishery Ports in Indonesia, there is still little discussion about the halal supply chain at fishing ports from the literature review.

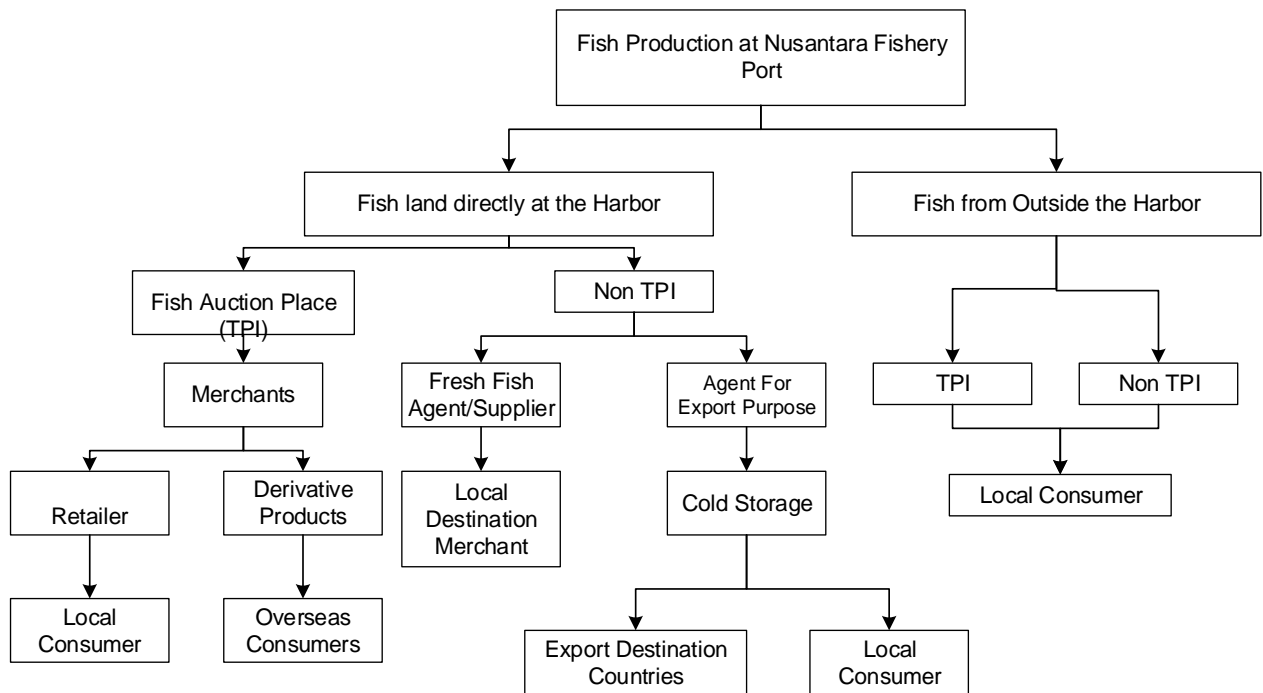
## FINDING AND DISCUSSION

The data were analyzed in two stages. To begin with, a case analysis was conducted to find out the activities of the Nusantara Fisheries Port in a single context. In contrast, cross-case analysis was conducted to determine the activities of fishers. Thus, the consistency of the

description for each case is generated through in-case analysis by capturing all relevant information about activities related to the halal supply chain.

The high supply chain activity at the Nusantara Fishery Port is often seen to neglect several halal aspects that ultimately affect the product, which becomes unclear in the process. The activities that appeared in the pre-survey conducted by the researchers found several fraud activities. These include manipulating the size of fishing vessels that did not match the information stated in the Fishing Vessel Permit (SIKPI), a closed fish auction process between the fish owner and the buyer, as well as the existence of "*Tukang Ngorek*" who takes fish without the knowledge of the fish owner. In addition, there is also the use and operation of non-environmentally friendly fishing gear, the use of formalin, the use of bombs and potassium, dyes, and bleaches. The use of these hazardous materials can harm consumers health. Moreover, there is also fraud in the supply chain activities of fish caught by fishermen, such as the indefinite amount of catch that fish collectors directly purchase. Without clarity regarding the quantity of fish, it results in losing one of the parties in the movement transaction.

### Halal Supply Chain Activities at Nusantara Fishery Ports



**Figure 2: Nusantara Fishery Port's Supply Chain**  
(Source: Researcher Observation, 2021)

The results of study found supply chain activities at the Nusantara Fisheries Port, where there are two fish production activities carried out, (1) sending fish by land route where supply is sent from other ports and (2) unloading fish directly at the port dock. The first activity is fish production from other ports by land route, selling fish directly to traders or agents to be sold directly in the market and local consumers who buy direct suppliers, determining the fish price by considering fish size, fish type and fish quality. This activity usually carried out by daily fishers (fishers who go fishing and return to sell fish on the same day), and in general are fish

products for the needs of local consumers.

The second is the production of fish on land or which is unloaded at the port dock directly. This activity takes place quite a lot, starting from the ship docking at the port dock according to the size of the ship. At the Nusantara Fisheries Port, fishing boats that can enter the port is 5 – 30 GT. Fish that enter the dock from ships with >10GT will enter the Fish Auction Place (TPI), but some do not go through the TPI. Fish that enter the TPI are usually fish consumed by the local or the surrounding area with a price determination through the fish auction place. At this stage, a fish auction will be carried out through an existing method. Then the fish will be sold to retailers and producers of marine products for resale to local consumers and consumers outside the region. Fishers and agents/suppliers rarely carry out activities at TPI because this process takes a long time, causing quality to decline. Meanwhile, fish that do not go through TPI are usually selected fish that have become commodities for export with high quality (e.g. Tuna, "Baronang" Fish, Snapper). There are many ways that fishers do to offer fish to consumers at TPI or Non-TPI. Usually, fishers will look for agents who the boat owners have trusted to sell them to get the highest price. However, fraud often occurs in this activity before fish enters the fish factory or market. One of them is the agent changes the price at will to sell. Even if it is the fish season which means that there is an abundant supply of fish, the price can fall significantly below its fair price, and this causes fishers to suffer relatively large losses.

The research results from observations and interviews conducted by researchers at the Nusantara Fishery Port found many findings from the aspects of fishers, baskets/traders, suppliers. One of the findings was in the fishers' preparation, the fishing gear was not in compliance with the Regulation of the Minister of Maritime Affairs and Fisheries of the Republic of Indonesia No. 71 of 2016 concerning Fishing Paths and Placement of Fishing Equipment in the Fisheries Management Area of the Republic of Indonesia. The fishers do this by stealth to avoid raids from the port officials. *".....ya tidak kita laporkan untuk alat tangkap karena tidak boleh sama pemerintah, kalau ketahun akan dilarang untuk berlayar bahkan pernah teman saya surat ijin kapalnya tidak bisa di perpanjang.... (... Yes, we don't report our fishing gear because it is not allowed by the government. If caught, we will be prohibited from sailing. Even once my friend's ship's license couldn't be extended.)"*, said Mudhor, one of the fishers at the port.

Another finding found in this study was the use of chemicals to keep fish looking fresh. Although not all fishers use chemicals, for sure, this is not allowed in terms of health. During the unloading and sorting of fish at the port, it was discovered that certain ships were using chemicals such as formalin to make certain fish look fresh. This chemical-based fish is promptly placed away by the PPN officer upon discovery to not mix with other fish. Bagus Triawan, PPN officer, when checking the report of loading and unloading fish at the port mentioned, *".....beberapa nelayan memang ada yang nakal mas, ikan yang awal didapat biasanya di beri formalin agar awet, alasannya mencari ikan perlu waktu 3-4 hari sehingga takut kualitas menurun (... some fishers are really naughty, bro, the first fish they get is usually given formalin to make it durable, the reason is that it takes 3-4 days to find fish so they are afraid of decreasing quality)"*. Not to mention the problem of determining the price of fish that often occurs by choosing price speculation. The supplier is more on the benchmark of how many fish is unloaded so that the selling price is often manipulated at fish auctions. Most of the fish auction processes in PPN do not carry out price speculation activities because this auction process is not profitable for traders and suppliers. *".....kalau pakai lelang mas, kita tidak dapat keuntungan yang rata karena lelang pasti yang memiliki modal besar saja yang bisa ikut pelelangan, sedangkan bagi pedagang/supliyer yang modalnya pas-pasan tidak memiliki kesempatan.... (... If we use the auction, we won't get an even profit because only*

*those who have large capital can participate in the auction, while traders/suppliers with mediocre capital don't have a chance. )”*, said Sumaji, one of the fish suppliers and traders at PPN.

### **Fishers' Halal Supply Chain Activities**

The first stage is the debriefing stage, which is the concept of the halal supply chain, which is carried out under Islamic law because the way to obtain all the needs needed to carry out shipping is obtained by buying legally. At this stage, preparations will be made for all the needs needed during the voyage, be it ship needs, personal needs. The goods for fishing that are prepared at the time of debriefing are halal goods, which means that obtaining them is also done lawfully through official and legitimate sales agents. Regarding the Shipping Permit that fishers will carry out, the Syahbandar office of Nusantara Fisheries Port has issued an integrated service for fishers, hoping that fishers will no longer falsely report the fishing gear used, the type of fish caught and the size of the vessel to be used. One of the activities that become an advantage for fishers if they take care of this shipping permit correctly is that fishers get diesel/fuel for subsidized vessels from the government. This is expected to suppress fraudulent activities in fishing supplies.

The second stage is sailing, the main activity, sailing to catch fish in the sea. Then, judging from the purpose, the voyage is carried out to work, where work is a command from Allah SWT to all His servants to fulfill the necessities of life. Moreover, working as a fisherman is lawful and not a job that is prohibited by religion. Judging from the object, which is marine animals or fish, then no religious law is violated. Fish or marine animals are halal to be consumed regardless of their condition, alive or dead, following Q.S. Al-Maidah verse 96. Another aspect of being considered is the use of nets/trawls for fishing. The nets/trawls used are environmentally friendly media and do not contain substances that can harm human health. Based on these aspects, this stage meets the halal criteria. Therefore, the work concept used must also be honest and legal. An understanding of the use of chemicals must be intensively carried out so that fishers do not take this action. The Nusantara Fisheries Port will check using a fish detector when unloading at the port dock. If the fish contains chemicals, it will be placed on a special dock, and the port will revoke the fishers' sailing permit for the next one month so that the ship cannot be used for sailing. This consequence is taken hoping that fishers' livelihoods to support their families can be carried out properly and by applicable regulations.

The third stage is storage. Storage is an activity carried out by fishers to maintain the quality of fish so that the fish remains fresh and in good condition. For example, the storage process carried out by fishers at the Brondong-Lamongan Nusantara Fisheries Port is by using ice cubes to keep the temperature low to make sure that the fish are still fresh. Storage is carried out in a layered system, in which ice cubes are arranged at the bottom of the hold with fish placed on top of it, and then another ice cube is arranged, then fish have placed again until the ship's hold is full. The use of ice cubes for storing fish so that its freshness is maintained does not violate Islamic law. The ice cubes used to keep the fish from rotting quickly also do not add harmful substances to health. This storage will cause the stored fish to die or can be said to turn into the carcass. However, according to Islamic law, carcasses from fish and other marine animals are still fit for consumption and are declared halal. Therefore, the fish stored with ice cubes is halal in the process, and the product can be said to be *thayyiban* because it is still good for consumption. So it can be concluded that the concept of storage like this is halal because it keeps the quality of fresh fish with natural ingredients and does not harm when consumed.



The next stage is to sell the catch. This is done so that the fish caught can be replaced with some money. In this case, the researcher did not find any violation that violated Islamic law. Although at first glance this is like a sale and purchase, which is prohibited by Islamic law because it contains elements of vagueness or *gharar*, after conducting a study of the transaction process carried out between the shipowner as a fish seller and the contractor as a fish buyer, the researcher saw that there were steps before the sale and purchase transaction contract and clear and agreed solutions by both parties (fishermen and buyers) if after the purchase contract errors occur. Therefore, it can be said that the wholesale buying and selling process does not contain any vague or *gharar* elements of buying and selling. It can also be said that the concept of buying and selling is per Islamic law so that the buying and selling process is declared *halal* because the buying and selling activities are carried out voluntarily by both parties.

The next stage concerns distributing wages for both the fishers and the sorting workers (*tukang ngorek*). In this case, all have agreed that both the shipowners and fishing crews who work to find fish in the sea and sorting workers as sorters of fish caught by the fishers will receive wages following what was agreed. Wages will be made after the workers complete their work. From this, it can be said that the shipowners have given the rights of the fishing crew as agreed. Therefore, in this process, it is known that it is under Islamic law and is *halal*. This concept of payment method is also *halal* because there has been a prior agreement between the two parties.

### **Halal Certification by LPPOM MUI for Nusantara Fishery Ports**

On the other hand, the implementation of *halal* supply chain management still faces several obstacles. For example, in its execution, the LPPOM MUI (Lembaga Pengkajian Pangan, Obat-obatan dan Makanan – Majelis Ulama Indonesia) *halal* certificate is limited to the production process and has not touched suppliers and retailers. The cost of *halal* certification still varies and is relatively expensive for the perpetrators. *Halal* certificates for Micro-enterprises issued by LPPOM MUI also have not been recognized by other countries, so that in exporting *halal* products, they still have to get the *halal* certification of the destination country, which adds to the operational burden. Some companies which produce daily consumed products even have not pocketed the LPPOM MUI *halal* certificate. Law Number 33 of 2014 concerning *Halal* Product Guarantee (JPH) has not been enforced compulsorily for all industries.

## **CONCLUSIONS**

This study concludes that to carry out *halal* supply chain activities, the Nusantara Fishery Port must prepare beforehand both from the management aspect, leadership vision, infrastructure feasibility, and understanding of the *halal* product itself among stakeholders. Logistics is a part of the supply chain which involves many business entities such as suppliers, manufacturers, distributors, and retailers. All of these entities will work together to obtain raw materials and turn them into final products. *Halal* logistics is an approach to avoid contamination of raw materials and perishable foodstuffs during transportation or distribution activities. This is also to prevent misinformed products and ensure that Muslim consumers will accept and only consume *Halalan* products. In the Malaysian Standard for *Halal* Logistics (MS 2400:2010), *halal* logistics requirements under Sharia law include requirements for logistics providers for transportation, warehousing, and retail. Meanwhile, in Indonesia, through LPPOM-MUI Law Number 33/2014 concerning guarantees for *halal* products, it is still limited to certification labels on final products.

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## **Bottom 40 Next Generation Model for Sustainability Entrepreneurship: Post COVID-19 Crisis**

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### **ABSTRACT**

Aligning a variety of capabilities and activities in a supportive environment for the Bottom 40 social entrepreneurs to sustain businesses during and post COVID-19 crises has never been easy. The research navigates new markets and sources of demand via its strategic next generation model, thus requires extensive effort to reshape and to suit the requirement of local markets. The rise of Internet of Things (IoT), and Digital Technologies offer many new opportunities for Bottom 40 social entrepreneurs to learn more about new capabilities, and the extent to which sustainability entrepreneurship are able to accelerate and improve the next generation model. The model is also aimed to reframe the income generation function that explains the comprehensive set of sustainability entrepreneurship activities of social entrepreneur's and its execution; and the enabling elements which examines the critical aspects needed for efficient and effective execution and designing sustainability entrepreneurship. This research is designed to use a broad-based strategy and a mix of methodological approaches. The significant of this research is on framing to deliver the next generation model, nature of income generation model applicable and construct a comprehensive roadmap for the transformation of sustainability entrepreneurship journey for the bottom 40 social entrepreneurs.

**Keywords:** Social Entrepreneurship; Bottom 40; Next Generation Model; Sustainable Entrepreneurship; Digital Entrepreneurship; Knowledge Management; Value Creation.

### **INTRODUCTION**

A next-generation model of Bottom 40 is addressing an opportunity for young social entrepreneur to capitalize on advances in digital entrepreneurship, and analytics of data which is able deliver new levels of performance across social enterprise value-creation for sustainability entrepreneurship.

Aligning a variety of capabilities, and activities in a supportive environment for the Bottom 40 social entrepreneurs to sustain businesses after post Covid-19 crises has never been easy. In this proposal and based on Malaysia Science, Technology, Innovation and Economy (MySTIE), the business and financial services will be one of the subjects of interest. Navigating new markets and sources of demand requires extensive effort to reshape and to suit the requirement of local markets. The rise of the Internet of things, and digital technologies offer many new opportunities for bottom 40 social entrepreneurs to learn more about new capabilities, and the extent to which sustainability entrepreneurship are able to accelerate and improve the income generation model.

This research is in its attempt to explore the impact and potential of Bottom 40 Next Generation Model for designing sustainability entrepreneurship and coordinate a comprehensive set of capabilities that encapsulate recent advances in technology, analytics and social entrepreneurship management practices. The research will examine the requirements in the proposed Bottom 40 Next Generation Model that restructures the function's relationship with its quintuple helix relationship, be it with customers, supply based and the stakeholders. The model is aimed to reframe the income generation model function that explains the comprehensive set of sustainability entrepreneurship activities of social entrepreneur's and its execution; and the enabling elements which examine the critical aspects needed for efficient and effective execution and designing sustainability entrepreneurship. By addressing entrepreneurship, this method responses to the SDG 8 on decent work opportunity and economic development; while in line with the Shared Prosperity Vision 2030 as set in KEGA 3 that connects to Industry 4.0 opportunities.

## LITERATURE REVIEW

Post covid-19 offers a change of mind-set in considering value sustaining opportunities. Superior business partnering, and sourcing of opportunities alone may not able to explain the process of sustainability entrepreneurship. Literature had indicated that Bottom 40 generation practices in designing sustainability entrepreneurship may require a new process, governance of data, organization of an agile leadership, capabilities and culture, and data and analytics. Ultimately, putting the right model together with a comprehensive review of each of these value-creating elements of sustainability entrepreneurship, this proposal will highlight where a social enterprise among the Bottom-40 can deliver its next generation model, nature of income generation model applicable and construct a comprehensive roadmap for the transformation of sustainability entrepreneurship journey for the Bottom-40 communities and social entrepreneurs (Raja Suzana, 2021).

Bollard et al., (2017) argue that companies have a clear vision of where they want to go. Recently, companies want to be more adaptable, sensitive, and efficient. They also want to provide excellent customer service, reduce costs, increase quality and transparency, and add value by using emerging technology. The findings suggest that companies must commit to a next-generation operating model in order to create value and provide compelling consumer experiences at lower costs. This operating model is a modern way of running a business that incorporates emerging technology and operations skills in a well-ordered, streamlined way to drive significant sales and customer service improvements.

This operating model can be visualized as having two components, each of which necessitates significant changes in the way businesses operate. The first component entails transitioning from uncoordinated initiatives inside silos to launching an integrated operational-improvement initiative organized around consumer journeys, such as customer buying experiences, as well as internal journeys, such as order-to-cash or record-to-report activities. The second is a shift from using individual technologies, operations capabilities, and approaches piecemeal within silos and toward applying them to journeys in combination and in the right order to achieve multiple impacts. Within this context, the word "customer journey" has been widely used in service management and design (Rawson et al., 2013). From the customer's perspective, the term refers to the processual and experiential elements of the service process. It is described as the customer's repeated experiences with a service provider, as well as an engaging story about the user's interaction with a service (Meroni & Sangiorgi, 2011; Stickdorn & Schneider, 2010). The customer journey perspective is important to the design processes and for involving customers in strategy work as well as business model development (Kimbell, 2011).

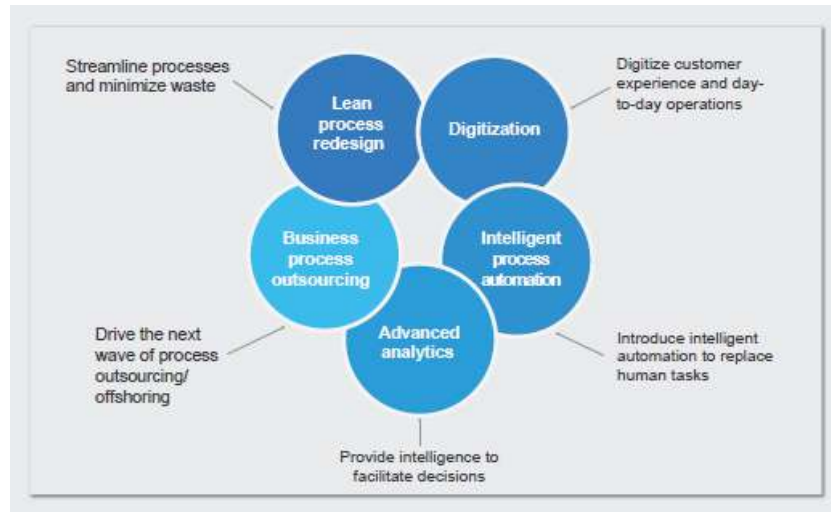
According to Folstad and Kvale (2018), there are two new customer journey approaches which are customer journey mapping (analysis of business process) and customer journey proposition (generative activities leading toward a possible service).

Each element of the Bollard et al., (2017) model as well as any required shifts are discussed in greater depth. Several autonomous efforts to increase performance are underway in many organizations, and they are typically located within different organizational units. This makes incremental gains within individual units easier to achieve, but the cumulative effect is always daunting and difficult to sustain. Due to hand-offs between departments, tangible consumer benefits such as quicker turnover or improved quality can be missed. In the end, these become black holes, requiring several back-and-forth moves and long lag times. Consequently, it's not uncommon to see individual functions report significant organizational changes while customer satisfaction and total costs remain unchanged.

Therefore, companies must think holistically about how their activities will contribute to providing a unique customer experience, rather than working on different projects within organizational units. Focusing on consumer journeys and the organizational structures that sustain them is the best way to do this. These naturally cut through organizational silos; for example, to help a customer opening a bank account, marketing, operations, credit and IT are needed. The preferred guiding theory is journeys, which include both customer-facing and end-to-end internal processes.

Classifying and mapping main journeys is the first step in transitioning to the next generation operating model. The journeys differ depending on the product or service line and the consumer category. The study's findings show that focusing on around 15-20 top journeys will unlock the most value in the shortest amount of time. In addition, they should concentrate on completely reimagining the consumer experience, which often exposes opportunities or potential to simplify and streamline journeys and processes, unlocking significant value. Behavioral economics concepts will ingeniously inform the redesign process. Usage of default settings on forms, restricting options to prevent consumers from being frustrated, and paying particular attention to the final touchpoint in sequence, as it is the one that will be remembered the most, are just a few examples.

Next, to enhance operations that underpin journeys, companies usually employ five main capabilities or approaches. Figure 1 below shows the set are includes digitization, intelligent process automation, advanced analytics, business process outsourcing and lean process redesign.



**Figure 1: Five approaches and capabilities to drive the next generation operating model  
(Source: Bollard et al., 2017)**

First, the process of using tools and technology to enhance journeys is known as digitization. Digital technologies have the ability to change consumer-facing journeys in significant ways, mostly by enabling self-service. Internal journeys can also benefit from the use of digital to reshape time-consuming transactional and manual tasks, particularly when there are many systems are involved. Second, intelligent process automation is a new set of technologies that incorporates fundamental process redesign with robotic process automation and machine learning to create intelligent process automation. This can be used to replace human effort in processes such as aggregating data from different systems or converting data from a written document into a structured data input. There are also approaches to automation that can handle higher-level functions.

Thirdly, advanced analytic is the method of automatically analyzing data using advanced software in order to uncover insights and make recommendations. It provides intelligence to aid decision-making, and it can be particularly useful on journeys that involve nonlinear thought. Smart claims triage, fraud management, and pricing. Fourth, to complete complex tasks or roles, business process outsourcing employs resources from outside the main business. It also employs labour arbitrage to reduce costs. This method is most effective for manual processes that aren't primarily consumer-facing and don't affect or represent key business decisions or value propositions. The most popular example is paper and correspondence processing in the back office.

Last but not least, companies may use lean process redesign to streamline operations, eliminate duplication, and promote a culture of quality improvement. This adaptable approach works well with both short and long-cycle systems, transactional and judgement-based processes, and client-facing and internal processes. In short, when deciding which capabilities and approaches to use and how to apply them, it is critical to think holistically and understand the whole journey. There are three design principles that must be followed; organizations must ensure that each approach is used to its full potential, then it is implemented in the proper series, and the approach should be communicate with one another to have a multiplier effect.

## RESEARCH METHOD

This research is designed to use a broad-based strategy and a mix of methodological approaches. The research would take the form of a systematic literature review. Papers for study were found through searches in Google Scholar, Web of Science, Scopus, Science Direct, and library database. The scope of the analysis is limited to examining and making statements about research papers that use the terms social entrepreneurship, social enterprise, B40, bottom of pyramid, as well as sustainability entrepreneurship in their titles.

The research will review on theory of sustainability and sustainable entrepreneurship, interview data on 500 social entrepreneurs from Bottom 40 populations and relevant industry, and published reports as well as information from the company's website. The extant of theories of entrepreneurial value creation; and a general theory of entrepreneurship will be examined, analyzed and criticized; along with several other theories in technology adoption, behavioural and economic field.

## CONCLUSIONS

As a conclusion, it was suggested that a three-part programme should be developed; 1) developing next generation operating model and transition roadmap; 2) transforming the critical customer journeys using a combination of capabilities and approaches; 3) establishing cross-functional foundations to scale and maintain the transformation benefits.

In accordance, the increased use of digital in business is crucial in the world of the COVID-19 crisis and in the post-COVID-19 world. When social enterprises want to use or start a new social cause in digital services, they need to know what they're doing. Hence, this study will explore more on digital capabilities and approaches toward sustainable entrepreneurship.

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## **Pest, Predators Disturbance and Safety Precaution in Edible Bird Nest Swiftlet House: The Case of Terengganu**

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### **ABSTRACT**

Many entrepreneurs are very interested in starting Edible Bird Nest (EBN) production. However, many of them lack knowledge of pest disturbance in swiftlet houses. They suffered losses because they are not concerned about pest disturbance in the swiftlet house. This study aimed to identify the pest in swiftlet houses and take preventive controls to avoid pest disturbance in swiftlet houses. This research was conducted through a field study. Field studies were conducted from three different areas, namely, town, coastal and forested areas. Based on the field study, ants were the most significant pest problem in EBN swiftlet houses, where about 128 observations of the houses were infested with the insects at one point or another. Cockroaches were the second most significant problem with 74 observations of the houses infested, and rats were 44 observations of the houses. Pest disturbance in the swiftlet house was the main cause of failure in the swiftlet ranching business. While predators were concerned, owls were the most significant nuisance, followed by eagles and bats. For safety precaution, entrepreneurs of EBN swiftlet house used double door safety set up, owned safety rails and signage, emergency lighting, fire hazards CCTV, guard dog, and hiring of security guards. The results showed no significant difference between pest disturbance in the swiftlet house and the swiftlet house locations. Minor pest and predator disturbance can be assured to be productive and profitable ranching venture swiftlet in the management of swiftlet houses.

**Keywords:** Edible Bird Nest (EBN) Swiftlet; Pest Disturbance; Predators Disturbance; Safety Precaution; Swiftlet House.

### **INTRODUCTION**

Edible Bird Nest in high demand has opened up opportunities for countries rich in these resources to become exporters to other countries. Indonesia is one of the biggest exporters of Edible Bird Nest in the world. However, Malaysia is also not left behind to become an exporter of EBN, followed by other countries such as Singapore, Thailand, Burma, China, and Vietnam to improve the economic status of their respective countries.

One of the sources of Malaysia's economic development is the natural resources available in this country. The commercial harvesting of Edible bird nests from caves was carried out 100 years ago in Malaysia. The first harvest was from Niah Cave, Sarawak, in 1878. There were efforts have been made to explore new areas in the Edible bird's nests harvesting in recent times. From a humane, economical, sustainable plantation on the Swiftlet population and being more environmentally friendly than traditional. Swiftlets` species have grown and migrated from the forest to the countryside and settled in the city. Since then, the Edible bird's nests industry has developed.

Swiftlet farming is rehearsing the possibility to develop into a multi-million ringgit industry because of its moderately beneficial hazard return profile, just as a constantly expanding

interest for EBN (Munirah *et al.*, 2018). Edible Bird Nest (EBN) is significant in Chinese food and prescription. It was first presented worldwide by the Chinese race. In Dynasty Ming (1368-1644), the timber-based cooking of the EBN was given celebrated in China. At first, the Edible Bird Nest was troublesomely found since EBN just made a home in the coral caves of the South China Sea.

Malaysia is also have been involved in the Edible Bird Nest industry. Malaysia has shown its active momentum until the industry proliferates from 2008 until now (Wan Khairy *et al.*, 2015). There are 41 Swiftlet Association registered in 2010 nationwide, which contributes output value worth RM 3.007 million per month with property value by its members and worth RM14.216 million at the end of 2010 (Department of Statistics Malaysia, 2012).

Terengganu also participated in the Edible Bird Nest industry when it realized the wide-open opportunities in this industry. Terengganu is the state with the longest coastline in Peninsular Malaysia, and this has given Terengganu an advantage and made it a "golden hole" to the *Aerodramus* (Swiftlet) farming industry. The Swiftlet house industry in Terengganu started in Kampung, China, where swiftlets migrating from Redang Island made shophouses in Chinese villages their stopover. The development of *Aerodramus* (Swiftlet) houses has expanded throughout Terengganu.

Many entrepreneurs are interested in participating in EBN production, but they do not have sufficient knowledge in this area (Wan & Mohd, 2020). To be successful in swiftlet ranching, in-depth knowledge about the pest, predator disturbance, and safety precautions are critical (Mohd, 2010). Being wild birds, EBN swiftlets are very sensitive to conditions in their habitat. States in their houses must be conducive and more minor pest disturbance for them to colonize and breed and not be stressful. Failure to control pest disturbance in the swiftlet house will usually end up in failure. The successful EBN swiftlet operators have sufficient knowledge about swiftlet ranching management (Azahar *et al.*, 2013).

However, not all entrepreneurs in this field succeed. This is due to the lack of knowledge in the industry, and many of their business was bankrupt. Therefore, this study is intended to provide a better understanding of this industry. Therefore, this paper aims to identify the pest in the Edible Bird Nest (EBN) swiftlet house and establish pest disturbance in the EBN swiftlet house.

## RESEARCH METHOD

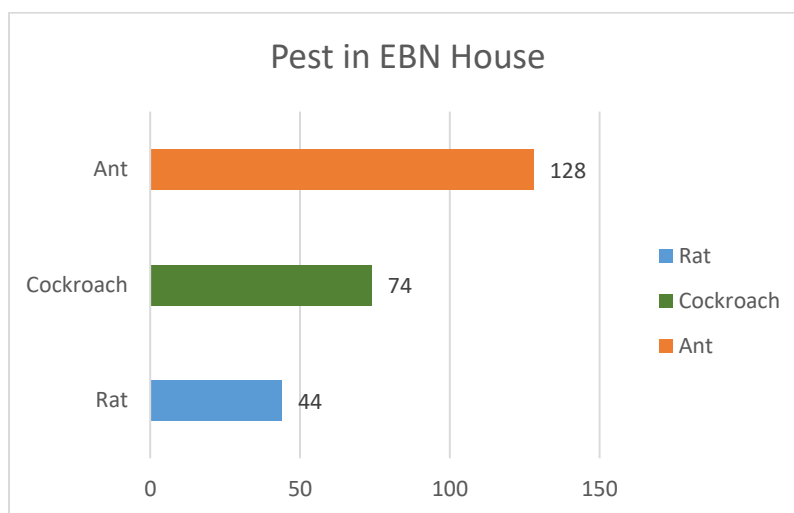
This research was conducted through a field study. Field studies were conducted in nine swiftlet houses from three different areas: town, coastal, and forested. The field study was conducted in 246 houses from three other areas (Kuala Terengganu, Marang, Setiu, and Dungun) in Terengganu with the highest swiftlet nesting houses. They included forest, town, and coastal areas. A forested area refers to a large area of land covered with trees or other woody vegetation. A Town area is an urban area consisting of cities and the region surrounding them. Most inhabitants of town areas have nonagricultural jobs. Coastal areas refer to the interface or transition areas between land and sea. Data on the pest in the swiftlet house were recorded and analyzed.

The suitable time to record the data and observe pests in swiftlet houses was between 10.30 a.m. until 3.30 p.m. (Retno & Soedarmanto, 2005). The swiftlet house is vacant, and the swiftlet is out searching for food and would only come back around 3.30 p.m. (Retno & Soedarmanto, 2005). Swiftlets would be scared away if the inside of the houses were frequently disturbed and visited (Azahar *et al.*, 2013). Therefore, the best time should be

chosen to refrain from entering the swiftlet house unnecessarily. The time that was selected for this study was around 11.00 a.m.

## RESULTS AND DISCUSSION

### Pests in Swiftlet Houses



**Figure 1.1: Pests in EBN Swiftlet House**

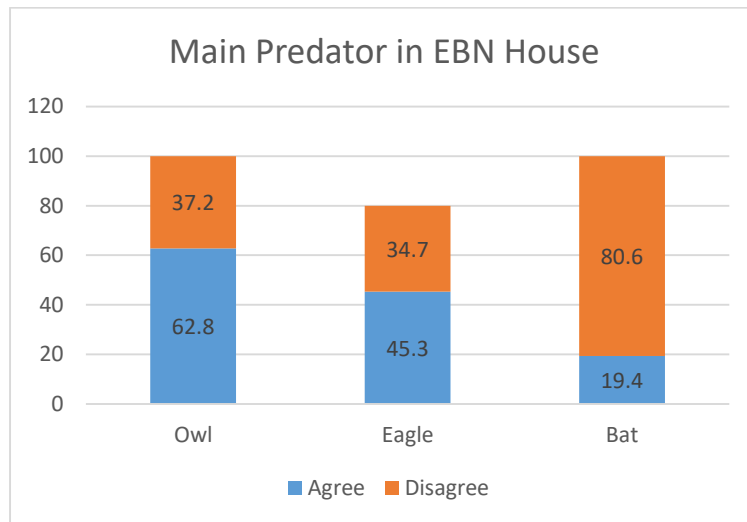
Based on Figure 1.1, ants were the most significant pest problem in EBN swiftlet houses, where about 128 observations of the houses were infested with the insects at one point or another. Cockroaches were the second most significant problem with 74 observations of the houses infested, and rats were 44 observations of the houses.

Pests is a problem that should be a significant concern in any EBN swiftlet house. Pests such as ants, cockroaches, and rats can cause swiftlets to move out of the present to the neighboring swiftlet houses (Hendri, 2007). Even though swiftlet feed on insects, some insect species will disturb the swiftlet population (Agromedia, 2007). Ants will disrupt the development of EBN swiftlet juveniles and kill them once the population is uncontrollable (Nasir, 2009). Very prolific cockroaches are very dangerous in EBN swiftlet houses as they will feed on swiftlet nests, thus lowering the nest quality. The nests' integrity will also be compromised, resulting in them being released from their nesting planks (Munirah et al., 2019). EBN swiftlets will normally not reproduce and will often move away to other houses if the number of pests exceeded the tolerable number (Nasir, 2009).

Rats were pests of both the swiftlets and their eggs. EBN producers must always be on their toes for the early tell-tale signs of the presence of rats in their swiftlet house. The rats in the swiftlet house will be so traumatic to the swiftlets that their normal behavior will be badly affected (Azahar *et al.*, 2013). As a result, swiftlet will be so scared that they will never again come back to their original house, and instead, they will be searching for a new house.



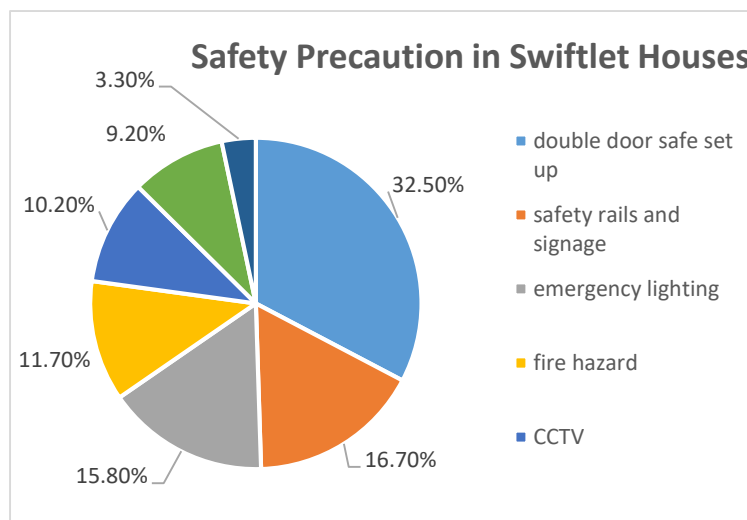
### Main Predator in Swiftlet Houses



**Figure 1.2: Main Predator in EBN Swiftlet House**

As far as predators were concerned, owls were the most significant nuisance, which is 62.8 percent agree to have this problem as 37.2 percent disagree with this. The second predator faced by the entrepreneur is an eagle, with 45.3 percent agree and 34.7 percent disagree with this. Finally, bats recorded the lowest predator as only 19.4 percent facing this problem, while 80.6 percent were predators of EBN swiftlet houses.

### Safety Precaution in Swiftlet Houses



**Figure 1.3. Safety Precaution in EBN Swiftlet House**

Based on Figure 1.3, only 32.5 percent of entrepreneurs of EBN swiftlet house used double door safety set up to secure their premise. In comparison, 16.7 percent owned safety rails and signage, and only 15.8 percent had placed emergency lighting. Other items owners had in this category included fire hazards (11.7 percent), CCTV (10.8 percent), guard dog (9.2 percent), and hiring of security guards (3.3 percent).

## **Descriptive Statistic**

Descriptive statistics typically present the basic features of the data in this study. It provides summaries about the samples and the measures. On the other hand, the data were illustrated as summary information, and the figures shown can be understood. Furthermore, the descriptive data can portray the split of respondents in this study (Fraenkel, 1993; Sekaran, 2006; Creswell, 2002).

## **The Confirmatory Factor Analysis (CFA)**

The Confirmatory Factor Analysis is required to validate the measurement model of all latent constructs involved in the study. The validation procedure in CFA will assess the one-dimensionality, validity, and reliability of all constructs (Awang 2014, 2015). Three types of fact will be evaluated, namely Construct Validity, Convergent Validity, and Discriminant Validity. The CFA procedure is executed once for all constructs. In this study, three latent variables are used to estimate the relationship between exogenous and endogenous constructs. Among these latent variables, two out of three latent variables are considered exogenous constructs: people and resources, opportunity, and deals. Meanwhile, Entrepreneur Edible Bird Nest is regarded as an endogenous construct.

## **CONCLUSIONS**

Based on the field study, ants were the most significant pest problem in EBN swiftlet houses, where about 128 observations of the houses were infested with the insects at one point or another. Cockroaches were the second most significant problem with 74 observations of the houses infested, and rats were 44 observations of the houses. The location of the swiftlet house does not influence ant disturbance in the swiftlet house. However, it is influenced by how owners manage their swiftlet houses to clean nesting planks and pest control (Nasir, 2009). According to Mohd (2010), to prevent ants, pesticide powder is used in the swiftlet house. Cockroach and rat disturbance is not influenced by the location of the swiftlet house but is influenced by management farming practices in swiftlet house in cleaning nesting planks and pest control (Munirah et al., 2018). Besides using pesticides in powder, owners also suggested applying glue to nesting planks to prevent cockroaches from disturbing as cockroaches stick to the adhesive on the planks (Hendri, 2007). Pest disturbance in the swiftlet house was the main cause of failure compared to the main predator in the swiftlet ranching business. For swiftlets to flourish, they need minor pest disturbances that make them comfortable and unthreatened. This is very important because comfortable swiftlets are the most productive ones. And for the safety precaution in swiftlet house, an entrepreneur used double door safety to secure their premise to protect from production for being stolen. In conclusion, to succeed in this industry, fewer pest and predator disturbances are critical factors, including safety precautions from being stolen from thieves that need to be given serious attention before building any EBN swiftlet house.

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## **Teori Keusahawanan Dari Perspektif Keagamaan: Kajian terhadap *al-Kutub al-Tis'ah***

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### **ABSTRAK**

Pada masa kini, kegiatan keusahawanan adalah salah satu penyumbang kepada pembangunan ekonomi negara. Kajian-kajian lepas telah membincangkan keusahawanan dari sudut perspektif ekonomi, psikologi, budaya dan sosial. Namun begitu, keusahawanan dalam perspektif keagamaan masih kurang diberikan penekanan. Sehubungan itu, kajian ini bertujuan untuk mengisi jurang dengan meneroka fenomena keusahawanan dari perspektif agama Islam melalui fenomena keusahawanan yang tercatat dalam teks-teks hadis. Kajian ini akan menggunakan pendekatan kualitatif dengan mengfokuskan kepada sumber data daripada sembilan buah kitab hadis (*al-Kutub al-Tis'ah*). Kajian ini diharapkan dapat merapatkan jurang kajian dalam keusahawanan dari perspektif agama Islam serta menjadi pemangkin pembangunan keusahawanan ke arah melengkap dan memperkayakan teori dan praktik yang sedia ada.

**Kata Kunci:** Keusahawanan; Keusahawanan Islam; Agama; Hadis.

### **PENGENALAN**

Keusahawanan menjadi komponen penting dalam pembangunan produktiviti dan pertumbuhan ekonomi. Konsep keusahawanan sangat luas pengertian dan perbincangannya jika dilihat dalam pelbagai perspektif tokoh dan disiplin ilmu. Perbincangan dalam ilmu keusahawanan semasa, mencatatkan bahawa ia bermula dengan penggunaan istilah *entrepreneur* yang dikaitkan dengan aktiviti ekonomi oleh Richard Cantillon (1680-1734M). Kemudiannya, konsep dan teori keusahawanan terus berkembang sehingga ke hari ini mengikut keperluan dan skop perbincangan dalam pelbagai aspek kehidupan manusia (Rosli et al., 2010, Norita et al., 2010). Fenomena keusahawanan dapat disokong oleh latar belakang teori seperti teori sosiologi, teori psikologi, teori budaya, teori ekonomi, dan mungkin teori yang lebih baru seperti pandangan pakar mengenai keusahawanan (Mohanty, 2005). Menurut Gümüşay (2015), aktiviti keusahawanan telah dikaji dari perspektif ekonomi, institusi, politik, psikologi dan sosial. Tetapi, fenomena keusahawanan dari perspektif keagamaan masih kurang diberikan penekanan. Walau bagaimanapun, tidak dinafikan bahawa terdapat peningkatan bilangan kajian yang berkaitan dengan agama dan keusahawanan, tetapi penyelidikan mengenai perkara tersebut adalah terhad dan lebih sukar untuk dijalankan, terutamanya hubungan empirikal antara Islam dan keusahawanan (Balog et al., 2014).

## SOROTAN LITERATUR

Dewasa ini, Ratten et al. (2017) memperakui bahawa agama adalah fenomena penting dalam pengurusan perniagaan kajian yang harus diperakui dan dibincangkan dengan lebih terperinci. Malah, agama mempengaruhi prestasi ekonomi dan perniagaan kerana peranannya yang sehati dalam masyarakat (Pistrui dan Fahed-Sreih, 2010). Hal ini bermaksud bahawa keusahawanan Islam dan tingkah laku keagamaan penting kerana berperanan mempengaruhi keputusan dan pilihan tingkah laku. Kesan agama terhadap perniagaan berasal daripada kepercayaan agama, yang dipengaruhi oleh nilai budaya yang berkaitan dengan keusahawanan (Dana, 2009). Hal ini membawa erti bahawa keinginan keusahawanan Islam dipengaruhi oleh sikap keagamaan individu dan masyarakat (Ratten et al., 2017). Maka, atas dasar ini, fenomena keusahawanan tidak hanya bergantung kepada bagaimana seseorang melihat fenomena tersebut, tetapi juga dipengaruhi oleh interaksi antara individu, masyarakat dan persekitaran (Hansen et al., 2007).

Menurut Gümüşay (2015), perspektif keagamaan dalam keusahawanan adalah berbeza, kerana biasanya merangkumi naratif dan mengandungi amalan yang khusus dan terperinci daripada sumber tulisan suci yang tertentu dan objektif metafizik (ketuhanan) yang berbeza. Dengan itu, pendekatan holistik diperlukan dalam penyelidikan keusahawanan dengan menggabungkan agama untuk melengkapkan serta memperkayakan teori dan amalan keusahawanan yang sedia ada. Menurut Gümüşay (2015) lagi, keusahawanan dari perspektif Islam mengandungi metodologinya yang tersendiri untuk mencapai pemahamannya. Ia perlu difahami dan dianalisis secara holistik yang mengandungi aktiviti keusahawanan, nilai-nilai agama, kewajipan agama Islam, pengaruh masyarakat, sumber kitab suci dan penggerak ekosistem, dan institusi yang memberikan tafsiran dalam konteks kerohanian agama.

*Theory of religious believe* telah digunakan untuk menjelaskan fenomena keusahawanan. Teori ini menyatakan bahawa keusahawanan adalah fungsi kepercayaan agama dan kesan agama akan membentuk budaya keusahawanan dalam diri seseorang individu (Weber, 2009). Seajar dengan penemuan Henley (2017) yang menyatakan bahawa keagamaan secara signifikan mempengaruhi keusahawanan. Walaupun para sarjana telah bersetuju bahawa agama mempengaruhi keusahawanan (Rietveld dan Burg, 2014), masih ada perdebatan tentang bagaimana dan dengan cara keagamaan nilai memberi kesan keusahawanan. Teori Weber adalah gabungan perspektif psikologi dan keagamaan yang berteraskan perspektif bukan Islam (Masyhuri, 2019). Dalam hal ini, perspektif bukan Islam membincangkan tentang nilai moral dan tidak menumpukan kepada kepercayaan satu Tuhan sebagai petunjuk kepada amalan mereka. Berbeza dengan perspektif Islam menunjukkan bahawa amalan yang diperolehi daripada tindakan individu hendaklah berlandaskan syariat Islam. Agama Islam menumpukan kepada kepercayaan kepada Allah SWT serta nilai yang berteraskan sumber al-Quran dan hadis. Nilai keusahawanan sangat rapat dan seiring dengan nilai Islam yang mendorong ke arah pembentukan karakter positif dan kesejahteraan seimbang dalam aspek kehidupan (Faisal et al., 2013; Abdullahi dan Suleiman, 2015; Mubarak, 2015).

Hal ini kerana Islam merupakan agama yang *syumul* yang mengandungi peraturan hidup yang sangat lengkap dan menyeluruh dalam pelbagai aspek kehidupan sama ada aspek ekonomi, sosial, politik dan sebagainya. Oleh yang demikian, dalam membentuk kerangka keusahawanan Islam, ianya saling memerlukan dan saling berinteraksi antara satu sama lain dan selari dengan syariat Islam. Dalam hal ini Ab Rahman (2015) menyatakan bahawa penggunaan perspektif sosial psikologi dan keagamaan dalam penerangan ilmu akan memberi kejelasan yang lebih holistik. Ini kerana dalam konteks penciptaan perusahaan dan inovasi melibatkan pelbagai tahap iaitu interaksi antara individu, organisasi, masyarakat dan

persekitaran. Di samping, menekankan kepentingan hubungan di antara manusia dengan manusia dan hubungan di antara manusia dengan Pencipta.

Umat Islam dikurniakan sumber rujukan yang sangat bernilai iaitu kitab suci al-Quran dan hadis sebagai panduan hidup bagi mencapai kesejahteraan kepada individu, masyarakat dan negara. Sabda Baginda SAW yang bermaksud: "*Aku telah tinggalkan kepada kamu dua perkara, kamu tidak akan sesat selama berpegang kepada kedua-duanya, (iaitu) kitab Allah dan sunnahku*". (Riwayat al-Hakim, No. Hadis: 318). Hadis ini menunjukkan bahawa al-Quran dan hadis merupakan sumber rujukan utama yang berharga buat seluruh umat Islam dalam setiap aspek kehidupan termasuklah urusan perniagaan dan jual beli. Akan tetapi, kedua-dua sumber ini masih belum digunakan sepenuhnya dalam kehidupan seharian umat Islam terutamanya dalam bidang keusahawanan yang merupakan kerangka ibadat yang berkait rapat dengan hubungan dengan Allah SWT dan juga sesama manusia. Bahkan, Rasulullah SAW dan para Sahabat merupakan ikon usahawan yang berjaya yang perlu dijadikan teladan kerana gerasinya adalah sebaik-baik generasi (Mubarak, 2016) sepertimana sabda Baginda S.A.W. yang bermaksud: "*Sebaik-baik manusia adalah manusia yang hidup pada zamanku (generasiku) kemudian generasi yang datang setelah mereka kemudian generasi yang datang setelah mereka*". (Riwayat al-Bukhari, No. Hadis: 3651).

Tambahan pula, menurut Ratten et al. (2017) kajian yang lebih mendalam dari perspektif keagamaan diperlukan kerana ianya masih di peringkat awal dibandingkan dengan pespektif lain untuk memastikan penemuan yang lebih mantap dan berpotensi berbanding dengan yang lain. Oleh itu, untuk mengetahuinya hendaklah berpandukan inti pati yang terdapat dalam al-Quran dan hadis. Dengan penemuan tersebut kajian ini akan mengumpul, menapis, menganalisis dan meletakkannya pada satu tempat agar dapat meneliti dan meneroka sesebuah fenomena keusahawanan yang berlaku melalui interaksi antara individu, masyarakat dan persekitaran.

Landasan teori adalah penting bagi penyelidik kerana ia membolehkan penyusunan analisis data untuk menjadikannya lebih struktur dan mudah difahami (Blaikie, 2010). Oleh itu, sesuai dengan objektif kajian ini untuk meneroka fenomena keusahawanan, maka teori interaksi simbolik adalah sesuai untuk kerangka kajian. Hal ini kerana ia menjawab persoalan bagaimana individu dan masyarakat saling berkaitan (Hewitt, 2007) yang dapat menjelaskan fenomena keusahawanan. Teori interaksi simbolik telah diilhamkan oleh Hewitt (2007) yang menunjukkan bahawa proses memahami makna daripada tingkah laku individu dalam sesuatu fenomena tidak hanya berdasarkan niat individu atau struktur sosial mereka sahaja tetapi kedua-duanya saling berkaitan. Begitu juga dalam melihat fenomena keusahawanan, ia tidak hanya bergantung pada bagaimana seseorang melihat fenomena tersebut, tetapi juga dipengaruhi oleh interaksi antara individu, masyarakat dan persekitaran (Hansen et al. 2007). Latar belakang teori ini juga sesuai dengan perspektif Islam yang mendorong orang beriman untuk mengekalkan dan menjaga hubungan antara manusia dan Allah SWT.

## METODOLOGI KAJIAN

### Reka Bentuk Kajian

Kajian ini menggunakan pendekatan kualitatif bersesuaian dengan tujuan kajian untuk meneroka dan memahami lebih mendalam tentang bidang yang dikaji dan dapat memberi kefahaman terperinci tentang fenomena yang dikaji (Creswell, 2014). Sehubungan dengan itu, penyelidik memerlukan satu prosedur untuk pengumpulan data. Pada peringkat permulaan, penyelidik perlu mengumpulkan data yang berkaitan dengan kajian dan memahami data keseluruhannya (Elo dan Kyngas, 2007). Menurut Jasmi (2012), pengumpulan data melalui analisis dokumen dapat memberikan maklumat yang relevan



kepada isu dan masalah yang dikaji. Oleh itu, kajian ini akan menggunakan data sekunder utama iaitu hadis bersama syarahnya. Manakala, data sekunder umum pula daripada pandangan sarjana Islam dan bukan Islam dalam artikel-artikel jurnal, prosiding, catatan sirah, buku-buku ilmiah serta keratan akhbar atau majalah.

### **Kaedah Pengumpulan Data**

Kajian ini memfokuskan kepada kitab-kitab hadis sahaja. Sepertimana yang diketahui bahawa fungsi hadis terhadap al-Quran adalah sebagai penjelas dan penguat bagi hukum-hukum yang terdapat dalam al-Quran. Oleh sebab itu, salah satu usaha para ulama terdahulu bagi menjaga hadis Nabi SAW adalah dengan menulis dan membukukan dengan teliti. Melalui teks-teks hadis terdapat pengkhabaran yang mengandungi perbuatan yang dipraktikkan oleh Baginda SAW dalam kehidupan hariannya. Urusan perniagaan adalah salah satu daripada aktiviti yang diceburi oleh Baginda SAW. Oleh itu, fenomena keusahawanan dapat diteliti daripada teks-teks hadis yang terdapat dalam kitab-kitab hadis yang masyhur. Justeru, penyelidik memilih untuk meneroka fenomena keusahawanan yang terdapat dalam kitab-kitab hadis yang masyhur seperti *al-Kutub al-Tis'ah*. *Al-Kutub al-Tis'ah* terdiri daripada kitab *Sahih al-Bukhari*, *Sahih Muslim*, *Sunan Abu Daud*, *Sunan At-Tirmidzi*, *Sunan An-Nasa'i*, *Sunan Ibnu Majah*, *Musnad Ahmad*, *Muwatta' Malik*, dan *Sunan Ad-Darimi* (Al-Qaththan, 1992).

Pada permulaan pencarian hadis, penyelidik menggunakan kaedah pencarian hadis melalui indeks hadis secara tradisional iaitu dengan merujuk kitab *al-Mu'jam al-Mufahras li al-Alfaz al-Hadith al-Nabawi* karya Wensink (1936). Penyelidik menggunakan karya Wensink (1936) kerana kitab mengandungi indeks hadis-hadis daripada kesembilan buah kitab hadis yang dikaji oleh penyelidik iaitu *al-Kutub al-Tis'ah*. Pada waktu yang sama, penyelidik juga akan menggunakan kaedah pencarian hadis secara moden iaitu menggunakan perisian *al-Maktabah al-Shamilah*. Oleh hal demikian, penyelidik menggabungkan dua kaedah ini untuk mengelakkan kebarangkalian tercicir hadis semasa proses pengumpulan hadis. Setelah mengenal pasti hadis, penyelidik akan merujuk kepada kitab syarah-syarah hadis untuk mengetahui dan memahami makna yang lebih jelas daripada teks hadis. Penyelidik memilih satu sahaja kitab syarah bagi setiap kitab hadis di atas kerana kitab syarah tersebut adalah yang paling masyhur dan penerangannya telah merangkumi kesemua kitab syarah yang lain. Selain itu, penyelidik juga mengambil pendapat para sarjana ilmuwan Islam dan bukan Islam yang terdapat dalam artikel- artikel jurnal, prosiding, buku-buku ilmiah, catatan sirah serta keratan akhbar yang berkaitan. Penyelidik mengambil kira pendapat sarjana ilmuwan Islam dan bukan Islam untuk memastikan hasil kajian ini selari dengan kajian kontemporari.

### **Kaedah Analisis Data**

Analisis naratif akan digunakan untuk menganalisis teks-teks hadis yang menerangkan fenomena keusahawanan dan kaitannya dengan teori keusahawanan yang sedia ada. Analisis naratif mempunyai ketebalan dan kedalaman yang unik kepada konteks dan memaparkan aspek peribadi dan penting. Kemudian, pendekatan naratif yang lebih khusus dan pendekatan bercerita boleh digunakan untuk menggambarkan satu siri peristiwa umum dengan cara yang lebih analitis (Van Burg et al., 2020). Manakala, unit analisis adalah parameter khusus dari apa yang menjadi subjek kajian (Hart, 2003). Unit analisis dalam kajian ini adalah percakapan, perbuatan, kelakuan serta sifat Nabi SAW dan para sahabat yang didedahkan melalui penceritaan dalam teks-teks hadis samada perkongsian, penceritaan semula, pengalaman atau mengisahkan sesuatu peristiwa (Hansen et al., 2007). Penyelidik memilih analisis naratif kerana ia memfokuskan kepada keadaan sekeliling ataupun yang ditujukan kepada individu, kumpulan, masyarakat dan budaya (Reissman, 2005).

Proses penganalisisan data kajian ini akan menggunakan pendekatan tematik yang merupakan salah satu cara menganalisis data untuk mengenal pasti pola atau untuk menemukan tema melalui data yang telah dikumpulkan (Braun dan Clarke, 2006). Cara ini merupakan kaedah yang sangat efektif untuk mengupas secara terperinci data-data kualitatif untuk menemukan kaitan pola-pola dalam sebuah fenomena dan menjelaskan sejauh mana sebuah fenomena terjadi melalui kaca mata penyelidik (Fereday dan Muir-Cochrane, 2006). Setelah semua data dianalisis, fenomena keusahawanan yang terdapat dalam *al-Kutub al-Tis'ah* dikeluarkan dan dikaitkan dengan fenomena keusahawanan yang sedia ada. Sama ada ianya mempunyai persamaan atau perbezaan dari sudut strategi, pengurusan, kreatif dan inovasi ataupun dari sudut yang lain. Akhirnya, penyelidik akan mengasingkan dan menjelaskan hadis-hadis yang terpilih ke dalam disiplin ilmu dalam bidang keusahawanan sama ada ianya relevan atau tidak.

## KESIMPULAN

Secara kesimpulannya, fenomena keusahawanan berdasarkan *al-Kutub al-Tis'ah* signifikan untuk dikaji kerana daripada kajian ini, beberapa pihak berkepentingan seperti para akademik, ahli agama, pihak kerajaan, swasta mahupun dalam kalangan usahawan sendiri perlu mengambil cakna tentang betapa pentingnya keusahawanan dari sudut perspektif keagamaan Islam. Oleh sebab itu, kajian ini akan melihat dari fenomena keusahawanan, iaitu dari strategi, pengurusan, kreatif dan inovasi ataupun dari sudut yang lain. Melalui fenomena ini, penyelidik akan dapat mengenal pasti fenomena yang paling menyumbang kepada pembangunan keusahawanan Islam di Malaysia. Seterusnya dapat memperkukuhkan lagi teori dan aktiviti keusahawanan yang sedia ada. Penyelidik berharap kepentingan keusahawanan Islam ini dapat disebar luas, dihayati, dan difahami dengan lebih mendalam. Tambahan pula, dapat menyemai motivasi yang lebih kukuh untuk masyarakat turut terlibat dalam keusahawanan berlandaskan syariat Islam. Di samping, dapat membentuk dan menerap nilai-nilai Islam dengan ilmu pengetahuan yang luas dalam setiap aktiviti keusahawanan demi mencapai keberkatan Allah SWT. Seterusnya, dapat membantu pembangunan keusahawanan Islam di Malaysia dan ekonomi negara supaya terus maju dan membangun dengan berlandaskan Syariat Islam kerana Malaysia terkenal sebagai '*Halal Hub Business*'.

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# Peranan Ar-Rahnu sebagai Sumber Dana Alternatif kepada Usahawan Mikro dalam Menjamin Kelangsungan Perniagaan

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## ABSTRAK

Ar-Rahnu memainkan peranan penting dalam meningkatkan aktiviti ekonomi dan membantu ekonomi daripada kemelesetan. Jika sesebuah perusahaan dapat kekal bertahan lebih lama, maka kadar pengangguran dan kemelesetan ekonomi dapat ditangani dengan baik. Oleh itu, kajian ini bertujuan untuk mengkaji penggunaan dan peranan ar-Rahnu sebagai alternatif kepada usahawan mikro dalam menjamin kelangsungan perniagaan ketika menghadapi sebarang krisis, khususnya krisis pandemik. Kajian ini memilih kaedah kualitatif dengan mengumpul data penting daripada usahawan mikro di beberapa kawasan terpilih. Data daripada temubual mendalam akan dinilai dan dianalisis secara tematik untuk melihat bagaimana ar-Rahnu dapat membantu para usahawan mikro menguruskan perniagaan ketika situasi pandemik ini. Penemuan kajian ini diharap dapat memberi manfaat bukan sahaja kepada individu sebagai usahawan, malah kepada masyarakat dan institusi dengan menjelaskan peranan ar-Rahnu dalam usaha menjamin kelangsungan perniagaan. Oleh itu, kajian ini diharap dapat memberi gambaran betapa penting institusi pajak gadai Islam dalam meningkatkan ekonomi perusahaan dan negara setelah dilihat memberi kesan yang besar dalam menghadapi krisis pandemik ini.

**Kata kunci:** Ar-Rahnu; Dana Alternatif; Usahawan Mikro; Pandemik; Malaysia.

## PENGENALAN

Perusahaan mikro mula menampakkan peranan dan sumbangan yang positif kepada pembangunan ekonomi negara. Perusahaan mikro memberi kesan positif terhadap ekonomi di beberapa buah negara membangun, walaupun terdapat halangan seperti sokongan yang terhad (De Soto, 1989, The Futurist, 2003). Peluang pekerjaan dapat ditawarkan dan kadar kemiskinan dapat dikurangkan dengan adanya perusahaan mikro (Rogerson, 2004, Servon, 1999). Di Malaysia, perusahaan mikro, kecil dan sederhana berperanan penting dalam membantu dalam pertumbuhan ekonomi, peluang pekerjaan dan pendapatan negara serta mereka menjadi sebahagian daripada proses transformasi ekonomi Malaysia (Tahir, 2018). Kini, dunia telah melihat peningkatan pertumbuhan Perusahaan Mikro, Kecil dan Sederhana sejak krisis kewangan pada tahun 2008 (The World Bank, 2020) ketika sedang giat aktif meningkatkan dan mengembangkan perniagaan mereka.

Walau bagaimanapun, pandemik COVID-19 memberikan cabaran besar kepada seluruh dunia dalam mencari penyelesaian segera untuk meratakan lengkungan. Dalam krisis Pasca COVID19, cabaran yang lebih besar adalah lengkungan yang curam menuju ke arah kemelesetan ekonomi dan krisis kewangan. *Lockdown* telah mewujudkan isu-isu seperti permintaan dan kejutan bekalan yang telah menjejaskan ekonomi global dengan ketara, yang dijangka membawa kepada kemurungan ekonomi (Yusuf et al., 2020). Kesan Pandemik

COVID-19 bukan sahaja kepada ekonomi individu tetapi ia juga merupakan kesan besar kepada kerajaan.

Krisis pandemik ini telah menjejaskan kegiatan aktiviti perniagaan perusahaan mikro. Pelbagai cabaran perlu dilalui oleh usahawan mikro seperti masalah aliran tunai akibat kerugian pendapatan harian, gangguan operasi, kedudukan pekerja, dan gangguan rantaian bekalan (Che Omar et al., 2020; Fabeil et al., 2020). Oleh itu, wabak pandemik ini memberi cabaran tersendiri bukan sahaja kepada individu, malah jenis aktiviti perniagaan, kawasan geografi, saiz, dan sumber yang dimiliki (Cassia dan Minola, 2012, Lai dan Scheele 2018). Hasil penemuan Cook (2015), menunjukkan bahawa 75% perniagaan tanpa pelan kesinambungan akan runtuh dalam tempoh tiga tahun selepas bencana atau krisis berlaku.

Oleh yang demikian, insentif dan bantuan kerajaan seperti Program Subsidi Upah, Geran Khas Prihatin dan pelbagai insentif mula diperkenalkan oleh Perdana Menteri Malaysia, YAB Tan Sri Dato' Haji Muhyiddin Bin Haji Mohd Yassin pada 18 Januari 2021 ketika Pengumuman Khas Pakej Bantuan Perlindungan Ekonomi & Rakyat Malaysia (PERMAI) dalam menghadapi pandemik ini (Pejabat Perdana Menteri Malaysia, 2021). Tambahan, kerajaan Malaysia telah pun menawarkan pelbagai bantuan kewangan dan kredit kepada usahawan sebagai salah satu usaha untuk meningkatkan dan mempromosikan penglibatan masyarakat dalam sektor keusahawanan. Antara agensi dan institusi kewangan yang menyediakan pembiayaan kredit mikro adalah Amanah Ikhtiar Malaysia (AIM), Tabung Ekonomi Kumpulan Usaha Niaga (TEKUN), Majlis Amanah Rakyat (MARA), Agrobank Malaysia Berhad dan Bank Perusahaan Sederhana Kecil (PKS). Oleh itu, pengusaha mempunyai pelbagai pilihan untuk mendapatkan sumber modal untuk menampung pembiayaan perniagaan mereka sama ada yang disediakan oleh kerajaan atau institusi kewangan (Salimah dan Nadratun, 2020).

Selain bergantung kepada pakej rangsangan ekonomi kerajaan Malaysia, pengusaha mikro Muslim perlu memilih kaedah alternatif untuk mendapatkan dana Kewangan Sosial Islam (*Islamic Social Finance ISF*). Nik Hadiyan et al. (2021) mengatakan bahawa Kewangan Sosial Islam telah memainkan peranan penting dalam menstabilkan pendapatan dalam kalangan pengusaha mikro semasa wabak COVID-19. Eko-sistem ISF memberi peluang untuk mengintegrasikan institusi kewangan Islam dan patuh syariah. Ciri dan prosedurnya lebih fleksibel dalam membantu usahawan mikro. Sektor ISF merangkumi institusi kewangan mikro Zakat, Wakaf, Baytulmal dan bukan keuntungan seperti Ar-rahnu. Semasa wabak COVID-19, instrumen ini telah digunakan oleh pengusaha mikro untuk membantu mereka bertahan (Nik Hadiyan et al., 2021). Kewangan sosial Islam perlu bertindak sebagai penstabil di antara ekonomi dan sosial demi keamanan masyarakat daripada kemiskinan dan pengangguran menyebabkan mereka hilang punca pendapatan dalam menghadapi krisis pandemic COVID-19 ini (Hidayat et al., 2020). Oleh itu, untuk merangsang kembali pertumbuhan ekonomi negara, kewangan sosial Islam memainkan peranan penting dalam meningkatkan aktiviti ekonomi seperti penggunaan, pelaburan serta perbelanjaan kerajaan (Ashraf dan Hassan, 2013, Zamir dan Abbas, 2006, Warde, 2010).

Dalam hal ini, terdapat keperluan untuk mengkaji perlaksanaan pembiayaan mikro yang sesuai disediakan oleh sektor ekonomi dan kewangan untuk kesejahteraan masyarakat umumnya dan perusahaan mikro secara khusus. Oleh itu, kajian bertujuan untuk mengkaji penggunaan ar-Rahnu sebagai salah satu mekanisme Kewangan Sosial Islam untuk membantu para usahawan mikro mendapatkan dana alternatif. Selain itu, kajian turut mengenal pasti peranan ar-Rahnu sebagai sumber dana alternatif kepada usahawan mikro dalam menjamin kelangsungan perniagaan. Ar-rahnu adalah institusi mikro-kredit Islam yang menyediakan pembiayaan jangka pendek kepada mereka yang memerlukan sama ada dari golongan rendah, medium atau tinggi.



Menurut Nik Hadiyan et al. (2016), usahawan mikro antara yang menggunakan ar-rahnu kerana perkhidmatan wang segera yang cepat dan mempunyai prosedur yang mudah (Bhatt dan Sinnakkannu, 1998, Muhamat et al., 2011; Hassan et al., 2015). Kebanyakannya memilih ar-Rahnu kerana sistem yang patuh syariah (Salimah, 2020). Keunikan dan kecekapan perkhidmatan ar-Rahnu antara faktor utama pelanggan memilih pembiayaan ar-Rahnu (Nik Hadiyan et al., 2020). Nik Hadiyan et al. (2020) turut mengkaji hubungan antara penerimaan ar-rahnu dan kesejahteraan kewangan pelanggan. Ketika krisis pandemik COVID-19, usahawan mikro telah terjejas teruk. Oleh itu, Nik Hadiyan et al. (2020) mengesyorkan pendekatan Ar-rahnu untuk membantu mereka bertahan dalam perniagaan mereka.

## SOROTAN LITERATUR

### Ar-Rahnu

Gadaian dalam bahasa Arab menggunakan istilah *rahn* dan dapat juga dinamakan dengan *al-habsu*. Secara etimologi, makna *rahn* adalah tetap dan lama, sedangkan *al-habsu* bermaksud penahanan terhadap sesuatu barang daripada hak milik sehingga dapat dijadikan sebagai pembayaran dari barangan tersebut (Anshori, 2016). Ar-Rahnu adalah skim gadaian Islam, yang bermuallamat dengan cara bergadai, iaitu berhutang dengan meletakkan suatu pertaruhan atau cagaran supaya pembayaran balik pinjaman tersebut terjamin. Walaupun peminjam tersebut tidak mampu menjelaskan pinjaman tersebut, pemiutang yang memegang barang gadaian tersebut boleh menjualnya dan mengambil harganya mengikut kadar yang dipinjam sahaja. Selebihnya dikembalikan kepada pemilik barang tersebut (Azizah et al., 2013). Ar-Rahnu merupakan alternatif kepada kemudahan pinjaman yang sedia ada, di samping memberi pilihan kepada peminjam untuk menuruti kehendak syariat Islam, iaitu untuk menghapuskan riba atau faedah dan *gharar* yang terdapat dalam pajak gadai secara konvensional.

Perkembangan ar-Rahnu di Malaysia telah mencetuskan fenomena yang positif sehingga membuka mata lebih banyak industri dalam kalangan institusi kewangan dan bukan kewangan untuk mewujudkan skim ini. Skim ar-Rahnu adalah skim pembiayaan jangka pendek, cepat, mudah dan bebas daripada unsur riba telah diperkenalkan kepada orang ramai dengan cara gadaian barang kemas kepada institusi ar-Rahnu sama ada bank-bank ataupun kedai gadaian sebagai cagaran kepada pinjaman. Ar-Rahnu menyediakan perkhidmatan pajak gadai yang halal dan sifar daripada unsur riba melalui pembiayaan kebajikan di bawah konsep *Qard al-Hasan*. Selain daripada itu, ar-Rahnu juga menyediakan perkhidmatan patuh syariah yang tidak mengenakan sebarang kadar faedah (Hassan et al., 2015).

Sejarah Islam membuktikan ekonomi pajak gadai telah lama wujud, berdasarkan dalil pensyariatannya daripada al-Qur'an, firman Allah SWT yang bermaksud:

﴿وَإِنْ كُنْتُمْ عَلَى سَفَرٍ وَلَمْ تَجِدُوا كَاتِبًا فَرِهْنَ مَقْبُوضَةً﴾

“Dan jika kamu berada dalam musafir (lalu kamu berhutang atau memberi hutang yang bertempoh), sedang kamu tidak mendapati jurutulis (pencatat hutang), maka hendaklah diadakan barang gadaian untuk dipegang (oleh orang yang memberi hutang)”. [Al-Baqarah, 2: 283]

Daripada terjemahan ayat al-Qur'an ini, dapat difahami bahawa Allah SWT memerintahkan supaya mereka berakad (individu-individu yang terlibat dengan hutang), sedangkan kedua-dua pihak ini tidak mendapati seorang pun jurutulis yang boleh mencatat hutang mereka, maka si penghutang dibenarkan untuk mendatangkan sebarang harta yang dimilikinya untuk

dijadikan cagaran, agar kedua-dua pihak mendapat kebaikan, di mana pemiutang tidak kehilangan haknya, begitu juga si penghutang ada jaminan bagi pembayaran hutangnya (Al-Jaziri, 1970).

Skim pajak Islam pertama mula diperkenalkan di Malaysia oleh Muassasah Gadaian Islam Terengganu (MGIT) atas inisiatif pihak Majlis Agama Islam dan Adat Melayu Terengganu (MAIDAM) pada 23 Januari 1992 dengan konsep *ar-Rahn* dan *Qard al-Hassan*. Kemudiannya diikuti oleh Perbadanan Kemajuan Iktisad Negeri Kelantan (PKINK) pada 12 Mac 1992 yang menubuhkan Kedai ar-Rahnu berkonsepkan upah simpan buat pertama kali. Kedai ar-Rahnu merupakan syarikat atau institusi gadaian terawal di Malaysia (Maamor *et al.*, 2005). Melihat kepada potensi skim ini sebagai alternatif kepada sistem pajak gadai sedia ada (konvensional) yang bebas daripada *riba* (faedah), *gharar* (keraguan) dan unsur-unsur manipulatif, maka Menteri Kewangan pada 21 Ogos 1993 telah mengumumkan bahawa skim ar-Rahnu akan dilaksanakan oleh Bank Kerjasama Rakyat Malaysia (Bank Rakyat) dengan kerjasama Yayasan Pembangunan Ekonomi Islam Malaysia (YaPEIM). Melalui skim ini, Bank Negara Malaysia bertindak sebagai penasihat dan menyediakan pakar di dalam bidang ini, YaPEIM bertindak sebagai pelabur dan Bank Rakyat pula menyediakan infrastruktur bagi menjalankan transaksi gadaian Islam (Azila *et al.*, 2014). Seterusnya, diikuti oleh bank-bank perdagangan yang lain misalnya EON Bank, AgroBank, RHB, Bank Islam, YaPEIM, koperasi-koperasi dan yang terkini adalah Pos Malaysia. Dengan pertumbuhan yang positif dalam instrumen kewangan Islam di Malaysia, Malaysia telah menjadi negara pertama yang melaksanakan transaksi pajak gadai Islam seiring dengan pajak gadai konvensional yang majoritinya dikendalikan oleh kaum Cina (Azila *et al.*, 2013).

Setelah dua dekad berlalu, penubuhan ar-Rahnu telah berjaya mengurangkan pengaruh terhadap perkhidmatan pajak gadai konvensional. Pelanggan lebih tertumpu kepada ar-Rahnu kerana konsepnya yang sifar *riba* dan caj perkhidmatannya yang murah (Mohammed *et al.*, 2005). Skim ini bukan hanya cepat tetapi juga memudahkan masyarakat yang berpendapatan rendah, bahkan kini telah diterima oleh pengusaha kecil dan sederhana (PKS) dalam membantu perniagaan mereka sebagai modal segera apabila menggadai emas ataupun barangan perhiasan (Mohd Rafi *et al.*, 2012). Penubuhan skim pajak gadai Islam dilihat mempunyai potensi dalam mengubah persepsi atau imej skim ini ke arah yang lebih positif dan adil seterusnya memberi impak yang positif kepada pembangunan sosio-ekonomi masyarakat.

### **Ar-Rahnu Sebagai Alternatif**

Institusi ar-Rahnu menjadi pilihan orang ramai terutamanya untuk mendapatkan perkhidmatan mudah tunai. Hal ini kerana kebanyakan bank sukar untuk memberikan pinjaman kepada usahawan mikro kerana masalah tiada jaminan dan tiada pendapatan yang tetap, menyebabkan pengusaha mikro cenderung memilih ar-Rahnu sebagai sumber modal perniagaan (Rugayah, 1986, Yusri, 1995, González, 2014). Menurut Ismail dan Ahmad (1997), Ar-Rahnu berkemungkinan menjadi salah satu pembiayaan yang berpotensi untuk pengusaha mikro. Hal ini bahawa ar-Rahnu diakui sebagai sumber modal yang membantu pengusaha mikro. Selain itu, ar-Rahnu menjadi sumber modal permulaan bagi sesebuah perniagaan serta sumber modal tambahan bagi mengembangkan perniagaan mereka. Di samping itu, ar-Rahnu juga sebagai alat pelaburan mendorong pengusaha untuk menyimpan dan berdagang pada masa yang sama (Hisham *et al.*, 2013). Hal ini kerana emas mempunyai nilai pasaran yang stabil (Meera, 2009). Emas membantu seseorang yang memerlukan wang untuk memulakan perniagaan atau menyuntikkan lebih banyak modal kepada perniagaan mereka. Ringkasnya, pengusaha mikro boleh mencagarkan emas dan mengambil wang tunai

dengan segera dan hal ini telah pun dijelaskan oleh Awang Kechil et al. (2005) dan Othman et al. (2013).

Skim ar-Rahnu diperkenalkan sebagai instrumen pinjaman mikro-kredit bagi membantu golongan berpendapatan rendah dan juga pengusah mikro yang memerlukan modal perniagaan. Ar-Rahnu berobjektifkan untuk membantu golongan yang tidak layak mendapatkan pembiayaan daripada institusi kewangan, serta bertujuan memberikan pembiayaan kepada pengusaha kecil meneruskan perniagaan mereka (Rasmin dan Markom, 2014). Hal ini turut dilaporkan dalam Laporan Bank Dunia (2015), pengusaha kecil atau mikro di beberapa negara-negara membangun mempunyai masalah kekurangan sokongan dalam bentuk kewangan untuk mencapai keuntungan optimal dalam perusahaan mereka. Di samping itu, perusahaan kecil atau mikro dikategorikan perniagaan yang berisiko tinggi dan memerlukan masa bertahun-tahun untuk menghasilkan pulangan yang lumayan. Oleh yang demikian, Nik Hadiyan et al., (2020) dan Osman et al., (2020) menyatakan bahawa ar-Rahnu merupakan alternatif terbaik untuk golongan yang berpendapatan rendah dan sederhana. Pembangunan dan kelestarian ar-Rahnu penting untuk usahawan mikro mendapatkan produk pembiayaan mikro Islam yang terbaik.

### **Ar-Rahnu dan Kestabilan Kewangan**

Matlamat institusi ar-Rahnu adalah untuk memastikan kesejahteraan kewangan masyarakat. Ar-Rahnu adalah instrumen kewangan yang menjamin keadilan bagi individu masyarakat dan ekonomi negara dengan pengagihan pendapatan yang lebih baik dan turut membasmi kemiskinan (Chapra, 2008). Meera (2010) menyatakan bahawa kesedaran diperlukan untuk melihat betapa pentingnya ar-Rahnu dalam mengurus kewangan seperti menabung, memulakan perniagaan baru, mengembangkan perniagaan atau pelaburan. Menurut kajian Abdul Razak (2011), pelanggan ar-Rahnu bersetuju bahawa ar-Rahnu memainkan peranan positif dalam pembiayaan untuk meningkatkan ekonomi negara. Pengusaha mikro wanita mendapat manfaat daripada ar-Rahnu dengan mengembangkan perniagaan mereka (Nik Hadiyan dan Salina, 2017). Pengusaha mikro memilih ar-Rahnu berbanding instrumen kewangan lain kerana penyediaan wang tunai segera, pengendalian prosedur yang ceppat dan mudah diakses.

Dalam hal ini kestabilan kewangan penting bagi pengusaha mikro demi menjamin kelangsungan perniagaan mereka. Allen dan Wood (2006) menyatakan bahawa dalam konteks perniagaan, kestabilan kewangan dilihat kemampuannya dalam mempermudah dan mengembangkan ekonomi, mengurus risiko dan bersedia menghadapi sebarang kejutan. Bank Negara Malaysia mendefinisikan kestabilan kewangan sebagai keadaan di mana apabila proses pengantaraan kewangan berfungsi dengan lancar dan wujudnya keyakinan terhadap operasi institusi kewangan utama dan pasaran dalam ekonomi (BNM, 2021). Dari perspektif pengusaha mikro pula, kelangsungan sesebuah perniagaan sangat penting untuk mengukur kestabilan kewangan (Gray et al., 2007). Keuntungan, jualan, aset, liabiliti dan pendapatan perlu dinilai dan dipertimbangkan oleh pengusaha mikro. Mereka perlu bertahan dan mengekalkan perniagaan mereka dalam situasi wabak pandemik ini. Hal ini menyebabkan pengusaha mikro memerlukan dana alternatif untuk menstabilkan status kewangan mereka.

## METODOLOGI KAJIAN

Dalam kajian ini, penyelidik memilih kaedah kualitatif untuk mendapatkan maklumat yang lebih mendalam terhadap penggunaan dan peranan ar-Rahnu dalam membantu pengusaha mikro. Kajian kualitatif merupakan kajian yang bersifat penerokaan (Crawford & Irving, 2009). Penyelidikan secara kualitatif adalah suatu proses memahami masalah sosial atau masalah manusia, berdasarkan kepada gambaran yang menyeluruh dan kompleks, melalui pandangan informan yang mendalam serta dilakukan secara semula jadi (Creswell, 1998).

Selain itu, penyelidikan kualitatif menggunakan pendekatan metodologi logik induktif. Pendekatan induktif beralih daripada spesifik kepada lebih umum, di mana kesimpulan umum dilakukan berdasarkan pemerhatian khusus (Sekaran and Bougie, 2009). Kategori wujud daripada informan bukannya daripada penyelidik. Kategori tersebut merupakan maklumat yang membawa kepada pembentukan pola atau teori-teori yang membantu dalam menjelaskan sesuatu fenomena. Bagi menentukan kesahihan dan ketepatan maklumat yang diperolehi, biasanya penyelidik akan menggunakan prosedur verifikasi maklumat dengan informan atau prosedur triangulasi yang menggabungkan data daripada pelbagai sumber maklumat yang berbeza (Creswell, 1994).

Oleh itu, kajian ini memilih teknik temu bual mendalam (kaedah kajian kes) secara bersemuka (face to face) atau atas talian (online). Pendekatan metodologi kajian kes akan digunakan untuk mengumpulkan data dan mengatur penyelidikan. Penyelidik memilih sampel yang berbeza sama ada manusia, tempat atau latar kajian untuk lebih memahami dengan lebih mendalam tentang kajian yang dikaji (Othman, 2014). Secara kualitatif, proses pengumpulan data dijalankan melalui persampelan bertujuan iaitu pengusaha mikro yang menggunakan instrumen Kewangan Sosial Islam ar-Rahnu. Populasi kajian ini tertumpu kepada para usahawan mikro di Kelantan. Pelbagai aspek difokuskan dalam memahami peranan ar-Rahnu sebagai sumber dana alternatif kepada usahawan mikro. Tiada isu bilangan yang tepat dalam menentukan jumlah informan untuk di temu bual. Erti kata lain, tiada peraturan yang tertentu dalam mempertimbangkan saiz sampel untuk ditemuramah (Patton, 2002). Apabila data dianalisa dan menjawab persoalan kajian, maka saiz sampel walaupun kecil sudah memadai dalam kajian ini.

Dalam hal ini penyelidik mengumpul sumber data primer, yang biasanya dikumpul melalui pemerhatian dan temu bual informan bagi menjawab persoalan kajian. Melalui metod ini, informan akan diwawancara secara mendalam dan separa berstruktur selama satu jam secara bersemuka atau atas talian. Protokol temu bual disediakan terlebih dahulu untuk menjawab persoalan kajian. Soalan temu bual dibina untuk meneroka industri ar-Rahnu dan keberkesanannya dalam mempengaruhi usahawan mikro untuk mengekalkan kelestarian perniagaan di beberapa kawasan terpilih. Semua sesi akan direkodkan secara digital oleh penyelidik menggunakan perakam. Data dari audio atau video akan dikodkan mengikut protokol penyelidikan.

Seterusnya, proses analisis data dijalankan menggunakan analisis tematik. Analisis tematik antara teknik menganalisa data bertujuan untuk mengidentifikasi pola atau tema melalui data yang diperolehi oleh penyelidik (Braun dan Clarke, 2006). Teknik ini merupakan metod yang efektif dalam kajian untuk meneroka secara terperinci data-data kualitatif yang dikumpul dan mengaitkan pola atau tema dalam sesebuah fenomena dan menjelaskan fenomena tersebut melalui kaca mata penyelidik (Fereday dan Muir-Cochrane, 2006). Langkah-langkah dalam melakukan analisis tematik adalah dengan memahami data, menyusun kod dan kemudiannya mencari tema (Braun dan Clarke, 2006). Semua tema yang diperolehi daripada temu bual akan digunakan untuk membuat kesimpulan yang tepat untuk perbincangan kajian ini. Hasil

tersebut kemudiannya akan menjelaskan keberkesanan industri ar-Rahnu dalam mempengaruhi pengusaha mikro untuk menguruskan kewangan dalam menjamin kelangsungan perniagaan mereka.

### **DAPATAN KAJIAN**

Kajian ini bermotifkan untuk mengkaji penggunaan ar-Rahnu dalam membantu usahawan mikro mendapatkan dana alternatif. Kajian Salimah (2021) menunjukkan bahawa beberapa isu dan cabaran yang dihadapi oleh usahawan mikro menyebabkan pembiayaan ar-Rahnu dicadangkan sebagai alternatif. Dalam hal ini, hasil kajian akan mendapati beberapa tema seperti kesedaran, pemahaman dan penerimaan untuk membuktikan penggunaan ar-Rahnu sebagai alternatif akan membantu usahawan mikro untuk meneruskan perniagaan.

Selain itu, kajian turut mengenal pasti peranan ar-Rahnu sebagai sumber dana alternatif kepada usahawan mikro dalam menjamin kelangsungan perniagaan. Menurut Gray *et al.* (2007), kelangsungan sesebuah perniagaan sangat penting untuk mengukur kestabilan kewangan. Oleh itu, hasil kajian juga akan membuktikan peranan penting ar-Rahnu kepada pengusaha mikro bagi memastikan kestabilan kewangan sekali gus menjamin kelangsungan perniagaan mereka.

### **KESIMPULAN**

Secara kesimpulannya, perkhidmatan ar-Rahnu memberi kesan positif kepada perusahaan di Malaysia. Hasil kajian ini akan membantu mengubah pemikiran perusahaan mikro sehingga mereka menjadi lebih positif terhadap ar-Rahnu di Malaysia. Kajian ini juga diharapkan dapat bermanfaat bagi industri ar-Rahnu membantu mereka yang memerlukan bantuan kewangan untuk menjaga kelestarian perusahaan mereka melalui pemahaman tentang ar-Rahnu. Oleh yang demikian, pendekatan alternatif yang dipilih oleh perusahaan mikro diharapkan dapat membantu menangani krisis pandemik dan mencari penyelesaian dengan norma baharu.

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# Factors Influencing Using of Business Advice from Public Practice Accountants among Small-Medium Enterprise: A Conceptual Paper

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## ABSTRACT

Public practice accountants (PPA) play a critical role as business advisors (BA) in supporting small and medium-sized enterprises (SMEs) to withstand a competitive edge. However, SMEs face economic, regulatory and business environment dynamics pressures that may affect their utilization of accounting knowledge and expertise. Subsequently, these are the main factors driving SMEs demand for advisory services. Hence, this study aims to determine the main factors affecting intention-behavior on using business advice from public practice accountants (PPA) in the Malaysian context. This study has concentrated on some theoretical contributions in the development process by expanding Decomposed Theory of Planned Behavior (DTPB) to a new construct that has never been tested before. In addition, this research will carry out the standing model of DTPB from the owner-manager (OM) outlook and attempts to understand how attitude (AT), subjective norm (SN), and perceived behavioral control (PBC) towards intention-behavior on using advisory services. Finally, the expected findings from this study are to assist as a guideline to OM by looking at the BA provided by PPA as an added value and the most beneficial resource. In addition, this study will provide an overview of accounting professionals to improve the quality of services and further enhance their support to SMEs to ensure business continuity.

**Keywords:** Business Advice; Decomposed Theory of Planned Behavior; Malaysia, Public Practice Accountants, SMEs.

## INTRODUCTION

Economic globalization in 2021 is unstable and has become a more challenging period for SMEs, and half of the economic activity is under pressure due to the Covid-19 outbreak. Small and medium-sized enterprises (SMEs) represent the critical marker of economic activity and the largest private-sector employer group (Phillips and Raby, 2018). Moreover, other studies discussed that most SMEs are unable to compete effectively due to their resource constraints such as human resource manpower and capital (De Bruyckere, Verplancke, Everaert, Sarens and Coppens, 2018). Therefore, to be able to be continuous and profitable in this situation, companies tend to utilize external outsource to a greater extent (Meliyio and Moronge, 2013) and, in particular, public practice accountants (PPA) as business advisors (BA). Companies looking for external outsource claims of business strategy to lower costs, increase efficiency, acquire expertise, strengthen business focus, reduce risk, maintain sustainable competitive advantages, and enhance rare sources (Meliyio and Moronge, 2013). This situation in recent years has brought achievement stories to the economy and entrepreneurs (Danjuma, Thomas and Bala, 2017).

Given this fact, BA was being utilized by large firms, but nowadays, it is becoming the first choice among SMEs (Ibrahimova-Guluzada, 2017). In this regard, accountants are recognized to be the most commonly used SMEs advisors. These business support services have become a crucial action for SMEs to remain sustainable and to upkeep efficiency. Thus, PPA should play a compelling role in helping the OM to cope with these problems. Accordingly, external outsourcing among SMEs has attracted a number of researchers (Danjuma, Thomas and Bala, 2017). However, most of these researches concentrated on developed countries (Hafeez and Andersen, 2014) and little is known about developing economics like Malaysia. Hence, the encouragement for investigating using BA from PPA among SMEs arises. This study will be conducted in the three East Coast states of Peninsular Malaysia: Kelantan, Terengganu, and Pahang.

This study has focused on some theoretical contributions in the development process by expanding DTPB (Decomposed Theory of Planned Behavior) related to the research question and will answer through the narrative review of the literature. Furthermore, this study applies existing model variables to a new construct that has never been tested before. There are attitudes (awareness and perceived benefits), subjective norms (peers and entrepreneurial associations), and perceived behavioral control (professional fees cost and growth orientation) towards intention-behavioral on using business advice service by PPA.

The rest of the study is structured as follows: Section two reviews literature review with discover two theories which discuss the theoretical framework of the research. Section three provides the proposed conceptual framework of the research and develops seven hypotheses to examine factors affecting using business advice by PPA. Section four clarifies all the constructs and section five discusses the conclusions with expectations of this study.

## LITERATURE REVIEW

### Theoretical Framework

Given that in 2020, the dynamic business and economic environment following the Covid-19 pandemic issue and the unprecedented implementation of the Movement Control Order will certainly have a major impact and challenge on SME performance. The results of a survey conducted by SME Corporation Malaysia shows that about 73% of SMEs are expected to suffer losses in 2020. As such, the challenge now lies in the speed and agility of SMEs in Malaysia to re-evaluate existing business models. The rest attempt to relate various strategies in new norms such as adopting digital technology in business operations, innovating, developing business continuity plans and working closely with financial institutions or accounting firms to manage their financial position and cash flows. SMEs face problems in handling due to their lack of expertise and resource constraints (Hafeez and Andersen, 2014). Therefore, to overcome such challenges, it is recommended that these firms outsource their external accountants by changing what they conventionally accomplished within the company (Kotabe and Mol, 2009). The following theories explain why it is significant for SMEs to use advisory services from PPA.

### Resource-based View (RBV)

The resource-based view (RBV) is defined as “the full ability of an asset, organizational processes, resources, firms related information, and knowledge composed by the company to plan and implement strategies” (Hafeez, 2013). Besides that, RBV also refers to the capability of management practices towards internal resources through strategic and tactical planning to sustain competitive advantages. According to Barney (1991), a sustainable competitive advantage is practical when organizations have a human resource group, which cannot be

defined by any competitors. More specifically, it clarifies that SMEs OM needs to utilize external accountants such as PPA in helping businesses strategic and financial management reparations of their management weaknesses. Therefore, to support this study, RBV is used as the underpinning theory because PPA is a valued resource to SMEs because the abilities of PPA are seen as unique firm resources and advantages to the companies. Therefore, RBV explains that decision making from OM is an important factor affecting companies to select their PPA as BA (Olumbe, 2015). This statement, supported by Carey (2016), describes external accountants as “business professionals”, which it clarifies add value to companies, and within help, SMEs maintain a competitive advantage.

### Theory of Planned Behavior (TPB)

The theory of planned behavior (TPB) introduced by Ajzen (1991) is a widely used theory in the study of behavior (Crespo & Bosque, 2008). A recent review study by Ajzen and Kruglanski (2019) showed that TPB provides a practical conceptual framework for addressing problems about social behavior. In addition, the key idea of TPB is that intention of behavior, i.e., a predictor of behavior, only if the behavior is under the control of desire (Ajzen, 1991). Therefore, TPB is the best method to explain and predict the intention-behavior of SMEs on using advisory service by PPA.

Many researchers have widely implemented TBP; some researchers have suggested that these behavioral intentions by three antecedents: the AT towards the behavior, SN (the social influence on the behavior), and PBC in directing the behavior. Thus, TPB is used as a theoretical framework in this study, and it is not surprising that many researchers in various fields use this theory as the basis of their research. TPB has been used to study halal labeled food purchase intentions (Efendi, 2020), social media intentions by SMEs (McLaughlin, Stephen and McGettigan, 2019), entrepreneurial intention formation (Mustapha, Ahmad, Kob and Zairon, 2017) and research toward intention to stay in a hotel that adopts the green concept on Langkawi Island (Siraj, 2017).

TPB generally covers three main dimensions, namely attitudes, subjective norms and perceived behavioral control. The three dimensions in this TPB are expected to describe intention, which will influence individual behavior. The correlations between AT, SN, PBC intentions and behaviors are shown in Figure 1.

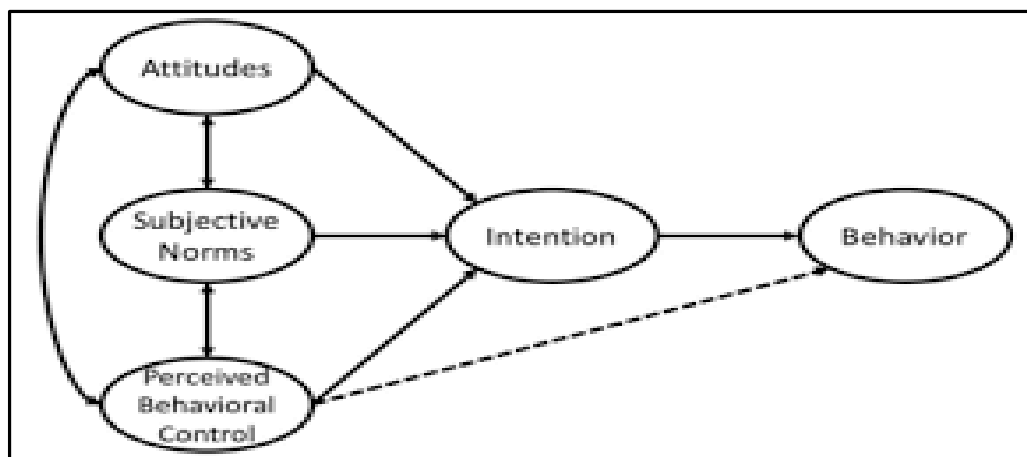


Figure 1: Theory of Planned Behavior  
(Source: Ajzen, I. 1991)



## A PROPOSED CONCEPTUAL FRAMEWORK

### Decomposed Theory of Planned Behavior (DTPB)

A conceptual framework is compulsory in conducting research. This study has constructed a conceptual framework based on DTPB as a starting point to build a theoretical foundation to determine the factors that influence towards intentions and behavior on using business advice by PPA among SMEs. The main goal of this theory is to predict and understand individual behavior. Since individual behavior is in the control of the will, the intention is seen as a major factor in determining the execution of behavior. Therefore, the DTPB model would provide a more reasonable explanation of the intentions and behavior of using BA from PPA among SMEs.

Taylor and Todd (1995) describe that the DTPB model provides an enhanced explanation and few advantages in comparison to TPB. Moreover, some additional constructs may be useful to improve the extended model (Conner and Armitage, 1998). Consistent with Taylor and Todd (1995), DTPB is more complex with merging more variables. Considering these advantages, DTPB is reflected as a greater method in determining the factors towards intentions-behavior among OM on using advisory services from PPA. Besides that, integrating specific beliefs helps to identify exact factors relevant to this study's objective.

As a gap in this research, a conceptual framework has been developed to suit this study. Therefore, by emphasizing the DTPB model, the three main constructs of the TPB will be decomposed into six additional constructs such as AT (awareness and perceived benefits), SN (peers and entrepreneurial associations) and PBC (professional fees cost and growth orientation). All these constructs will be analyzed to see the relationship toward the intention to use business advisory services from PPA among SMEs in Malaysia. Figure 2 presented the proposed conceptual model.

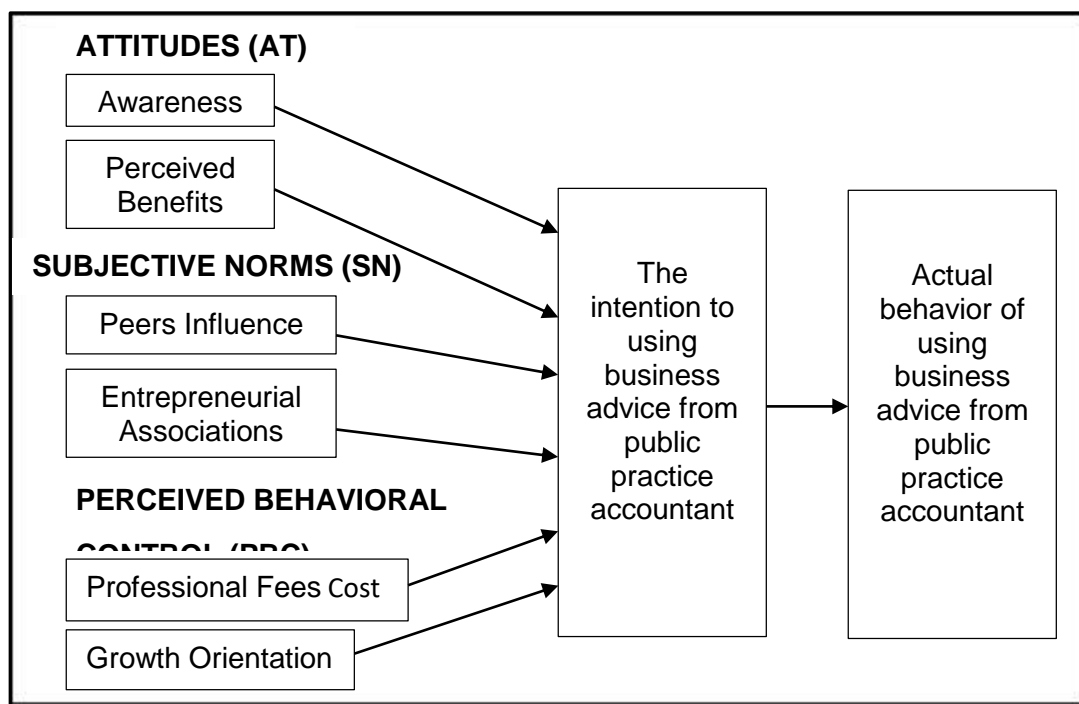


Figure 2: Conceptual Framework

## **The Constructs Of Using Business Advice From Public Practice Accountant**

### **Intention and Behavior toward Used Advisory Services from PPA**

In the theory of planned Behavior, Ajzen and Fishbein (1980) define intention for a person's readiness in a behavioral matter. Chan, Prendergast and Ng (2016) define intention as an individual's desire to act or do something in the future. Ajzen (1991) explains that behavior is an expectation and belief about the resulting personal effects. According to Tornikoski and Maalaoui (2019), behavior refers to how far is the individual's level of evaluation either favorable or unfavorable. This means that an individual will evaluate and feel the potential to perform the behavior. This clearly shows that intention is a major factor that contributes to the formation of behavior.

Previous researchers verify a positive relationship between intention and behavior (Schifter and Ajzen, 1985; Bagozzi and Warshaw, 1990). Moreover, several recent studies have been conducted to explain the relationship of intention and behavior, namely by Irwansyah, Hatta and Al Masriki (2018); Chang, Enkhjargal, Huang, Lin and Ho (2020); Nasir, Wahid and Noor (2021) proving that there is a positive relationship between intention-behavior.

In conclusion, intention is a good predictor for OM deciding to use BA from PPA. Therefore, this study can indicate the intention to use advisory service to be the closest factor between AT, SN and PBC to perform behavior of OM in using business advisory services from PPA.

### **Attitudes toward Using Advisory Services from PPA**

Attitudes (AT) factors are very important to influence a person's intention to do something. According to Ajzen (2005), AT is defined as an assessment of a person on the effects of implementing a Behavior. AT toward action or Behavior is the extent to which an individual has a good or bad evaluation of an interesting action or Behavior (Leong and Ng, 2014). In other words, individual attitudes can also influence choices in things and actions.

Findings from previous studies in various disciplines found a relationship between attitudes, intentions and behaviors. Among them, Abdullah and Hussin (2021) investigated the determining factors to succeed among Muslim SMEs in Malaysia. Next, Shafiai, Ali and Yaacob (2020) prove that attitudes and intentions significantly influence the use of Islamic micro credit. Based on past studies, it has been proven that AT plays an important role in intentions and behaviors. Therefore, it is desirable to look at the AT towards the intentions-behaviors of using business advisory services from PPA among SMEs. To study more clearly the relationship between constructs in TPB, Taylor and Todd (1995) suggested that AT constructs be described more clearly. Thus, this thesis describes AT into two dimensions, namely (1) Awareness and (2) Perceived benefits.

### **Subjective Norms toward Using Advisory Services from PPA**

The subjective norms (SN) factor refers to the perception of an individual's tendency towards others that are considered important regarding the behavior (Ajzen, 2005). According to Leong and Ng (2014), SN is related to an individual's motivation to do those behaviors based on others' views. Therefore, the behavior is highly dependent on other people's perceptions of their behavior. A current study by Wulandari (2020) found that SN has an influence on the intentions and behaviors of purchasing halal food products. In another study, Hong (2019) proved a significant positive effect between SN and the use of mobile value-added services. Similarly, a study on hotels that adopt the concept of green practices in Langkawi Island showed a positive relationship between SN, behaviors and customer intentions (Siraj, 2017).

As a result, based on past literature review and the above discussion, it clearly shows that SN is an important predictor of behavioral conduct and further justifies examining its influence on

intentions and behaviors using business advisory services from PPA. Past studies have shown that scholars have analyzed the role of SN into several dimensions, such as family, neighbors, professional bodies, friends and spouses (Photcharoen, Chung and Sann, 2020). This study elaborates SN into two dimensions, namely peer influence and entrepreneurial associations, which are two parties that are often the reference of SMEs. This dimension is proposed in line with the recommendation by Ajzen (1991), who argues that reference groups have an influence on a person's intentions.

### **Perceived Behavioral Controls toward Using Advisory Services from PPA**

Perceived Behavioral Control (PBC) reflects the ability observed by the individual on a Behavior (Ajzen, 2005). According to Ajzen (1991), PBC is closely related to an individual's perception of whether it is easy or difficult to perform a behavior. On the other hand, a person has full control to do or not to do against a certain behavior. Among the previous studies that prove that there is a relationship between PBC, intention, and behavior are the latest study by Ridho and Martha (2020) about the role of Muhammadiyah *fatwa* on smoking behavior. Similarly, the findings of a study from Aziz, Saidin, Jais, Esa and Gafar (2019) prove that PBC influences entrepreneurial intentions among female students at the Malacca Islamic University College. Lastly, Chan, Prendergast and Ng (2016) show new findings where PBC is more influential in predicting healthy eating practices among teenagers in China.

Therefore, if viewed from the perspective of SMEs, PBC is expected to influence OM's behavior towards the use of business advisory services. Considering the importance of PBC in influencing intention, it justifies this thesis to examine its influence on intention and behavior using business advisory services from APA. Hence, this study describes PBC in response to two constructs: professional fees cost and growth orientation. Finally, the recommendations of the TPB, PBC by SMEs, are also expected to directly influence the Behavior of using advisory service from PPA and probable to have strong intentions to choose as business advisors.

## **CONCLUSION**

A conceptual framework model (DTPB) has been proposed to promoting the understanding of the relationship between AT (awareness and perception of benefits), SN (influence of entrepreneurial partners and association), and PBC (professional fees cost and growth orientation) toward intentions-behavior on using business advice from PPA among Malaysian SMEs. Therefore, we believe this model can assist OM to understand the main factors that influence their decision to seek and use business advice from PPA based on TPB and RBV perspectives.

It is hoped that this study will make a theoretical contribution by emerging previous models and research in developing countries like Malaysia. Another significant probability implication is the requirement for skillful knowledge among OM, especially on financial and management for their businesses' survival and future growth. The determinants toward making decisions that are more consistent and implementing an effective planning process help to increase SMEs performance. Besides that, it helps to encourage SMEs to build a strong relationship with their PPA and motivate them to source the right combination of advice services to secure long-term economic sustainability. Finally, the research results will be taken as input for future research to assist as a guide to develop hypotheses to be tested on and discover new visions on business support among SMEs in Malaysia.

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# Developing A Conceptual Framework of Research and Commercialization Activities Among Malaysian Public University

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## ABSTRACT

The knowledge-based economy shows that research, development and innovation are essential to achieving sustainable economic growth. The Malaysian government has worked hard to create an environment that encourages the commercialization of research in the country. Despite the efforts, the rate of commercialization of research results in Malaysia is still low and unsatisfactory. Therefore, the purpose of this study is to explore the resources factors influencing the research commercialization activities among lecturers in Malaysian public university. Literature classifies resources perspective as human, social, technical and financial which might exist independently. In this study, the purpose of this work is to concentrate on its conceptual nature, it just examines the synthesis of literature findings. In this discussion, limitations will not be mentioned. Thus, this study proposed a conceptual framework to further understand the role of each resource as factors influence to commercialized their research findings. Finally, this study enriches the lack of research commercialization existing literature in Malaysian public universities context.

**Keywords:** Factors; Commercialization Activities; Research; Public University; Resources.

## INTRODUCTION

The Malaysian government has been working aim to improve an environment that encourages the commercialization of research in the country. Malaysia aims to create an economy that is largely based on innovative ideas. It can be seen in the 10th Malaysia Plan, which includes a strong emphasis on innovation, particularly in the promotion of research, development and commercialization (MASTIC Official Portal, 2019). Commercialization is important due to the active participation of universities in knowledge transfer, economic growth, job creation and entrepreneurship (Jamil et al., 2015). Furthermore, researchers at the university given important responsibilities in fostering innovative talent, promoting technology innovation and commercialization of research findings (Russell et al., 2015; Theodoraki et al., 2018).

The commercialization of research results is critical to a country's socioeconomic development based on science, technology, and innovation (Huu Xuyen et al., 2020). Nowadays, research commercialization issues are very significant, since the most university looking forward to get international certification and world ranking (Wahab et al., 2020). The commercialization of research is critical for economic growth, employment creation, and fundamental change in society (Odei, 2017). In order to optimize the potential of research to be successfully

commercialized, the role of a research administrator becomes very important (Lasambouw et al., 2020).

Based on the data survey by the Organization for Economic Cooperation and Development (OECD) for 2016, the ratio of Gross Research and Development expenditure (GERD) to Gross Domestic Product (GDP) is an important indicator to measure the intensity of R&D investment in a country. However, the GERD ratio decreased to 0.36 percent in 2018 which is 1.4% (2017) and 1.04% (2018). At that time, the government realised it has not reached the target which is 2.0% by 2020 (OECD, 2019; MASTIC Official Portal, 2021). In the 11th Malaysia Plan (2016-2020) also shows the level of commercialization of research results by Institutions of Higher Learning (IPT) and Government Research Institutes (GRI) is still low (Unit Perancang Ekonomi, 2015). Therefore, the low commercialization of research results is a major issue and it is a necessity to ensure that the rate of commercialization can be increased after the government spending millions of ringgit in the form of grants and so on to university (Sagir et al., 2019). The aim of this paper is not to produce a robust finding, but significantly make a review of the previous studies for suggesting the factors that may influence the enhancement of research commercialization activities in Malaysian public universities.

### **STATEMENT OF PROBLEM**

The importance of commercialization of research results is recognized to have a positive impact on the economic growth of a country. However, the rate of commercialization of research results in Malaysia is still low (MOSTI, 2017) and unsatisfactory (Ab. Aziz et al., 2012; Ismail et al., 2017; Ismail & Sidek, 2019). A total of 2,059 research projects involving public universities have applied for commercialization and of the total, 442 (21%) research projects have the potential to be commercialized, but only 125 (6%) projects were successfully commercialized (Akademi Sains Malaysia, 2015). Based on the report of Akademi Sains Malaysia (2018), revenue generation from the commercialization of R&D in Malaysia is among the lowest compared to other ASEAN countries at USD1.2 billion. It is lower than Singapore by USD18.6 billion, Thailand by USD4.1 billion and Indonesia by USD1.6 billion. This indicates that a large gap exists between R&D activities and commercialization. Therefore, there is a need to bridge the research gap in the study of research commercialization.

From an empirical perspective, it is evident that the lack of understanding of the factors influencing the commercialization of research results has had a significant impact on the rate of commercialization (Biranvand et al., 2019). Most previous studies have been more of a qualitative study to understand the challenges and obstacles faced by researchers in commercializing their research results (Ismail et al., 2017; Khademi et al., 2015). However, there are relatively few quantitative studies that focus on factors influencing the commercialization of research (Khademi et al., 2015) and provide gaps for research in this field. Therefore, to ensure that research results can be commercialized so that wastage of government funds can be reduced (Biranvand et al., 2019), a study identifying the factors influencing the commercialization of research needs to be conducted.

The objective of this research is to discuss the importance of human resources, social resources, technical resources and financial resources as factors towards the commercialization of research. The study of Mustar et al. (2006) and Zhou (2015) used organizational management and support teams as human resources, but this study used individuals as human resources like studies described by previous scholars such as Ismail and Sidek, (2019); Lotfollah et al., (2014); Mehrabi et al. (2013). Additionally, previous research has shown that successful academic involvement in business activities can make a

positive contribution to the development of local communities and economies. However, evidence on the factors of academic involvement in commercialization is still not widely conducted (Meusburger & Antonites, 2016). Therefore, this study reviews the role of resources and commercialization by linking existing ideas especially in the form of literature review to enhance the activities of commercialization of research results based on four perspectives of resources namely human, social, technical and financial.

## LITERATURE REVIEW

### Research Commercialization Activities

Commercialization of university research products is attracting a lot of attention these days because of its potential to aid in the expansion of the country's economy. This has led to significant governmental measures in the United States, such as the Bayh-Dole Act of 1980, which encourages the commercialization of inventions developed through government-funded research, as well as similar initiatives in European countries. The US Bayh-Dole Act of 1980 is the most well-known government policy encouraging commercialization. The implementation of the Bayh-Dole Act in 1980 is widely credited with the increase in patenting and licensing activities observed in US colleges in the 1980s and 1990s (Abreu & Grinevich, 2013).

In commercializing research activities, academic scientists can take several forms of mechanisms such as spin-off creation, patenting and licensing, research contracts and consulting (Wang et al., 2021). Commercialization is also considered a prime example of producing academic impact because research output can be measured directly through its acceptance in the market (Urban & Chantson, 2019). In addition, commercialization is something that not only benefits the research and innovation owned, but has a greater positive impact on economic growth, benefits to society, reputation, industry partnership and entrepreneurship (Azlin et al., 2019).

According to Åstebro (2004), commercialization is a new process or service that leads to economic growth of a country, increased employment and profitability to the organization. Conceptually similar work has also been carried out by Rahal and Rabelo (2006) describe the commercialization of university research as the process of converting research findings from university to industry into useful products or practical applications. For an academic, commercializing research aims to gain recognition and advancement in his or her career. In addition, commercial activities can also generate research funds as well as their internal motivational factors (Ismail et al., 2015). The ability of academics to transfer knowledge effectively to industry is key to universities achieving entrepreneurial missions (Miller et al., 2018). Moreover, the importance of knowledge transfer from universities as a source of new ideas and inventions has positioned universities as key pioneers in regional innovation systems (Schmitz et al., 2017).

A study by Bansi (2018), found that the main challenges in commercialization are seen as: lack of entrepreneurial skills, lack of infrastructure, inadequate incentives, limited access to funds, institutional bureaucratic regulation, commercialization not considered a priority by top management, system inefficient in relation to intellectual property, research lacks market focus, research is not done with commercialization and lack of local industry stimulation. Based on the existing literature review it has been proven that the formulation of national and institutional IP policies and implementation frameworks are considered as significant barriers for HEIs towards successful industry-institutional relationships and technology transfer or technology commercialization. Some of the barriers that exist in universities and research

centres related to innovation and commercialization include the lack of strong university-industry linkage; supporting ecosystems to provide incentives to researchers and industry; adequate research funding; facilities for innovation; and experienced IP professionals (Sattiraju et al., 2021).

A study conducted by Ravi and Janodia (2021) about factors affecting technology transfer and commercialization of University Research in India was found that research conducted at universities is far from the demands of the industry. While relevant supporting systems for enhancing university-industry collaboration already exist, such as setting up technology transfer offices (TTOs) in the universities, they hardly channel resources for socially useful innovations. For the interest of society, it is critical for academia to conduct commercially viable research. This limitation are acknowledged by the authors Ramli et al., (2021) conducted a study to determine the types of constraints that make it difficult for academicians to commercialise their research findings. The findings revealed that the most significant impediments were commitment and time limits, followed by orientation, experience and abilities, financial support, and incentives. Thus, university researchers can prepare themselves and prevent challenges when moving their ideas to the level of commercialization by being aware of these barriers.

### **Human Resources Factor**

Human resources have been defined as the knowledge and abilities of individuals that can cause changes in economic action and growth (Coleman, 1988). This definition states that human resources refer to the knowledge, skills and ability of an individual to do a job. As Coleman's definition shows, human resources are explicitly associated with change and growth. Moreover, according to Barney (1991), human capital encompasses the training, experience, judgment, intelligence, relationships and views of individual management and employees in a firm. Typically, human resources are measured as the founder's background, professional management experience and reputation (Lichtenstein & Brush, 2001). Coff (2002) describes human resources as referring to the knowledge, skills, and abilities found in human beings. Moreover, Cooper and Bruno's (1977) study focusing on human resources states that the initial efficiency of a new venture essentially coincides with the competencies of its founders i.e., knowledge and skills. Any competitive advantage achieved by a new company is likely based on what the founder can do better than others.

Based on the study of Ismail and Sidek (2019) found that the ability of researchers in entrepreneurship is important in achieving commercialization activities. The findings of the study of Meusbarger and Antonites (2016) support the concept that individual factors are more significant than institutional factors in determining entrepreneurial actions such as commercialization. Conceptually similar work has also been carried out by Khademi et al., (2015) in which examining behavioral characteristics of university researchers can be crucial to enhance the university commercialization rate. Furthermore, knowledge with commercialization concepts and methods is an evident requirement for research commercialization (Yaacob et al., 2017). From the review of the different methods, these are the main points to conclude that the ability of academics to transfer knowledge effectively to industry is key for universities to achieve their entrepreneurial mission (Miller et al., 2018).

Similar ideas have been proposed before in Syahira et al. (2016), found that among the factors that influence commercialization is coming from within the researcher himself such as entrepreneurial skills. Entrepreneurial characteristics related to an individual's knowledge, skills and abilities as an intangible and valuable resource can contribute to an organization's

competitive advantage (Tehseen & Ramayah, 2015). Therefore, as discussed in the literature, this research will investigate the role of human resources towards research and commercialization activities.

### **Social Resources Factors**

Many scholars have conducted a study related to the commercialization of research results. It has been shown in Ismail, Mohd Nor, et al., (2017); Kadir, (2017) and Razak & Murray, (2017) that university-industry collaboration can motivate them to commercialize their research results. This fact is supported by Ismail et al., (2017) that study on the challenges to commercialize research results found the difficulty of establishing relationships with industry because they are more focused on their teaching and research. Atkinson, (2018) is also of the view that building good relationships with industry is an important requirement for researchers. Collaborative research between university and industry researchers is essentially about marketable projects.

It is clear from the extensive evidence in literature that collaboration between universities and industry in Malaysia is still limited. This needs an adjustment in present activity in terms of encouraging effective collaboration. However, there are still projects that have not been completed, and evaluating the recent successful university-industry collaboration projects is tough (Ramli & Senin, 2021). Based on the findings of the Awasthy et al., (2020) study, universities need to play a more proactive role in the commercialization of research results. They need to demonstrate the applicability of research to the industry in a relevant context and promote the results of their research. Before this, they need to gain a better understanding of the needs of the business and the surrounding consumers. This will help universities align their research objectives to make a greater impact.

Ismail et al., (2020) discusses effective collaboration strategies between universities and industry for the successful commercialization of research results. The results indicate that effective strategies for collaboration between universities and industry are related to the commercial value of research products, aspects of intellectual property rights and commitments from universities and industry. However, barriers that hinder cooperation between the two parties must be removed to ensure effective cooperation between universities and industry in promoting commercialization activities. Conceptually similar work has also been carried out by Bjursell and Engström (2017) in which examined the barriers of university-industry collaboration by conducting in-depth interviews with university research heads. The study identified that “performance-based funding for research (publication pressure)”, “lack of researchers’ orientation and competence towards IP”, “lack of organizational processes” were barriers that needed policymakers’ attention. Removing these barriers is a high priority but often ineffective in most countries.

However, based on the analysis of the paper reviewed by Hamid et al., (2019), least scholars discussed the factors of collaboration. Therefore, his study suggested that future research should be focused on the influence of collaboration on commercialization. This suggestion is backed up by evidence Suhaimi et al., (2020) through which the author concludes the findings revealed that two criteria, academician behavior and university-industry collaboration, are significant and positively associated to commercialization.



### **Technical Resources Factors**

In Malaysia, universities with government support have established Technology transfer offices (TTOs) to increase the commercialization of academic research and bring new technologies to market with an emphasis on strong industry-university relationships (Ismail et al., 2012; Othman et al., 2014). The role of TTOs in university commercialization activities has been emphasized by many scholars. Researchers have emphasized that for the successful commercialization of academic research, TTOs should be properly handled with relevant expertise (Rashid, 2015). Previous scholars have emphasized the importance of support services to promote quality research. Universities with talented researchers, advanced research equipment, and good support staff tend to further commercialize their findings (Sharif et al., 2018). Similar work has also been pursued by Abubakar (2018) in which emphasized that technology transfer has a role in the commercialization activities of academic research. Technology transfer should be handled with proper and relevant expertise. Many new technologies are generated from university research. However, not all of these technology products are available in the market. Therefore, technology resources are needed to accelerate the commercialization of technology both through internal and external technology bases (Sutopo et al., 2019).

A number of studies and reviews have been undertaken to explore the transfer of technology from universities to the commercial sector needs to be understood in its broader context. The main purpose of the technology transfer program is to help its researchers disseminate research findings for the good of society. The success of this endeavor is only partially reflected in the revenue generated for the university or the number of companies just starting a business. The level of success depends not only on the nature of the interface between the university and the business community but also on the acceptance of the surrounding community as well as the culture, organization, and incentives within the university itself. (Carlsson & Fridh, 2002). Similar work has also been pursued by others Meusburger and Antonites (2016) in which highlights the importance of having clear strategies and policies, as well as the appropriate combination of expertise and experience in TTO to provide adequate support to commercialization activities.

In addition, intellectual property protection has a statistically significant relationship with company formation (spin-off). This means that protected intellectual property acts as a physical resource for academic commercialization activities (Meusburger & Antonites, 2016). Chang et al. (2006) also found a positive relationship between university intellectual property management capabilities and licensing creation. Most previous scholars have emphasized that technology transfer has a role in the commercialization activities of academic research. Technology transfer should be handled with proper and relevant expertise (Abubakar, 2018).

### **Financial Resources Factors**

In projects involving complex technologies, a higher level of financial resources is required to develop and integrate those technologies into products and processes (Cheah et al., 2020). In a study conducted in Iran, Beyadar et al., (2021) discovered that universities depends on a limited government funding, which make it difficult for academic researchers to engage in commercialization activities. The role of government in the early stages of product or prototype construction is very critical especially by providing adequate grants and funds. According to Khademi et al., (2015), financial support to university researchers is essential to provide them



with funds not only to conduct their research successfully but also to produce output and commercialize their research findings. However, many of the University's Research results could not be utilized further due to lack of funding. The research funding provided is not enough to support the development of further research ideas. Another study conducted by Mustar et al., (2006) over a 10-year period also had similar definition of financial resources refer to all types of funds required to commercialize research. As claimed by Lockett and Wright, (2005), availability of financial support is a critical element that organizations should consider at all times when conducting research commercialization.

This suggestion is backed up by evidence Nguyen (2020) through which the author concludes that another line of research determines whether more financial resources can boost R&D activities in Vietnam higher education institutions. In this context, policymakers and university management are debating whether a lack of financial resources is a major impediment to university R&D and whether factors are the primary determinants of university R&D activity. Commercialization of products require substantial capital investment in product development. Therefore, the government should take proactive action by providing adequate funding for selected technologies to encourage more commercialization of research products in universities. In addition, the government also needs to choose products that have a high commercial value to be commercialized. Nevertheless, for researchers who have joint ventures may not experience financial constraints as they are funded by interested companies (Ismail, Mohd Nor, et al., 2017).

### Proposed Conceptual Framework

The proposed conceptual framework (see Figure 1) for this study is developed based on the literature reviews and the classified of each resource's factors were taken from the past studies. Previous literature highlights that human resources, social resources, technical resources and financial resources helps researchers to conduct research commercialization activities.

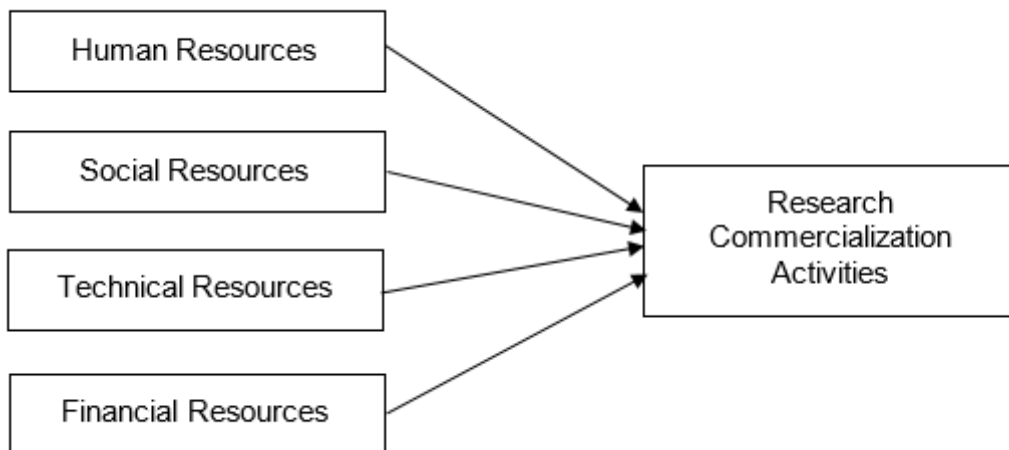
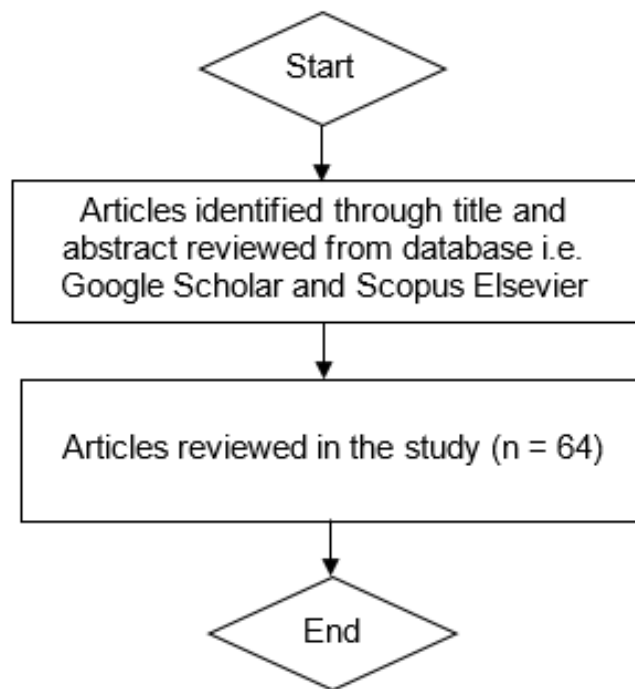


Figure 1: The Proposed Conceptual Framework

## METHODOLOGY

Since this is a conceptual article, it looked at both theoretical and empirical literature, focusing on human resources, social resources, technical resources, financial resources, and research commercialization activities. The proposed conceptual framework, as illustrated in Figure 1, has been developed in line with the objective of this study to better understand the role of each resource as factors influencing commercialize research findings. It is based on previous articles and literatures that have been gathered, reviewed, and extracted. The main sources used to find existing studies were from several databases such as Scopus Elsevier and Google Scholars. The majority of the sources were journal articles that had been peer reviewed. The main keyword searches used are “resources”, “factors”, “research” and “commercialization activities”. Most of the articles are in the last five years (2017-2021) which is 38 articles. The articles used in this study before 2000 (2 articles) while between 2001 to 2010 were 8 articles and the rest are articles from 2012 to 2016 which is 16 articles. The total articles reviewed in this concept paper are 64 articles. The relevance of each article is referenced based on the issues discussed and its relationship to the topic of this study. The research flow chart of this study is shown in Figure 2.



**Figure 2: Research Flow Chart**

## CONCLUSION

This paper proposed the conceptual framework on understanding how resources factors (human, social, technical and financial) encourage the academic researchers to commercialized their research findings. By understanding those factors, the university administrators and policy makers could implement appropriate strategies to propel the number of research findings to be commercialized. Finally, the future study will investigate the relationship of resources factors and research commercialization activities. This study is expected to contribute to the body of knowledge in terms of theoretical framework and

approach used, but the most important part will be the factors identified that lead to research commercialization activities.

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# Corporate Ethics Commitment Index to Enhance Financial Reporting Quality for Public Listed Companies in Malaysia

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## ABSTRACT

In Malaysia, there has recently been a surge in the number of cases involving ethical misconduct within corporations. Despite the country's declaration of having a strong corporate governance policy, which has been strengthened by the Code of Ethics for Company Directors and the Malaysia Code of Corporate Governance (MCCG), unethical practices and a lack of integrity within firms remain a problem. As a result of the issue's pervasiveness, Malaysian firms' financial reporting quality has been jeopardized. This paper examines the current implementation of corporate ethical practices among corporate governance practitioners, as well as the factors that influence a firm's commitment to corporate ethics. This paper presents findings on the corporate ethics commitment found in Malaysian firms, as well as whether its implementation has improved the firms' overall financial reporting quality. This paper also emphasizes the importance of ethical practices among corporate governance practitioners in improving the financial reporting quality of Malaysian firms. This paper is the result of extensive research on corporate ethics commitment and financial reporting quality.

**Keywords:** Corporate Ethics; Corporate Governance; Commitment Index; Ethical Commitment; Financial Reporting; Financing Reporting Quality.

## INTRODUCTION

The rising number of cases involving ethical misconduct have received considerable attention following the collapse of a few firms worldwide. Cases of ethical misbehavior, such as the widely publicized Enron and Parmalat scandals, were met with legislative solutions, such as those addressing corporate governance. In Malaysia, notable companies convicted for ethical violations include Gula Perak, MEMS Technology, Puncak Niaga, Golden Land and Actacorp, Megan Media, Transmile, and Welli Multi. Lately, the Malaysian corporate sector has been stunned by corporate scandals and underperformance among government-related companies such as 1Malaysia Development Berhad (1MDB), Lembaga Tabung Haji, Khazanah Nasional Berhad, and Felda Global Ventures. Despite the loud claim of having a robust corporate governance system in place, which is further bolstered by MCCG, unethical behaviors and a lack of transparency continue to be serious issues among Malaysian corporations. As a result of the problem's pervasiveness, the overall financial reporting quality of Malaysian enterprises has been jeopardized.

According to PwC's Global Economic Crime and Fraud Survey 2020, 70 percent of Malaysian registered companies committed some form of economic crime, specifically customer fraud, bribery and corruption, cybercrime, asset misappropriation, and business misconduct. However, PwC Malaysia indicated that the actual figure could be higher due to the large number of cases of ethical misconduct that go unreported. However, more businesses are gradually tightening their corporate controls. More instances of fraud are being detected through mechanisms such as routine internal audit, which could be attributed to better

resource allocation to internal audit functions in Malaysia. Fighting fraud and economic crime requires a strong organizational culture that is driven by the right behaviors from the top. Besides, the number of crimes discovered as a result of whistleblowing hotlines and tip-offs has dropped significantly from 42 percent in 2018 to 14 percent in 2020. This is concerning, given that one of the most effective ways to combat economic crime is to speak up and report unethical behavior. A KPMG 2019 report released in the following year also suggested that an uncontrollable desire for a wealthy lifestyle is a driving force behind many of the unethical behaviors discovered. Thereby, in light of the worsening situation of ethical misconduct in Malaysian firms, studying these corporate ethical issues has never been more important or appropriate.

In fact, the Malaysian government has always played a supportive and proactive role in combatting ethical misconduct in firms by ensuring that corporate governance such as Code of Ethics for Company Directors and the Malaysia Code of Corporate Governance (MCCG), is properly revised and well-abreast of current development. Furthermore, the Securities Commissions of Malaysia (SCM) has developed the Corporate Governance Strategic Priorities 2017-2020, which focuses on five precedence, namely improving the corporate governance regulatory framework, strengthening the corporate governance ecosystem, promoting greater gender diversity on boards, embedding corporate governance culture early in the life cycle of companies, and promoting corporate governance culture throughout the life cycle of companies. By highlighting the relationship between financial reporting quality and corporate commitment to business ethics, the public expects firms to become exceptionally virtuous in terms of their ethical commitment.

Despite the fact that there is a positive correlation between having a corporate ethical commitment and a company's sustainability, the level of disclosure on the commitment remains uncertain. According to Md Zaini et al. (2020), many Malaysian public companies avoid disclosure, whereas Minority Shareholder Watch Group (2017) and Abidin et al. (2017) emphasize that CSR disclosures receive more attention than ethics-related disclosures. On top of that, Joseph et al. (2016) stated that Malaysian companies make few voluntary disclosures and are still hesitant to share information about their ethical practices. Therefore, in this study we will generate index that will be able to measure ethics related practices within public listed companies. In addition, Puteh Salin and Ismail (2015) highlighted that Malaysian companies still lack of awareness in disclosing ethical practices, especially the disclosures related to codes of ethics.

By focusing on the relation between financial reporting quality and corporate commitment to business ethics, we aim to design corporate ethics commitment index that able to demonstrate a firm's level of corporate ethical commitment. This study will create an ethical commitment index that incorporates the recommendations by SCM in the MCCG which has undergone several reformations and enhancements since its inception in 1993. Thereby, we incorporate Malaysian regulators' perspectives into the index's development whilst still emphasizing the aspect of Corporate Governance Strategic Priorities 2017-2020.

## **ISSUES IN FINANCIAL REPORTING QUALITY AMONG PUBLIC LISTED COMPANIES IN MALAYSIA**

Several well-known Malaysian frauds, such as Transmile Group Berhad, Southern Bank Berhad, Megan Media Holdings Berhad, and 1Malaysia Development Berhad (1MDB), have been linked to financial reporting manipulation. These firms defrauded their investors by providing deceiving financial reports (Fong, 2007a, Fong, 2007b, Saeedi and Ebrahimi, 2010) resulting in massive losses for investors as a result of poor investment decisions based on

misleading information. These financial reporting frauds not only reduced investors' trust in financial reporting, but also raised concerns about Malaysia's low-quality financial reporting. In order to combat these issues, Malaysia converged its accounting standards with the International Financial Reporting Standards on January 1, 2012, by enforcing the Malaysian Financial Reporting Standards (MFRSs). This adoption of global accounting standards aims to improve the quality of financial reporting in the long run. A high-quality financial report, as reported by Ham et al. (2017) is free of misstatements, omissions, and biases. Investors can make better investment decisions if they have access to high-quality financial reporting, according to Khan and Ibrahim (2015). Transparent disclosure and reliable accounting information may assist current and prospective shareholders in reducing investment risks. Stated by Rashid et al. (2018), some authors argue that each financial report should have measurement tools to measure the financial report's quality.

Early studies on financial reporting quality in Malaysia focused on corporate governance, including the role of audit committee and external audit in leading corporate reporting. However, on the following year, another research was discovered and prove audit committee has no effect on financial reporting quality but financial distress does (Haji-Abdullah and Wan Hussin, 2009). In line with Hasnan et al. (2013) where they discover that financial distress is positively related with financial fraud reporting, whereas family ownership is negatively associated with financial fraud reporting. Meanwhile, Md Salleh (2009) said that in order to attract global capital inflows, developing countries must have high-quality financial reporting. Because Malaysian companies are politically responsive due to government ownership, it is worth noting that the presence of a politician as a shareholder is not linked with financial reporting quality. The increased demand for high-quality financial information has prompted policymakers and academics to look for ways to encourage businesses to establish and disclose high-quality financial data. The International Accounting Standards Board (IASB) requires significant changes in accounting standards under the International Financial Reporting Standards (IFRS). Among other things, the change results in the production of higher-quality financial data (Ebrahimi Rad and Embong, 2013).

Past literatures shows that the writers have used earnings management level to measure financial reporting quality. Earnings management is classified as accrual or real based, according to definitions by Kuo et al. (2014) and Darmawan et al. (2019). Meanwhile, Yasser et al. (2017) Hook (2016) discovered contradictory results regarding the impact of a firm's ownership structure on the financial reporting of East Asian countries, including Malaysia. The study found that firms convicted of fraudulent financial reporting in Malaysia are vulnerable to corporate governance ineffectiveness, particularly in controlling and monitoring their firms' earnings management practices. Apart from that, (Ball et al., 2000, as cited in Abdul Manaf et al., 2013) claimed that Malaysian firms produce low quality financial reporting because the authors presume this is due to concentrated ownership. This however, contradicts with research made by Wang (2006) that associated concentrated ownership with high quality financial reporting. This argument also supported by Nor et al. (2018) as their findings discovered that only the independence of the board of directors has a substantial effect on financial reporting quality in the post-adoption period of the MFRSs. Reported by Arieftiara and Utama (2018), previous studies have shown that corporate governance influences the quality of financial reporting, earnings management activities, firm performance, and etc. Susanto and Siregar (2017) studied the effect of corporate governance mechanisms on financial reporting quality and discovered that corporate governance has a positive effect on financial reporting disclosure. Furthermore, neither the effectiveness of the board nor the size of the auditor has a significant impact on earnings quality.

As per highlighted by Ghafoor et al. (2019), Malaysian firms tend to manipulate their financial records in order to provide more optimistic accounting reports and deceive financial statement users. This statement had been supported by Nasiri et al. (2020) as they reveal that managers in poorly managed companies have high potencies to abuse accounting powers, resulting in a decline in corporate performance compared to managers in well-managed companies. Moreover, the possibility of fraud proxies, multiple directorships, and audit quality are all associated with fraudulent financial reporting in a positive and significant way. Hasnan et al. (2013) discover evidence of earnings management in the years preceding financial fraud reporting. Due to these circumstances, Leuz et al. (2003) suggested that Malaysia is among several East Asian countries with a poor financial performance system and is involved in earnings management. Bukit and Iskandar (2009) explained that earnings manipulation in Malaysia's firms ranges from financial statement frauds to earnings management. Therefore, in order to prevent fraudulent financial reporting, it is essential that firms start with minimizing their existing earnings management. Over the years, the Malaysian government has gradually improved its regulatory and enforcement measures with a purpose to increase the confidence of foreign investors in Malaysia's firms.

A study by (Enomoto et al. as cited in Al-Absy et al., 2017) on earnings management activities in 38 countries provided evidence that real earnings management activities are preferred over accruals earnings management in countries with a stronger investor protection system. They also discovered that Malaysia has a high aggregate accrual earnings management score. This is confirmed by Nasir et al. (2018) which asserted that real earnings management was found to be more aggressive in firms with financial statement fraud in comparison to non-fraudulent firms in the four years prior to the committal of those frauds.

## **THE IMPORTANCE OF ETHICS FOR FINANCIAL REPORTING**

Derived from biggest accounting scandals, such as Enron, Parmalat, and many other notable companies, accounting bodies and other interested parties are starting to question the dependability of financial reports published by professional accountants. Stakeholders begin to lost trust in the presentation of financial statements. The fallout from these corporate scandals may have a negative impact on national growth and development as investor and consumer reluctance to invest in the affected country. Thus, according to Rashid et al. (2018), one way to conquer this is to instill ethical behavior in all professional accountants. As specified by Oxford Dictionary 3<sup>rd</sup> edition, ethics is the study of moral principles or the branch of knowledge that focused on them. In the accounting area, financial statements need to be presented in a true and fair manner to gain the trust and confidence of shareholders. Asset misappropriation, creative accounting, window dressing, and personal trading are examples of unethical financial reporting activities.

Referring to study by Rashid et al. (2018), the authors examine the relationships between ethics of the accountants in Nigeria and its report's quality. There are numerous rules and regulations that Nigeria's accountants must follow, such as the principles of audit profession, in order to ensure that the quality of the report is in perfect order. The authors also highlighted that accountant should adhere to a code of ethics in making sure the report is based on the concepts of truth and fairness, as this can help to restore public trust in the accounting profession in Nigeria. Other than that, Arowoshegbe et al. (2017) pointed out that ethics in accounting should be made a major course in Nigerian universities so that students understand that they must behave appropriately based on good manners and not engage in unethical practices. Pursuant to Ibrahim et al. (2016), unethical upper management, such as a board of directors, can have a direct impact on financial reporting assurance. The



corporation failed as a result of poor corporate governance and ineffective board of directors. Weak corporate governance also implies unethical board of director behavior. The board of directors is one of the internal parties in the organization that is directly involved in good ethics and corporate governance. Many issues of fraudulent financial reports exist as a result of the board of directors' unethical behavior. Unethical board of director behavior results from a conflict of interest between the board of directors and the shareholders. Thus, having independence among board members is important for ensuring good ethics and ethical behavior of the board of directors. (Rashid et al., 2018). This statement also supported by an example made by (Ghafoor et al., 2019) as the findings indicate that having more independent non-executive directors on the board improves reporting quality and reduces the likelihood of fraud. Their conclusion is consistent with previous literature Razali and Arshad (2014). Adjusting the amount of revenue and expenses, window dressing, concealing any fraudulent activities, and so on are examples of poor corporate governance. From the evidences above, it really shows that ethics in financial reporting is really important in producing high quality financial report. That is the purpose of Malaysian Code of Corporate Governance (MCCG) as it provides guidelines to corporate boards of directors on how to be independent and free of bias.

Mat Norwani et al. (2011) as well emphasize the significance and impact of corporate governance and financial reporting issues. In Malaysia itself, many scandals and financial issues arise as a result of a failure of corporate governance, which is connected with ethical issues and may have an impact on financial reporting. Kermis and Kermis (2013) said that accountants should have a strong relationship between professional ethics, personal ethics, and financial reporting regulations as it really important aspect of dealing with financial reporting is responsibility and integrity

## **ENHANCING FINANCIAL REPORTING QUALITY WITH CORPORATE ETHICS COMMITMENT INDEX**

It is a well-known fact that financial information is necessary for a variety of reasons. Firms are constantly striving to improve the quality of their financial disclosure and deliver financial reports that reflect their positive accomplishments to their respective stakeholders. The publication of various financial reporting documents, such as financial statements, can demonstrate a firm's financial reporting. High-quality financial reporting, according to Salleh et al. (2006), is free of errors, omissions, and biases. Previous research has primarily focused on investigating the mechanisms for improving financial reporting quality, such as requiring the presence of auditors.

Nevertheless, only a few studies have been found to place a high value on the ethical and moral principles followed by corporate governance practitioners. In Malaysia, the Malaysian Code of Corporate Governance explicitly emphasizes the role of corporate boards of directors and management in promoting ethical corporate behavior. Abidin et al. (2017) reaffirm this, arguing that a board's commitment to business ethics is positively related to the firm's financial performance. According to Salin et al. (2019a), corporate governance practitioners must set a good example of ethical leadership and be consistently committed to creating a good ethical work culture in their organizations.

A firm's established code of ethics must also be consistently promoted, embedded, and enforced in the firm's daily operations. Another study conducted by the same authors Salin et al. (2019b) discovered that a board's ethical commitment strengthens the relationship between corporate governance and overall firm performance. Other than that, Pae and Choi (2011) examined the Korean Stock Exchange from 2004 to 2008, incorporating 636 firms. Their



findings revealed that firms with a stronger commitment to business ethics have better corporate governance practices and a lower cost of equity capital.

Indeed, corporations are expected to have clear policies addressing corporate ethical obligations, and their managers are expected to keep a high level of discipline in order to avoid being involved in any unethical conducts within their business operations. Although the goal of a business is to maximize profits and shareholder wealth, the interests of stakeholders should also be considered because they play an essential part in determining a firm's overall corporate performance. Stakeholders consider a firm's corporate ethics as a type of social responsibility because they are inextricably linked to their professional commitment (Shafer et al., 2016). The authors' findings also revealed how a strong corporate ethics value is negatively associated with the intention to commit financial fraud, according to key stakeholders. The firm's agenda in raising stakeholder interest and maintaining a constructive social interaction between the firm and its stakeholders can be stated as the firm's commitment to business ethics. Furthermore, stakeholders are more attracted to firms that have a high ethical commitment, as this commitment reflects one of the firms' responsibilities in ensuring their long-term success (Abidin et al., 2017).

Besides, employees' perceptions of corporate ethical commitment were investigated by Mitonga-Monga and Hoole (2018) and their findings revealed that corporate ethical values significantly encourage employees to extend and continue to discharge their organizational commitment because they are equipped with perceived higher organizational justice. Alleyne (2016) also looked into the impact of corporate ethical values on whistle-blowing intentions in corporations. The study discovered that both organizational commitment and corporate ethical values have a positive impact on employees' willingness to report wrongdoing.

The implementation of a whistleblowing policy in Malaysian businesses is fraught with difficulties. These include a disparate sense of loyalty among employees at different levels of power - between top management and other employees - fear of retaliation, and a policy of not interfering in other people's personal lives (Nawawi and Salin, 2019, Rachagan and Kuppusamy, 2013). These difficulties are the key reasons for the ineffectiveness of many Malaysian companies' whistleblowing policies. As a result, numerous programs should be explored to ensure that a whistle-blowing policy can be implemented effectively in organizations, including promoting increased engagement of corporate governance practitioners in being more devoted in their practice of practical conduct. Moreover, based on Merchant and White (2017), firms must regularly convey their code of ethics to their employees in order to give comprehension, build a strong ethical culture, avoid unethical behavior, and affect their morale (Whyatt et al., 2012).

In 2014, Abidin et al. (2017) conducted a study on business ethics commitment and its effect on return on assets and return on equity among 243 publicly listed companies on the Bursa Malaysia Main Board. Based on the Ethical Commitment Assessment Items by Pae and Choi (2011) the study measured business ethics commitment using a total of six themes incorporating corporate ethical values, action to promote ethics, a whistle-blowing policy, a code of ethics, sustainability practices, and ethics committees as the modified Ethics Commitment Assessment Index. Using a modified index that included MCCG, their findings confirmed that a firm's commitment to ethics is positively related to its overall financial performance.

In addition, according to Laouisset (2009), in building an establish corporation, ethical values include integrity, courage, compassion, loyalty, honesty, forgiveness, trust, optimism, and resilience are important. Ho and Taylor (2013) also mentioned that disclosing information

about ethics as a company strategy can create values for shareholders. Indeed, Malaysian businesses recognize the significance of corporate strategy disclosures (Md Zaini et al., 2020). It is therefore important for management to be highly committed to and supportive of ethical values, as they can instill an ethical culture within their own organizations and create values for their companies (Driskill et al., 2019). According to (Schwartz, 2013), the implementation of ethics programs is extremely important for organizations in order to create an ethical culture. The author also stated that an ethical culture can be effectively implemented when companies promote their core values among their employees by organizing relevant programs and demonstrating the company's leadership commitment to ethics in general. Ethics programs, according to Abidin et al. (2017), should be part of a larger mechanism to promote an ethical culture in businesses. Nonetheless, managers are largely responsible for ensuring that ethical behavior is widely practiced in the company and that unethical behavior is strictly prohibited and condemned, both in theory and in practice.

The rapid growth of Malaysia's capital market necessitates a higher level of corporate ethical commitment from firms. Based on the previous literatures reviewed, it is discovered that only a small number of studies have investigated the importance of corporate ethics for firms' financial reporting quality, possible factors that influence ethical decision-making in financial reporting issues, and tools for detecting early-warning signals for potential corporate misconducts.

### **SIGNIFICANCE OF THE STUDY**

The findings of this study have a great potential for application to policy contributions and the discovery of corporate ethics practices within the corporations themselves. Firms can identify absences and/or applicable corporate ethical principles in order to improve firm performance. It is guaranteed that the findings of this research will be able to supply levels of business ethical commitment via the established index. It can thus be utilized as an early warning signal to stakeholders (such as investors, suppliers, financial institutions, and employees), as well as policymakers, as an indicator of a lack of moral awareness. The policymaker may also refer to the results as guidance for developing best practices and guidance for firms' corporate ethical conduct. Based on the newly developed index, it is also hoped that the measurement can be extended to other types of firms, such as small and medium-sized businesses.

Sum up, this study seeks to align with the national agenda of increasing the value of life. This study broadens practitioners of corporate governance in Malaysia's understanding of ethical practices. It also improves the moral awareness, intent, judgement, and behavior of ethical practices in public companies. Apart of that, interested parties can use the Corporate Ethics Commitment Index developed from this study to determine the level of a specific firm's corporate ethical commitment as well as the firm's credibility. Economically, higher capital ventures have the potential to influence the value of the investment in the future and provide opportunities for Malaysian firms to expand further. The government's demonstrations of commitment and effort will attract potential shareholders who are constantly looking for assurance and security in their investments. As a result of the sources and constructive references supplied by this research, our nation may bloom, grow, and expand constructively.

### **CONCLUSIONS**

In Malaysia, there has been a great deal of discussion about the increasing number of cases involving ethical misconduct within firms. Despite the declaration of strong corporate governance and its reinforcement through the Code of Ethics for Company Directors and the MCCG, unethical practices and a lack of integrity continue to plague Malaysian firms. Hence,

this paper focuses on the studies on corporate ethics commitment practiced by Malaysian corporate governance practitioners. It explains the advantages of ethically committed governance on the overall value of a company. Other than external stakeholders, internal stakeholders also can benefit from a company's ethical behavior. This paper believes that a thorough understanding of the practice can help to improve and maximize a firm's financial reporting quality. Firms that emphasize ethical commitments, either within or outside of their operations, frequently see an increase in their corporate values. Undeniably, when businesses demonstrate their commitment to ethics in activities other than their operations, such as having ethical sensitivity toward the environment, those businesses will naturally gain the trust of their stakeholders. All in all, corporate ethical commitment is advantageous in improving a firm's financial reporting quality, resulting on a favorable return in the firm's overall values.

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# **Sustainable Funding Model of B40 Social Enterprise Startups in east-coast areas in Malaysia: A Systematic Literature Review**

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## **ABSTRACT**

The concept of Social Entrepreneurship is interesting because this research is focused on achieving profit but also creates benefits for the community, especially in the last decade. The aims to shift the paradigm in which social funding currently exists by enabling a payment-by-results model involving the government, SEs, and the private sector. Little empirical findings had associated the mechanism to build sustainable funding model among social entrepreneurs who are from the Bottom 40 backgrounds. As an entity with social purpose, in particular those engage with environment and climate change initiatives, the mechanism to outline, measure, track and report of the impact of sustainable funding model on the success of social initiatives remain under-traveled. The systematic literature review is used in this research methodology so that the systematically review can be explained. Based on the findings of the literature review study, it is expected that there are methods or frameworks that can be used for researchers as well as practitioners to understand the formation of social entrepreneurial intentions so that they can inspire further research.

**Keywords:** Funding Model; Sustainability; Start Up; Social Innovation; Social Enterprise; Systematic Literature Review.

## **INTRODUCTION**

Since in May 2018, Malaysia has been under the new government, Pakatan Harapan, which is still focusing on strengthening the country's economy and eliminating poverty. There were many initiatives taken as soon as possible to restore positive economic situations such as the replacement of GST implementation with SST, salary and bonuses cuts of government employees and cancellation of some projects managed by the previous government. However, the income group below 40% (B40) is still the main agenda of the country to ensure that this group is not left behind in the government's attention. According to statistics, a total of 2.7 million Malaysian households are categorized as B40 with an average monthly household income of RM2,537 (Mohamad Zaharuddin Zakaria, Ahmad Zaki Salleh, Mushaddad Hasbullah, Abdul Manan Ismail & Mohd Afiq Ab Jalil, 2019). There are various schemes and initiatives introduced to improve the quality of life of B40 households that focus on improving income generation opportunities including small and medium micro industries run by the B40 group affected when the COVID-19 pandemic hit for the redevelopment and sustainability of the lifespan of their business. Many research concepts from entrepreneurs are currently being studied by academics as one of the fields that have caught their attention in recent years. The concept of entrepreneurs is also glimpsed by the government because the impact of this entrepreneurial process is proven to be able to increase growth in the economic, social sector and also support political stability in a country. Research that supports this is from Alhanoof Alghamdi (2017) indicates that social enterprises (SEs) from B40 group for startups are able to make it grow and expand builds upon on their future investment in restructuring, technology and human capital or workforce that significantly more financially

constrained. Indicated in the Shared Prosperity Vision 2030, social innovation is seen as especially vital in addressing the increasing complexity of social issues (Economic Planning Unit, 2019). Using social innovation approach, startup social enterprise can work better to strengthen its funding model. The idea is for them to collaborate among the private sector, social sector, and government. The Shared Prosperity Vision (SPV) 2030 also proposed to focus on nine target groups in ensuring that the equality and sustainable development. The Bottom 40 group of social enterprise startups as set in this paper serves as one of the target groups and is an agenda to be focused in this proposal. The model will require action through a whole-society approach. Beyond that, developing a sustainable social funding or financing model will help to create a new paradigm for how Malaysia, as a nation, approach and address social issues affecting the people today. The government now shoulders much of the responsibility of social service delivery. Historically, much of the government's resources has gone into providing reactive programmes which offer remedial solutions after a particular social issue arises. Many social enterprise (SEs) have attempted to provide innovative interventions to social issues as well, but often face capacity and resource constraints. The question, then, becomes how to effectively combine the government's scale and resources with the collective action, skills, and enthusiasm of SEs in order to promote flexibility in the delivery of social services, as well as reduce burden to the government. Issues and limitations to the current model include sustainability and scalability, rising social disparity and complexity, as well as insufficient collaboration between the government and SEs. The combination leads to an inefficient allocation of resources at a time when it is imperative to maximise resources. The new Sustainable Funding Model aims to shift the paradigm in which social funding currently exists by enabling a payment-by-results model involving the government, SEs, and the private sector. According to Tranfiels et al. (2003), systematic reviews are based on systematic methods and aim to collect, evaluate and synthesize all studies on the topic. It also identifies gaps in the literature to help further accumulate scientific knowledge. Although it is complex and time consuming (Danang Nugroho, Margo Purnomo, Bambang Hermanto & Erna Maulina, 2019), systematic reviews play an important role in contributing to the academy of literature as well as methodological advances for the field of study. This literature review was constructed to answer the research questions; "How is B40 social enterprise entities build their entrepreneurial intention?", "What nature of association exists between B40 social enterprise startups social cause mission and sustainable funding initiatives?", "What nature of association exists between B40 social enterprise startups social cause mission and their entrepreneurial intention?" and "What nature of sustainable funding model of B40 social enterprise can be formulated among startups of social enterprises located in the coast areas of Malaysia?". This paper aims to construct a framework that synthesizes the sophistication of an easily accessible shared literature. It provides a basis for the study of the scaling mechanisms of initiatives starting from the bottom up by presenting the latest knowledge on the topic (what is known and where the gaps are) and by providing the conceptual understanding desired for the study of this topic.

## RESEARCH METHOD

The researcher adopted the systematic literature review (SLR) as the method. SLR was applied in Medical Science (Cook, Mulrow & Haynes, 1997), adopted in the field of management and entrepreneurship (Tranfield et al. 2003) and in environmental studies (Hossain, 2016). This method was used to provide a framework for looking the gaps in the literature relevant to measuring social and sustainable initiatives and also for synthesizing the existing findings. Systematic literature reviews improve the quality of the review process and outcome by employing a transparent and reproducible procedure (Tranfield et al. 2003). There

are 5 phases to facilitate the literature review process namely planning, search, screening, extraction, and synthesis as well as reporting based on the methodology from Tranfield et al, (2003).

*Planning:* Researcher undertakes planning in the study to identify the research questions. For this study, the research questions were “How is B40 social enterprise entities build their entrepreneurial intention?”, “What nature of association exists between B40 social enterprise startups social cause mission and sustainable funding initiatives?”, “What nature of association exists between B40 social enterprise startups social cause mission and their entrepreneurial intention?” and “What nature of sustainable funding model of B40 social enterprise can be formulated among startups of social enterprises located in the coast areas of Malaysia?”. The answers to the research questions will facilitate the content and identify the theories and practices that occur.

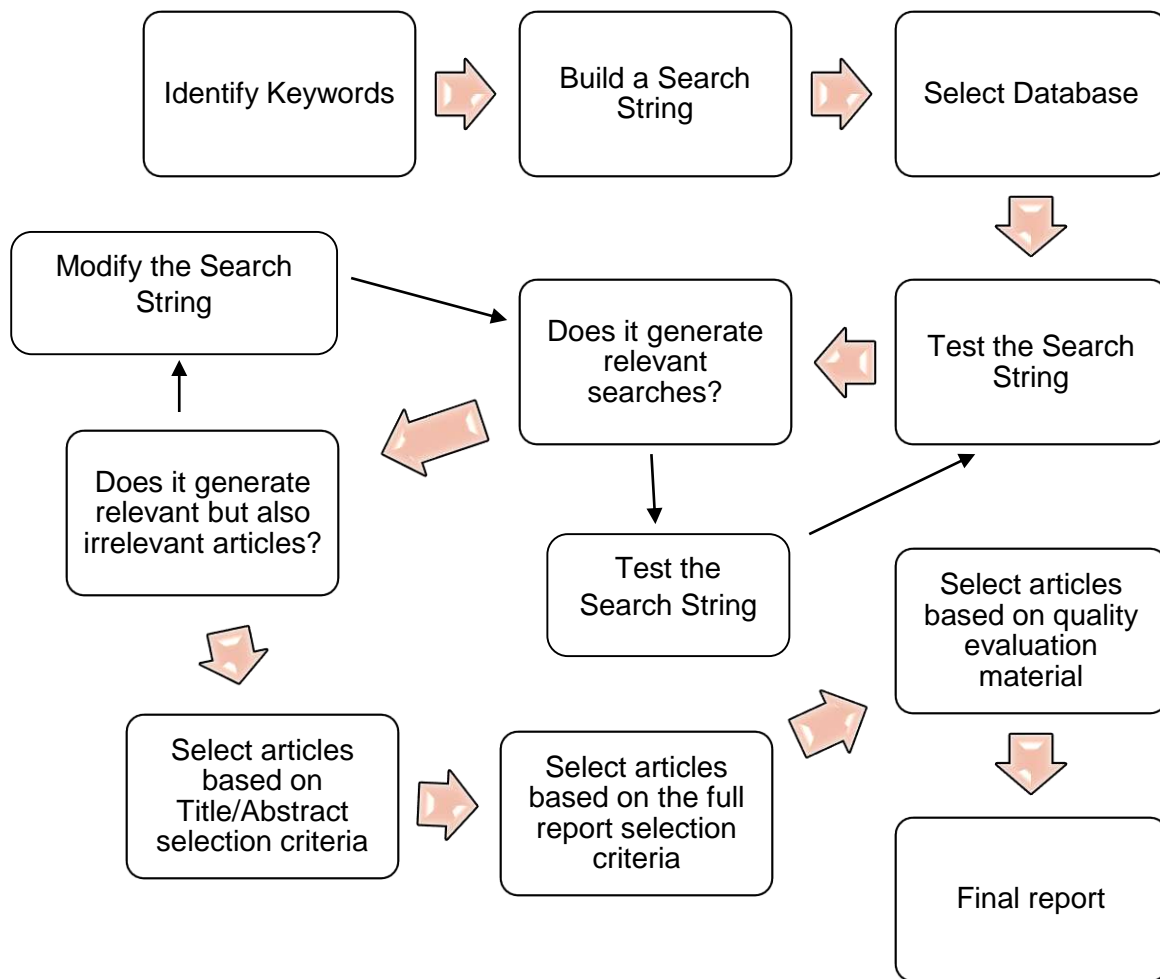
*Search:* The search process for articles related to the research questions was conducted using a search database; Google Scholar, Research Gate, Sage Pub, Pro Quest and Science Direct. The selection of the articles was based on articles that showed good and appropriate presentations on Social Enterprise, Social Funding Model, Entrepreneurial Intention and related empirical studies. The key words used in this study are “Social Enterprise, Social Funding Model and Entrepreneurial Intention. With these key words, researchers can find answers to research questions from general to specific.

*Screening:* Search results from search databases; Google Scholar, Research Gate, Sage Pub, Pro Quest and Science Direct have produced a total of 728 articles listed along with abstracts. After that, the researcher re-evaluated the results of the study based on the research questions. Then, the researcher implemented specific acceptance and exclusion techniques to facilitate review of the articles. The acceptance criteria are:

- Only select articles in English and Bahasa Malaysia;
- Sources of articles in research papers, books, pamphlets, webinar videos, thesis reports and articles from websites;
- No duplicate copies;
- Read Abstracts and Keywords that contain explanations of research questions;
- Articles containing empirical and theoretical research methods.
- From various countries including Malaysia

The exclusion criteria are:

- Articles other than English and Bahasa Malaysia;
- Articles that do not match the research questions;
- There are duplicate copies.



**Figure 1: Literature search process**  
(adapted from Danang Nugroho, Margo Purnomo, Bambang Hermanto & Erna Maulina, 2019)

*Extraction:* As a result of the screening criteria, researcher has obtained a total of 269 articles from the results of the reception to search for "Social Enterprise", "Social Funding Model" and "Entrepreneurial Intention" as search techniques in general. Then, the researcher made re-acceptance according to the research questions that had themes for Social Enterprise, Social Funding Model and Entrepreneurial Intention. Thus, the researcher only obtained 28 articles that specifically answered the research questions. This indicates that research on social enterprise and entrepreneurial intent has been extensively done. However, not on the sustainability of social financial models that has not been studied in depth. The purpose of the researcher has chosen the keywords of this study generally to look at all the methods as well as the theoretical basis used in the study in general. From these results, the researcher conducted an in -depth review of the study as outlined in Microsoft Excel as an acceptance database. With the database in Microsoft Excel is very useful for researchers to know and obtain articles in a structured manner and make research reviews in the form of columns in Excel (Tranfield et al. 2003), Through Excel columns, researcher can collect and classify information aspects of articles by Title, Author, Distributor and Year of Publication. The main focus of this study was to find the literature gap in the study results from previous studies on Social Enterprise, Social Funding Model and Entrepreneurial Intention

## RESULTS AND DISCUSSION

In this section, the researchers will explain the findings of a systematic review that has been identified based on group criteria in the excel database. The researchers will explain the findings of the article based on year and publication, namely as many as 31 previous articles that specifically discuss the research question.

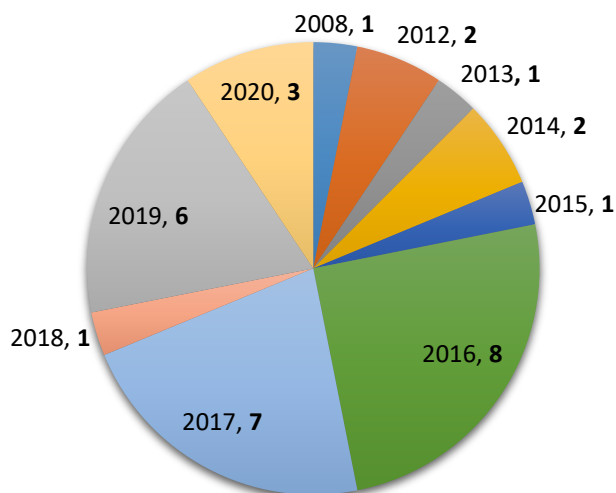


Figure 2: Pie chart for articles collected by year

### Classification based on Year and Publication

The researchers analysis of the selected set of publications indicated that the first publications on social entrepreneurship from 2008. This shows that this research has been conducted almost for more than decade regarding social entrepreneurship. From 31 articles or books that the researchers found, there each of which was 1 article respectively published in 2008, 2013, 2015 and 2018. For the rest running each year that is 5, from 2012, 2014, 2016, 2017, 2019 and 2020, which there was more than 1 article published. Publishers from these articles are Journal of Islamic Monetary Economics and Finance, Department of Sociology The University of Arizona, Hitotsubashi Journal of Commerce and Management, World Journal of Entrepreneurship, Management and Sustainable Development, Handbook of Empirical Research on Islam and Economic Life, Journal of Small Business and Enterprise Development, International Journal of Applied Business and Economic Research (IJABER), Centre for World Solidarity, International Journal of Entrepreneurial Behaviour & Research, Local Economy, Caribbean Policy Development Centre (CPDC), International Journal of Islamic Business, International Journal of Business, Economics and Law, Journal of Emerging Economies & Islamic Research, International Business School, International Journal of Islamic Finance, Journal of Islamic Economics, Finance and Banking, Islamic Financial Services Board (IFSB) 7th Public Lecture on Financial Policy and Stability, Journal of Islamic Thought and Civilization of The International Islamic University Malaysia (IIUM), Journal of Global Entrepreneurship Research, International Journal of Islamic and Middle Eastern Finance and Management, Journal of Islamic Philanthropy & Social Finance, European Journal of Islamic Finance (EJIF), PERTANIKA Journal Social Sciences & Humanities, MDPI Sustainability Journal, Journal of Social Entrepreneurship, Journal of Innovation in Business and Economics, Turkish Journal of Islamic Economics, Journal of Saunah Zainon et al. / Procedia

- Social and Behavioral Sciences, Sustainability Journal and finally the journal Islamic Fund And Wealth Management : A Way Forward.

Based on a systematic review of social entrepreneurship studied by Marion van Lunenburg, Karin Geuijen and Albert Meijer (2020), the researcher expected a dominant focus of the environmental areas in social enterprise, social funding model and entrepreneurial intention literature but surprised that the environmental areas only dominate the literature on social enterprise and entrepreneurial intention.

Classification Based on Paper Type. According to the systematic literature review classification of Petersen et al. (2008), researchers have classified 6 types of categories from the research paper facet:

1. Validation Research: These methods investigated are novel and have not been implemented in practice yet. Methods used are for example experiments or work performed in the lab.
2. Evaluation Research: These methods are practically implemented and an technique evaluation is conducted which means it is shown the way the method is implemented in practice for solution implementation and what are the consequences of the implementation in terms of benefits and drawbacks for evaluation. Other than that, this includes identifying problems in industry.
3. Solution Proposal: A solution that can be either novel or a significant extension of an existing technique for a problem is proposed. The potential benefits and the applicability of the solution are shown by a minor example or a good line of argumentation.
4. Philosophical Papers: Papers sketch a new way of looking at existing things by structuring the field in form of a taxonomy or conceptual framework.
5. Opinion Papers: These papers express the personal opinion of somebody whether a good or bad certain technique, or how things should be done. They do not rely on related work and research methodologies.
6. Experience Papers: They explain on what and how something has been done in practice based on the personal experience of the author or researcher.

The findings from the previous study found that there are 3 results of articles from Munerah Haron, Mohd Khairy Kamarudin, Nur Athirah Muhamad Fauzi, Murniza Mhmd Ariff & Muhammad Zuhair Zainuddin (2016); Mohamad Zaharuddin Zakaria, Ahmad Zaki Salleh, Mushaddad Hasbullah, Abdul Manan Ismail & Mohd Afiq Ab Jalil (2019) and Sergio Sparviero (2019) using Validation Research.

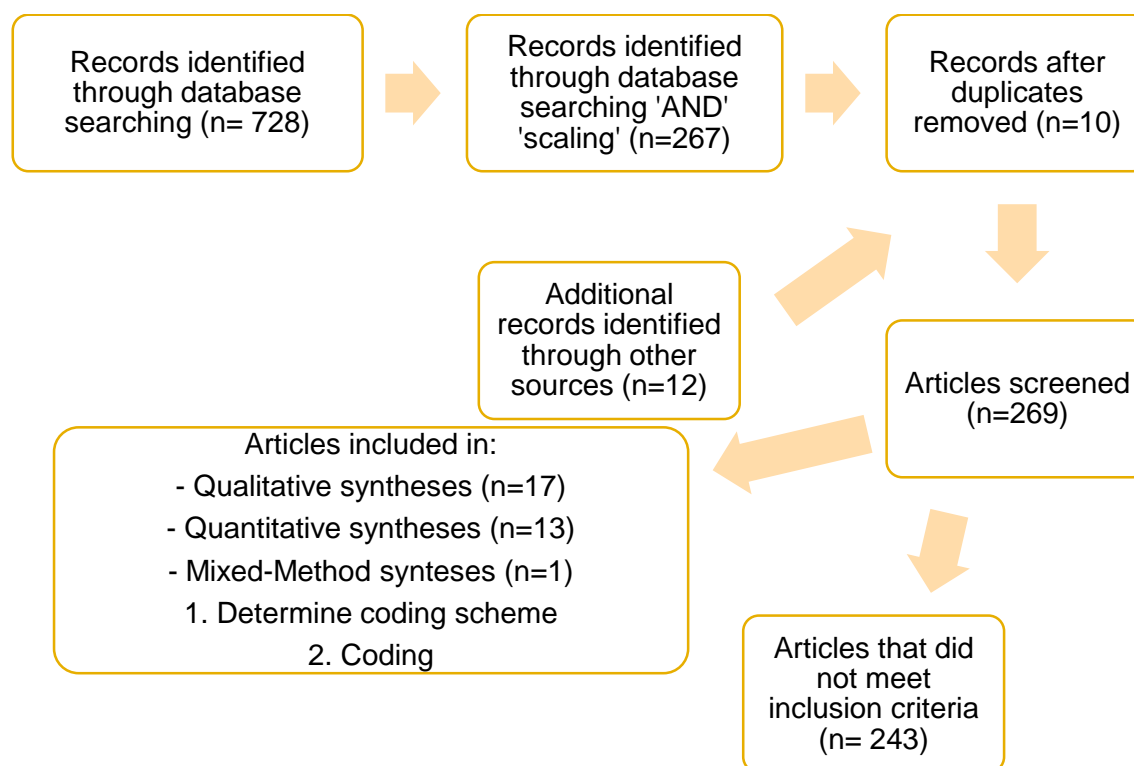
10 previous studies using Evaluation Research from Jarita Duasa & Mohamed Asmy Bin Mohd Thas Thaker (2016); Konstantinos Politis, Panagiotis Ketikidis, Anastasios Diamantidis & Lambros Lazuras (2016); Siti Sara Binti Ibrahim, Abd Halim Bin Mohd Noor, Sharfizie Binti Mohd Shariff & Nurhanani Aflizan Binti Mohamad Rusli (2016); Joseph Satish (2016); M. Granados & A.M. Rivera (2016); Artur A Steinerowski & Izabella Steinerowska-Streb (2012); Hafiz Zahid Mahmood, Kausar Abbas & Mehreen Fatima (2017); Barbara Bradač Hojnik and Katja Crnogaj (2020); Raja Suzana, R. K., Zulazli, H. and Zainudin, A. (2016) and Nuttasorn Ketprapakorn & Sooksan Kantabutra (2019).

The next 7 studies using Solution Proposal, articles from Mohammad Ashrafal Mobin & Abu Umar Faruq Ahmad (2016); Abubakar Yusuf Sanyinna, Hydzulkifli Hashim & Muhammad Farihal Osman (2017); Diana Hazam, Dijana Karimova & Magnus Gabriel Olsson (2017); Aulia Arifatu Diniyya (2019); Abidullah Abid & Dr. Muhammad Hakimi Mohd Shafiai (2017); Mohamed Asmy Mohd Thas Thaker, Hassanudin Mohd Thas Thaker & Anwar Allah Pitchay (2018) and Jarita Duasa & Mohamed Asmy Bin Mohd Thas Thaker (2017).



For the studies of Philosophical Papers, articles related are which 6, Angela E. Addae (2016); Kanji Tanimoto (2008); Mir Shahid Satar & Shibu John (2016); Ridzwan Bakar, Wardah Sakinah, Rapih M Zaini & Farzana Sarmin (2018); Maya Puspa Rahman, Mohamed Asmy Mohd Thas Thaker & Jarita Duasa (2018) and Nur Azura Sanusi, Suhal Kusairi & Mohd Fikri Mohamad (2017).

There are 3 results of articles from Saunah Zainon, Syahrul Ahmar Ahmad, Ruhaya Atan, Yap Bee Wahd, Zarina Abu Bakar & Siti Rahayu Sarman (2014); Paolo Pietro Biancone & Maha Radwan (2019) and Mohamed Asmy Mohd Thas Thaker & Hassanudin Mohd Thas Thaker (2019) using Opinion Papers type, 1 past article study using Experience Papers from M. Kabir Hassan (2015).



**Figure 3: Flow diagram of the literature screening process (adapted from Marion van Lunenburg, Karin Geuijen & Albert Meijer, 2020)**

## Framework

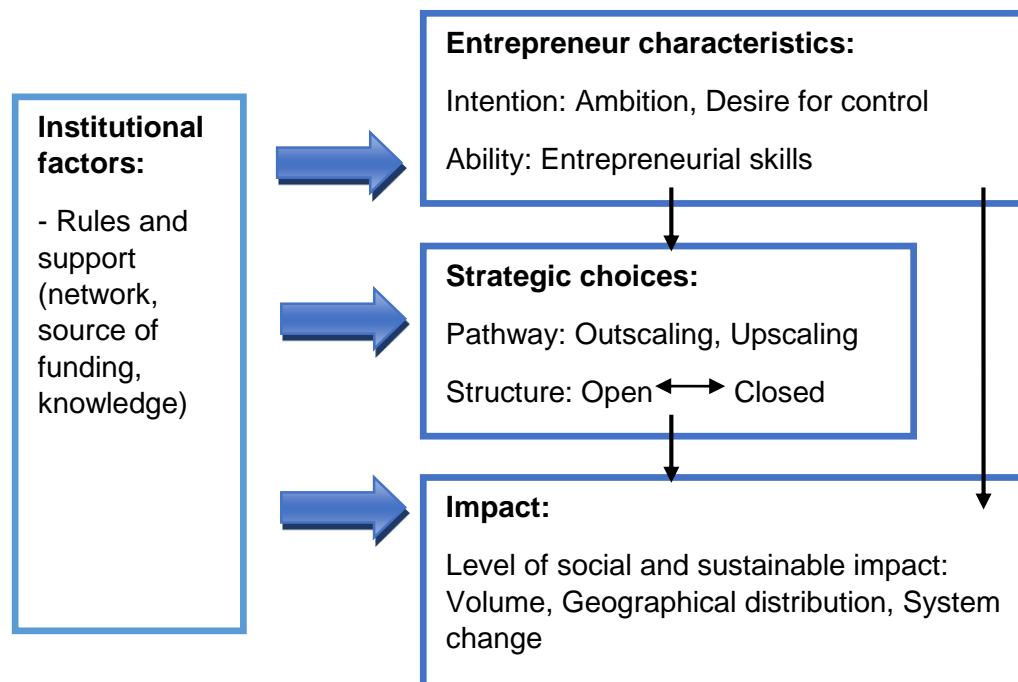
The purpose of review was to combine literature on social entrepreneurship with social innovation and start-up initiatives to find out the reasons and methods of social and sustainable initiatives scale. The current academic knowledge about scaling is very fragmented and anecdotal. Furthermore, there was much confusion about terms and relevant factors. Due the reason, the researchers focused research on reducing conceptual confusion and building a framework of the different factors and relations in the process of scaling start-up initiatives.

The review of 31 articles resulted in a framework below that reflects the current state of the field. It presents a concise overview of key theoretical concepts in the literature. Based on the

literature, the researchers distinguish two choices in the scaling process: pathway (scaling up and scaling out) and structure (organizational form). Successful scaling implies more social or environmental impact. The researchers chose the perspective of the initiative and categorized the influential factors for scaling in 'entrepreneur characteristics' (intention and ability) and 'institutional factors' (rules and support).

The literature review provides important insights into the process of scaling. The researcher's analysis of the literature highlights that:

1. Entrepreneur's scale ambition, hybrid logic and entrepreneurial and leadership skills are surely related to the level of impact realized through scaling;
2. Open structures may contribute speed and more social and environmental impact;
3. A collaborative structure dominates in social innovation literature and this may be caused by focus on the local community and less desire for monetary control;
4. An institutional environment in which there is room to experiment with different schemes and strategies for helping the initiative to scale.



**Figure 4: Framework for scaling social and sustainable initiatives**

## CONCLUSION

A review based on research evidence on social entrepreneurship and social financing models has identified a number of areas that need further study. The first obvious gap relates to the lack of detailed understanding of how social funding models differ from businesses funding models. While it is recognized that business financing models address social problems, much research has focused on the role of social entrepreneurs in identifying and pursuing opportunities to adapt social financing models to yield results. Many studies recognize that the

advantages of the social financing model are the result of the social system in which entrepreneurs operate, in terms of support and knowledge gained through interaction with key actors, and the institutions operating within this system. However, the role of commercial organizations in using social funding models tends to be overlooked. As noted by Wendy Phillips, Hazel Lee, Peter James & Abby Ghobadian (2014), the overlap between social and business innovation is quite numerous and many business innovations have provided significant improvements in quality of life, so we question whether the focus should be on the value that innovation has to society compared to its location.

This prompts one to challenge the understanding and acceptance of our current social financing model. Whether social innovation can sustain social enterprise by using the social financing model or should it focus on the innovation process only, from the point of view of the identification of opportunities to its implementation and impact on society. In making this shift, attention is drawn from who is doing social innovation on how to do social innovation if they do not know and understand the existence of social financing models. Admittedly there is a growing pressure to do things differently (Wendy Phillips, Hazel Lee, Peter James & Abby Ghobadian, 2014), so there is an urgent need to address social innovation management in all sectors whether business, private, public or NGO if the practice of social innovation can be fully understood.

The next area that requires significant study relates to sources of social funding. Although the importance of funding sources in supporting social entrepreneurship has been extensively studied, there seems to be an increasing need to understand the types of resources needed and available for social entrepreneurs. From a study reviewed by Iain Davies & Helen Haugh (2018), their output only focused on funding sources to provide access to social financing which is social crowdfunding community loans and community division problems without other funding sources. Much has been made in the literature of cross -sectoral partnerships, but the roles of actors involved in such partnerships, such as professional bodies, government bodies and research centers appear to be poorly researched. In terms of policy, this has clear implications. Sources of funding clearly have an important role in maintaining social enterprises but there is insufficient evidence to inform social entrepreneurs on how they can obtain appropriate social funding source platforms or approach appropriate firms that provide funding sources, therefore research in this area needs immediate attention.

It has been well documented in the literature that entrepreneurial behavior is intentional and thus predictable by intent on the behavior, not by attitudes, beliefs, personalities or demographics (Carlos Bazan, Hannah Gaultois, Arifusalam Shaikh, Katie Gillespie, Sean Frederick, Ali Amjad & Simon Yap, 2020).

Researcher suggests further exploration of frameworks in specific branches or topics, such as social initiatives in healthcare or sustainable initiatives in the food industry. This will help explore the different relationships and dynamics in the framework in more detail. Comparing results across various branches and topics can potentially yield results because our literature review shows that incorporating literary bodies reduces the fragmentation of academic literature and is beneficial for more than one discipline. Another suggestion for future researchers is to explore the sustainability of social enterprises in terms of management and administrative models.

As conclusion, this paper emphasizes that actors need a facilitative context, a willingness and ability to create functional scales and strategies so that they can realize better (commercial) dissemination or a stronger impact on policy. There is no evidence for a 'miracle cure' because the complex interactions between actors, environments, strategies and effects are dynamic

and interactive in nature. Scaling requires 'contextual work', and in -depth empirical analysis for this type of work is needed to improve understanding of this pattern of scaling.

### ACKNOWLEDGMENT

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# **Analysis on the Current Situation and Countermeasures of Innovation and Entrepreneurship Education for Chinese College Students**

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## **ABSTRACT**

With the promotion of the policy of mass entrepreneurship and mass innovation, the innovation and entrepreneurship education in colleges and universities has ushered in new opportunities for development. How to correctly analyze the problems of college students' innovation and entrepreneurship education, and then put forward corresponding countermeasures for the problem? Based on the practice of entrepreneurship education, this paper expounds and analyzes the problem. In order to solve these problems, colleges and universities can be carried out according to the above methods, namely, to further improve the understanding and to pay attention to the positive transformation of ideas, the construction of innovation and entrepreneurship education curriculum system, the construction of teachers' team, and effectively improve the ability of innovation and entrepreneurship of college students, but also promote their better development.

**Keywords:** Colleges and universities; College students; Innovation and entrepreneurship education; Countermeasures.

## **INTRODUCTION**

The reason why we should carry out innovative education activities in college teaching is to cultivate more talented people with higher creative spirit and practical ability, so as to meet the needs of modern social and economic development for comprehensive social talents (Chen jianan, Chen rui, Tao ya., 2014). In order to better guarantee the quality of innovative talents, colleges and universities should pay attention to the problems existing in the education of innovation and entrepreneurship. The emergence of these problems has seriously affected the development of education. Therefore, it is necessary for colleges and universities to improve and perfect the curriculum system of innovative education for undergraduates in the light of the current social and economic development. This paper analyzes the current situation of innovation and entrepreneurship education for Chinese college students, points out the existing problems, and puts forward measures to strengthen and improve it.

## **RESEARCH METHOD**

The research uses meta-analysis, which is a qualitative methodology. It involves an analysis of peer-reviewed journals to collect relevant information on the research topic. Peer-reviewed journals are easily accessible online; they are affordable and stable. Stability means that the data is reliable as it is less likely to change. It should be noted that the subjects of qualitative research here are all Chinese colleges and universities.

## RESULTS AND DISCUSSION

### 1. The problems of college students' innovation and entrepreneurship education.

In view of the problems existing in college students' innovation and entrepreneurship education at present, it has a certain influence on the development of students, so it is necessary for the school to attach importance to this combination. These problems are mainly manifested in the following aspects.

#### 1.1 The lack of awareness of innovation and entrepreneurship education

As a university, its innovation and entrepreneurship education is mainly aimed at better meeting the needs of the development of the knowledge-based economy era. It can be seen from the perspective of education concept and educational content that the development of this kind of educational activity is not only a innovation of traditional education in the past, but also to a certain extent, to promote the reform of traditional teaching methods and teaching content. But in combination with the reality, most colleges and universities in China have not paid enough attention to the innovation and entrepreneurship education, so in the daily teaching management, it is not an important education system. At the same time, there is a lack of more perfect education system and knowledge structure of innovation and entrepreneurship. In general, most colleges and universities carry out innovative and entrepreneurial education activities, the main purpose is to provide a certain opportunity for graduate employment problem, as well as to effectively improve the employment rate of school graduates. The emergence of such a situation not only seriously deviates from the important significance of innovation and entrepreneurship education, but also does not meet the requirements of College Students' innovation and entrepreneurship education.

#### 1.2 Lack of teachers in innovation and entrepreneurship education, and teaching methods are too backward

1.2.1 The problems that exist in the teaching of teachers. At this stage, most universities in China have the same problem in innovation and entrepreneurship education. That is, there is a serious shortage of teachers specializing in innovation and entrepreneurship courses (Huang zhaoxin, Huang yangjie, 2016). Specifically, the number of teachers is insufficient, the knowledge structure of teachers is irrational, and their practical skills are weak. In general, some colleges and universities work in this work, mainly by the teachers of the employment guidance center to take on the current college students' creative education. Although they have certain theoretical knowledge, they still remain in the knowledge of creative and entrepreneurial education, so they do not have the practice of innovation and entrepreneurship. Experience. In addition, there are still some colleges universities lack of relevant experience in the process of innovation and entrepreneurship.

1.2.2 The Problems in teaching means. The teaching problems existing in innovation and entrepreneurship education of university students are mainly manifested in the following three aspects. First, innovation and entrepreneurship education and teaching facilities are relatively backward. According to the actual survey, we can find that most colleges and universities in China have not established a laboratory of innovative education in this teaching. Second, the innovation and entrepreneurship media teaching is not conforming to the modern development trend. Especially in the course of innovation and entrepreneurship education, it is obviously not enough innovation, and the sharing of curriculum resources is relatively low (Huang zhaoxin, Huang yangjie., 2016).

1.3 The atmosphere of innovation and entrepreneurship is not strong, and the students' enthusiasm is not high

1.3.1 Schools do not attach importance to innovation and entrepreneurship education. Some colleges and universities are lagging behind in public opinion on innovation and entrepreneurship education (Ding yingying, Li zheng., 2020). Therefore, in the actual campus innovation teaching work, only a few departments pay attention to it. In the present work of College Students' innovation and entrepreneurship education, it is not only the reform work in the whole education field, but also an important way to carry out traditional education and teaching. Therefore, it is a more complex system engineering, not only rely on a few departments, but need to set up a new education concept in this educational work in colleges and universities, and strengthen the reform of the related curriculum system.

1.3.2 The students' enthusiasm for innovation and entrepreneurship is not high. The relevant data show that in recent years, the willingness of college students to start a business is not high, of which at least 80% of the students are more indifferent to entrepreneurship; Only 11% of students have a strong willingness to do so. There are two main reasons for this situation. First, there is a deviation in understanding of the education of innovation and entrepreneurship. The two is that most students are affected by various factors in the competition of innovation and entrepreneurship education, and are restricted by certain factors, which will seriously affect the enthusiasm and initiative of the students (Ding yingying, Li zheng., 2020).

**Table 1: College students entrepreneurial willingness statistics**

Construct	The percentage
Strong will	11
Between strong will and indifference	≥9
Indifferent	≤80

2. Measures to strengthen and improve college students' innovation and entrepreneurship education

2.1 Further raising awareness and paying attention to the positive transformation of ideas

2.1.1 Actively promoting innovation and entrepreneurship education is a major strategic move to train innovative talents. In the long and medium term plan for national education development, new requirements are put forward for talent training in the development of modern society (Chen kuqing, Mao wei, Yuan zhihua., 2014). The emergence of this index provides an important impetus for the current universities to carry out innovative education activities. In practice, the development of innovation and entrepreneurship education work is mainly aimed at cultivating innovative talents for the needs of the national construction. Therefore, for the university personnel, in the work of entrepreneurship education for college students, it is not only necessary to reform the actual teaching content and teaching methods, but also make a certain change in the ideas and ideas of the teachers and students. In this regard, as a university, it is necessary to carry out the work of innovation and entrepreneurship education in the whole education management, and also to implement the relevant ideas in the specific teaching.

2.1.2 Encourage students to consciously innovate their understanding of entrepreneurship education. In order to effectively improve students' understanding of this aspect, it is necessary for colleges and universities to educate the students according to the actual situation of the students, so as to mobilize the enthusiasm and initiative of students to accept the innovative and entrepreneurship education to a certain extent. At the same time, teachers are required to enhance their creativity in teaching. Only in this way can we better transform the idea of innovation and entrepreneurship into the concept of students.

## 2.2 Constructing the curriculum system of innovation and entrepreneurship education

As a university, it needs to combine the actual situation in construction system of innovation and entrepreneurship education. There are two aspects in the following aspects. First, we should appropriately set up the curriculum system of innovation and entrepreneurship education (Xing yao, 2018). In order to carry out innovative and entrepreneurial education activities for colleges students, first of all, it is necessary to set up innovative and entrepreneurial education curriculum according to the actual situation of different majors in related courses. In this process, colleges and universities should arrange the curriculum of innovative and entrepreneurship education in the compulsory courses of college students according to the current trend of education development, and make clear the number of their teaching hours. In addition, in combination with the actual situation, we should constantly strengthen the construction of College students' innovative and entrepreneurial teaching materials, as well as the problems existing in the students' innovative and entrepreneurial teaching methods teaching ideas, and carry out key reforms. For teachers, in the actual teaching process, we should pay attention to their own way teaching methods and choose appropriate teaching methods according to the specific needs, so as to improve the comprehensive quality of innovation and Entrepreneurship of contemporary college students to the greatest extent. After that, teachers should pay attention to the construction of students' knowledge structure in innovation and entrepreneurship. The main reason for this is to enable students to establish better psychological quality of entrepreneurship mentality in the process. In order to achieve this goal, teachers need to continuously improve their professional theoretical knowledge and practical skills of innovation and entrepreneurship. Two is to strengthen the development of relevant professional courses teaching reform workers. In this work, colleges and universities are required to focus on the idea of innovation and entrepreneurship education in various professional courses. To this end, relevant teachers in the curriculum teaching reform, in accordance with the relevant requirements, the relevant professional needs of the appropriate combination. And carry out the comprehensive analysis and research to it. In addition, teachers should make appropriate adjustments to the original teaching materials appropriately. In this way, a new teaching courses can be designed. In this course, teachers can set up corresponding practical courses according to actual needs. Developing practical courses for students can effectively improve students' practical operation ability. In this regard, as a university in the course of teaching reform, we should be able to appropriately increase the interaction between teachers and students in teaching. In the process, teachers need to pay attention to the use of multimedia assisted teaching tools, which will enable students to learn the course more actively in the process of participation (Guo fangyan, 2020). Finally, colleges and universities should also properly integrate the teaching and practical classroom teaching of College students' independent innovation and entrepreneurship according to the requirements. Practice has proved that this way not only improves college students' sense of innovation and entrepreneurship, but also plays an important role in improving students' entrepreneurial ability.

### 2.3 Pay attention to the construction of the teaching staff and constantly improve their safeguard measures

As we all know, in the whole university student's innovation and entrepreneurship education, the most important link is teachers. In this case, the level of teachers in the course of teaching, that is, the level of teaching, ideological and political level, will play a decisive role in improving the ability of college students to improve their own innovative and entrepreneurial ability. Therefore, colleges and universities need to pay attention to this aspect. For teachers, only with strong innovation and entrepreneurial thinking and rich experience of innovation and entrepreneurship can we better cultivate comprehensive talents to meet the needs of social and economic development. In order to further strengthen the construction of teaching staff and related measures and guarantee in universities, colleges and universities can proceed in the following ways. First, in combination with the actual situation, we will specially build a team of teachers responsible for innovation and entrepreneurship education. After that, we will carry out relevant training work. In the course of training, we should strengthen the understanding of these teachers' ideas and thinking in modern innovation and entrepreneurship, and at the same time, we should also focus on the improvement of teachers' comprehensive quality. Only in this way can teachers improve their efficiency and quality in the practice of innovation and entrepreneurship education (Xing yao, 2018). The two is to strengthen the training of the existing teachers in colleges and universities. We should focus on enhancing teachers' awareness of innovation and entrepreneurship education activities. Third, actively build a team with high quality and strong technical and stable innovation and entrepreneurship. In this work, need according to actual demand, reasonable use professional talented person. In particular, it is to invite relevant experts or technicians to serve as part-time teachers for college students' innovation and entrepreneurship education. In practice, students can be given lectures to communicate and interact with students on innovation and entrepreneurship education activities. In this way, the college students' innovative thinking ability is greatly improved.

## CONCLUSIONS

Based on the above, with the rapid development of China's social economy in recent years, the demand for talents is bigger and bigger, especially the innovative talents. In this situation, colleges and universities need to pay attention to the development of innovative entrepreneurship education of college students' in this work, in order to better improve the ability of students to innovate and entrepreneurship, first of all, it should pay attention to the existing problems of college students' innovation and entrepreneurial education. For some problems, colleges and universities must conduct in-depth research on them, so as to find out the main reasons for the problems. To ensure its effectiveness and quality in innovation and entrepreneurship education. In order to solve these problems, colleges and universities can be carried out according to the above methods, namely, to further improve the understanding, and to pay attention to the positive transformation of ideas, the construction of innovation and entrepreneurship education curriculum system, the construction of teachers' team, and effectively improve the ability of innovation and entrepreneurship of college students, but also promote their better development.

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The above research and discussion are based on innovation and entrepreneurship education in Chinese universities and college students. Due to the limitation of the scope of qualitative research, the research results may not be completely comprehensive



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# The Systematic Literature Review of Safety Outcome in Royal Malaysian Navy

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## ABSTRACT

In spite of current government and organizational efforts and practice of Royal Malaysian Navy (RMN), RMN still struggle to improve the safety of their employees as evidenced by the yearly more than 100 work-related deaths nationwide. Occupational safety research is scattered and inaccessible, especially for practitioners. Through systematically reviewing the safety literature, this study aims to provide a comprehensive overview of behavioural and circumstantial factors that support employee safety. A broad search on occupational safety literature using four online bibliographical databases yielded 44,400 articles. Through a systematic reviewing process 38 online articles were identified that met the inclusion criteria (e.g., original peer-reviewed research; conducted in selected navy; published between 1975-2018). Variables and the nature of their interrelationships were extracted, and then grouped and classified through a process of bottom-up coding. The results indicate that safety outcomes prevail as dependent research areas. The majority of safety research has focused on addressing RMN safety outcomes through variables related to others within the organization, the work (place) itself, employee demographics, climate and external factors. This systematic literature review provides both researcher and safety practitioners an overview of the studied circumstantial factors related to occupational safety behavior. Researcher could use this overview to study gaps, and validate relationships. Safety practitioners could use the insights to evaluate organizational safety policies, and to further development of safety interventions.

**Keywords:** Safety Outcome; Leadership; Safety Climate; Capacity Building; Safety performance Royal Malaysian Navy Organization.

## INTRODUCTION

Occupational Safety and Health (OSH) programmatic or systemic approaches have long been recognised as important to the prevention and management of occupational injury and disease. Over the last three decades, multinational OSH initiatives or management schemes have evolved as a significant technique to solve safety and health in the workplace which influence their implementation, development and effect (Gallagher, Underhill & Rimmer, 2003; Masi, Cagno & Micheli, 2014). In various countries, OSH programme rules and voluntary standards have been established or are under development (Frick, Jensen, Quinlan & Wilthagen, 2000). The Occupational Safety and Health Administration (OSHA) first established voluntary OSH policy recommendations in the USA in 1989. Despite the favourable reviews for these recommendations, OSHA has more recently determined that voluntary adoption has not been sufficient to consider the fullest capacity of OSH services to curb the continued high levels of fatalities, disabilities, and diseases associated with work. An OSHA law on OSH programmes is therefore under development, with an initial draught released in 1998 (Leigh, Markowitz, Fahs, Shin & Landrigan, 1997).

The RMN is the one component of the Malaysian Armed Forces. It is well-known for the RMN mission to protect the straits settlement and interest of Malaysian maritime. RMN has been

responsible by the Malaysian government to ensure safety and peace of Malaysian maritime from the outsider intruder. Apart from that, RMN function is including the capabilities to enhance the national domestic security to a diversified of incidents such as catastrophic events (i.e. floods, and bush event). Throughout this, RMN personnel seems to be a significant asset to move in every inch of the RMN operation. In which, they are the most valuable resource in the RMN given armies where it represents the professional, hierarchy organisations character, highly structured, and stand with the high level of discipline and motivation. By their righteousness of capacity, the training and operation in the field is a life-threatening environment. At the same time, they have to remain motivated to achieve individual and shared goals.

However, when it comes to safety, they have to operate the field mission with the immediate environment, in which, as they need to calculate the risk effectively to minimise risk failure operation which to ensure their safety outcome. In the same vein, the daily task at their operation base also has come to the attention of safety. Where, at the operation, the navy personnel also exposed to several hazards such as ammunition, deadly weapon, engineer machine operation, and intense military training. In which this hazard exposer might lead them to the fatal accident and would catalyst the life-threatening to the navy personnel. Therefore, when it comes to safety measure, the RMN needs to take serious action to ensure the navy personnel safety were safe at all the time, either on the mission field or operation base. A capacity building of safety measure, leadership involvement, compliance, participation in safety climate would lead to better safety outcome. By having this safety combination of the pillar, it would postulate the formulation of safety environment practice in RMN.

Therefore, the intervening of the OSHA Act or similar in RMN organisation was seen as compulsory to postulate a comprehensive safety measure for the armed forces. In which, the content of OSHA has in-depth touch about the industry and non-industry standard towards the safety practice and operation in diversified environment and situation. Also, the field of OSHA encompasses the physical, physiological and psychosocial condition of the organisation that spans the full range of work context for the wellbeing of mankind. Besides that, OSHA management is a multidisciplinary that diverse as economics, engineering, industrial relations, law, occupational hygiene, occupational medicine, psychology, and sociology. Often the practitioner and academic have a difficulty to face a multidisciplinary issue pertained to accident causation and safety (Bohle, & Quinlan, 2000). A wide range of research has been carrying out in many disciplines to clarify and verify those multidisciplinary. Furthermore, industries itself faced a lack of unifying integrated theoretical framework towards multidisciplinary of OSHA management on causation and prevention of accident.

As mentioned in the earlier discussion, the safety outcome in the armed forces has been discussed, whereby the practice of safety was always a top priority in RMN. This organisation experiences a significant accident rate which is not reported publicly or contributed to the SOCSO statistics (Syed Aziz, 2012). It is a main priority to improve occupational health and safety in the RMN, having a separate security legislation and own regulatory institution make the RMN in difficulty condition because the Armed Forces safety act are not bound by the 1994 OSHA (Act 514) in Malaysia. Even though, RMN has practised its safety standard that similar to OSHA standard. In which, Occupational Health and Safety Management System (OHSAS) 18001:2007 has been a guideline since 2009 to enhance safety workplace environment in RMN (OSHP, 2018) for better safety outcome.

Currently there were very limited research that have been carried out to explore, investigate, and identify the occupational accidents, hazards and risk factors towards the safety outcome in the RMN in Malaysia. An extensive review have been carried out from the prominent

literature in RMN specifically. An extensive review from the previous studies that have been conducted on occupational incidents, accidents, hazards and risk factors in RMN from the year 1958 to 2019.

Based on an extensive reviewed from previous study an literature, it has displayed a polar about safety study in RMN (Refer Table 1.2). The evidence showed most of the studies conducted were only focused on occupational hazards in the RMN and a very limited none research done were specifically concentrate on RMN policy implementer as a unit analysis were shown. It has come to notice that their poor safety climate in RMN lead towards poor safety outcome (Syed Aziz, 2012). It is undeniable that promoting and cultivating safety climate begin with safety leadership. Safety climate in organisations is vital action to develop a safety culture that can be embedded in any particular organisation. Besides, by safety culture practice would make any specific person always to be reminded and aware about their safety and health condition at the workplace (Neal, Griffin, & Hart, 2000; Zadow, Dollard, Mclinton, Lawrence, & Tuckey; 2017; Murphy, & Fogarty, 2017).

Organisation value attribute focus towards safety antecedents would expedite safety outcome in the workplace to provide better accident risk-free workplace (Silva, Lima, & Baptista, 2004). As this value always been discussed in a separate principle. On the matter, the combined value of safety leadership style (Zohar, 2002; Fin & Yule, 2004), capacity building (Murie, 2007; Hawe, Noort, King & Jordens, 1997), and safety performance (Griffin & Neal, 2000; Zohar, Huang, Lee & Robertson, 2014) in safety climate would make a better organisation in building safety outcome in workplace. Building on previous studies in workplace safety and environment, the authors analysed that leadership style, safety performance, capacity building are believed to be antecedents of the specific safety climate and the associations between these climates and safety outcome. This combination factor, would catalyst better RMN policy formulation and operation, including with implementation. It is believed that leadership style, safety performance and capacity building will predict the safety climate, which will in turn mediate the relationship between these constructs and safety outcome. By having those mentioned factors, the value of safety outcome would be better in term of the result that reduces the accident in RMN organisation.

Therefore, the main problem of the RMN in safety is to gain better safety outcome that substantiated from safety climate, leadership, and organization capacity itself (capacity building) including with RMN personel (safety performance). Hence, integrated and combination factors need to be postulated in RMN safety practice to generate better safety outcome result. Those factors are leadership style, capacity building, safety performance, safety climate, and safety outcome. These factors will be further identified and examine to determine its function in this research. So, the need to model development for safety outcome in RMN would have more inclusive and comprehensive result for better future safety compared to previous practice. For that reason, this research is deemed necessary to be further examined and carried out for better health and safety among RMN personels. In general, the main objective of this paper is to review the literature of safety outcome in RMN. To be specific, this study aims to achieve an objective in identifying the factors contributing towards the safety outcome in RMN.

**Table 1.1: Summary of the previous studies conducted on Occupational incidents, accidents, hazards and risk factors in RMN.**

No	Author	Articles	Respondents
1	Hamid & Shariff (2017)	Towards the Development of a Standardised HIRARC Guidelines for Royal Malaysian Navy Ships' Galley	Cooks in RMN
2	Bokti & Talib, (2009)	A Preliminary Study on Occupational Stress and Job Satisfaction among Male Navy Personnel at a Naval Base in Lumut, Malaysia	Male Officers and non-officers of RMN Lumut, Perak
3	Zainal & Rampal (2006).	Occupational Injuries Among Royal Malaysian Navy Personnel, Lumut Base, Perak	Navy personnel who attended to RMN Hospital Lumut, Perak.
4	Syed Aziz, S. H. (2012).	Factors influencing safety behaviour in the Malaysian army.	Malaysian army
5	Collins (1958)	Accidents In A Naval Dockyard	Royal Naval Hospital, Singapore.
6	Rahman & Othman (2019).	Factors Affecting Workplace Injuries at 73 Workshop Division Malaysian Army	Malaysian Army
7	Chan, Hamid, Din, Ahmad, Nadzalan & Hafiz (2019).	Prevalence and Factors Associated with Low Back Pain Among Malaysian Army Personnel Stationed in Klang Valley.	Malaysian Army
8	Din, Rampal, Muslan, & Hoe (2016).	Association between pain catastrophising and musculoskeletal disorders is modified by past injuries in Malaysian military recruits.	Malaysian Military Recruits
9	Ab Aziz, Nuawi, & Nor (2015).	New regression model for predicting hand-arm vibration (HAV) of Malaysian Army (MA) three-tonne truck steering wheels.	Malaysian Army
10	Ab Aziz, Nuawi, & Nor (2016).	Development of Noise and Vibration Exposure Monitoring System for Malaysian Army (MA) Three-Tonne Trucks.	Malaysian Army
11	Zakowski, B., Wagner, I., & Domzalski, M. (2019).	Analysis of a military parachutist injury—a retrospective review of over 37,000 landings.	Soldiers of the Polish 25th Air Cavalry Brigade
12	Omar, A., Leong, H. L., & Moy, F. M. (2020).	Trend and Prevalence of Overweight and Obesity among The Military Population—A Systematic Review.	Malaysian Army
13	Abul'as, Abdul Rahman & Mat Radzi (1998).	An exploratory study on occupational safety and health hazards (OSHH) in the Malaysian Army	Malaysian Army
14	Ahmad, Mahidon, Shukur, Hamdan & Kasmin (2014).	Reconstruction for chronic grade-II posterior cruciate ligament deficiency in Malaysian military personnel.	Malaysian Army
15	Shiyuti, Mohamad & Sidek (2014).	Otosopic Changes Before and After Shooting Amongst Military Army Personnel.	Malaysian Army
16	Samil, F., & David, N. V. (2012).	An ergonomic study of a conventional ballistic helmet.	Malaysian Army
17	Tan & Lopes (1972).	A preliminary study of the status of leptospirosis in the Malaysian Armed forces.	Malaysian Army
18	Ahmad (2011).	A Study On Prevalence Of Hearing Impairment And Ear Diseases Among Navy Personnel Of The Royal Malaysian Navy, Lumut Perak	Navy Personnel

19	Zulkafly, Saim, Hasen Said, Mukari & Rajaa Abdullah (1996).	Divers, N. (1996). Hearing Loss in Diving~ A Study amongst Navy Divers.	Navy Personnel
20	Mukri (2004)	Tahap Tekanan Kerja Dan Faktor Penyebab Tekanan Kerja Di Kalangan Penyelam Tldm Di Pusat Selam Tldm, Pangkalan Tldm, Lumut, Perak Darul Ridzuan	Divers RMN

## REVIEW OF LITERATURE

### Safety Outcome

An interpretation of safety outcome requires close attention to the measure and characteristic of the main data source. Safety outcome has a limited discussion in the literature widely. In which, most of the debate on safety outcome can be founded in medical or health industry (Minichiello, Marino, Khan, & Browne, 2003; Liu, Lee, Chia, Chi & Yin, 2012; Lee, Yoo, Kim, Koo, & Lee, 2015; Saini, Atchaneeyasakul, Goswami, Ambekar, Ramdas, Guada, & Yavagal, 2017). Moreover, every measure of task performance simultaneously with the expected outcome of the task. Therefore, most of the underlying safety outcome discussion surround that area.

Past historical trends of the pattern were mixed for the safety outcome measure reviewed with certain measure showing some improvement, declining, and unchanged. Thus, this literature will outline its literature of safety outcome then establish its measurement for safety outcome in the organisation, especially in the military organisation.

At first, this literature attempt to define the term "safety". Rowe (1977) describe the word of safety as the possibility for the occurrence of the undesired consequences of an unfortunate event. While Confer and Confer (1994) explained, it's as the appropriate conduct of a substance task to remove or avoid any capacity towards cause to the injury or harm. Besides, Van Steel (1996) simply indicated the term of safety as the absence of danger or hazard exposer from any harm result. Meanwhile, in the millennials era, a different safety concern has been outlined. In which among millennials, there is much concern about personal safety. Thus, safety term mean in millennials era is the best safety practice in ensuring safe and healthy working condition with providing for research, training, education, and information (Oakes, 2009; Goetsch, 2011, Friend & Kohn, 2014). Other than that, according to Kumar, Chelliah, Chelliah, and Amin (2012), safety can be described as liberation from harm, injury and danger. Moreover, safety can also be a form of "caution" to escape risk (Makhtar, Balakrishnan, Parasuraman, Zakaria & Ismail, 2020). To conclude, this literature for safety means developing a safe and healthy workplace, including able to elicit any possible danger and incident that might cause any harm.

Then, the term "outcome" can be defined as the possible result of an experiment that has been performing. Further, in an extent of outcome meaning is the potential consequences derive from the experiment form with the determine elements of a sample space (Schalock, 2001; Kishi, Abdalla, Chun, Zorzi, Madoff, Wallace, & Vauthey, 2009). In another mean, the outcome is the output can be measured from various or diversified elements or perspective (Kim, Lee, Washington, & Choi, 2007; Pashayan, Wallman, & Bartlett, 2015; Chevyrez & Friz, 2017). The combination of two words between safety and outcome have determined a new and extension of safety meaning. In which, the safety outcome defines as safety output or result that generate through several determinants indicator for the better result (Minichiello et al., 2003; Vaishnav, Pettigrew, & Ryan, 2008; Liu et al., 2012; Corbett, 2017).



It was found that the importance of safety outcome in the military organisation should align from these measurements to attain an inclusive and comprehensive safety outcome model. Saleh and Pendley (2012) stated that the important element of safety outcome together with the safety literacy among the individual in any particular organisation (Medeiros, Hillers, Kendall, & Mason, 2001; Mastal, Joshi, & Schulke, 2007; Arcury, Estrada, & Quandt, 2010). Moreover, Hu, Griffin, and Bertuleit (2016) indicated that the need element of safety compliance would catalyst the enhance of safety outcome in the organisation (Najavits, Weiss, Shaw, & Muenz, 1998; Shiffman, Ferguson, Rohay, & Gitchell, 2008; Watson, Yap, Pandi, Husband, & Tekelas, 2018). Meanwhile, Stanton, Chambers, and Piggott (2001) explained the preference requirement of awareness measurement in safety outcome as it would stimulate the safety climate in safety outcome in the organisation (Sawacha, Naoum, & Fong, 1999; Ownsworth, & Clare, 2006; Oschwald, Lund, Latorre, Shelton, Hughes, Liston, & Powers, 2015; Campanale, Boldrini, & Marletta, 2018).

Apart from that, Clarke and Ward (2006), pinpoint the significance safety participation among the individuals in an organisation as the comprehensive implementation of safety outcome model would be exhaustive reach from the top to bottom of the organisation (DeJoy, Schaffer, Wilson, Vandenberg, & Butts, 2004; Maggard-Gibbons, 2014; Mullen, Kelloway, & Teed, 2017). In contrary, Hall (1983) expressed the earlier thought about accessibility on logistic reach as it would reduce the time required for rescue accessibility (Repetto, Castiglioni, Boscarini, Balian, Vaninetti & Binaghi, 1999; Aguiar, Stolzer, & Boyd, 2017), simultaneously Bates and Gawande (2003) more concern about information accessibility among the participation in safety community area (Lavin, Harper, & Barr, 2015; Goldenberg & Grantcharov, 2018). This two different view become one part of the safety outcome dimension for accessibility. Record keeping has become a vital task for safety outcome performance, by having a proper and excellent record keeping it will be tractable at every case occur at the workplace (Jaselskis, Anderson, & Russell, 1996; Zegers, de Bruijne, Spreeuwenberg, Wagner, Groenewegen, & Van der Wal, 2011; Hofmann, Burke, & Zohar, 2017). The model of safety outcome will not be considered as inclusive and comprehensive if the element of Hazard Identification, Risk Assessment, and Risk Control (HIRARC) are not to be plug-in. Hence, Saedi, Thambirajah, and Pariatamby (2014) highly stressed on the employment of HIRARC in workable and practicability of safety outcome. As the basis of HIRARC able to forecast and determine pre and post any harming occurrence condition (Ideris, 2012; Abidin & Irniza, 2015; Muniandy, 2015; Anggraini, & Kusuma, 2018).

In conclusion, to establish safety outcome consensus for the current requirement, the outline element in the military organisation about this characteristic should be articulate. In which, it includes safety literacy, safety compliance, awareness, safety participation, accessibility, record keeping, and HIRARC where it can become the foundation development of safety outcome measurement.

### **Safety Leadership Style**

Safety leadership was one of the divisions of leadership style, where the leadership style was widely discussed in management. There is a lot of discipline to consider the leadership style, especially in the organisation part. Commonly, most of the leadership debate stand around on how to manage the workers, individual, and organisation. Apart from that, the leadership style typically concentrates on the outcome for productivity, profit, and turnover. However, in this particular research, the focus is about safety in the organisation. Thus, the emergence of a millennial era begins a different dimension of leadership style in the organisation, the phrase of “good safety is good business” widely spread (Yukl, Gordon, & Taber, 2002). From this

phrase, it was stated that the importance of safety leadership in the organisation to sustain the business or organisation performance.

Currently, most of the past empirical leadership and safety research is from the energy and manufacturing industry (Ginnett, 2010; Fallucco, 2018). But still, there is safety leadership has been discussed in the military organisation (Winn, 2014). The author has discussed the need for the leader in the development of safety in the military organisation. Furthermore, Flinn (2003) extended the need for safety leadership in the military organisation due to the dangerous activity of armed forces expose, including with the hazard exposer. A transformational leadership from autocratic or regimental leadership should be intervened with the safety leadership as part of the scope of leadership in the military organisation. Despite concentrate on discipline manner, a need for safety measure concern among leadership is a current focal point in the military in ensuring each of the armed forces stays safe (Alexander Arthur & Hardy, 2014).

The element of safety leadership should concern about the transformational and transactional value in leadership (Bass, 1994; Masood, Dani, Burns, & Backhouse, 2006). The transactional in leadership is about the relationship between leader and follower. The leader is promising in rewarding the subordinate or follower towards their performance in an agreed standard guideline given. From this situation, the leader gained compliance with mutual benefit from the subordinate together with the expected outcome of the performance (Bass & Avolio, 1993). Simultaneously, transformational leadership resides on the inspiring, charismatic, considerate and stimulating value (Bass & Riggio, 2006). Through this portray image of leadership, the subordinate would cultivate the sense of purpose towards the image of success, confident, shared goal, mutual understanding, and self-belief (Roueche, Baker III, & Rose, 2014). In summary, that revealed element of safety leadership is necessary to extrapolate the means of safety leadership in the military organisation.

### **Capacity Building**

Capacity building is also known as capacity development. It was first started in 1991 that the term evolved from the "community capacity building" by the United Nations Development Programme (UNDP). In the beginning, the meaning of capacity building defines as a development process that occurs in a long-term denote all relevant stakeholder. Furthermore, it divided into three different levels of the capacity building; individual level, institutional level, and societal level (United Nations Committee of Experts on Public Administration, 2006). In the same vein, Wakely (1997) defined the capacity building is about training or human resource development in combination with organisational development and institutional development. From that point, the process of capacity building for the individual would equip with the inclusive understanding and skills so that the talent could generate a compelling performance.

On the other hand, Honadle (1981) described that capacity building is a concept that subsists towards the broad range of activities that are the focus at enhancing the capability of citizens and their governments to generate further responsive and efficient services and public goods. Hence, an earlier discussion of the capacity building, it can conclude that capacity building is the set of activities towards the development to improve any particular individual, organisation, institutional, or societal. In that way, capacity building can be linked to safety development by promoting standard and participation (Murie, 2007). Consequently, the capacity building would promote catalyst better sustainable development in the organisation towards improving safety outcome.

### **Safety Performance**

The term safety performance was widely used in many organisation as its function to improve performance in safety practice. Several studies have discussed the meaning of safety performance as part of the criterion measure in term of accident rates (Siu, Phillips, & Leung, 2004), occupational injury rate (Siu, Phillips, & Leung, 2004), near miss rate (Hinze, Thurman, & Wehle, 2013), safety compliance (Mejza, Barnard, Corsi, & Keane, 2003), and safety practice (Mearns, Whitaker, & Flin, 2003).

Before those indicators were mentioned in safety performance, Campbell, Gasser, & Oswald (1996) first discuss the distinction of performance component. Campbell et al. (1996) divided the element of performance into two parts, first about the determinant of performance and second, the antecedents of performance. While Borman and Motowidlo (1993) stated that component of performance explained the actual behaviour of the personals or individuals perform their task at work. In which, it segregates the performance into two main parts that are contextual performance and task performance.

They were starting in the new millennial area, as the working condition and task complexity become advance since the rapidness development of technology. The new definition of safety performance also has to be evolved. Thus, Safety performance has defined into further meaning, in which the element of safety practice and compliance advance the in this meaning (Griffin & Neal, 2000; Mejza, Barnard, Corsi, & Keane, 2003). Those combination meaning would inclusive the definition of safety performance in the way of process practice and policy improvement for compliance in the organisation. In the implementation of this meaning, it will generate a chain link with promoting safety climate and better safety outcome. Thus, the outline of this literature defines the sub-element of safety performance into safety practice and safety compliance.

### **Safety Climate**

The evolution of safety climate definition has been undergone more than 30 years (Cohen, Smith, & Cohen, 1975), the emergence of safety climate in the era of 70s described the dimension of safety climate for its characteristic. During this time, the safety climate consulate the definition of safe conduct in the worker's occupational behaviour and perception of management attitude towards safety. Then, in the modern era of safety climate define as value to be perceived on safety at any point of time in organisation or institutional. These beliefs and understanding affected the values, attitudes, action, and opinion of other individuals or workers in an organisation (Lee, Huang, Cheung, Chen & Shaw, 2018). In addition, it can be enhanced from time to time, depending on the current situation or environment (Zohar, 2014).

Previous studies has found that safety climate was one of the significant predictor of safety performance (Griffin & Neal, 2000; Gillen, Baltz, Gassel, Kirsch, Vaccaro, 2002; Siu, Phillips, Leung, 2004; Lyu, Hon, Chan, Wong & Javed, 2018) . In which, it was also reported that the workers unsafe activity was the main contributor of many accidents. These safety climate practices can be found in the "high reliability" industries. That term refers to the sectors that have the possibility of incident injury or accident typically industries are manufacturing, military, mining, construction, and agriculture (DOSH, 2018). Currently, it was noticeable that some movement to redefine safety measure in safety climate based on retrospective data or called lagging indicators. Those mentioned were to measure fatalities, incidents and lost time accident rates (Flin, Mearns, O'Connor, & Bryden, 2000). A transformation movement from lagging indicator towards leading indicators in safety measure in safety climate. Leading indicators used to forecast changes in the situation, in safety, it was employed to predict the exposor of hazard that might lead towards fatal injury or death. It has been assessed through the application of a certain method of assessment of safety, such as risk assessment activity.

The application will be based on the leading factor from the past data, statistical data and trend to determine possible fatalities cases (Manuele, 2009; Hinze et al., 2013).

The usage of a leading indicator for safety climate measurement that predictive measures were enabling safety condition monitoring (Flin, 1998), which may elicit the extended time frame waiting for the system to fail in order to take remedial actions that came from the weaknesses. On the other hand, the leading indicator in safety climate could be conceptualised from the “feedback” assessment method and switches to the “feedforward” control (Falbruch & Wilpert, 1999). As a result, safety climate can be formed as the surface from the workforce attitudes and perception according to the current environment as the safety culture discerned (Schneider & Gunnarson, 1991; Cox & Flin, 1998). It is an overview of the organisation or institution provides an indicator towards outline the safety culture in the work of group, plant, or organisation.

### **METHODOLOGY**

To examine the foci of research to date, we conducted a systematic search in the occupational safety literature from 1980 to 2015. A systematic review of the literature is typically based on a ‘detailed and comprehensive plan and search strategy derived a priori’ in order to reduce bias (Uman, 2011). In contrast to a meta-analysis we do not strive to come to a ‘single quantitative estimate or summary effect size’ using statistical techniques (Uman, 2011). Instead, we aim to present an overview of topics addressed in both quantitative and qualitative research on occupational safety, and their general direction. This approach is similar to approaches in previous systematic reviews (e.g., Ahonen et al., 2007, Kringos et al., 2010).

Our aim was to capture as much of the available literature on occupational safety as possible. We therefore chose a literature search using broad search terms as a starting point, as opposed to citation networks that may result in overlooking new and less frequently cited literature. Our literature search was conducted using the following bibliographic databases: Scopus, Web of Science, PsycInfo, and Business Source Elite. We used combinations of keywords that emerged from the literature as key indicators of occupational safety: safety performance; safety participation; safety compliance; occupation\*; and employ\*. This resulted in a total of 44,400 records published between 1975 and 2018.

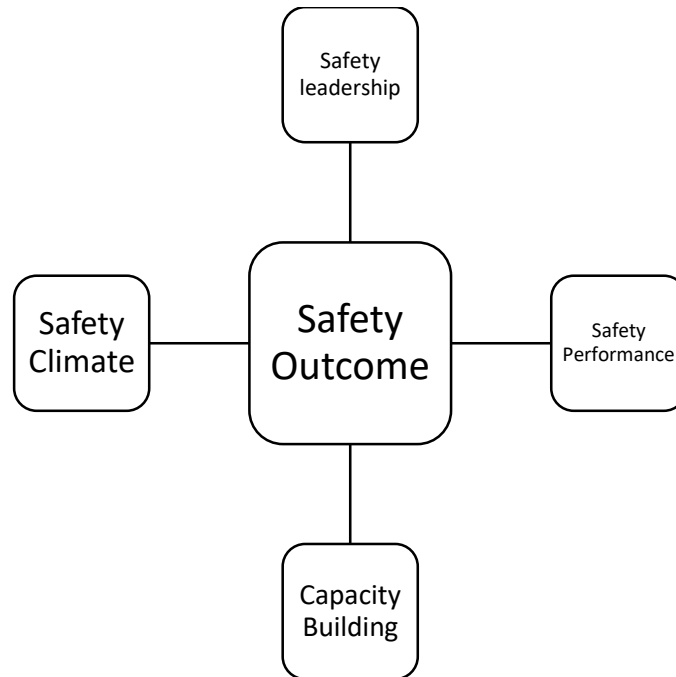
### **FINDING ANALYSIS OF THE LITERATURE**

Based on the discussion earlier, the crop up of safety outcome discussion literally in the area of single view and some combination of variable involved. In which the discussion view, either between safety leadership style, safety performance, and safety climate (Wu, Chen, & Li, 2008) or safety leadership, and safety performance with safety climate as a mediator (Wu, Chang, Shu, Chen, & Wang, 2011). Others, the past empirical either in a pair of two or focus only on the main variable. In the view of that part, based on author extensively view of literature, still did not find any similar study that combines all five variables into one research and makes safety climate as a mediator variable (refer Table 3.1). In detail for the involvement variables in this research model are safety outcome as the dependent variable, safety leadership style, capacity building, and safety performance as the independent variables. In contrast, the safety climate stands as the mediator variable.

Together, from this combination of those variables, it will generate the unexplored view of safety outcome in RMN organisation. As currently, there is limited discussion about the safety outcome with the contribution of any those mentioned variable. As a consequence, these antecedent’s hopes can develop and introduce a better safety outcome model for RMN. Table 3.1 below indicated the summary of previous literature of this study:

**Table 3.1: The Summary of Previous Literature of This Study**

No	Author	Safety leadership	Capacity building	Safety performance	Safety climate	Safety outcome
1	Minichiello, Marino, Khan, & Browne (2003)					/
2	Liu, Lee, Chia, Chi & Yin (2012)					/
3	Lee, Yoo, Kim, Koo, & Lee (2015)					/
4	Saini, Atchaneeyasakul, Goswami, Ambekar, Ramdas, Guada, & Yavagal (2017)					/
5	Pendley (2012)					/
6	Stanton, Chambers, & Piggott (2001)				/	/
7	Sawacha, Naoum, & Fong (1999)				/	/
8	Owensworth & Clare (2006)				/	/
9	Oschwald, Lund, Latorre, Shelton, Hughes, Liston, & Powers (2015)				/	/
10	Campanale, Boldrini, & Marletta (2018)				/	/
11	Hence, Saedi, Thambirajah, & Pariatamby (2014)					/
12	Winn (2014)	/				
13	Flinn (2003)	/				
14	Bass (1994)	/				
15	Masood, Dani, Burns, & Backhouse (2006)					
16	Bass & Avolio (1993)	/		/		/
17	Bass & Riggio (2006)	/				
18	Wakely (1997)		/			
19	Honadle (1981)		/			
20	Murie (2007)		/	/		
21	Siu, Phillips, & Leung (2004)			/		
22	Siu, Phillips, & Leung (2004)			/		
23	Hinze, Thurman, & Wehle (2013)			/	/	
24	Mejza, Barnard, Corsi, & Keane, (2003)			/		
25	Griffin & Neal (2000)			/		
26	Mejza, Barnard, Corsi, & Keane, (2003)			/		
27	Cohen, Smith, & Cohen (1975)				/	
28	Lee, Huang, Cheung, Chen & Shaw, (2018)				/	
29	Zohar (2014)				/	
30	Flin, Mearns, O'Connor, & Bryden (2000)				/	
31	Manuele (2009)				/	
33	Flin (1998)				/	
34	Falbruch & Wilpert (1999)				/	
35	Schneider & Gunnarson (1991)				/	
36	Cox & Flin, (1998)				/	
37	Wu, Chen, & Li (2008)	/		/	/	
38	Wu, Chang, Shu, Chen, & Wang, (2011)	/		/	/	
39	<b>Current study</b>	/	/	/	/	/



**Figure 1: Conceptual framework developed for this literature review.**

### **LIMITATIONS**

The conducted literature review has some limitations that will be discussed in relation to the steps conducted in this study. With regard to the literature search and selection of articles some potential limitations need to be addressed. In finding appropriate literature, the choice was made to use online databases only. This might have resulted in a shifted distribution of articles over the years, due to older publications that might not be digitally available. On the other hand, and this was our main rationale to use online publications only, it increases the replicability and controllability of this study as online articles are easily accessible to other researchers.

Our literature search did not include keywords like 'injury' and 'injuries,' that might be common in this or adjoining fields. This deliberate choice was made in order to direct the focus towards determinants of safety, instead of the wide range of potential occupational safety outcomes such as injuries, near misses, accidents, incidents, or lost-time rates. Due to the sheer number of publications it was not feasible to include each and every study that was conducted across the four industries of interest. However, the selection method applied in this review was thorough and transparent, and it provides other scholars with the opportunity to perform complementary reviews. Limiting the included literature to four specific domains lead to the absence of certain relationships that have been established in other domains. The gaps identified in our research are purely based on gaps present in the included literature. With regard to the analysis of the data, a potential limitation is related to the lack of interrater reliability in selecting articles based on their full text, and the extraction of individual relationships from the articles. Instead, potentially problematic cases were discussed and decided upon by two of the authors together. The same holds true for the recoding of extracted variables, as this whole process was done by two of the authors together. In the process of



recoding variables from the bottom up, we have exchanged some depth and accuracy in favour of clarity and concision.

### **PRACTICAL APPLICATIONS**

The results of this systematic review provide several practical leads for safety practitioners. First, there is an increasing need among practitioners for grounded knowledge about the field of occupational safety. Our results provide practitioners with a comprehensive overview of the elements present in literature, which serves as good starting point for getting up to speed with the field. Second, the comprehensive overview of the elements and the nature of their relation with negative safety outcomes and performance, provides practitioners with a number of useful leads in the development and evaluation of interventions aimed at improving occupational safety.

### **CONCLUSION**

This systematic review mapped scientific research from 1975 to 2018 in the domains of Navy, Armed forces, and occupational safety outcome. In doing so, it showed that research is focused on improving safety outcomes through variables associated with workplace characteristics and circumstances, climate and culture, management and leadership, and capacity building.

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# Resources and Information Technology Towards Operational Performance in Logistic Firm

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## ABSTRACT

Logistics concept is integrally linked to economic operations. In particular, logistics operations are becoming increasingly important to a company's success due to the importance of their performance evaluation. Operational performance is important to influence the logistic firm to achieve the strategy and long-term objective. Operational performance is divided into four dimensions: quality, speed of delivery, flexibility, and cost. Therefore, this study attempts to investigate the factors that influence operational performance in the logistics firm. The factors of human resources, organizational resources, relational resource and value-added information technologies that can be affected operational performance in logistics firms. This study reviews past literature for the operational performance and the factors of operational performance in the logistic firm. It focuses on the examination of the factors that influence operational performance in the logistic firm.

**Keywords:** Operational Performance; Human Resources; Organizational Resources; Relational Resources; Information Technology.

## INTRODUCTION

Operational performance is defined as an organization's ability to become more effectively create and deliver products to consumers with enhanced quality and shorter lead times, eventually enhancing its market position and expanding its chances of selling its products into global markets. According to Morgan et al, (2018) to analyze the operational performance, firm need to achieves a result of executing a sustainable supply chain strategy on logistics outcomes such as delivery time, inventory levels, and capacity utilization. Operational performance can be measured by transportation, warehouse and supply chain aspects and this will be divided to the shipping time, order accuracy, delivery time, transportation costs, warehousing costs, number of shipments, inventory accuracy, inventory turn over and inventory to sales ratio (Datapine, 2021).

On the other hand, organizational performance (OP) is an example of how well a company meets its targets. Operational performance applies largely to short-term objectives whose achievement is seen as leading the organization to achieve its strategic or long-term objectives. Operational performance is divided into four dimensions: quality, speed of delivery, flexibility and cost (Swink et al., 2005 and Muthemba, 2016).

In the meantime, quality means 'conformity and consistence' in other words that the product complies faithfully with the standards and does not require a rework or maintenance return. Quality is an important element in the happiness of customers. The pace of delivery improves

the consumer's satisfaction - it can easily react to customer refunds and faulty product replacements.

Next, flexibility means the freedom to adjust what, how and where, so that four forms of criteria are available to the company: Flexibility of goods, which is the right to fix or change products returned, mix versatility in terms of capacity to manufacture a wide range of goods, flexibility in volume, which entails being able to adjust production levels and flexibility in distribution in relation to the ability to change delivery times (Muthemba, 2016).

There are great variations in the expense systems of the various organizations. When the other performance targets are well handled - not only external expenses can be paid for by good quality, high speed and great stability but even operational costs can be saved. Costs, times and quality are cut as well as flexibility gains benefit from cooperation and process coordination between participants of the same chain as each company focuses on its core competencies (Jarillo, 1988). The higher the producer relies on its return schedule, the higher the clients rely on the quality assurance of the vendor. In addition, the returns policy of a manufacturer is a central component of the customer support group.

The performance is "Set of metrics used for quantifying the efficiency and effectiveness of supply chain processes and interrelationships, covering certain organization's functions and several companies and for the orchestration of the supply chain. Each organization's objective is to increase its performance, but to change it must be correctly measured first.

Hence, operational performance is the degree to which predetermined objectives and fulfilled by a process-oriented strategy, which tests capital effectiveness and the consistency of goods and services outputs (Shaw, 2003). Operational efficiency defines and analyses the characteristics associated with company performance outcomes including error rates, period of output and inventory sales. Operational success measures are an ongoing framework for the timely, effective and effective implementation, evaluation and pro-active disciplinary action to achieve operational objectives.

Human resources are generally recognized as essential to sustainability and performance in business. As a result, business organizations are eager to recruit talent in order to meet their corporate goals. The HR activities have been seen as having a strong connection to firm performance.

The best appropriate theory for explaining organizational resources was determined to be the Resource Based View (RBV) theory. RBV analyses and categorizes a company's strategic advantages based on its capabilities, talents, assets, and intangible assets (Pearce and Robinson, 2013). The core concept of RBV theory is that each business has a "unique" bundle of resources both real and intangible assets that the organizational capabilities then exploit.

According to Karia et al. (2015) claimed that the firm's relational resources are its embedded relationships. These connections aid in the development of trust between the company and its partners, as well as long-term collaboration and coordination. The contribute to the firm's activities and performance by improving the efficacy and efficiency of communication with suppliers and consumers. In this work, it can define relational resources as the firm's strong ties with its suppliers and customers. The objective of this study is to past literature for the factors of operational performance in logistic firm.

The current business climate is one of discontinuity, with constant and disruptive change. It is difficult for business firms to accurately estimate future performance. The modifications might

be modest or major and the major problem is the ability of a firm to effectively manage with this uncertainty in performance levels, rather than the magnitude of the functions (Selvam et al, 2016). As a result, strategic management in every business becomes a starting point. Furthermore, the discovery of factors or dimensions that influence company performance. Supply uncertainty, customer or demand uncertainty, and technological uncertainty are three causes of uncertainty. The level of variation and unpredictability in suppliers' product quality and delivery performance is characterized as supply uncertainty (Li and Lin, 2006). Supply uncertainties include the engineering level of the supplier, lead time, delivery reliability, arriving material quality, and so on (Lee and Billington, 1992). This uncertainty induced by the supplier may result in the firm's manufacturing process being postponed or even halted. Furthermore, these uncertainties will extend across the supply chain in the form of amplification of ordering unpredictability, resulting in excess stock, increased logistical costs, and inefficient resource utilization (Yu et al., 2001). Thus, the problem is how the uncertainty may be affected the operational performance and how the factors of resources influence the operational performance in logistics firm. The objective of this study is to review the past literature for the factors of operational performance in logistics firm.

## LITERATURE REVIEW

### i. Underpinning Theory

Resource-based view (RBV) theory are widely used for control and arrangement of capital in literature on business strategies. It takes an individual approach to the acquisition and effective utilisation of organisation (Day 2011). RBV assesses a company's strengths and skills to achieve net positive returns, customer loyalty and create a durable competitive edge. These resources may be tangible or intangible, including money, staff, information, IT and equipment (Formentini and Taticchi 2016).

The RBV illustrates well that an enterprise should manufacture superior goods or services than another company, create a sustainable competitive edge and minimize production costs (Vlachos and Malindretos, 2012). The RBV also promotes the idea that collaboration and information dissemination among individuals within a firm improves the knowledge that can be applied to business and provides a distinct source of competitive advantage (Bouranta et al., 2017), as interconnected internal capital work together to achieve the best results at the lowest cost (Lozano et al., 2015). According to Hunt and Morgan, (1995), Lafferty and Hult, (2001), Crittenden et al, (2011) on the basis of this theory, in line with many scholars, market-oriented businesses are in a unique position to adapt strategically to customers and stakeholders concerned with broader responsibilities to society and will thus achieve competitive advantages and superior performance in order to develop their businesses over the long term. According to Queiroz and Wamba (2019), companies are thus trusted related as a mixture of distinguishing tools allowing them to grow and create competitive advantage. The RBV approach will help address questions about organizational structure management (Treiblmaier, 2019). The RBV firms may gain a competitive advantage by owning and controlling specific types of resources which eventually leads to superior companies' results investigates the utility of analyzing firms on the capital side rather than on the commodity side in its research on capital and returns. Resource-based view (RBV) theory was widely used for the control and arrangement of capital in literature on business strategies. It takes an individual approach to the acquisition and effective utilisation of organisation. RBV assesses a company's strengths and skills to achieve net positive returns, customer loyalty and create a durable competitive edge. These resources may be tangible or intangible, including money, staff, information, IT and equipment. Theory of RBV of firm competencies to focused resources

commitments are associated with factors of operational performance such as human resources, organizational resources, relational resources and information technology. Thus, theory of RBV will apply in this study.

## **ii. Operational performance**

Operational performance is the degree to which predetermined objectives are fulfilled by a process-oriented strategy, which tests capital effectiveness and the consistency of goods and services outputs (Shaw, 2003). Operational efficiency defines and analyses the characteristics associated with company performance outcomes including error rates, period of output and inventory sales. Operational success measures are an ongoing framework for the timely, effective and effective implementation, evaluation and pro-active disciplinary action to achieve operational objectives (Carter et al, 2000).

According to Voss et al., (2012), operational performance applies to elements of an organization's process that can be measured. Production efficiency and error rates, processing time, on-time delivery, cost of quality and scrap reduction, productivity, and inventory control are all factors to consider. According to Srinivasan et al. (2011), supply chain efficiency refers the level of performance of the processes used within the firm's supply chain department. The strategic dimensions in which organizations choose to compete have been identified as operational performance (Chavez et al, 2015). By delivering high-quality products and services in a timely manner, better operational performance may boost customer satisfaction. Its use delivery, flexibility, cost, and inventory to evaluate a firm's operational success based on previous research (Chavez et al, 2015, Lau et al, 2018 and Santos et al, 2019).

Operational performance described as the competitive firms' strategic dimensions, and it comprises operational level indicators such as flexibility and delivery. (Chavez et al, 2015). Quality management system outcomes are also displayed at operational levels. According to Birech (2011) highlighted a number of performance metrics in the operations region, including productivity measures, quality measures, inventory measures, lead-time measures, preventive maintenance measures, performance to schedule, and utilization; specific measures, such as cost of quality, variances, period expenses, and safety measured on a common scale such as number of hours without an accident.

## **ii. Human Resource in Operational Performance**

Human resources have always been seen as the most important aspect of many types of businesses. In terms of efficiency, a company's practice of sustaining and training its employees is one of the benefits that employers give to their employees who work as managers and production workers that had a significant impact on the growth of these companies (Othman & Abdullah, 2016). According to Lombardi et al. (2020) have also looked at the impact of human resource management activities on organizational innovation, and whether there is a link between that and information management competency. Researchers have identified the significance of HRM in operational performance in a variety of ways, including performance enhancers (Delaney & Huselid, 1996).

According to Cristiani and Peiró's (2019), it built efficient and collaborative HRM processes that resulted in lower employee turnover and improved operational and financial results. HRM aggregated outcomes, such as labor productivity, turnover, and employee satisfaction also help to enhance internal organizational performance, such as productivity and quality, and these gains, in turn, have a positive impact on firm financial performance. (Boselie et al.,



2005). Financial performance is positively correlated with productivity and quality (Cooke, 2018; Crook et al., 2011). In terms of efficiency, a company's practice of maintaining and training its personnel are some of the benefits that employers provide their people to serve as managers and production workers have had a significant impact on the growth of these companies (Othman & Abdullah, 2016).

### **iii. Organizational Resources and Operational Performance**

The best appropriate theory for explaining organizational resources was determined to be the Resource Based View (RBV) theory. RBV analyses and categorizes a company's strategic advantages based on its capabilities, talents, assets, and intangible assets (Pearce and Robinson, 2013). The core concept of RBV theory is that each business has a "unique" bundle of resources both real and intangible assets that the organizational capabilities then exploit (Pearce and Robinson, 2013). The organization's resources and competencies allow it to gain a competitive edge (Pesic, 2007).

Organizational resources refer to the employee experience in the "upstream" (Dollard and Bakker, 2010), distal parts of the organizational environment at a contextual and system level (Kalliath, 2012). Organizational resources are defined as components of the organizational environment, physical and psychological system levels that are not particular to the function and which impact directly or indirectly the organizational engagement of the environment, employment resources and commitment.

In general, organizational resources are system supplies and support sources that people and groups may draw from to assist accomplish psychological, attitudinal, motivational, behavioral, team and organizational results (Albrecht et al, 2018). Organizational performance is a key indication of whether a company will succeed or fail. Performance is measured quantitatively and qualitatively, and it is attained via the efforts of individual individuals and departments (Zehir et al., 2016).

### **iv. Relational Resources and Operational Performance**

Relational resources have gotten a lot of attention from management experts among the numerous categories of firm resources (Wong and Karia, 2010 and Shou et al, 2017). According to Gretzinger and Royer (2014) also agreed, by referencing Nahapiet and Ghoshal (1998) for their use of the multi-dimensional framework of social capital in analyzing relational resources.

Recently, Karia et al. (2015) claimed that the firm's relational resources are its embedded relationships. These connections aid in the development of trust between the company and its partners, as well as long-term collaboration and coordination. The contribute to the firm's activities and performance by improving the efficacy and efficiency of communication with suppliers and consumers. In this work, it can define relational resources as the firm's strong ties with its suppliers and customers (Karia et al. 2015). Relational resources have a major influence on a firm's competitive advantages, according to past studies (Ogunmokun and Li, 2001; Story et al., 2009; Karia et al., 2015). This focuses on the importance of the company's external relationships, such as with suppliers and consumers (Karia et al., 2015).

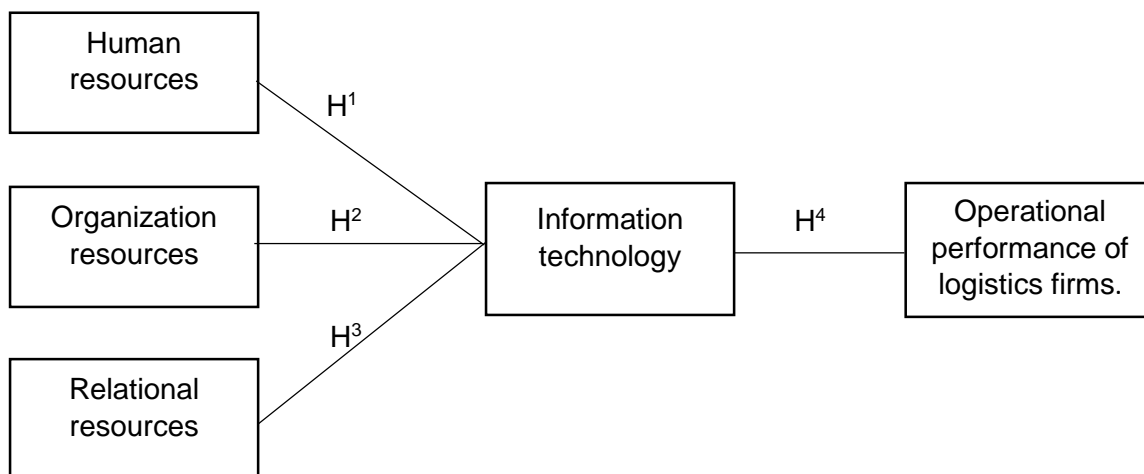
### **v. Information technology as a mediator factor**

Information technology (IT) act as a mediator factors influence the operational performance because of capabilities of IT have a difference impact in used for different countries and there

have a different effect to the logistic firm. Thus, IT act as mediator factors to examine the implication of IT capabilities for the logistic performance. IT consists of the production, processing, storage, security and sharing of all electronic information systems employing computers, storage and networking systems, as well as physical devices, infrastructure and techniques. In view of the ongoing development of these technologies and their rising application in global business, the performance impacts of IT investment remain a hot subject (Sabherwal and Jeyaraj 2015; Chaysin et al, 2016). IT capability is one of the most important variables in supply chain management and plays a crucial role in improving supply chain performance. The success of the supply chain is inextricably linked to IT competence (Zhang and Wang, 2011).

Furthermore, one of the top three important success criteria is the utilization of IT knowledge in supply chain management. Users' IT expertise is critical for fully leveraging accepted technology to improve corporate operations (Ang et al., 2000). According to Ang et al. (2000), IT knowledge may be obtained through training and courses. Furthermore, IT re-configurability has a major impact on supply chain performance. It provides business activities with the benefits of robustness, flexibility, and agility (Basheer et al, 2019). Technology has become a prerequisite in good corporate operations, and supply chain technology has become a need in human existence. According to Basheer et al, (2019), in addition to commercial operations, technical functions are significantly reliant on providing a trustworthy intermediate for high-quality information transfer. As a result, supply chain technology will be more significant than ever before in the textile and garment industries.

#### vi. Research framework



**Figure1: Research framework**

Based on the Figure 1, the factors of human resources, organizational resources and relational resources influence the operational performance with the information technology act as mediating variable.

## CONCLUSIONS

The objective of the study to review the past literature for the factors of the operational performance in logistic firm, thus there are ambiguous findings from the past studied that the operational performance is supported with the factors of human resources, organizational resources, relational resources and information technology for the logistic firm. First factor of the operational performance is human resources and from the past studied was found that human resources positive influence the operational performance with the human resources management such as labor productivity, turnover and employee satisfaction (Boselie et al., 2005). Second factor is organizational resources also influence operational performance to measure either company will succeed and failed (Albrecht et.al 2018). Another factor is relational resources refers to the firm relationship for the connection in the development of trust between the company and its partners and this factors also influence the firm competitive advantage and directly affect to the operational performance (Karia et.al 2015). Information technology act as mediator variable because roles of IT is most influencing the operational performance. IT capability also one of the most important variables in supply chain management and plays a crucial role in improving supply chain performance (Zhang and Wang, 2011). As a conclusion, all the variable influences the operational performance in the logistic firm.

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# Factors Influencing the Intention to Contribute Waqf in Healthcare Among Muslim in East Coast Malaysia: A Conceptual Framework

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## ABSTRACT

Healthcare is one of the sectors that being cover by waqf in attempt to enable the benefits from healthcare waqf can be enjoyed by all members of society and this widespread of benefits will led to the creation of well-being society. The purpose of this study is to investigate the factors influencing the intention to contribute waqf in healthcare among Muslim in East Coast Malaysia. In studying this healthcare waqf contribution factors, three influencing variables have been identified which are attitude, subjective norm and perceived behaviour control. In collecting the required data, Muslim in East Coast Malaysia have been identified as the respondents for this study. Through this research, researcher hopes to enlighten the Muslim in East Coast Malaysia towards the factors influencing their intention to contribute waqf in healthcare. Finding from this research is also expected to help other researchers to extent further research in healthcare waqf by providing the data on the factors that influences Muslim in East Coast Malaysia intention to contribute waqf in healthcare.

**Keywords:** Healthcare; Waqf; Healthcare waqf; East Coast Malaysia.

## INTRODUCTION

In Arabic, the term of waqf is refer as hold, prohibition or confinement, where it means the need of holding and preserving certain property in order to ensure their expected philanthropy benefits can be utilized and any used that might disposed its stated objectives are fully prohibited (Kahf, 2003). Waqf is the proof on the uniqueness of Islamic philanthropy system as its shows the willingness of asset's owner to release their ownership on certain asset in order to ensure its benefits can be enjoyed by other people in the society, in accordance with the aim of asset's owner (Ab Rahman, 2014).

The first waqf that happened in Islamic history was on the development of Masjid Quba that being built by Prophet Muhammad (pbuh) when he was arrived at Madinah during the *hijrah* event and Masjid an-Nabawi has become the second mosque that being built in Madinah after the *hijrah* event (Mujani et al., 2018). In Islam, they encourage their adherents to contribute some of their wealth in helping the poor and unfortunate group of society members. This is not only done through zakat but also by waqf contribution by building a mosque, hospitals, schools, and other facilities that can benefits societies. Those Muslims that commit this noble deed are promised to be reward a Jannah (paradise) on the Hereafter (Ratnasari et al., 2019).

In aspect of beneficiaries, waqf is different from zakat as zakat beneficiaries are clearly stated in Quran whereas there are eight categories of *asnaf* that are liable to receive zakat. While for waqf, its beneficiaries are not clearly stated. However, the purpose of waqf need to be for any pious purposes and must not contravene with Shariah principle. Hence, in the past waqf being

used for the educational purpose such as paying the teacher salary and providing a scholarship for students in order to enable them to pursue higher education. Not only that, the cost of healthcare and medicine also being covered using the waqf fund (Suhaimi Nahar & Yaacob, 2011).

Since healthcare is one of the largest economic sectors in the world. The demand for good healthcare services is growing even faster for the upcoming decades. The cost of healthcare, medication and health services keep on increasing and becomes the major concern of the government. In 2014, total health expenditure in Malaysia for public and private sector accounted for 55.2% and 44.8% compared than 54.8% and 45.2% in 2013. In term of amount, public health expenditure has increase for about 13.2% to RM24.6 billion in 2014, while private health expenditure has increase for about 11.7% to RM19.9 billion (Baltic Consulting, 2017). The rise in the cost of healthcare services will give impact to the economic well-being of societies (Economic Planning Unit Malaysia, 2016).

Due to this, the establishment of social-based healthcare institution seems to be necessary in order to ensure all group of society will be able to get a proper healthcare service. Social-based healthcare institution refer to the any institution that aim to provide a service that can maximize the society healthcare (Hazriah Hasan & Ismail Ahmad, 2018). Therefore, the third sector economy seems to be the most suitable player in dealing with this issue. Hence, as waqf is part of third sector economy, then waqf-based institutions should be highlighted especially by the government. Based on history, waqf has shown a good performance as socioeconomic enhancer in increasing the development socioeconomic level in society. It also takes the essential roles in promoting the well-being and social development of nations.

As the third sector economy, waqf roles are not only focusing on the building mosques and schools but in broader area such as in the field of financing, corporate work, and health. Healthcare waqf is one of the focusing area that being emphasized in the waqf implementation as under this term, activities such as building of hospitals, purchasing the medical equipment and providing medical facilities in the aim to benefits those who are sick and unfortunate are all been funded through waqf. During the glorious era of Islam, the development of healthcare institutions and it facilities were using the waqf fund, among the earliest hospital that been developed are Bangkami Hospital in Turkey, Ikhshidid Hospital in Egypt, Ghulam Badr Hospital in Baghdad, and Hospital Marakish in North Africa (Conteh et al., 2020).

In accordance to this, researcher have come out with the idea to conduct a research in order to study on what waqf as the social Islamic finance instrument can do to help the healthcare sector. This is because, during the glory era of Caliph, the contribution of waqf was not only cover on the development of religion center and education facilities but also contributed in providing healthcare services for its society as a whole.

## LITERATURE REVIEW

Based on previous study, there are few factors that influences donors to make the waqf contribution. Common factors that highlighted by previous researchers such as Busry (2020), Syadiyah Abdul Shukor et al. (2017), Mokthar (2016) and Amirul Faiz Osman (2016) who are conducting research on waqf are emphasizing the elements of attitudes, subjective norm and perceived behavioural control as the factors that influencing donors to contribute in waqf.

## **ATTITUDE**

Attitude as defined by Ajzen (1991) refer to the psychological tendency that resulted from the favourable or unfavourable evaluation of person on a particular entity. He in TPB had explained that attitude towards behaviour affects intention more than the other behaviours (subjective norms and perceived behavioural control). In general, if a person has a favourable intention to commit the behaviour, then it will influence their attitude to perform that behaviour. Previous studies on the different settings of behaviours and intentions show that 50% of the variance that influences those behaviours and intentions are come from the attitude. According to Amirul Faiz Osman (2016), attitude toward behaviour also can be defined as an individual's positive or negative feelings about performing a target behaviour.

## **SUBJECTIVE NORM**

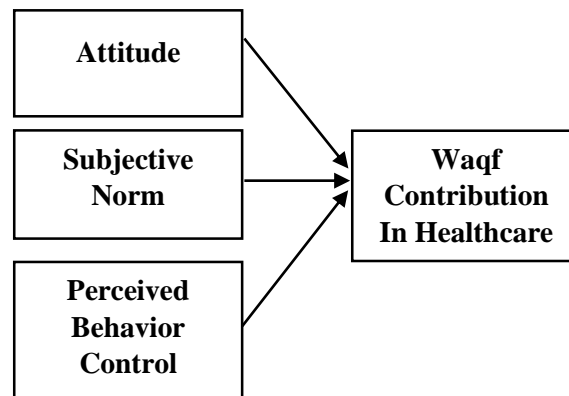
Ajzen (1991) defines the term of subjective norm can be referred to the perceived social pressure that influences persons to perform the behavior of interest. Its influences person's perception which makes their perception to be depends on other opinions in performing particulars behavior. Due to the subjective norm influence, the way of individual's thinking is on what others want them to do related to the specific behavior and this can be seen as lot of people is being encourage by deeds and advice from others before they perform the behavior.

According to Niswah (2020) indicated that subjective norm have the ability to not only influence individual's perception but also their decision either to commit or not the certain behaviour. More significant, subjective norm also be defined and measured as a set of normative beliefs that able to be the reference's indicator on the agreement or disagreement of certain behaviour. Besides, the allocation part of subjective norm or intention itself is consist of three parts which are relate to the intention of worshipping, intention of obedient and intentions of sacrifice. All of this part of subjective norm or intention are influencing person's perception toward the behaviour.

## **PERCEIVED BEHAVIOR CONTROL**

Ajzen (1991) also stated that perceived behavioral control refers to the individual's perception on the level of ease or difficulty in performing the behavior of interest. There is relation between attitude and subjective norm on perceived behavior control itself as the more favorable the attitude and subjective norm toward the behavior, then the greater individual's perceived behavioral control on their intention to perform the behavior. Besides, perceived behavior control also explains on the ability of individual physical and mental control toward the behavior and their confident level on committing that behavior (Ajzen, 2011).

Based on the previous research and explanation about the factor influencing the contribution on waqf, Figure 1 show the conceptual framework of this study as below:



**Figure 1: Conceptual Framework**

Previous research have been conducted by Abdulkareem (2020) to examines the influences of attitude, subjective norm and perceived behavioural control on the intention to establish Waqf for poverty alleviation in Oyo state, southwestern Nigeria. Findings from this research found that there is a significant positive relationship between subjective norm and intention to establish waqf for poverty alleviation. Perceived behavioural control is identified as the most influencing factor on the intention to establish waqf for poverty alleviation. While attitude resulted as the second highest significant in intention to establish waqf for poverty alleviation.

Besides, Busry (2020) have done a research to examine the factors influencing the intention to contribute to cash waqf among KUIPSAS students. Result from the research find that attitude, subjective norm and perceived behavior control have significant relationship toward the intention to contribute to cash waqf among KUIPSAS students. Hasbullah et al. (2015) conducting a research to study the intention to contribute in corporate waqf among Muslims particularly to the employees of Majlis Agama Islam Wilayah Persekutuan (MAIWP). The finding indicated that attitude and subjective norm are significantly associated with people's intention to contribute in corporate waqf. However, perceived behavioural control is not significantly related to people's intention to contribute in corporate waqf.

Thus, this study has decided to point out attitude, subjective norm and perceived behavior control as the variables for the conceptual framework of the study on the factors influencing waqf contribution in healthcare. The selection of these variables is due to its significant influence toward the waqf contribution for poverty alleviation, cash waqf and corporate waqf as stated by the previous study and research. While the selection of healthcare waqf as the field of study is to examine whether the variables of attitude, subjective norm and perceived behavior control are also influence the waqf contribution in healthcare or conversely.

## **METHODOLOGY**

The research design adopted in this study is descriptive research and cross-sectional study where the data being collected just once in order to answer the research question or called one-shot (Kumar, 2013). The questionnaires as a research instrument in this study were adopted and adapted from the previous research will be review and evaluate by the experts in the field of waqf and healthcare in term of the content of each item in the instrument. After the review and evaluate process are finish, pilot test of the instrument will be made to

determine the validity of the content and to ensure that the instrument is recognized as valid and reliable.

Convenience sampling technique will be used to select the respondent of this study which is a Muslim in East Coast Malaysia. Respondents are required to answer the questionnaires that will be distributed through social media and email. The G-Power tools will be used in order to determine the sampling size for this study.

The analysis method that will be used in this study is descriptive and inferential analysis. Descriptive analysis consists of frequency and mean score. Meanwhile inferential analysis will use Partial Least Square (PLS) to explore the data and to examine the structural relationship in the proposed conceptual framework.

## CONCLUSION

Based on previous study by Nur Atikah Atan and Fuadah Johari (2017), they have stated that the need to further more research on waqf in healthcare services since the study on waqf in healthcare is still low compared others topics of waqf. Furthermore, previous study by Salehuddin Md Dahlan and Nor Asiah Mohamad (2017) stated that the research on waqf in the area of East Coast Malaysia was recorded low number of research compared than other states like Selangor, Pulau Pinang and Johor. Thus, by using the three main factors extracted from TPB which are attitude, subjective norm and perceived behavior control, this study been conducted in attempt to fill the gaps of study in order to know the factors influencing the intention to contribute waqf in healthcare among Muslim in East Coast Malaysia.

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# An Overview of Gigs Economy in Malaysia

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## ABSTRACT

Gigs economy seems to begin and rise in Malaysia even though it has been introduced in another part of the world since 2008. This paper is to have a glance at the definition of the gig economy, the status of the gig economy in Malaysia comparable to European countries as well as discussing the future of gigs in Malaysia with some focus from the view of the education sector. Based on the desk review, further studies associated with this area are suggested and need to be taken into attention. Finally, this article is hopefully will clarify the description of the gig economy and opening some eyes to how it can contribute to the economic growth of a country.

**Keywords:** Gigs Economy; Crowd Worker; Digital Economy; Freelancer

## INTRODUCTION

The global and local governments had been debated and outlined the various definition of Gigs economy. It has been mentioned and defined in few newspapers as well as articles nationally and globally. For example; (Forbes, 2019) stated that “*The concept of creating an income from short-term tasks has been around for a long time. The gig economy is very broad and encompasses workers who are full-time independent contractors (consultants, for example) to people who moonlight by driving for Uber or Lyft several hours a week.*” Meanwhile, (Techtarget, 2019) claims “*a gig economy is a free market system in which temporary positions are common and organizations contract with independent workers for short-term engagements.*” (Jobstreet, 2019) stated that “*Gig economy is simply, a big group of part-timers and freelancers working on contractual or ad-hoc basis*”. The current method of employment which is participated by contingent workers such as freelancers and part-time workers has gradually become an alternative, which substantially develops a new norm of economic growth; the gig economy. The most important elements are that these gig economy players should apply flexibility and autonomy in their work engagement. Figure 1 illustrates the definition, top skills, and regions related to the gig economy.

## Gig Economy: Futurising the Future



### What is the gig economy?



- Requires a high degree of autonomy
- Payment by task, assignment, or sales
- Short-term relationship between worker and client.

### Who is part of the gig economy?



### Why do talent opt for gig-type jobs

- ✓ Flexibility to choose jobs or projects
- ✓ Exposure to a more diverse work experience
- ✓ Control over working hours

### Top skills identified by freelancers

- Communication and business correspondence
- Networking
- Time management
- Interpersonal Skills and negotiation
- Problem Solving

### Top 5 regions that employ online labour

1. United States of America
2. Europe
3. Australia
4. United Kingdom
5. Asia and Oceania

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**Figure 1: Gig Economy.**  
(Source: Under Secretary, Policy Division,  
Ministry of Human Resources, Malaysia, 23rd April 2019)

According to Dunn (2018b), gigs economy can also be considered as a medium for promoting entrepreneurship and innovation without limitation, as with flexible and autonomous forms of services, gigs economy can provide a balance of life and opportunities for individuals to generate income through the services and expertise they possess to meet customer demands (Dunn, 2018a). In addition, some jobs in the gig economy are short-term and some workers use the gig economy to highlight their skills and talents (Lehdonvirta, 2018). The enterprise that connects employees with employment through websites and mobile applications is a new development in the gig economy (Bajwa et al., 2018).

Referring to a study from Caza (2020), the gig economy is a growing labor market from the traditional full-time work style tied to office time. The gig economy is driven by technological advances that highlight a person's ability to use computers, smartphones, various applications, and online payments to meet customer demand (Sinicki, 2019). Among the factors that attract young people especially to be involved in the gig economy is that it is elastic in terms of working time i.e. not tied like office time. In addition, a gig economy is also an option especially for tech-savvy because it can generate income through channels that they love based on the skills they possess. A study from (Bikse et al., 2016) found that job models characterized by flexible entrepreneurship and business from the point of view of working time are increasingly getting high demand, especially among young people.

Furthermore, those involved with the gig economy can perform their jobs at their convenience without having to follow the employer's instructions and be able to perform their jobs anywhere as long as there is broadband access. Among the other advantages is that those who are involved in the gig economy can also spend more time with their families as some only work from home to generate income. It can be formulated that, the gig economy is a labor market characterized by short-term contracts or free cooperation either full-time or part-time that is flexible in terms of time by being driven by digital technology platforms to meet the will of the market. Such a job concept is seen as more fulfilling the will of young people who do not want

to be bound by employers, static work environment and tied to working hours such as office hours.

### **GIGS PARTICIPATION IN EUROPEAN COUNTRIES**

According to a survey made by the Foundation for European Progressive Studies (FEPS), participation in the online economy in European countries is significant across all the seven countries studied. The sale of goods online, in particular, has been extensively practiced in all countries. The activities were taking many forms, for example, the resale of one's belongings, of new or used goods, or self-made craft products. These economic movements seemed to be the most predominant income-generating activity, considerably more so than crowd working, even using the broadest possible definition. This definition of crowd working includes any respondents who said that they had ever sold their labour or services via an online platform in any of the following three categories:

1. Executing work from home for a specific website such as Upwork, Freelancer, Time, etc, Clickworker, or PeoplePerHour2.
2. Performing work for various customers somewhere outside your house based on assigned work through a website such as Handy, Taskrabbit, or Mybuilder.
3. Carrying out work involving driving client to a location for a fee using an app or website such as Uber or Blablacar

Crowd work, the alternative name of gigs work, thus defined as paid work via an online platform, has contributed some income for 9% of the UK and Dutch samples, 10% in Sweden, 12% in Germany, 18% in Switzerland, 19% in Austria and 22% in Italy. Crowd work is, therefore, less prevalent than all other forms of online income generation except renting out rooms and selling self-made products or selling on a personally owned website. Nevertheless, it is undoubtedly a source of income for a substantial minority of the population (Huws et al., 2017). Due to the increment of interest in participating in this type of new employment, the survey concluded with some suggestions for improvement especially for the government such as clarification of the definition of self-employment, subordinate employment, and private employment agencies as well as temporary work agencies. This differentiation of definition plays substantial roles to specify the roles and functions of each party. Apart from that, some other recommendations were suggested like decisive on minimum wages, insurance, and legal liability, data protection, and health and safety of the worker.

### **GIGS INVOLVEMENT IN MALAYSIA**

A thorough and detailed infographic on the gig economy in Malaysia has been published in The Edge newspaper date November 13, 2017 (Figure 2.0). The infographic depicts the necessary data for better comprehension of Malaysian's situation of the gig economy. It is shown that 68% of the partakers chose to freelance as their first choice in early of their career. Moreover, it can be seen that the number of self-employed is growing at a significant rate by more than three times for the age range of 25 to 29 (from 2010 to 2016).

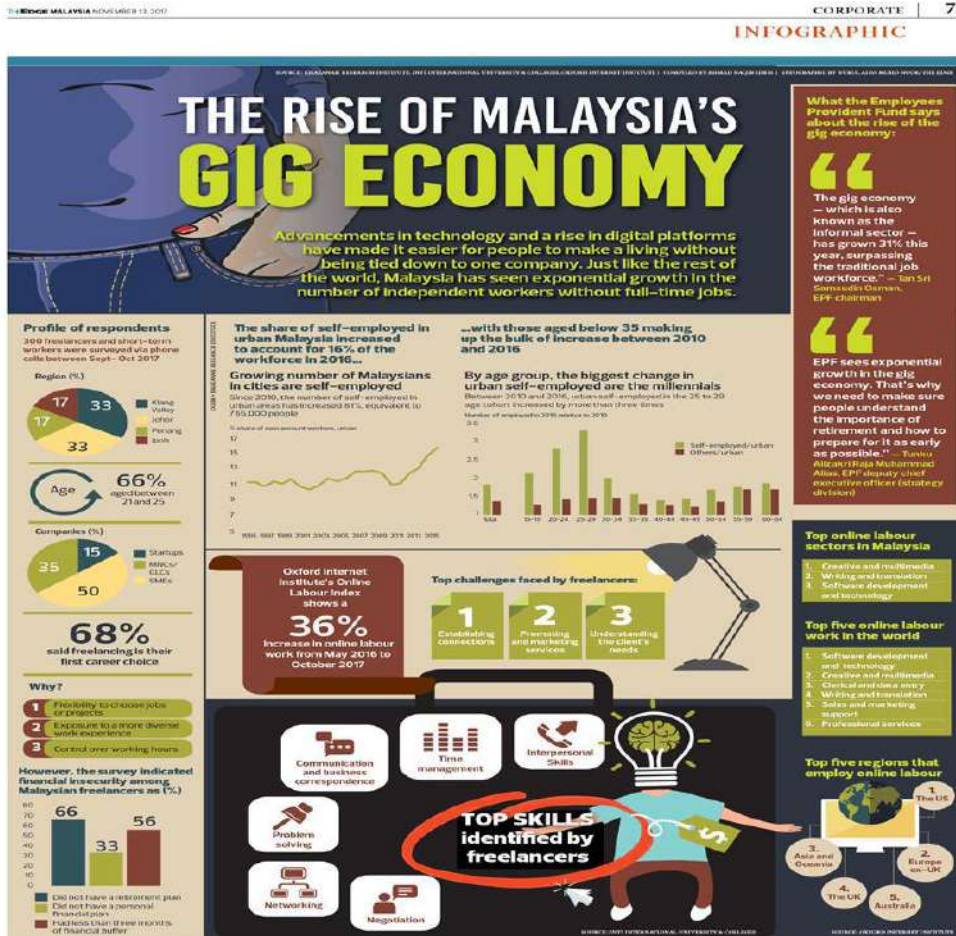


Figure 2: Gig Economy in Malaysia  
(Source: The Edge Malaysia Nov 13, 2017)

In Malaysia, the gig economy is estimated to continue to increase in 2021 as many people are losing their jobs due to the pandemic hit. By looking at the constraint of movement, they are comfortable leveraging digital platforms to generate revenue and income for their families. Many gig workers from the younger generations are proficient with the latest technology such as the use of mobile applications as well as active in social media platform. Therefore, the government has identified gig economy can be considered as a source of new economic growth, thus it will be part of the 12<sup>th</sup> Malaysia Plan 2021-2025, which in turn contributes to the country's gross domestic product (GDP). There are three main important players in the gig economy ecosystem which are (1) freelancers or on-demand employees who are paid based on specific tasks; (2) customers who want a particular service; and (3) companies that connect the gig employees with job available through digital platforms such as GrabFood, FoodPanda, TaskRabbit, Bungktutl as well as e-hailing services like Grab and MyCar. Market demand and increasingly technology-savvy consumers are a few driving factors in accelerating the growth of the gig economy. In addition, the features such as flexibility in terms of time to work and freedom to choose the type of job are among the reasons making the gig economy a job choice today (The Star, 2021)

On the other hand, when we talk about the gig economy among students or graduates, the discussion will focus on the employment landscape for graduates as well as the new



generation facing the current economic challenges (Abd Rahman et al., 2020). Under the 11th Malaysia Plan, human capital development through entrepreneurial activities has been identified as an important agenda in supporting the transition of economic sectors to knowledge-intensive activities and innovation (Economic Planning Unit, 2015). Accordingly, Higher Education Institutions need to be proactive in transforming their delivery system to be more flexible and focusing on student entrepreneurial development. This is not only meet the local needs but up to global perspective to create a higher education system that capable of producing people who are holistic, balanced, and have entrepreneurial minds which are capable of acting as a job creator as desired under Shift 1, Malaysian Education Blueprint 2015-2025 (Higher Education) or MDE(HE) (Ministry of Education Malaysia (MoE), 2015). Structured and holistic IPT entrepreneurship programs and education provide opportunities for students to generate income during their studies, as well as being able to increase their employability.

### **FUTURE OF GIGS ECONOMY IN MALAYSIA**

On 12 October 2019, the 7th Former Prime Minister, Tun Dr. Mahathir Mohamad announced in a parliamentary session to make the gig economy part of the 12th Malaysia Plan (RMK12). This shows the seriousness of the Government in welcoming the booming gig economy in the country as one of the mediums to ensure Malaysians especially the young can generate income. The rapid rise of the gig economy, which employs a digital technology-based workforce, has led to a heated debate about the implications of the economy and public policy. An opinion is of the view that the gig economy has produced productivity and flexibility for employees. Another view also suggests the burgeoning gig economy reflects the exploitation of workers.

As such, Malaysia is transforming its society, referring to (Zakaria, Wan Yusoff and Raja Madun, 2011) through its research finding that Malaysia is changing the situation of society from a government-dependent society to a self-employed society. The government advises people to become self-employed by not depending on the help of others to support themselves or their families. This means that the government has indirectly encouraged the community to works for themselves as business owners and become entrepreneurs. With the availability of entrepreneurs in the business field to increase employment opportunities for Malaysians, the culture of salaried employees can be reduced by the presence of entrepreneurs in the job market.

The digital economy platform is the main thrust given special attention by the government as announced in the 2020 Malaysian Budget which has been placed as the first thrust i.e. to spearhead economic growth in the new economy and the digital age. This has shown that the growth of the gig economy has been taken seriously by the government to ensure that it is utilized by the people in the country especially among the young. This is a reflection that Malaysia is heading towards strengthening the digital economy which is expected to contribute to the economic growth of the country will indirectly expand the gig economy in the country.

By looking at the increment of people participating as gig workers, more policies should be developed to protect the well-being, safety, and future of the employer. Moreover, Kalleberg and Dunn (2016) stated that it is very important for a company operating in the gig economy to provide health insurance, retirement schemes and not to bind employees to long hours of work and not to exploit employees. Thus, to avoid such a situation, the Government announced to conduct a detailed study on the legal definition of the gig economy in line with the 4.0 industrial revolution. This is aimed at safeguarding the welfare of workers involved in



the gig economy as well as establishing regulations to protect workers' rights to ensure that any oppression and exploitation can be eradicated.

### **FURTHER STUDIES**

As a result of the COVID-19 outbreak, the world economy is now facing its worst crisis since the time of the Great Depression in the 1930s (Wheelock, 2020). The unemployment rate is expected to rise to double figures in the United States, India, Canada, Spain, and China (Blustein et al., 2020). Trade conflicts and political upheavals in some countries will worsen the situation. This at the same time has a more negative impact on the world economy. The development of the information technology era especially in industry 4.0, the digital economy as well as the era of disruption has led to drastic changes in the economic landscape. This situation has driven the development of entrepreneurship focusing on the gig economy especially in Malaysia (Adnan et al., 2021). With the current economic situation that more geared towards capitalism and the influences of world globalization, these problems can lead to high unemployment and job losses (Blustein et al., 2020).

As far as the graduate's employment is a concern, the gig economy could be a new employment future for our youth to generate income and earn for living. Even though there were studies shown that gig jobs sometimes give hard time to their worker, but the leverage should not be ignored. All graduates and undergraduates have to equip themselves with the skills and knowledge and the Institution should prepared performers for this new type of economy grower. The educational entity, either higher education or technical education, needs to board on embedding and encouraging the adoption of the gig economy in their teaching and learning, especially in the related course such as Entrepreneurship subject or respective training.

Thus, Higher Education Institutions (HEI) play a role in implementing continuous efforts towards further expanding the potential of individuals throughout and integrated with producing more successful entrepreneurs, especially among their alumni. At the HEI level, entrepreneurship is one of the subjects that students need to learn whether they are taking business courses or outside the program. This is to enable entrepreneurship in daily life through the curriculum in the institution, thus creating successful entrepreneurs as job creators who have a strong foundation in the aspects of knowledge, thinking skills, communication, creativity, innovative thinking, positive enthusiasm, good moral values, and ethics in the context of entrepreneurship.

Thus, further research needs to be performed to study the current entrepreneurship subject syllabus offered in those entities, either they have been advocating this new way or alternative of traditional employment or otherwise. The upcoming findings shall direct more interest in getting information on student's tendencies and inclination towards embarking as a gigs worker or still prefer to involve in conventional employment. This, indirectly, will contribute to the realisation of our nation's Shared Prosperity Vision 2030 which is to achieve sustainable growth with a fair, equitable, and inclusive economic distribution.

### **CONCLUSIONS**

The development of digital technology has helped to boost the gig economy both globally and nationally. Based on World Bank data, Malaysia's participation in the gig economy is expected to grow rapidly year after year. This is due to the lack of demand from the traditional employment sector due to cost-cutting, optimizing current employees, and sustaining financial

conditions. Thus, the opportunities to broaden gig's works offering will boost participation in the gig economy. It is time for young adults, including university graduates, to develop the skills they possess to generate income without having to be in the period of unemployment due to waiting for employment opportunities from the existing employment sector. At the same time, the government should constantly examine and ensure the welfare of the people involved with the gig economy can be properly regulated and able to recover all the shortcomings and weaknesses that exist in the gig economy model over time. More studies need to be performed to gather information on statistics of current participants of gig economy among youth, college and universities students as well as adult and elderly. With that data, more improvement can be planned and implemented to empower the potential of this new way of employment. With add-on benefits such as insurance and saving plans, this could also attract more people especially young people to be involved in the gig economy while contributing to the economic development of the country.

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## Debt Literacy in Credit Card Users: A Pilot Study

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### ABSTRACT

Debt literacy is a component of broader financial literacy discussion. A few is known about debt literacy in credit card users. This pilot study attempts to fill this gap by analyzing debt literacy in managing credit card. Credit cards users are the informants with experiences in managing debt and self-assessing financial knowledge. A qualitative thematic analysis was used to analyze debt literacy, specifically amongst credit card users. This study finds that two themes mostly emerge in managing credit card debt; awareness and ignorance of debt-related credit card management. Awareness generally arises from the workplace and is influenced from the credit cards' issuer. However, the aggravating ignorance amongst credit card users were one of examples of bad practices of managing card credit account.

**Keywords:** Financial literacy; Debt Literacy; Credit cards; credit card management; debt management.

### INTRODUCTION

Borrowing decisions amongst consumers are critical since credit crises recorded years ago, especially the credit card debt. In 2019, 185.5 billion USD purchase transactions were made worldwide using only Visa payment cards (de Best, 2020). Credit card spending in Malaysia increased up to 78% from 2018 to 2019 (Goh, 2020). The recent financial crisis raises the question of whether individual's financial literacy cause them to incur credit card debt they could not afford. According to Maswati, Abdullah, & Wai Yee (2015), credit card spending and borrowing among users are susceptible to misuse due to the nature of the credit card. This situation happens when using credit cards and users tend to borrow such an amount to multiple accounts. Moreover, credit cards are known as complicated to use and understand (Majamaa, Lehtinen, & Rantala, 2019). While credit cards facilitate credit to users with numerous benefits and convenience, they may have adverse effects. The users are open to the inability to manage their spending due to the quick and convenience of charging purchases, thus at the end of each month, resulting in high outstanding balances that can prolong the repayment period and increase interest (Zainudin, Mahdzan, & Yeap, 2019). This indicates that the users have debt problems (AKPK, 2017) and will compromise financial well-being among users at every level (AKPK, 2018).

A closer look into the debt problems literature shows that lack of financial literacy amongst credit card users is prevalent. For instance, Lusardi & Tufano (2015) observe that individuals with lower levels of debt literacy prone to conduct mischievously in a high-cost manner, incurring higher fees and high-cost borrowing on credit cards and this is supported by current

research (Azma, Rahman, Adeyemi, & Rahman, 2019; Zainudin, Mahdzan, & Yeap, 2019; Rahman, Azma, Masud, & Ismail, 2020).

Financial literacy can be understood as how well an individual grasp information and use personal finance instrument such as personal loan, hire purchase and credit card (Ali, Rahman, & Bakar, 2013). Understanding personal finance content covers four areas: basic concept, borrowing and investing, and insurance (Huston, 2012). Lack of financial literacy can lead to inefficiency in portfolio allocation and less savings, and if associated with debt, credit card ownership or increasing consumer credit may increase financial risk (Hidajat & Hamdani, 2017). The very existence of financial literacy in individuals has demonstrated that it improves financial decision and perceived well-being (Ahmad, White, Hiller, Amini, & Jeffe, 2017). Thus, the crucial component to strengthen one's financial well-being is preparing with knowledge about financial obligations (Letkiewicz, Lim, Heckman, & Montalto, 2019). It is because individual, in general, develop product knowledge in terms of usage, especially in credit card, through information search, use and experience (Johan & Putit, 2016). Furthermore, some people have a lot of financial experiences, the research by Lusardi & Tufano (2015), found that people who involved in credit cards debt complications (e.g., only paying minimum payment balance on credit cards and incurring late or over the limit fees) are those with a weaker understanding of implications of debt.

Debt literacy is a component of financial literacy and discusses more on the ability to make own assessment regarding debt agreement and able to apply some basic knowledge of calculation or know how about interest compounding to everyday financial choices (Lusardi & Tufano, 2015). Yet the study on debt literacy still in scarce since the work on debt literacy pioneered by Lusardi & Tufano, some study focus on social worker student (V. Loke & Hageman, 2013; Lee & Mueller, 2014), other research related with mortgage loan decision (van Ooijen & van Rooij, 2016). Current research on debt literacy provides new perspective between developed economies to emerging ones (Cwynar, Cwynar, & Wais, 2019) and the level of debt literacy from the perspective of household budget (Kurowski, 2021). However, a only few information on the debt literacy of credit card users is currently available.

Hence this paper attempts to bridge this gap by analyzing debt literacy in credit card management. The researcher develops the question related to debt management since credit cards users are the informants with experiences in managing debt and self-assessing financial knowledge.

## **METHODOLOGY**

This research applies the qualitative method as a research methodology regarding the pilot study objective to analyze debt management literacy among credit card users. To reach the objective, processing of data was performed. Data were collected from semi-structured in-depth interview. A pilot study is a small scale methodological test conducted to prepare for a main study (Kim, 2011). Semi-structured in-depth interviews were executed initially with the AKPK's financial advisor and three persons who enrolled Debt Management Program (DMP) attached at AKPK Kota Bharu. Snowballing sampling was used to select them.

Interviews covered the main objective that is what is the literacy of debt management among credit cards users. All informants admitted that they prefer to use credit cards as a medium to purchasing any product or services to fulfil their needs while their account is under rescheduling, which is the debt repayment plan.

Interview transcripts represent the data set. Basic research ethics requirement were followed based on Fouka & Mantzourou (2011), which is informed consent, respect for anonymity and confidentiality and respect for privacy. Next, the researcher analyzed using and repetition, which is one of the easiest ways to identify themes (Ryan & Bernard, 2003). Themes were determined by thorough scrutiny of the interview scripts. Then, common themes were clustered into main categories. These categories constitute research findings.

## RESULTS AND DISCUSSION

The data analysis contributes to identifying two themes (refer to table 1). The first theme is debt awareness consist of two sub-themes which is workplace activity and offering loans. The second theme is ignorance about debt which is consist of three sub-themes cost, effect and practices. They form the key of debt management amongst credit card users. The result shows that the awareness of credit card is more complicated amongst users.

This pilot study aims to analyze literacy in debt management amongst credit card users. It was found that awareness is the central theme, mainly the determinant reason for having a credit card. Sub-theme 1.1 found that the reason influences IF1 and IF2 to devour credit card initially for workplace activity. They have utilized their credit card facility for travelling and any related to the workplace demand. All the informants established that a credit card was a powerful instrument offered by financial institutions but came with undeniable cost and effects. This finding is supported by the previous study that recommended short-term financial literacy education should be built around employment, education, housing, financial services, and communication with a particular focus on younger people, older people, single parents, and people with disabilities (Suri & Purohit, 2017).

Another sub-theme (1.2) concluded that financial institution led them to own a credit card. Financial institutions throughout non-exhaustive marketing strategies are always looking for new customers to apply for credit card. In this research, the informants seem to enlighten non ignorance, particularly in term of usage wrongly. Furthermore, a study conducted by Mohd Dali, Yousafzai, & Abdul Hamid (2015) discovered that four factors continuously influence credit card selection amongst credit card users. The factors are insurance/takaful provided by the credit issuers, cost associated with a credit card, the rewards point programme offered and the convenience factors.

Nevertheless, all the informants used the credit card as a convenient payment medium for purchasing online products, services, and many other transactions. On the other hand, the informant may become unfamiliar with the credit card function as a short term revolving credit facility provided by the banks for the users. The ignorance in this study is defined in Merriam-Webster (2021) as "lack of knowledge, education, or awareness". The ignorance amongst the informant was applied to knowledge or awareness of one's debt (Letkiewicz et al., 2019). This research can be understandable through sub-theme 1; cost, sub-theme 2; effect and sub-theme 3; practices. All the informants do not know the cost been imposed on their account. All the cost has been ignored to the extent the informant only serves the payment at own discretion. At the same time, the informant, IF2 and IF3, neglect the effect if they do not pay as per the bill provided by the bank. Unfortunately, the prevalent ignorance act conducted by all informants was bad practices of managing card credit account.

Thus, the present study was designed to analyze the literacy in debt management of informants. Overall, the literacy in debt management amongst credit card users, specifically



in Kelantan, is low. The study finds that informants cannot apprehend financial literacy, especially in debt management, and this finding complements those of the earlier studies (Lusardi & Tufano, 2015; Adamu, Abdul Rahim, & Hamed, 2017; Suri & Purohit, 2017; Letkiewicz et al., 2019; RinggitPlus, 2020; FEN, 2020).

One of the significant findings to emerge from this study is that know how best practices for managing credit card debt is crucial. It might be related that exposure to the basic learning of money management either through reading materials or education in the early stage was least. These results are corroborating the study by (Loke, Yen, & Tan, 2013; Zainudin, Mahdzan, & Yeap, 2019; Cloutier & Roy, 2020; Rahman et.al., 2020).

**Table 1: Interview Analysis**

Theme	Sub-Theme	Informant	Interview Segment
1. Awareness	1.1 Workplace activity	IF1	<i>"Yes, for work travel."</i>
		IF2	<i>"I applied for credit card purposely for work travel"</i>
	1.2 Offered by Credit Card provider	IF1	<i>"Bank officer offers me a credit card."</i>
		IF3	<i>"I'm a school teacher. I've been offered a card credit associated with Jabatan Pendidikan Negeri targeting school teachers".</i>
2. Ignorance	2.1 Cost	IF1	<i>"As I worked abroad, I pay my credit card when I get back to Malaysia."</i>
		IF2	<i>"Bank offered for upgrading my card limit, but do not give me extra time for payment."</i>

	IF3	<i>"I do not know the cost. I pay every month but still hike like no payment at all."</i>
2.2 Effect	IF2	<i>"(Laughing) I am not sure, can't remember. I just made my payment, that's all."</i>
		<i>"I don't know at all the effects."</i>
	IF3	
2.3 Practices	IF1	<i>"it depends on my financial status, and it could be full or minimum payment when I get back to Malaysia".</i>
		<i>"Sometimes minimum, sometimes no payment, I delayed the payment."</i>
		<i>"only minimum payment, but I think I made a lot of payment but still outstanding."</i>
	IF2	
	IF3	

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## CONCLUSIONS

This study represents an initial attempt to analyze financial literacy concentrating on debt management amongst credit card users through thematic analysis. These findings exposed the drawback amongst credit card users in managing debt. In particular, this pilot study identifies debt literacy amongst credit card users related to the national literacy issue (Bank Negara Malaysia & Suruhanjaya Sekuriti Malaysia, 2019). Furthermore, receiving feedback from the informant in the pilot study and reading transcriptions has helped the researcher to modify the interview question for the main research and eventually improved the practicability of the interview protocol.

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# **Work-related ICT Use Outside Work Hours on Work Family Conflict and Work Family Enrichment Nexus Across Generation: A Conceptual Framework**

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## **ABSTRACT**

Challenges related to balancing work and family have invited the attention of crucial organizational decision-makers (as evidenced by an increasing focus on family-friendly policies) and at the national level among government representatives (as evident in the 11th Malaysian Development Plan of Family Well-Being). Despite developing information and communication technologies (ICTs), non-manual works have become more flexible and accessible. Consequently, most employees will benefit from the development of ICTs and tend to engage in work-related activities after normal work hours, even without any written contractual obligation in place. However, existing research on work-related technologies use has influenced employee's work and family lives. Prior research is focusing negative spillover from work to family life that may result from work-related ICT use outside work hours but remains an open question on positive spillover. This article aims to identify the relationship between work-related ICT use outside work hours on work-family conflict and work-family enrichment among working adults. Further, the study highlights these effects according to the age factor based on Gen Y, Gen X, and Baby Boomer. Using quantitative analysis will help policymakers and organizations to gain a better understanding the impact of being connected to work activities while at home and help employees based on their age factor.

**Keywords:** work-related ICT use outside work hours; work-family conflict; work-family enrichment; age.

## **INTRODUCTION**

The increasing research interest in the relationship between work and family life is due to demographic trends, such as increasing numbers of dual-earner families. Given these changes, more employees report difficulties in juggling responsibilities of work and family domain. The current demands of modern life create a conflict between the demands of work and the demand of family life. These higher demands from work, connected with the rapid advancement of technology, enables work to interfere with the workers' non-work life (Gadeyne, Verbruggen, Delanoeije, & De Cooman, 2018). Malaysia's Healthiest Workplace by AIA vitality's finding survey shows a growing culture of overwork in the office for long hours and increased connectivity and work-related stress after-hours (B.Suresh Ram, 2019). A growing number of employees use information and communication technology (ICT) for work tasks outside of their normal working hours. This expansion of work duties to non-work time challenges employees' work-family balance to meet work and personal life commitments. Balancing work and family life have become more challenging since technology tools such as smartphones, laptops, and tablets have transformed work practices. The issue has grown in importance in light of recent ICT evolutions over the last few decades, has started to change



in working lifestyle and personal communication that made our lives easier to manage between work and family domains and blurred the boundaries across domains. For instance, the “always-on” environment is a part of the new flexible era that creates an opportunity to equally prioritize the demands of work and personal life (Bliese, Edwards, & Sonnentag, 2017).

The work-family interface can be distinguished in work-family conflict and work-family enrichment. The conflict perspective dominated in most work-family literature than positive interaction between work and family roles. Past research suggests work-related ICT use outside work hours create an imbalance between work and personal domains. Previous research (e.g., Tennakoon, 2018; Gadeyne et al., 2018); Wei & Teng, 2018) has paid attention to determining the impact of work-related ICT use outside working hours on work and family conflict. Some studies have attempted to explain that work-related ICT outside work hours may have potential positive spillover from work to personal life (Duranova, 2016; Ghislieri et al., 2017; Derks. et al., 2016). So far, however, there has been little discussion about work-related ICT use outside work hours, work-family conflict, and work-family enrichment within the framework. As a result, it remains unclear whether work-related ICT use outside of work hours in the work-family interface indicates the negative, positive, and integrative aspects of the work-non-work domain of individuals. Furthermore, individuals have varying views on how work and family life should be integrated or segmented. Individual preferences, such as whether to integrate or segment work and life domains, may increase work-family conflicts. Individuals’ work-family boundary preferences have been studied for their impact on work-family conflict, with findings indicating that a high degree of work-family segmentation preferences can reduce conflict levels and enhance levels of enrichment. (Chen, Powell, & Greenhaus, 2009; Liu, Wang, Li, & Zhou, 2019). This study systematically reviews the past literature for work-family conflict and work-family enrichment, aiming to examine the positive and negative spillover from work to personal life resulting from work-related ICT use outside work hours that influence generational differences (i.e., Gen Y, Gen X, Baby Boomers).

## LITERATURE REVIEW

### *Work-family conflict*

Kahn et al. (1964) acknowledged the early concept of WFC using the role theory framework. The term “inter-role conflict” refers to challenges that arise between work and family roles and responsibilities, according to the role theory. The work-life interface occurs when a person between the work role and personal or family roles becomes incompatible. In 1985, Greenhaus and Beutell demonstrated that work-family conflict occurs when the family role expectations are perceived as incompatible with the demands of the job or vice versa. He also defined “work-family conflict as a specific form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (p.77). According to Carlson et al. (2000), there are classification work-family conflict dimensions. This view is supported by Greenhaus and Beutell (1985), who write that work-family conflicts are measured using the three common dimensions. First, multiple roles juggle time-based conflict, such as time spent on work that cannot be equally assigned between one role to another. Second, strain-based conflict develops when the performance of one role directly affects the performance, such as fatigue (Pleck et al., 1980). The two roles cannot occur simultaneously because the strain imposed by one role makes it more challenging to meet the demands. Third, behaviour-based conflict arises when acquired behaviours, such as behavioural habits and role expectations, affect role performance in another domain. If the person is unable to modify their behaviour to meet the demands of multiple roles, they will

likely experience conflict. Prior work-related research was conducted based on two WFC dimensions: (a) time-based WFC and (b) strain-based WFC (Gadeyne et al., 2018). However, empirical research has been lacking, which directly measures the prevalence of behaviour-based conflict. The most common typologies recognize three forms of conflict in the literature for work-family conflict: time, strain, and behaviour-based conflict. However, limited studies provided data for a time, strain, and behaviour-based conflict independently (see table 1). This study will therefore examine further each form of work-family conflict for theoretical clarification.

**Table 1: Selected previous studies on work-family conflict**

<b>Author</b>	<b>Construct studied</b>	<b>Focus of study</b>
Carlson, Kacmar, Williams (2000)	“Role conflict, role ambiguity, social support, involvement, job satisfaction, organizational commitment, family satisfaction, life satisfaction” (p.267)	“Validate three form of work-family conflict (i.e., Time-based, strain-based, behavioural-based) for work interference with family and family interference with work” (p.264)
Byron (2005)	“Work-domain variable (i.e., job involvement, hours spent at work, work support, schedule flexibility, job stress); non-work domain (i.e., family involvement, hours spent in nonwork, family support, family stress, family conflict); demographic variables” (p.173) (i.e., sex, income, coping styles and skills)	“work interference with family (WIF) and family interference with work (FIW)” (p.173)
Michel, Kotrba, Mitchelson, Clark and Baltes (2010)	“Work domain (i.e., Role stressor, role involvement, social support, work characteristics); personality; family domain (role stressors, role involvement, social support, family characteristics); personality” (p.692)	“Work-to-family conflict and family-to-work conflict” (p.692)
Kotecha, Ukpere and Geldenhuys (2014)	Technology-assisted supplemental work	“Time-based, strain-based, behavioural-based work-life conflict” (p.631)
Gadeyne, Verbruggen, Delanoeije and Cooman (2018)	“Work-related ICT-use outside work hours” (p.88)	“Time-based work-to-home conflict, strain-based work-to-home conflict” (p.91)

### *Work-family enrichment*

Much of the current literature on the work-family interface has primarily focused on the negative spillover between work and family life, such as work-family conflict (Byron, 2005; Carlson, Kacmar, & Williams, 2000; Michel, Kotrba, Mitchelson, Clark, & Baltes, 2010). Later in 2006, several researchers showed that the benefits of a job with multiple responsibilities could be assessed by considering different approaches to the work-family interface, such as work-family enrichment (Greenhaus & Powell, 2006; Rothbard, 2001), positive spillover (e.g.,

enhancement) (Ruderman, Ohlott, Panzer, & King, 2002), and facilitation (Grzywacz & Butler, 2005). Work-family-enrichment is defined as “the extent to which experiences in one role improve the quality of life, namely performance or affect, in the other role” (Greenhaus & Powell, 2006, p.73). Thus, the term “work-family enrichment” refers to the positive aspects of work, and family can benefit one another. As noted by Carlson et al. (2006) and Frone (2003), Work-family enrichment is conceptually and empirically different from work-family conflict. Both WFC and WFE, on the other hand, represent multiple dimensions that are made up of bidirectional relationships (i.e., work-to-family and family-to-work).

Work-family enrichment have been identified as a multidimensional construct and has three dimensions that work to family and family to work (Carlson et al., 2006). First, work-family development is described as a process that occurs when individual becomes more engaged in their work or family roles and as a result, learn new skills, knowledge, behaviours, or views that enable them to be better members of their families or at work. Second, work-family affect is a feeling that positively influences an individual’s ability to act as a better family member or worker. Third, work-family capital, which refers to participation in work that encourages psychosocial resources such as self-esteem, fulfilment, security, or accomplishment that enable an individual to be a more effective family member. The previous theoretical models suggested some aspects of the enrichment, which were based on personal experience. There were a few key factors to the perception of enrichment that previous theoretical models proposed. A number of studies have found that contextual characteristics (e.g., Social support, work autonomy, family-friendly policies), personal characteristics (e.g., work involvement, work engagement, work centrality), boundary management (permeability and flexibility preference), and use of technology after hours can be potential antecedents to WFE (Daniel & Sonnentag, 2015; Ghislieri et al., 2017; Lapierre et al., 2017).

**Table 2: Selected previous studies on work-family enrichment**

<b>Author</b>	<b>Construct studied</b>	<b>Focus of study</b>
Carlson, Kacmar, Wayne and Grzywacz (2006)	“Work antecedents (i.e., job salience, developmental experiences, autonomy, relationship with supervisor); family antecedents (i.e., family salience, relationship with family, family mutuality)” (p.152)	Validate “three form of work-to family direction (i.e., development, affect, and capital) and from family to work direction (development, affect, and efficiency)” (p.133)
Ghislieri, Martini, Gatti and Colombo (2011)	“Work-family conflict, supervisor support, colleague support, family support” (p.215)	“Development, affect, and capital for work-family enrichment; and development, affect and efficiency for family-work enrichment” (p.217)
Daniel & Sonnentag (2015)	Boundary management (i.e., flexibility preference and permeability preference)	“Work-to-family enrichment, comprising three dimensions (capital, affective and developmental)” (p.7)
Lapierre et al., (2017)	“Contextual characteristics; contextual resources; environmental resources and personal characteristics on work and family domain” (p.388)	“Work-to-family enrichment and family-to-work enrichment” (p.388)

Ghislieri, Emanuel, Molino, Cortese, & Colombo (2017)	“Off-work hours technology assisted job demand (off-TAJD), workload, emotional dissonance, supervisory coaching” (p.8)	“Work-to-family conflict and Work-to-family enrichment” (p.8)
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*“Work-related ICT use outside work hours”*

The term Information and communication technologies (ICTs) is generally understood to mean technical to handle information and aid communication (Schlachter, McDowall, Cropley, & Inceoglu, 2017). The ICTs encompasses electronic devices (e.g., smartphones, laptops) and the medium communication-enabled (e.g., e-mail, calls). The broad use of the term technologies uses after work hours such as “work connectivity behavior during the non-work time” (pp.142-160) (Richardson & Benbunan-Fich, 2011), “work-related communication technology uses outside of regular work hours” (pp.507-530) (Wright et al., 2014) and “daily smartphone uses after working hours” (Derks et al., 2014). Although differences of opinion still exist, there appears to be some agreement that the term “work-related ICT use outside of work hours” refers to “CT use after hours” (Boswell & Olson-Buchanan, 2007), “work connectivity behaviour after-hours” (Richardson & Benbunan-Fich, 2011; Richardson & Thompson, 2012), and “technology-assisted supplemental work” (Fenner & Renn, 2010; Kotecha et al., 2014). Thus, given the contextual suitability of this term to the purposes of the study, the term “work-related ICT use outside work hours” is to be used in this research. A generally accepted definition of “work-related ICT use outside of work hours” is lacking. While a variety of definition of the term has been suggested, this paper will use the definition from Richardson & Benbunan-Fich (2011), conceptualized “as an organizational member’s use of portable wireless-enabled devices to engage with work or work-related colleagues during the off-work time (e.g., mornings before work, evenings after work, weekends, or vacations).” (p. 155). Furthermore, this study focuses only on using new technologies and the work performed outside regular work hours.

*Integration Preference*

Managing work-family balance has become a more compelling and important issue for employees in recent years. Integration preference demonstrated that people have varying preferences for how they prefer to segment or integrate aspects of their work and family lives (Nippert-Eng, 1996; Edwards & Rothbard, 1999). According to Ashforth et al., 2000; Nippert-Eng, 1996), Segmentation and integration were constructed as two poles on a continuum, each with opposite approaches to balancing work and life. People who identify as segmenters prefer to keep the work and personal domains separate (Zerubavel, 1991); these individuals would rather keep work at work, and personal or family lives at home. On the contrary, others prefer to combine work and home domains by removing boundaries and blending both domains. The boundaries between domains can be permeable or blurred for those who integrate various aspects of their lives. Following boundary theory, individuals may be different in the amount of boundary permeability they prefer; and the experience of spillover depends on individual preference to combine or separate work and family domain. Thus, the preference of boundary management to either integrate or separate roles is considered a value on which individuals systematically differ in juggling their work and non-work roles competing demands.

Padhi & Pattnaik (2017) has pointed that individual integration preference increases work-family conflict and work-family enrichment. It has commonly been assumed that the use of daily work-related smartphones outside of work hours with integration preference was reported to lower work-family conflict among employees (Gadeyne et al., 2018; Derks et al., 2016). However, Allen et al. (2014) points out that employees high on segmentation

preference more strict work-home boundaries and focus on segmenting work and family time (Allen, Cho, & Meier, 2014). Collectively, these studies outline a crucial role of integration preference, and it may be assumed that transitions between work and family life correspond with the boundary management preference of people with integration preference are less stressful than someone with a low integration preference.

### *Generational differences*

Clark (2017) defined a cohort as a group of people born during the same period of time who went through life together. Costanza et al. (2012) pointed out that a generation of people of the same age has the same life experiences as expected, such as economic conditions, politics, and historical events. Thus, the cohort approach is practical when comparing age groups or over a specific time horizon. The United States is the country that introduces generation labels. These labels of generational differences have been explained into five cohorts of employees that are at this time, making up the labor force which are traditionalists, baby boomers, Generation X, Millennials (sometimes referred to as Gen Y), and Generation Z (e.g., Haeger & Lingham, 2014; Hernaus & Vokic, 2014). Today, the three dominant generations that make up the labor force are the Baby Boomers, Generation X, and Generation Y. In a previous conceptual discussion of individuals' work-family interface, and it was suggested that age group could represent conflict at various stages of life (Bennett, Beehr, and Ivanitskaya, 2017; Erickson et al., 2010; Huffman et al. 2013; Schieman, Glavin, & Milkie, 2009). A number of studies have examined age group as a control variable associated with work-family conflict (e.g., Gadeyne et al., 2018; Derks et al., 2016; Boswell & Olson-Buchanan, 2007), but to date none has examine generational differences in work-related ICT use outside work hours, WFC, and WFE.

The purpose of this study is to review the literature on the work-family interface. It begins by understand the effects between “work-related ICT use outside of work hours” and the work-family lives. The current findings add to a growing body of literature on work-family conflict and work-family enrichment to the work-family interface across generations. In accordance with the existing literature, previous studies have demonstrated that work-related ICT use outside of work hours on time-based and strain-based work to family conflict (Gadeyne et al., 2018; Yang et al., 2019; Wei & Teng, 2018; Kotecha; Ukpere; Geldenhuys, 2014; Derks et al., 2016). However, the existing study is limited by the lack of information on the relationship between “work-related ICT use outside working hours” and work-family conflict in three dimensions of work to family conflict (time-based, strain-based, and behavioural-based). In addition, limited studies has been found that examined the beneficial effects of communication technologies and work-family enrichment (Day, Scott, & Kelloway, 2010; Ghislieri et al., 2017; Wajcman, Rose, Brown, & Bittman, 2010). This indicates a need to understand the concept of work-family enrichment, such as the use of technologies after working hours provides a way to strengthen skills, knowledge, and tangible gains that transfer to the family domain, leading to more significant work-family enrichment.

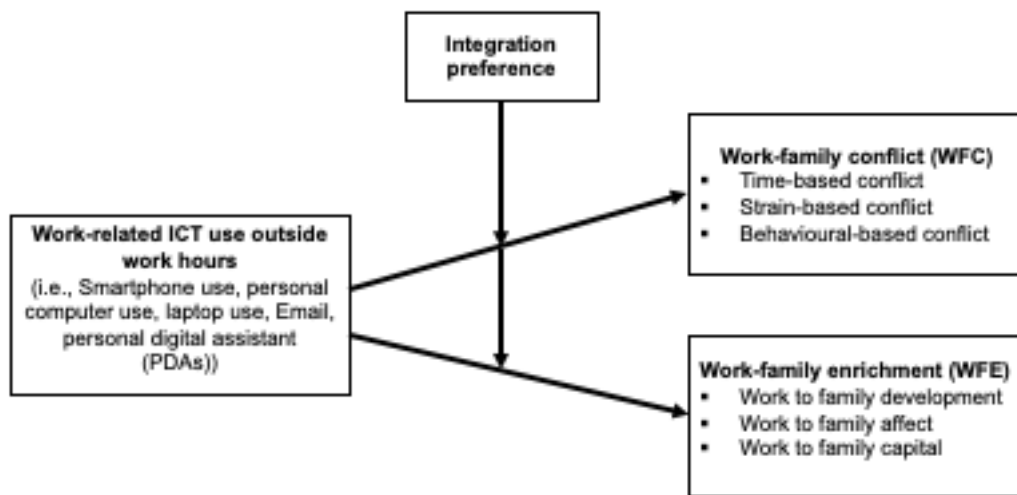
## **THEORETICAL FRAMEWORK**

The Boundary Theory (Ashforth et al., 2000) and role theory (Kahn et al., 1964) are used in this study. This research utilizes boundary theory to investigate “work-related ICT use outside work hours” and boundary preference concerning work-family conflict and enrichment. In line with boundary theory, the ability to transition between domains as needed reduces conflict between roles, but it may also improve multiple roles. Olson-Buchanan & Boswell (2006) added that employees could create boundaries for ICTs use for personal purposes in the work domain. Daniel & Sonnentag (2015) and Padhi & Pattnaik (2017) indicate that those that



employ a boundary strategy were found to experience greater WFC and WFE. In addition, in accordance with the role theory, it has been argued that work-family balance is achieved by not restricting the number of roles performed but by engaging in multiple roles instead of a single role. Thus, this study contributes to the growing body of research examining the relationship between work-related ICT use outside of work hours, work-family conflict (WFC), and work-family enrichment (WFE).

There has been little empirical evidence found the work-related ICT use outside of work hours and work-family interface among working adults in Malaysia, and this research will tell a significant contribution to the present literature. A growing body of research on the work-family interface, particularly in the Western context, however, there have been very few studies in the Asian Pacific region have a focus on South Asia (Carlson et al., 2011; Derks et al., 2016). Based on the literature findings, the research framework (see figure 1) should be viewed as an extension of some studies developed in the past.



**Figure 1: Conceptual framework**

This research framework should be viewed as an extension of some studies developed in the past (e.g., Gadeyne et al., 2018; Derks et al., 2016; Boswell & Olson-Buchanan). Many research studies have focused on the relationship between work-related ICT use outside work hours and adverse outcomes such as work-family conflict (Derks et al., 2016; Gadeyne et al., 2018; Yang et al., 2019). Within the past few years, several studies exploring the specificity of work-related ICT use outside work hours and its relationship to work-family enrichment have emerged in the literature (Day et al., 2010; Ghislieri et al., 2017; Wajcman et al., 2010). The framework was also synthesized from empirical studies by Boswell et al. (2007); Derks et al. (2016), Gadeyne et al. (2018), and Yang et al. (2019) have developed the relationship between work-related ICT use outside work hours and work-family conflict. Ghislieri et al. (2017) introduced the relationship between work-related ICT use outside work hours towards work-family enrichment, and the findings reported a significant difference between these direct relationships. However, most studies have only relied on how work-related ICT use outside work hours leads to work-family conflict but not explaining work-family conflict and work-family enrichment within the framework.



Drawing from previous research (Boswell & Olson-Buchanan, 2007; Gadeyne et al., 2018) and building on current findings, this study proposes the following proposition and model for future research.

*Proposition 1:* work-related ICT use outside work hours is positively related to work-family conflict.

*Proposition 2:* Work-related ICT use outside work hours is positively related to work-family enrichment.

*Proposition 3:* Integration preference moderates the relationship between work-related ICT use outside work hours and work-family conflict.

*Proposition 4:* Integration preference moderates the relationship between work-related ICT use outside work hours and work-family enrichment.

*Proposition 5:* There is a significant difference in variables interaction among the different age groups (Generation Y, Generation X, and Baby-boomers).

## CONCLUSIONS

Managing conflict between work and family demands is a significant challenge for individuals and organizations and a rising study area in organizational behaviour and human resource management. This study aims to describe the interface between work and family life that may arise from the working usage of ICT outside work hours not covered from the earlier studies. This paper has argued the existing research that concentrated on the conflict between work and family roles. It could be interesting to give greater attention to positive aspects of work and family role combination such as work-family enrichment. However, within the context of Malaysia, there is a need for further study to directly test the impact of work-related ICT use outside work hours on perceptions of work-family outcomes. This study provide insight into the experience of work-family conflict and work-family enrichment among working adults in Malaysia. The present study addresses these gaps in the literature by examining the relationship between work-related ICT use outside work hours on work-family conflict (WFC) and work-family enrichment (WFE). These findings may encourage the organizations to emphasize employee's work-life issues by developing policies that include practical guidelines for achieving a good work-family balance even when working outside regular work hours and when connected to information and communication technology (ICT).

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# **The Role of Self-Resilience on the Relationship between Self-Leadership and Employee Engagement: A Conceptual Paper**

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## **ABSTRACT**

In the gig economy sector, the main obstacles are to maintain workers' efficiency, satisfaction, and retaining them within the organisation. In order to achieve organisational performance, there is no doubt that these challenges require high employee engagement among the workers. Factors such as self-leadership and self-resilience have an impact on employee engagement according to the previous research. Hence, the objective of this study is to examine the relationship between self-leadership with the effect of moderating variable; self-resilience. The constructs which are linked to employee engagement and are well suited to the nature of gig workers. Respondents are among workers that are involved directly in the gig economy. Lastly, the finding can be used for designing an organisation system dedicated for the gig workers according to the interchangeable relations between social structure and behaviours. The human resources in the gig economy sector also may be able to take initiatives such as implementing training and engagement activities to enhance employees' self-leadership and self-resilience that leads to the increment of employee engagement among gig workers.

**Keywords:** Self-leadership; employee engagement; self-resilience.

## **INTRODUCTION**

The organisations are required to constantly adapt to the changes and accommodate the diverse needs of the workforce to cope with the business environment that is uncertain to keep growing. Organisations usually will be cutting costs, lowering prices, downsizing the number of employees, and redesigning business flows in order to continue their survival and competition. These mechanisms will have an impact on the organisations. Thus, the latest approaches to Human Resource Management (HRM) are inevitable for organisations persistence and development. Then, employee engagement comes into the picture to shift the focus in HRM to strengthen the workforce. Consequently, rather than concentrating on problem-coping approaches, numerous articles have been published in this particular area of employee engagement (Luthans & Avolio, 2009; Bakker & Schaufeli, 2008; Luthans & Youssef, 2007; Avey et al., 2008).

Employee engagement is an employee or worker's feelings of enthusiasm and dedication towards their job, which is based on integrity, trust, communication, and two-way commitment between the organisation and its employee. Those who are dedicated at work, are highly energetic, and committed to their job are engaged employees, whereas those who detach from work, do not enthusiastic, and have low energy to put in work are disengaged employees



(Bakker et al., 2008; Towers Perrin, 2009). As a result, profitability, productivity, customer services, and employee retention will be affected by employee engagement (Zigarmi et al. 2009; Xanthopoulou et al. 2009). Furthermore, employees who are engaged perform better than those who are not. Among other causes why engaged employees enhanced their performance are; they always experience positive emotions, they experience improved health, they build their job resources and personal resources, and lastly, they share their engagement with others (Bakker & Demerouti, 2008).

Organisational commitment, job satisfaction, intention to leave, and organisational citizenship behaviours are all linked to employee engagement (Saks, 2006). As a result, it is a chosen character in employees that organisations seek, and various studies have provided suggestions as to how engagement can be attained. Employees who experience a “good fit” with their work surrounding become more engaged (Hicks et al., 2014). Disengagement happens when there is a misfit between the employee and the surrounding. Bore-out arises when an employee is not sufficiently pushed by the surrounding. On the other hand, too much difficulty (and thus stress) increases the risk of burnout (Barlage et al., 2019). The issues of engagement not only exist in the traditional corporate workforce. Although the new workforce of the gig economy is gradually taking over, still the problems of engagement are there.

The gig economy has made a dramatic shift in the work culture of the corporates. Due to the changing landscape, many corporates now depend on gig workers to get their work done. The gig economy is also known as shared economy or contingent economy or on-demand economy or peer economy or platform economy. It is an important aspect for organisational success even in the gig economy. The emergence of digital platforms linking workers with businesses and the rise of millennials have all played a contributing role to the stream in the gig economy. It provides advantages, notably in terms of job flexibility for the workers. However, there are several issues and challenges of employee engagement in this new landscape, including the benefits, job security, and work design of the gig workers. Hence, all the issues need to be rectified before the gig economy becomes a source of sustainable growth (Howson et al., 2020; Mamatha, 2020; Anwar & Graham, 2020; Toxtli et al., 2020).

As the gig economy increasingly gathers the workforce, engagement is changing. More companies are struggling to grips their contingent workers. Organisations need to secure commitment in new and different ways which is different from conventional ways. However, the continually changing environment, demands organisations to shift their thinking to adapt to the current climate. Moreover, the high turnover rate in the gig economy sector has made workers more priceless (Fleming & Head, 2021; Rosenblat, 2018; Healy et al., 2017). Thus, achieving employee engagement has become harder in this sector. The high turnover rate has led to a shortage of skilled workers and has lessened workers' engagement and commitment. Referring to this, the need for the further investigation of employee engagement in the gig economy sector is justified. Thus, the current research suggests that employee engagement of the gig workers as an area of study needs increased focus.

The study scope is to investigate the employee engagement among gig workers and fulfill the gaps that exist in engagement literature. Indeed, this research offers primary data and analysis of the gig workers' employee engagement. Factors such as self-leadership, and self-resilience have been considered in employee engagement studies (Kotzé, 2018; Breevaart et al., 2016; Park et al., 2016; Zhang et al., 2014; Kunzelmann & Rigotti, 2020; Amir & Mangundjaya, 2021; Dai, 2019). Self-leadership and self-resilience need further investigation, as the existing literature is scarce on these two constructs. In addition, these two constructs are seen as very relevant to the nature of gig workers.

## **Theoretical Foundation**

There is two prominent theory that is important in this study, first is Self Determination Theory (SDT) and second is Social Exchange Theory (SET). The study will implement these two theories to develop a theoretical ground.

Self Determination Theory (SDT) shows that an individual's core motivation is driven by a demand for personal development and self-control, and these basic psychological requirements drive goal-directed conduct (Deci and Ryan, 1985). Self-leadership is a set of cognitive and behavioural skills that help people achieve their goals by increasing their core motivation (Manz, 1986; Neck and Manz, 2012). Hence, Individuals have greater confidence and independence in their acts during the self-leadership process, and the innate drive for self-growth triggers these activities; as a result, their self-efficacy and self-worth appear to improve. Internal strength acts as psychological capital or personal resources for work engagement in the job demands-resources (JD-R) approach (Bakker & Leiter, 2010; Xanthopoulou et al., 2007). Therefore, surroundings that promote autonomy and competence, as well as self-growth inclinations encourage employees to put more effort into their work.

Social Exchange Theory (SET) clarifies the social interactions between humans and society (Homans, 1958). Human, in general, depends on their perceptions and preferences in interacting with the society based on has-to-do cost-benefit analysis. Either subconsciously or not, human evaluates the cost and benefit. That relationship seems to have high values will be prolonged by humans (Edvardsson et al., 2011). In recent research, the social exchange theory is the most extensively acknowledged and used theory for employee engagement. Saks (2006) mentioned, "A strong theoretical rationale for explaining employee engagement can be found in social exchange theory." People make social decisions based on perceived costs and benefits; which is the core of the social exchange theory (Cropanzano & Mitchell, 2005). However, people evaluate all social interactions in order to assess the benefits they will get in return (Homans, 1958; Blau, 1964; Ethugala, 2011).

As stated by Saks (2006), the organisation can be repaid honestly by the employees through their level of engagement. The employee will decide whether or not to engage themselves depending on the resources they get from the organisation. A mutual relationship between organisation support and employee motivation in increasing individual and group performance is shown through this perception. The social exchange theory offers the theoretical underpinning in justifying why employees decide to participate plus-minus in their work or remain with the organisation. The emotional and psychological relationship between employees and the organisation is part of employee engagement. This relationship can be turned into dark and bright manners which employees show at their workplace.

Finally, individuals' self-control and inner strengths contribute to the positive emotions that support the relationship between self-leadership and employee engagement.

## **Employee Engagement**

Employee engagement is an employee's participation and dedication to their work. The disengaged employee will perform at a lower level with the end result that is not satisfying, effortless, involuntary, or unemotional (Pandey & David, 2013).

Availability, meaningfulness, and safety are three physiological factors that boost employee engagement. Employee perceptions on how they will be completely supported in terms of cognitive, emotional, and physical capacity in order to complete their work means availability

(Pandey & David, 2013). The intrinsic value that a person attaches to his or her job is described as meaningfulness (May et al., 2004). While, a state in which employee has the freedom to express their feelings realistically in their work is safety (Pandey & David, 2013).

Moreover, rewards and recognition, workload, perceived fairness and values, control, community, and social support are factors that are related to employee engagement (Maslach et al., 2001). Furthermore, employee engagement towards the job task will increase if those factors are properly fulfilled.

The platforms of the gig economy need to understand the employee engagement of their working partners in the sector. Thus, better decisions can be made and more suitable strategies ahead can be developed. Through a better partnership level, gig economy platforms will have to beat their competitors with a better competitive advantage.

However, it is not easy to maintain employee engagement in an organisation. This challenge can be eliminated by increasing self-leadership among the workers.

### **Self-Leadership**

In the leadership process followers are typically active participants (Chaleff, 1995; Drath, 2001; Howell and Shamir, 2005), leader activities become the attention of the research effort until followers are left behind. Therefore, leaders are frequently held accountable for employee engagement. Accepting the role of followers in leadership dynamics has become increasingly crucial since the spread of leadership in new forms and leaderless organisations grow (Avery, 2004).

Gig workers are the independent workers that doing their job with less supervision or almost none at all (Pichault & McKeown, 2019; Kirven, 2018; Steinberger, 2017; De Stefano, 2016). Sometimes, they are their own boss (Barratt et al., 2020). Thus, this leaderless group of workers needs to have strong self-leadership to control themselves. An approach that relates self-leadership to employee engagement is needed in responding to the necessity of developing personal resources (Park et al., 2016).

A concept of self-leadership clarifies that through self-direction and self-motivation, people can influence themselves to attain desired objectives (Manz, 1986). Self-leadership is a part of the self-influence concept which is grounded on the belief that a mental process is shaped by individual behavior, and afterward again the mental process is controlled by the results of behavior (Neck & Manz, 2012). Therefore, by putting into practice the behavioural and cognitive strategies, the capacity to control individual intellectual and behavioural tendencies is improved effectively (Manz, 1986; Stewart et al., 2011).

A major emotional driver for work engagement is a strong feeling of self-control and self-efficacy through a self-motivation perspective (Tuckey et al., 2012). Furthermore, a sense of dignity and accomplishment can be achieved in the working condition; increasing working with high motivations (Luthans et al., 2007). Furthermore, positive thinking and affective personality assist employees to increase their emotional well-being and job satisfaction (Judge & Locke, 1993). Concisely, throughout the development of self-leadership, people recognise their worth, increase self-control, positive thinking, knowledge, and emotional states that assist them to overcome difficulties and remain focus and energised at work. Thus, all of these qualities will lead to high employee engagement.

Moreover, there is emerging empirical evidence of a statistically significant positive relationship concerning self-leadership and work engagement. Daily self-management involving five strategies of self-observation, self-hinting, self-goal setting, self-reward, and self-

punishment was positively related to employees' resourcefulness that improved their work engagement. Self-leadership assists employees to inspire themselves, elevate their work surroundings, and attained the standards needed. All of these lead to the increment of employee engagement among them (Breevaart et al., 2014). The relationship between self-leadership and employee engagement is further supported by Shaoping et al. (2015) that also found a positive relationship through their study. Therefore, the personal resource of self-leadership is proposed to influence employee engagement.

### **Hypothesis: Self-Leadership contributes positively to Employee Engagement.**

#### **Self-Resilience**

Self-resilience is a concept that nurtures the ability to endure demanding situations and derive potency from hardship (Fletcher & Sarkar, 2013). This notion indicates confidence, positive feelings, and optimism to keep functioning productively, regardless of the psychological challenging circumstances. This is only possessed by a resilient person. Positive emotions are optimistically predicted by self-resilience (Philippe et al., 2009). This will eliminate stress and give chance for workers to focus on work. Furthermore, work-related stress and self-resilience are inversely related (Steinkopf et al., 2018). Moreover, a study among nurses founded that stress is negatively linked to self-resilience (Hetzl-Riggin et al., 2019). Hence, work stress due to difficult or intimidating circumstances can be reduced by increasing self-resilience among employees. Thus, there is a connection between self-resilience and employee engagement that led to work satisfaction (Bande et al., 2018).

Employee self-resilience which is positively linked to employee engagement is established by the studies as an aspect of personal resource (Turner, 2020; Malik & Garg, 2017; Dai et al., 2019). Also, a personal resource such as self-resilience is observed to have a major effect on employee engagement (Kim et al., 2019). Similarly, Cao & Chen (2019) revealed in a Chinese study of nurses that self-resilience is the highest significant positive employee engagement element. In addition, employee's self-resilience can lower the decision to quit and increase work engagement (Dai et al., 2019).

Thus, self-resilience is a vital personal resource to the gig workers because the nature of the job is precarious (Muntaner, 2018). Furthermore, assistance from human resource administration, such as training, promotions, career development, and job security is limited or none for the gig workers (Spreitzer et al., 2017). Hence, having a successful gig economy work demands dedication and self-resilience because it is challenging without human resource management support structures (Ashford et al., 2018).

However, the factors nurturing self-resilience and employee engagement in the gig work setting have garnered very little study despite its significance and contribution to the gig economy. Instead, many researchers have mostly acquired a job design approach in terms of economics and business development. Thus, self-resilience needs to be pondered as the underlying process that allows this impact to happen, specifically for gig works that are commonly not considered as a profession.

Moreover, there is a research finding that suggested self-resilience as a protecting factor in career development and increases the capability to adjust to shifting circumstances (Ferrari et al., 2017). Since gig workers are not considered as employees, they frequently have concerns about employment relationships and how this chosen profession will evolve in the future (Spreitzer et al., 2017). Managing the flexibility that comes with nonstandard employment is mostly reliant on personal resources, as gig workers are frequently responsible for their training and development due to a lack of organisational assistance (Vincent, 2016). Amid

greater self-resilience, gig workers are expected to be able and ready to adjust to the inconsistency and flexibility of gig works, as well as to stay engaged in gig work.

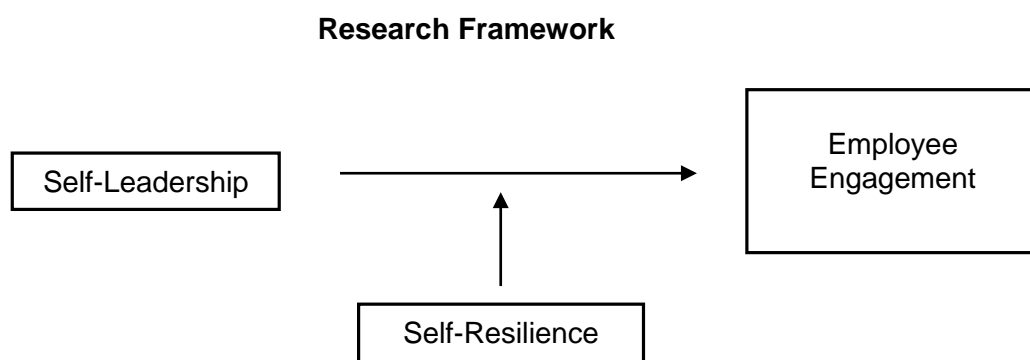
Self-Resilience and greater optimism have also been revealed to be linked to higher psychological performance. Furthermore, in creating positive thinking, processes of constructive thought that focus on decreasing dysfunctional principles and destructive self-talk also is related to greater optimism and self-resilience (DiLiello & Houghton, 2006). Nevertheless, these theoretical arguments, the relationship between self-leadership and psychological capital such as self-resilience is scarce to find in other studies.

Employee engagement is a positive psychological work-related state (Bakker, 2009). However, employee engagement can be threatened by work design challenges and excessive job demands with negative effects on work design outcomes. But, a positive psychological state of development or an individual's levels of psychological capital could aid the employee in constantly protecting these difficulties or stresses by staying resilient. Through the belief that they can put forward the required strength to successfully reached their goals this can be achieved (Luthans et al., 2007).

Similarly, as demanded by self-leadership, self-observation inspired by hope can empower them to create different paths in achieving their goals. Through positive self-talk and constructive thought that implemented higher psychological performance is expected, thus higher levels of optimism and greater self-resilience can be achieved (Houghton et al., 2012; Ugurluoglu et al., 2013). Therefore, continuous positive psychological states are the best way in responding to any challenges to employee engagement. Furthermore, in order to be more resilient to face job pressure, self-leadership may have a great impact on psychological capital because it allows the employee to effectively employ the psychological capital (Avey et al., 2008).

Hence, these two constructs are seemed affecting each other. In a study by Mitchell et al. (2018), they recognised self-resilience as a moderator of performance that affects an individual's ability to self-regulate. Later, this led to either causes energy exhaustion such as burnout or improved efficient behaviours. Thus, self-resilience is proposed as moderating construct to the relationship of self-leadership and employee engagement.

**Hypothesis: Self-Resilience will have moderating influence on the relationship between Self-Leadership and Employee Engagement.**



**Figure 1: Research Framework**



## CONCLUSIONS

The works on human resource management are extended by examining and proposing the approaches required to increase employee engagement among gig workers in the gig economy sector. The study has significant implications for providing higher employee engagement in terms of personal resources.

Level of self-leadership and self-resilience among the employees or workers are the key factors to attain better employee engagement among gig workers. The study only incorporates selected personal resource factors to investigate gig workers' engagement. Future research should consider incorporating other personal resource factors that may increase the gig workers' engagement.

In conclusion, a greater understanding of the role of personal resource aspects may facilitate organisation and policy-maker to increase gig workers' engagement and further improve the gig workers' future and wellbeing.

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# The Significance of Franchise System Innovation on Firm Performance and Sustainability of Franchise Business in Malaysia – A Conceptual Study

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## ABSTRACT

In the 21st century means that practitioners and academics must learn to keep up with the ever-mobile multi-device consumers, across new technologies, platforms and behaviours for social marketing. Today's global and e-commerce world franchising has become a popular growth strategy for businesses; especially in times of increasing instability, uncertainty, complexity and ambiguity. The popularity of franchise business continues to increase as new e business model has been introduced in business market. The franchisor has thriving embodied its franchise into a multi-channel blueprint through the e-commerce functionality. The franchise businesses around the world are growing with the advent of e-business Strategy such as the implementation of e-commerce. E-commerce serves as a practical guide to using the Web to conduct business in the twenty-first century. The application of new technology plays an important role for franchise business to continue growing. The new business and analytical opportunities through big data technologies for innovation may grow franchise systems around the world. Innovativeness is so important in developing new R&D proceeding, it is imperative to be more creative in trying and addressing a variety of new products or services and technology leadership. To intensify the continuance of this expanding process, franchise entrepreneurs need to conserve a sustainable creative value in undergoing the challenging of the business environment towards the evolution of new information and knowledge of global innovation process. The limitations of external factor of business environment such as franchise system innovation affect the business survivability. This paper pursues to discover the franchise models that captured in the different analysis of dimensions and strategies on sustainability goals of franchise business.

**Keywords:** Franchise Industry; Franchise System Innovation; Firm Performance; Business Environment; Business Sustainability.

## INTRODUCTION

Globally, the principle of sustainability in business has been practiced by many companies. Since a decade ago, a franchise system had performed well but they need to keep an attitude of firm performance development up to high level to achieve sustainability and maintain for a long term in franchise business. According to Cagnin (2005), the business sustainability exertion model was predicated on the awareness of blueprint, values, erection and delusion of the firm. This model derived from sub factors of communication, competencies, partnership, operation, motivation, technology and the strategy of the firm.

This can be viewed from the perspective of the franchisee and franchisor respectively. The economic growth of Malaysia was led by a positive relationship with the level of franchise investment in Malaysia, especially franchising. Malaysian franchising businesses started to



develop around the 1940s by the retailer company of Singer and Bata followed by EON and PETRONAS petrol station (Malaysia Franchise Association, 2018). Beside foreign franchise businesses, the local franchise businesses in the restaurant and retail sectors have also been expanding rapidly since 2011 (FDD, 2018). These local small and medium enterprises (SME) are the backbone of the Malaysian franchise businesses; that has become one of the most desirable forms of business (Franchise Development Department, 2018). As a result, in 2015, the growth of franchise business in Malaysia contributed about 3.4 per cent of the Malaysian gross domestic product (GDP), or 26.8 billion ringgit and it is expected that the franchise industry will contribute 28 billion ringgits to the GDP in 2016. This growth is anticipated to contribute 35 billion ringgit or 4.4 per cent to the GDP by 2020 (KPDNHEP, 2016). The Malaysia government also targeted to increase the franchises outlet from 10,720 in 2010 to 23,140 outlets in 2016 with assume to provide 150,800 job; and the forecast of growth percentage of Malaysia GDP to 9.4% and 76,010 number of outlets by year 2020 (KPDNKK, 2016).

Foreign franchisors, particularly those with unique franchise models and concepts, are actively encouraged to enter into the Malaysian market. Researchers such as Bradach (1998), Kaufmann et al. (2007), and Frazer et al. (2012) have argued that in managing franchise restaurant and retail organisations formed in franchise business arrangements, managers are faced with several management challenges. Where, these challenges also applied for franchise business in Malaysia. These management challenges are such as growing outlets for business expansion; uniformity of the standard operating procedures; local responsiveness; and system wide adaptation. The franchisees must ensure their first outlet at growth level before can proceed to add new outlets. In addition to have more units, franchisee needs to expand a chain's market sight, whereby each new unit or outlet refuge from the accelerated proficiency of the chain. However, Holmberg and Morgan (2004) imply that adding outlets in franchise arrangements also contributes technical difficulties, especially in the medium to long term of the operation. These challenges include issues such as the increasing level of standardised operations, quality consistency, brand name recognition, system innovation and advertising effectiveness.

## **FRANCHISE BUSINESS SUSTAINABILITY**

End of year 2019, the COVID 19 pandemics began to spread worldwide and cripple the world economy. This factor is expected to cause, the franchise business is uncertain or volatile. Furthermore, Malaysia is managing under a new government and the cause of COVID 19 pandemics may result of such changes in Malaysia policy and practice. Additionally, this resulted the business operation need to applied to a new norm practices such as online method for business purpose. Through this type of digitalization business operation, it looks like this method is more suitable during this kind of business environment crisis. A survey has been done towards franchisors and franchisees during the movement control order and lockdown in Malaysia, stated that the total sales of franchise business has been dropped up to 80% for all sectors, where 70% are from food and beverage sector (KPDNHEP, 2021). The survivability of franchise businesses is having been a part of important issue in franchise business research and this shows that the franchisee businesses also being pretended (Weaven et al., 2010). As stated by Davies et al. (2011); the delicate perils exist within franchising because the profitable and embracive manipulation of market opportunities depends awfully upon the dedicated and unconditional obedience of all parties. Stanworth et al. (2001) pointed out that the survival of firms in a franchise business arrangement can also be predicted by the maturity level of the business.

The franchisor has to spend at least two years in testing the business's concepts, such as the sales, marketing, product or service, price determining and the staff strategy (Stanworth et al., 2001). It also needs time for testing and making several adjustments to its business concepts (Stanworth, 2001). In present franchise contract, most of the franchisees need to spend a minimum five years to the business concept. Alongside that, the franchise business also has to be able to achieve the strategic targets of the firm, such as market sales, geographical coverage, target market occupation etc. (Stanworth et al., 2001). Table 1.0 shows the declining trend of franchise industry in Malaysia. The number of terminated franchise business increasing up to 62.5% from year 2018 to 2019. It means that, the number of franchisees in Malaysia also in a reducing measure.

**Table 1.0: Malaysian Franchise Industry Statistic**

Description / year	2014	2015	2016	2017	2018	2019
Registered Franchise Business	759	807	839	850	856	945
Cancel/Termination	N/A	N/A	0	24	24	39
Bumiputera	N/A	N/A	225	236	239	259
Non Bumiputera	N/A	N/A	605	628	631	675
Others	N/A	N/A	9	10	10	11

(Source: KPDNHEP, 2020)

## FIRM PERFORMANCE IN FRANCHISING

The firm performance is act as the most related show cause to franchise business sustainability. It is an important measurement in an organization strategy through exploring the firm direction from its proposition and chains in order to gain profit and sustain the business. According to Sheng et al., (2011), profitable markets show franchisee performance metrics. The concept of performance as a whole is closely linked to the franchise and the system itself. It is established the erection of the organization to achieve the firm's vision and mission. It is consequential that an organization has well-considered and well-structured strategies that encompass the empowerment the teams to align their behaviour in a way to benefit the entire organization.

In order to sustain in the industry, the entrepreneurs should perform well and develop their business performance by closely monitoring the limitation in their business. Through the benefits of cost reduction and the pursuit of new product opportunities in the market are expected to have the potential to support corporate reputation. According to Engelman (2013) and Washington (2015), entrepreneurs need to understand production and population pressure to address sustainability challenges. The issue of sustainability in franchising is no different to any other business challenge because businesses is not guarantee successful in the long term due to both environmental and financial sense. Mentioned by Smith (2014), the

extent to which it affects the company sustainability for the next five years can be based on the exploring of why and how companies address sustainability in previous investigations.

## **THE BUSINESS ENVIRONMENT CHALLENGES**

According to strategy literature, a concern of environmental change is deliberated as one of the largish roots of opportunities and threats (Liao et al., 2003). Duncan (1972) indicated that environmental dynamism plays a critical role in firms' adaptation, and firms need to change their behaviour to adopt with changing environments. According to Raymond and Croteau, (2009); from view of contingency theory, the environmental context plays a crucial role in the firm's outcome. In addition, to achieve an optimal outcome, a firm should consider the alignment between the firm's strategy and environmental contingency for organizing resources. Besides that, since the franchisees are doing business in different geographical areas, attributes of local markets might also affect the relationship between the use of franchising and performance (Combs et al., 2011a). The survivability of franchise businesses is having been a part of important issue in franchise business research and this shows that the franchisee businesses also being pretended (Weaven et al., 2010); Bordonaba-Juste et al., 2011). As stated by Davies et al. (2011); that delicate perils exist within franchising because the profitable and embracive manipulation of market opportunities depends awfully upon the dedicated and unconditional obedience of all parties. The franchise entrepreneurs should understand and know how the sustainability issues can be effectively managed such as on financial, social and environmental risk, obligations and opportunities, towards the short-term and long-term value of the company can contribute. Doing business in furious environments requires the growth of an organizational process for external knowledge management (Lev et al., 2009). According to Smith (2014), some entrepreneurs have given up on the possibility of addressing the status quo over unimaginable challenges. Adoptability between the business environmental condition and organizational features is imperative for getting optimal performance and alignment between the internal and external factors can enhance.

The 21<sup>st</sup> century means that practitioners and academics must learn to keep up with the ever-mobile multi-device consumers, across new technologies, platforms and behaviours for social marketing. The franchisor has thriving embodied its franchise into a multi-channel blueprint through the e-commerce functionality. The franchise businesses around the world are growing with the advent of e-business Strategy such as the implementation of e-commerce. E-commerce serves as a practical guide to using the Web to conduct business in the twenty-first century. The application of new technology plays an important role for franchise business to continue growing.

The new business and analytical opportunities through big data technologies for innovation may grow franchise systems around the world. Innovativeness is so important in developing new R&D proceeding, it is imperative to be more creative in trying and addressing a variety of new products or services and technology leadership. According to Combs, Michael, and Castrogiovanni (2004), the firm's performance is influenced by the innovative of entrepreneurial features, which correspond to a strong interest in implementing its own ideas. Mentioned by Chen, Chen & Wu, (2005) in today's global and e-commerce world franchising has become a popular growth strategy for businesses; especially in times of increasing instability, uncertainty, complexity and ambiguity. The popularity of franchise business continues to increase as new e business model has been introduced in business market. Shukri (2015) also emphasized research and development (R&D) by franchisor, value added products and a good system is a key to the successful of franchise business. In order to increase profit, the execution of regularized policy or operation is seen to be influenced by

franchisee motivations. Studied by Croonen, Grunhagen & Wollan (2016), the franchise system is a substantial organizational form for entrepreneurs who intrigue in retail and service business to create wealth. For example, the restaurant chain McDonald's pays close attention to innovation and franchisees participate actively in every stage (idea, development, pilot and rollout). On the other side, franchisees play also an important role in innovation process as they are frequently involved in developing new or adjusting existing ideas. They also contribute to problem solving (Kaufmann and Eroglu, 1999). Any company, whatever its industry or characteristics, needs a website to reinforce brand awareness, company image and boost sales through consumption networks (Achrol and Kotler, 2012). Digital communication has changed the way big brands and organizations deliver information to the end user. Mentioned by Centola (2013), the idea of social support from online interactions has been around since the inception of the internet.

According to Combs et al., (2011a); the evolution of new information and knowledge is the core intention of innovation. Furthermore, the franchisee has relapse to local knowledge, many ideas created by franchisees are consequential source of innovation. Supported by Perrigot et al. (2011a); Zachary et al, (2011); as the brand is a major component of franchising and of a franchise chain's performance a website plays an important role in not only brand diffusion among customer but also among potential franchisees. Mentioned by Cliquet and Voropanova (2016), when franchisor online sales are increasing, these solutions should be either improved or even totally transformed. Many franchise chains now implement a 'web-to-store' strategy. In ASEAN, the Internet market is growing Estimated at about 3.8 million new users. According to Ferry, Yi Lin, and Oliver (2016), e-commerce receipts in ASEAN between 2015 and 2025 are expected to increase 17 times to nearly \$ 100 billion. The application of new technology plays an important role for franchise business to continue growing. The popularity of franchise business continues to increase as new e business model has been introduced in business market. Mentioned by Frazer, (2012), this discrepancy could be attributed and found that 80 percent of franchisees failure was caused by a failure to adhere to updated operating systems. Thus, mentioned by Gillis and Combs (2009); Wu (2015), franchise innovations that being celebrated through knowledge sharing, at franchise events, and at local and regional meetings, have a critical role in ensuring that standardization can be maintained whilst promoting innovative behaviours. Therefore, since the franchisees are doing business in dissimilar local markets with different local competitors, consciousness enable the franchisee to achieve exceptional performance in a competitive environment. Thus, even though a franchise system innovation is primarily under the control of the franchisor, it gives benefits to franchisee on having knowledge of their local markets network. Mentioned by Combs et al., (2011a); the evolution of new information and knowledge is the core intention of innovation. Therefore, since the franchisee has relapse to local knowledge, many ideas created by franchisees are consequential source of innovation. Supported by Perrigot et al. (2011a); Zachary et al, (2011); as the brand is a major component of franchising and of a franchise chain's performance a website plays an important role in not only brand diffusion among customer but also among potential franchisees. Mentioned by Cliquet and Voropanova (2016), when franchisor online sales are increasing, these solutions should be either improved or even totally transformed. Many franchise chains now implement a 'web-to-store' strategy.

In ASEAN, the Internet market is growing estimated at about 3.8 million new users. According to Ferry, Yi Lin, and Oliver (2016), e-commerce receipts in ASEAN between 2015 and 2025 are expected to increase 17 times to nearly \$ 100 billion. The process of dynamic change can be enhanced through competition in demand. The franchise entrepreneurs are doing business in dissimilar local markets with different local competitors, consciousness enable the franchisee to achieve exceptional performance in a competitive environment. Thus, even though a franchise system innovation is primarily under the control of the franchisor, it gives benefits to franchisee on having knowledge of their local markets network. Mentioned by Combs et al., (2011a); the evolution of new information and knowledge is the core intention of

innovation. Therefore, since the franchise entrepreneurs has relapse to local knowledge, many ideas created by franchisees are consequential source of innovation. Supported by Perrigot et al. (2011a); Zachary et al, (2011); as the brand is a major component of franchising and of a franchise chain's performance a website plays an important role in not only brand diffusion among customer but also among potential franchisees. Mentioned by Cliquet and Voropanova (2016), when franchisor online sales are increasing, these solutions should be either improved or even totally transformed. Many franchise chains now implement a 'web-to-store' strategy. As detailed by Hult (2011), the classic point of origination for resource-based theory and the foundation for the RBV is the theory of the growth of the firm, which addressed the acquisition of marketing resources that can be applied by a firm to establish a position in the marketplace (Penrose,1959).

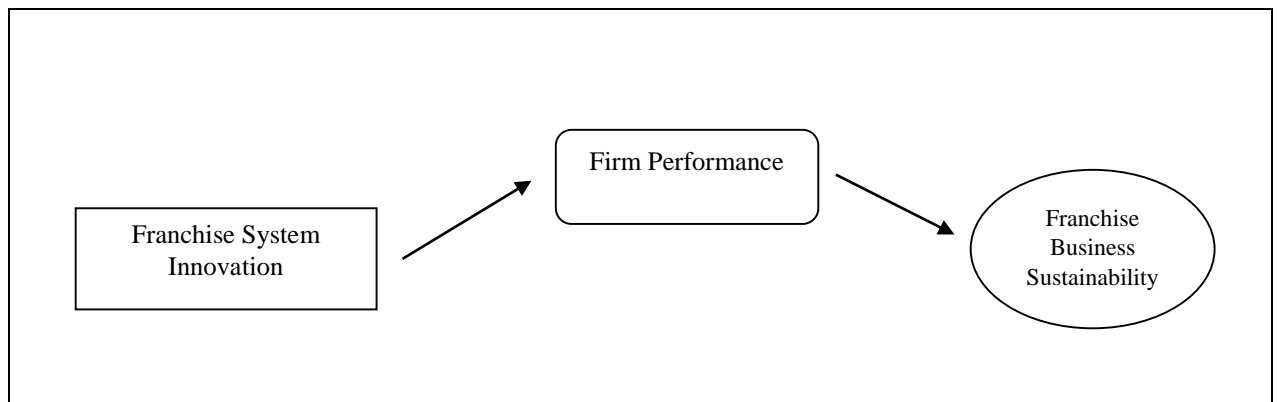
According to Paniagua and Sapena, (2014); developing on the resource-based theory, firms exploit their particular resources to develop and implement strategic actions to enhance performance. It also explained how resources can be turned into capabilities to enhance the business performance. Franchise entrepreneurs need to adopt and looking for a new technological transfer of research and development (R&D) with the substitute standards and practices for its business survival. The questionnaires are the instrument that used in this study and were develop and built based on previous studies and being modified accordingly and pre-defined or adopt and adapt based on quantitative method. The questionnaires are '*Your franchisor provided the latest innovation*', '*Your franchisor provided an innovative idea and input for its business development*', '*Your franchisor spread innovative ideas towards business expansion*', '*Your franchisor provided website transactional towards business expansion and E-commerce is a benefit for your company*'. The reliability test was then analysed using SPSS based on Cronbach's alpha reliability coefficients, which is internal consistency. If the value of Cronbach's alpha (from the reliability test) is less than 0.60, this is considered poor, while if the value is 0.7, this is acceptable, and if the value is above 0.8, it is considered good (Sekaran & Bougie, 2013). Therefore, the closer the Cronbach's alpha reliability is to 1.0, the better the value. According to Table 1, the constructs' measures were achieved acceptable Cronbach's alpha value from reliability test ( $\alpha = 0.709-0.943$ ) for further analysis. The greater level of franchise system innovation in franchise arrangements the greater the level of firm performance and franchise business sustainability.

**Table 1: Reliability coefficient test**

<b>Construct</b>	<b>Item</b>	<b><math>\alpha</math></b>	<b>Mean</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>
<b>Franchise System Innovation</b>	BEF	0.923	4.287	0.534	4.200	4.467



Figure 1.0; describe the relationship of Franchise System Innovation towards Firm Performance and Franchise Business Sustainability.



**Figure 1.0: The Proposed Conceptual Model**

## **DISCUSSION AND CONCLUSION**

The concept of sustainability uses the organizing principle which includes an innovation systems and processes that meet the needs of firm in term of economy, social and environment view. Franchise entrepreneurs should follow the updated processes and give a maximize commitment on this approach in order to get a high-quality outcome for them to sustain in the industry. The process of dynamic change can be enhanced through competition in demand. From the finding, this study has identified that franchise system innovation is significant in enhancing the franchise business performance and sustainability. Therefore, franchise entrepreneurs need to adopt and looking for a new technological transfer of research and development (R&D) with the substitute standards and practices for its business survival.

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# Research on the Application of Internet of Things in the Cold Chain Logistics of Agricultural Products

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## ABSTRACT

Based on the introduction of the concept and characteristics of cold chain logistics for agricultural products e-commerce, this article explains the rapid development of e-commerce and the application of the Internet of things in cold chain logistics have brought earth-shaking changes to people's consumption patterns, the current deficiencies in the cold chain logistics management of agricultural products and the urgent needs for the application of the Internet of things information system, and analyzes the application of Internet of things in different stages of cold chain logistics for fresh agricultural products such as pre-cooling at the place of production, processing and packaging, cold chain transportation and sales. Research conclusions show that by using Internet of things to optimize the cold chain logistics system of fresh agricultural products as a whole, building a fast, effective, and full traceable cold chain IOT information system can promote the efficient and stable development of cold chain logistics and transportation of fresh agricultural products.

**Keywords:** Internet of things; E-commerce; Cold chain logistics; Agricultural products.

## INTRODUCTION

In recent years, the upgrading and popularization of Internet of things have exacerbated the changes in people's consumption patterns. Online consumption has gradually become a living habit, and consumers can purchase high-quality goods from all over the world without leaving their homes. The combination of e-commerce and the fresh agricultural product industry based on Internet of things has overturned the traditional agricultural product sales model. The data shows that the China's fresh food e-commerce transaction scale is developing rapidly at a growth rate of more than 30%. As of 2020, the nation's transaction scale has reached a new high of 400 billion yuan, a year-on-year increase of nearly 40%. This is expected in 2021, and the data will exceed 550 billion, a year-on-year increase of 37.50% (Wang, Wang et al. 2021).

With the continuous deepening of Internet applications and the rapid expansion of e-commerce platforms, fresh food e-commerce continues to attract major domestic e-commerce companies to participate in market competition (Qu, Mao et al. 2017). With the rapid development of domestic agricultural product e-commerce, how to reduce cold chain distribution costs? Improving the timeliness of cold chain logistics has become the biggest problem facing the development of major e-commerce companies (Ban 2018). Transportation cost is the most important part of cold chain logistics distribution cost, and the most critical one is the choice of specific transportation methods (Zhao, Zhang et al. 2020). In the currently widely used traditional transportation methods, fresh products have many perishable and easily damaged phenomena during the transportation process, resulting in severe waste.



Based on the research statistics, due to the high loss during transportation and loading and unloading, about 70% of the cost of fresh agricultural products is occupied by cold chain logistics costs, which far exceeds the United States, Japan, Europe, and other countries (Ma, Wang et al. 2018). High cold chain logistics costs have increased the selling prices of fresh agricultural products on e-commerce platforms, making enterprises more sensitive to logistics costs. In addition, the loss rate of fresh agricultural products in circulation is very high, with an average of as high as 30%, while the ordinary commodity wastage rate is less than 1% (Wang, Wei et al. 2018). Once the commodity does not meet consumer expectations and returns or exchanges, it may not be sold again according to the shelf life theory of fresh agricultural products. Therefore, it also creates very high reverse logistics costs.

E-commerce fresh cold chain logistics is required to have sensitive and accurate market response capabilities, and it has high requirements for coordination between upstream and downstream links. It needs to be closely connected between links to ensure that the fresh food categories meet the required temperature, humidity, and efficient circulation in the environment. Substantial information technology is necessary to ensure that the quality of fresh agricultural products in cold chain logistics meets market expectations through practical information guidance.

In the 21st century, cold chain logistics has entered an era of rapid development in China, especially since 2012 (Sun, Gao et al. 2020). With the popularization of the Internet, fresh agricultural products worldwide have entered ordinary people's homes through cold chain logistics. The rapid development of the domestic cold chain logistics industry is mainly based on two reasons. Firstly, the rise of fresh food e-commerce is an important driving force for the cold chain. From the perspective of the number of completed orders, the emergence of cold chain logistics has greatly promoted the transactions of fresh food e-commerce, and the rise of fresh food e-commerce has also promoted the development of cold chain logistics. The total output value of China's food industry accounted for 7.1% of the whole national industry (Sun and Ahn 2018). By 2014, the total output value of the food industry reached 12.3 trillion yuan, an annual growth rate of 15% (Wang 2016). The proportion is still very low, and its market share of fresh agricultural products is even lower. Although since 2013, food e-commerce has begun to explode, the average annual transaction volume of platforms such as Tmall, JD, and COFCO has increased rapidly, and the fresh food e-commerce system has become more mature, but it accounts for the market entity. The circulation ratio is still very low. The current market share is only about 1%, far lower than clothing, electronic products, skincare cosmetics, and other categories (Only 2017).

However, the development level and scale of China's fresh food e-commerce are still in its infancy. The overall scale is small, and the consumer groups and market are not significant—for example, e-commerce giants such as Tmall and JD, who have more advanced systems and management. The logistics informatization and information interaction of small enterprises are not enough, and most of them are in the initial stage of optimization. Therefore, the informatization construction of the e-commerce platform can help improve the timeliness of cold chain logistics and ensure the freshness of agricultural products so that the e-commerce of agricultural products can quickly gain market share and enhance the competitiveness of the e-commerce platform (Qu, Mao et al. 2017).

## **THE DEFINITION CONCEPTS**

### **The concept of fresh product e-commerce and the characteristics of fresh agricultural product e-commerce logistics**

#### **The concept of fresh food e-commerce**

Fresh product e-commerce refers to the use of e-commerce to directly sell fresh products online. Fresh products include fresh fruits and vegetables. The fresh food e-commerce market has enormous potential. It has a large-scale screen name base, its market share is low, and its room for improvement is evident (Zeng, Jia et al. 2017).

Fresh food e-commerce optimizes the supply chain, enables cold chain logistics, enhances information transparency, and delivers fresh products to consumers efficiently and transparently (Qu, Mao et al. 2017). Among them, China pointed out in the "Development Plan for Cold Chain Logistics of Agricultural Products" that the cold chain logistics of agricultural products means that fresh agricultural products such as meat, poultry, aquatic products, fruits, vegetables, eggs, etc. are harvested (or harvested or slaughtered) from the place of production and then processed. Storage, transportation, distribution, retail, and other links are always in a suitable low-temperature control environment to ensure product quality and quality safety to the greatest extent, reduce losses, and prevent pollution (Shi, Xie et al. 2018). The cold chain logistics of fresh agricultural products is a systematic project, which requires the support of product manufacturers or producers, cooperatives, agricultural associations, distributors, etc., is the cold chain logistics of the entire supply chain from farmland to consumers (Jing, Wen et al. 2019).

#### **Characteristics of e-commerce logistics of fresh agricultural products**

##### **Its primary task is to ensure the quality of agricultural products**

The particularity of e-commerce and the perishable nature of fresh agricultural products determine that the logistics and transportation of fresh agricultural products have different characteristics from general logistics (Zhang and Huang 2015). Compare with the previous purchases of vegetables in physical stores in the market, e-commerce is completely different due to its virtual nature. Consumers ordering fresh agricultural products such as vegetables and fruits online are invisible and intangible. They are the first time they consume. It is only through product description details or evaluation to purchase goods, so the first consumer experience is very important, depending on the quality of the agricultural products themselves. From the agricultural products in the fields to consumers, in this entire supply chain link, a visual e-commerce information management system is used to ensure the controllable state of product quality (Zhang and Huang 2015). It is of great help to consumers in establishing online shopping information.

##### **Ensure the high timeliness of the distribution process**

Due to its perishable nature, the shelf life of fresh agricultural products is relatively short. People pay attention to whether the products are fresh when buying. It is required faster and timely logistics and distribution, and the operation time of the fresh produce supply chain process should be kept to the shortest (Wang, Mechanics et al. 2013). The freshness of the product can be guaranteed, thereby enhancing customer satisfaction and experience. In addition, the current target customers of fresh agricultural products e-commerce are mainly office workers, and their receiving time is greatly restricted, which has higher requirements for the logistics and distribution of agricultural products (Ban 2018). Enterprises are also solving this problem. Now, many e-commerce companies of agricultural products can deliver home delivery services the next day in the same city or deliver them to consumers on the same day at an appointment time (Jing, Wen et al. 2019).

### **The particularity of transportation equipment and technology**

Due to the particularity of the transport of goods, the technology of storage, packaging, transportation, and other links will directly affect the quality of fresh products. Many fresh agricultural products have high water content and short fresh-keeping period. Therefore, some special refrigerated transportation must be used in the cold chain logistics system (Bao, Zhang et al. 2018). Since the transportation tools are specially made according to the characteristics of the goods, they must be equipped with low-temperature storage warehouses, food preservation boxes, and refrigerated transport vehicles accordingly (Navazi, Tavakkoli-Moghaddam et al. 2018). Therefore, transportation technology and equipment are tough conditions directly linked to the freshness of fresh products so that the freshness of the products can be maintained during the transportation process (Ma, Wang et al. 2018).

### **The distribution network is simplified, but the distribution points are scattered**

The consumption points of households are scattered in the city, resulting in many distribution points and increasing the difficulty of distribution (2018). Unlike the traditional distribution of food distributors to significant supermarkets and markets, these logistics points are concentrated, and the delivery volume is large, the cost is relatively low, and the logistics route is easy to plan. However, now it is highly scattered, and the unit delivery volume is small. It is difficult to control the distribution route and time, which requires scientific planning of the distribution route to meet customer requirements (Xiao, Zhao et al. 2019). Despite the above problems, the distribution of agricultural products under e-commerce does reduce many circulation links and increases efficiency compared with the traditional model (Bao, Zhang et al. 2018).

## **RESULTS AND DISCUSSION**

### **Application of Internet of things in different stages of cold chain logistics of fresh food e-commerce agricultural products**

Fresh agricultural products have the characteristics of perishability and high timeliness. Therefore, in the essential links of production, storage, transportation, and sales included in cold chain logistics, Internet of things is used to optimize fresh agricultural products' cold chain logistics system throughout the process (Wang, Zhang et al. 2015). Internet of things is used in the cold chain logistics transportation system of agricultural products to realize the whole process of visualization of the entire cold chain logistics transportation to improve transportation efficiency and ensure the cold chain logistics system (Liu, Xu et al. 2016).

### **The application of the Internet in the production area pre-cooling, processing, and packaging links**

Since the "first mile" of agricultural products is far away from consumers, fresh food e-commerce and consumers often do not pay attention to its role in the supply chain, leading to an endless loop of excessive investment in the "last mile" but not apparent results. The "first kilometer" is of great importance in the entire supply chain. By introducing a comprehensive quality management system, pre-control is emphasized so that the control effect and cost savings are significantly improved compared to post-control, and the entire management is realized—optimization of the system (Zhao, Li et al. 2019). The temperature of fresh agricultural products is quickly reduced to the optimal storage temperature after being picked, which is called pre-cooling at production. Pre-cooling at the place of production can effectively preserve the freshness of the product and extend the shelf life, reducing its loss in the circulation process. In actual business, because some companies worry that this link will increase the cost of cold chain logistics, nearly 80% of agricultural products enter the circulation link directly without pre-cooling (Liu, Xu et al. 2016). This situation makes

agricultural products seriously depleted in the transportation process and leads to the country's agricultural products. The consumption has been at a high level.

Based on the application of Internet of things, agricultural products can be pre-cooled immediately after harvesting to supervise the whole process so that the loss of agricultural products can be effectively reduced (Li and Keat 2021). Modern pre-cooling technologies mainly include cold storage pre-cooling, ice-touch pre-cooling, forced air pre-cooling, water pre-cooling, vacuum pre-cooling, etc. Among them, vacuum pre-cooling technology is the most commonly used technical means in the cold chain logistics of agricultural products. This technology can quickly evaporate water under vacuum conditions, effectively ensuring the freshness and quality of the product. The primary purpose of this technology is to cool the product to the previously set temperature quickly, take off items from the equipment, and then process, store, transport, and sell. It is a fast and effective processing method (Gruyters, Defraeye et al. 2019).

After the agricultural products are pre-cooled, their shelf life, freshness, etc., will be longer than those before the pre-cooling, and even some agricultural products can be sold directly. Appropriate packaging of fresh agricultural products after pre-cooling is indispensable, especially for fresh food e-commerce, which requires light, fast and straightforward product packaging and can also keep fresh for a long time. Among many packaging methods, modified atmosphere packaging can effectively meet the particular requirements of fresh food e-commerce companies (Gruyters, Defraeye et al. 2019). This method is light and simple and can most effectively maintain the original quality of the product. Table 1 summarizes and compares the storage period of some agricultural products after vacuum pre-cooling and ordinary pre-cooling.

**Table 1: Comparison analysis of the storage period of some fresh agricultural products after vacuum pre-cooling and ordinary pre-cooling (Unit: day)**

Description	Ordinary Storage cooling	Cold Vacuum Pre-cooling	Pre-Vacuum Pre-cooling + Modified Atmosphere Packaging (MAP)
Spinach	7-10	40	50
Mushrooms	2-3	10	16
Strawberries	5-7	9	15
Celery	8	40	54
Cabbage	8	39	50
Bayberry	10	20	30
Green peas	4-7	14	30

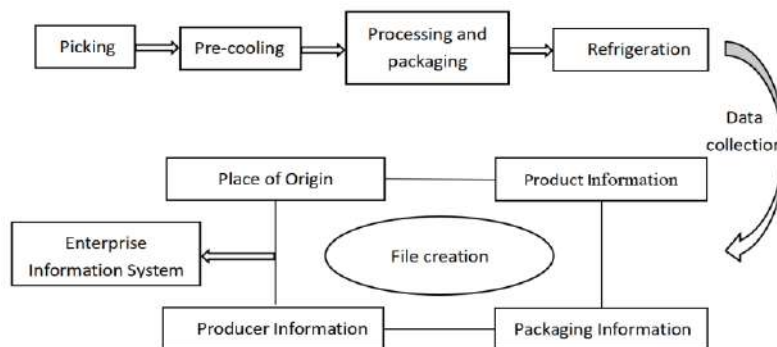
(Source: China Meat Machinery Net (<http://www.mpmc.cn/>))

In pre-cooling at the place of production and processing and packaging, various information about agricultural products need to be collected, including information on the place of origin, product information, packaging information, and farmer information. The collected data are all established production files and uploaded to the information system of the production enterprise to facilitate subsequent product information inquiries. Information can be transmitted in real-time so that the entire harvesting and pre-cooling process can be monitored

in real-time, and the information collection and traceability process at this stage can be completed, as shown in Table 2 and Figure 1.

**Table 2: Information collection and equipment at the harvest stage**

Link	Data Collection	Internet Technology Required
Picking	Inspection Data for Growth Information of Fresh Agricultural Products	“RFID” Electronic Tag and “RFID” Reader
pre-cooling	Temperature information	Temperature Sensor
Processing and Packaging	Packaging Materials, Processing Time, Working Staff and other information	“RFID” Electronic Tag and “RFID” Reader



**Figure 1 Flow chart of pre-cooling and processing and packaging of origin (Source: Gruyters, Defraeye et al. 2019)**

### The application of the Internet in the cold chain transportation stage

The distribution of fresh agricultural products is quite different from ordinary products. Due to its unique perishable and high timeliness, it has higher requirements for all aspects of logistics and transportation. Although fresh agricultural products can achieve a certain degree of freshness preservation in traditional logistics and distribution, they cannot achieve the entire cold chain logistics and distribution (Navazi, Tavakkoli-Moghaddam et al. 2018). The limitations of traditional logistics distribution are mainly reflected in the poor connection of various links in distribution, the inability to achieve effective information collection and low interaction capabilities, and the inability to understand the transportation environment of goods in transit in time, which can easily lead to a higher rate of cargo damage, and it may also be possible. It causes food pollution, which has an impact on the quality of agricultural products, seriously threaten consumer safety, and results in low customer satisfaction. Therefore, the key issue that needs to be solved urgently in the development process of fresh food e-commerce is to realize the entire cold chain transportation of agricultural products (Ma, Wang et al. 2018).

From the perspective of the future development trend of Internet technology, the construction of a cold chain traceability query information system is a key link in the realization of Internet

technology in cold chain logistics and transportation (Weng, Chuanfang et al. 2019). Based on Internet of things, build a cold chain logistics traceability information management system for fresh agricultural products, gradually improve the information filing system for each link in the cold chain logistics of agricultural products, and improve the quality and safety of each link in the cold chain logistics (Ridwan, Santoso et al. 2019). Enhancing the whole-process monitoring will help the government and related departments, fresh food e-commerce, agricultural product processing enterprises, cold chain logistics industry, and consumers to detect, supervise and control agricultural product logistics activities.

To build a cold chain logistics traceability inquiry system using Internet of things, temperature and humidity sensors must be installed in all directions in the refrigerated vehicle to enable it to collect the information in the refrigerated vehicle accurately and to scan the product package with "RFID"(Radio Frequency Identification) temperature and humidity The label can monitor the temperature and humidity of the goods at all times. This information will not only be transmitted to the computer or mobile phone terminal in the cockpit, but also the various monitored data will be fed back to the remote monitoring center through the "GPRS" (General Packet Radio Service) wireless communication method (Hao, Qiu et al. 2017).

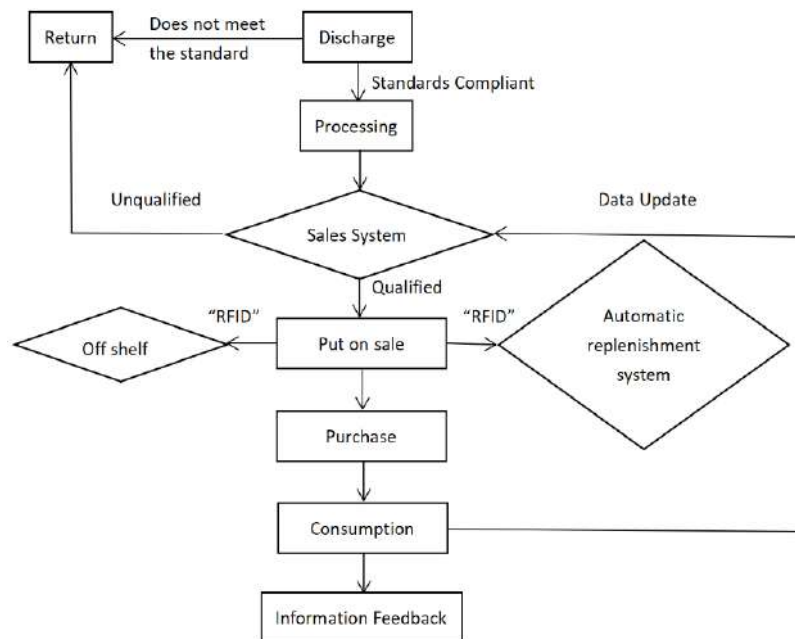
Real-time monitoring of the temperature and humidity of the refrigerated truck, when various unexpected situations occur, the system will immediately issue an alarm and immediately notify the driver to take corresponding measures, which can avoid all kinds of unnecessary losses in time (ASADI, Gholamhassan et al. 2014). In addition, the "GPS"(Global Positioning System) positioning and tracking system is installed on the refrigerated vehicle to obtain the accurate location, vehicle group number, operating status, and real-time road conditions of the vehicle to locate and track the vehicle to ensure that it arrives on time. Finally, a "GIS" (Geographic Information System) system can be installed on the refrigerated truck. Through wireless transmission, the vehicle's real-time position can be monitored, and the relevant data can be transmitted to the monitoring center in real-time.

The provided man-machine interface is graphical and operable. Thus it can monitor various vehicles in transit in real-time, zoom in and out as needed, and accurately display the real-time location of transport vehicles (Bao, Zhang et al. 2018). According to the technology of the "GIS" system, the traffic conditions of the entire road can be monitored in real-time. Then information and data such as the loading capacity of the transport vehicle, the size of the vehicle type, the delivery place, the customer address, and the real-time road conditions can be obtained for calculation. Through the rapid processing of the data, It can automatically select the optimal distribution route, guide freight flow, improve transportation efficiency, and reduce logistics costs. The specific process is shown in Figure 2.





order, customers can inquire about real-time logistics information of goods in transit and various product information through mobile phones and other terminals at any time, as shown in Figure 3.



**Figure 3: The cold chain logistics sales process of agricultural products based on the Internet**  
(Source: Li and Huo, 2016)

## CONCLUSION

The introduction of Internet of things into the cold chain logistics and transportation of fresh agricultural products can improve the level of cold chain logistics and transportation of fresh agricultural products. Accelerating the development of cold chain logistics can extend the shelf life and sales period of agricultural products and reduce the loss rate in the transportation of agricultural products while ensuring product quality, thereby reducing logistics costs and ensuring the economic benefits of fresh food e-commerce. Through the use of networking technology in the cold chain logistics of agricultural products, on this basis, a business process-oriented cold chain Internet information system is constructed, which provides a reference for how to realize high-speed and effective cold chain logistics transportation for fresh food e-commerce enterprises. From the above research, it can be found that the use of Internet technology in the cold chain logistics of fresh agricultural products can promote the improvement of cold chain logistics operation efficiency and realize the whole process of visual monitoring and traceability. Taking into account the particularity of fresh agricultural products, in the application of Internet technology, the entire process includes harvesting, product pre-cooling, processing and packaging, cold chain transportation, and sales phases, which are combined with the three-tier architecture model of the Internet of Things, based on The foundation for the construction of cold chain logistics business processes will eventually lead to the formation of the cold chain Internet of Things architecture system.

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## **The Impact of COVID-19 towards Tourism Sectors in Sabah: Operating in the Midst of Pandemic**

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### **ABSTRACT**

Tourism industry provides livelihoods for all of the people around this world by supporting local business and boost the revenue of the economy in an impressive way. When the World Health Organization (WHO) proclaimed the pandemic in 2020, this vital industry suffered significant losses. Therefore, this conceptual paper aim to determine the impact of COVID-19 towards tourism industry and how they operate in the midst of pandemic. This study uses a quantitative approach to collect primary data via an online survey, as well as a thorough examination of related literature from academics, online news portals, and online platforms. As a result, this paper finds that COVID-19 outbreaks cause job and revenue loss, declining in tourist counts and minimized operation in tourism related business. The travel ban order has resulting in cancellation of travel and tour packages as well as hotel and flights booking which lead to the massive drop in tourist arrival. The prohibitions during this pandemic affect the economy greatly because almost all business especially in tourism industry has to freeze their business. This paper will assist the policymaker and related business in tourism industry in planning their future operation during and after this pandemic end.

**Keywords:** Coronavirus disease; COVID-19; Tourism Industry in Malaysia, Sabah.

### **INTRODUCTION**

Tourism sector is one of the key generator to the rapid growth of the economy and a source of employment globally. Accounted for providing about 300 million employments globally and 29 per cent of the exports in the world's services, it is undeniably that this sector is the major contributor to the income of all countries. But, the outbreak of COVID-19 in Wuhan, China in December 2019 really hit the world. Most countries announced lockdown as a way in preventing the spread of the virus. The outbreak of COVID-19 impacts all sectors in the economy, such as tourism, manufacturing, financial, trade, service and transport. Cancellation of flights and hotel bookings, tours and revenue loss in tourism merchandise has put the economy in a critical state. Between April and May 2020, 100% of all worldwide destinations introduced travel restrictions in response to the COVID-19 pandemic, through the closure of borders for tourists and suspension of international flights (UNWTO, 2020).

Nowadays, Malaysia has been known globally because of the uniqueness of its multi-cultural citizen and beautiful tourist attractions. Malaysia's economy was boosted with a total of RM86.14 billion in tourist receipts of expenditure from 26,100,784 international tourists who come to visit Malaysia (Tourism Malaysia, 2020). In 2020, Malaysia faced a downfall of almost RM3.37 Billion due to COVID-19 (Wasiul Karim, 2020). In 2020, Ministry of Tourism will introduce the campaign of Visiting Malaysia in targeting the arrival of almost 30 million tourists but sadly has to be cancelled because of this outbreak. On 18<sup>th</sup> March 2020, Malaysia's



government implemented the Movement Control Order (MCO) to contain the virus. Many tourism business or practitioners has been greatly affected by this worst situation when they have to close their operation for a longer period depending on the pandemic situation. It is such a waste because each state in Malaysia has a lot of attractions to offer during the campaign including Sabah.

Sabah is among one of the state in Malaysia that become a popular tourism destination because of the beautiful natural wonders. In 2019, Sabah alone recorded 4.2 million total of tourist arrival domestically and internationally. Due to the Movement Control Order (MCO), tourism business owner facing a hard time in generating revenue and cannot afford to pay their employees. The most affected sectors by the COVID-19 outbreak in Sabah are: hotels, transportation, gifts and souvenirs, seafood business, entrance fee in tourism hotspots and also restrictions to visit public places such as theatres and supermarkets. As time passed, Sabah finally allows inter-zone tourism activities among locals with strict SOPs. Starting March 2021, travelers are allowed to travel across the zones but only by using registered tour companies (NST, 2020). Traveling is only allowed using tour vehicles registered with Tourism, Arts and Culture Ministry and individual travel is banned. All tour companies which allowed to operate as usual have to apply for permission from the police and vehicle should not stop at non-designated zones. As a precaution during inter-zone tourism activities, Sabah has grouped the districts into six zones:

**Table 1: Grouping of Districts in Sabah by Zones**

<b>Zone</b>	<b>District</b>
Zone 1	Kota Kinabalu, Kota Belud, Ranau, Tuaran, Penampang, Putatan and Papar
Zone 2	Beaufort, Kuala Penyu and Sipitang
Zone 3	Kudat, Kota Marudu and Pitas
Zone 4	Sandakan, Beluran, Kinabatangan and Tongod
Zone 5	Tawau, Semporna, Lahad Datu, Kunak and Kalabakan
Zone 6	Keningau, Tambunan and Tenom

**(Source: New Straits Times, 2021)**

The grouping of districts also has slow down tourism activities as tourist only permitted to travel among the districts in the zone group. Although permission has been granted, inter-zone tourism activities were only allowed via the travel bubble approach where application must be submitted first by the tourism operators to ensure that they can comply with the protocols. During the operation of tourism activities, tour operators are reminded to always comply with the SOP to ensure the safety of the tourists (Bernama, 2021). Resulting from this critical situation, the declining in the number of tourist arrivals from the travel restrictions order has seriously impacted the tourism industry in Sabah. Thus, this paper aim to present the COVID-19 effect towards tourism in Sabah and how they survive in this new norm.

### **COVID-19 outbreak**

COVID-19 is a newly discovered infectious disease. Coronaviruses, which can affect humans, as well as a range of other mammals and birds, were first identified in 1965, and since then, they have been responsible for a number of disease outbreaks (John and Comfort, 2020). Coughs, exhales, and sneezes are the most typical symptoms of this virus. COVID-19 is a respiratory virus that easily transmitted from the saliva and mucus while coughing, sneezing, yelling and talking. Physical contact with contaminated objects or surfaces, shaking hands and also when touching mouth, nose and eyes will spread this disease. Coronavirus can live in the air up to 3 hours. Thus, breathing in the same air as the infected person increase the possibility

to be infected. This virus is vulnerable to old and young people with weak immune system, also who has preexisting breathing and cardiovascular illness where in some cases it may prove to be fatal.

This virus originated from China when a form of pneumonia with unknown causes reported in December 2019. Soon after that in January 2020, the US Centers for Disease Control and Prevention (CDC) identified a seafood market in Wuhan as the suspected area of the outbreak and remain closed since then (Lee-Peng Foo et al., 2020). In Malaysia, the first COVID-19 case was confirmed on 25 January 2020, which involved three Chinese citizens, who had entered Johor Bharu, Malaysia via Singapore on 23 January 2020 (Lee-Peng Foo et al., 2020). On 30 January, COVID-19 declared as a global health emergency of global concern by the World Health Organization (WHO). Soon after that, this virus started to spread to all state in Malaysia including Sabah.

Sabah reported its first COVID-19 case on 12 March 2020 in Tawau, after a 58 years old man being monitored for the symptoms at Hospital Tawau tested positive for the disease (Alen Kee, 2020). The patient has a history of attending religious meeting at Masjid Jamek Seri Petaling in Selangor from March 3 to 5. On 10 March 2020, he was admitted to Tawau Hospital after developed some symptoms of fever and cough.

Malaysia is a well-known tourism destination because of the warm hospitality and communication system. Due to COVID-19, people from other countries has to cancel their advance travel plan to Malaysia as an act of concern on the COVID-19 outbreak. Apparently, this virus has severely affected many sectors in economy especially tourism (Idris et al., 2020).

### **Role of Tourism Industry**

Tourism is a main instrument for country development as well as the fastest growing economic sectors. It falls within specific attributes of a service product which are inseparability, heterogeneity, intangibility, and perishability (Loke et al., 2018). This sector is responsible in promoting the uniqueness of arts and culture, reflects the beauty, nature and make a better image of Malaysia especially around the world. The tourism industry has seen tremendous growth in Malaysia and is one of the fast-growing sectors (Ahmad, et al., 2019). It contributes in generating income, earning substantial foreign exchange and creating job opportunities. Tourism is one of the most important sectors in the global economy, significantly contributing to the world's GDP (Gamage et al., 2017).

Within tourism industry, there are several supporting industries: accommodation, food and beverages, transportation, retail and culture, sports and also hospitality. The varieties of supporting sector are because tourism is not only for the purpose of visiting one place but also for leisure, work and business, education and also medical. In term of host destination, tourism also develops the infrastructure of a country and experiencing cultural exchange between foreigner and citizens. This purpose of visit created job opportunities not only in tourism sector but also may include the agricultural sector, health sector, communication sector and educational sector. Travelling for the purpose of cultural exchange is very profitable to the local restaurants, shopping centers and stores. But, all of this contribution has fallen deep when the COVID-19 occurs. The travel and tourism sector is more likely to get influenced by the COVID-19 pandemic (Shretta, 2020).

### **Impacts of COVID-19 in Tourism Industry**

COVID-19 outbreak has devastation impact on Malaysia's economy, especially in the travel and tourism sector. Many travel and tours package are cancelled, which affects mostly the airlines and hotel. The Movement Control Order (MCO) and border closure cause increase in

unemployment rate, revenue loss, declining in the tourists count and also affected the operation of tourism related business. In response to this situation, several experts voiced out their opinion.

**Table 2: Experts Opinion on Tourism Sector during COVID-19**

<b>Expert</b>	<b>Opinion</b>
Zied Ourhazi, <i>Economist, Tourism Specialist</i>	“Depending on the size of the tourism sector within the economy, the lack of tourism in developing countries could impact macroeconomic stability and lead to political instability. Decreasing tourism demand could result in the closure of small and medium sized enterprises (SMSEs) operating in the sector, notably those that are least competitive, and a drop in production in other economic activities (agriculture, agri-food businesses, transportation, etc.) leading to the contraction of or negative economic growth. In such a situation, developing countries will register job losses jobs not only in the tourism sector but also in the other activities putting the pressure on governments especially those with limited fiscal space. In supporting the tourism sector and economic growth, governments may see their fiscal position deteriorating without reaching the expected outcomes due to the weak public financial management systems that are characteristic of most developing countries.”
Brad Holland, <i>Communications and Marketing Business Consultant</i>	“Developing countries will experience direct economic impact in the transportation, tourism, hospitality and services sectors as well as the informal economy that is reliant on foreign visitors. All around the world, small fishing villages that transformed into coastal tourist towns are turning out the lights. The reality is that, in three months without tourism in developing countries, many people have already exhausted their savings, missed paying an energy bill and do not know when the next opportunity for work will come. Scores of families in developing countries are not earning money to buy basic daily items right now due to the lack of tourism.”
Libby Owen Edmunds, <i>Senior Tourism Specialist</i>	“Countries are being affected differently depending on the relative importance of tourism to their economy and their overall ability to recover following the crisis. For example, for 22 developing countries tourism accounts for more than 10% of their GDP leaving them highly exposed to the impact – most of these are small islands. The impact on employment is similar – for 17 developing countries, tourism represents 10% of employment, hence unemployment will be high. Small and medium sized businesses will be impacted relatively more than larger businesses as they do not have the capacity, cash flows, diversity of markets or supply chains nor the resources to mitigate impacts.”

**(Source: Development Aid, 2020)**

### **Employment**

Tourism industry is extremely a significant source of employment. It is among the world 's top creators of jobs requiring varying degrees of skills and allows for quick entry into the workforce for youth, women and migrant workers (International Labour Organization, 2010). The most affected industry in term of employment are aviation and hotel industry. The travel restrictions order received quick response from all airlines. Many staff were laid-off, asked to take unpaid leave and also salary cut. Malaysia Airlines has acknowledged that the company is now in a "serious situation" and urged workers to take unpaid leave voluntarily (AFP, 2020).

Due to the quick development in tourism, hotel industry also is on rise as they make improvement in their customer services. This industry also makes a good move in providing *Shariah* complaint hotels as the number of Muslim travelers from Middle Eastern are rising (Haque, et al., 2019). As of March 2020, most of this industry staff also loss their job as they are required to take unpaid-leave, laid-off and wage cuts. During this outbreak, Sabah's economy suffered especially in the tourism sector as many businesses and shops in Sabah are forced to close down and many lost their job (Miwil, 2020). It is also estimated that out of around 500,000 people who are currently unemployed in Malaysia, 200,000 are from Sabah, and many of them are impacted by the tourism sector downturn (Yusof, 2020).

### **Revenue Loss**

Malaysia has suffered great economic losses when COVID-19 spread because of the strong economic links with China. Tourism in Malaysia contributes 15.9% of the country's Gross Domestic Products (DOSM, 2019), where most of the tourists are from China. Among all segments in the economy, Tourism is one of the main sectors which impact the economy as many governments impose travel restrictions, travel bans, shutting down airports, and mass passenger cancellations. Thus, the tourism industry cost with a loss of over US\$ 820 billion in revenue globally due to the COVID-19 pandemic (Ozili & Arun, 2020).

Booking cancellation of flight, hotel and travel and tour package contributing in the revenue loss. Kuala Lumpur experience 61,859 booking cancellation worth RM24.91 million losses during the period, Sabah with 33,769 cancellations worth RM11.79 million, Selangor with recorded losses of RM9.05 million and Penang with 18,476 cancellations worth RM8.96 million (Mahalingham, 2020). Tourism is an important economic driver and the third highest contributor to Sabah's economy after agriculture and manufacturing (Badawi, 2008). Sabah's tourism receipts for January-February 2020 period fell by 21.6 per cent or RM320 million year on year to RM1.16 billion (Bernama, 2020).

### **Tourist Count Decrease**

Tourist arrival count has fallen about 300 million from January to May in 2020 compared to 2019 because of this pandemic. The increasing cases of COVID-19 in Singapore and China has led to the cancellation of many tours, which has already led to a large drop in the number of tourists to Malaysia (Lee-Peng Foo et al., 2020) as these countries is the most frequent travelers to Malaysia. Banned of inbound international travelers has resulted in a decline in passengers count. There is a noticeable week passenger demand across the globe and Malaysian airlines have observed less passenger demand to and from China (Tan, 2020).

In 2020, Tourism Malaysia aim to launch Visit Malaysia 2020 (VM2020) as an initiative to make Malaysia recognized globally. Featuring this campaign, Sabah participation is highly anticipated. Tourism Malaysia has introduced a special edition booklet entitled "Best of Sabah Holiday Packages 2019/2020" in supporting the campaign and also promoting Sabah's beautiful and exciting attractions to both local and international tourists (Tourism Malaysia, 2019). But, it has been cancelled by the Ministry of Tourism, Arts and Culture because of the COVID-19. It might impact the government's target to achieve 30 million arrivals during the



campaign of Visit Malaysia 2020 (MSN, 2020). The COVID-19 outbreak and cancellation of Visit Malaysia 2020 campaign show sharp decline in the number of tourist arrivals in Sabah. According to the statistics in Table 2, number of tourist's arrivals to Sabah up to February 2021 and the same period as 2020 decline from 567,108 to 30,729 counts.

**Table 2: Visitors Arrival by Nationality 2021 to Sabah**

Sabah : Visitors Arrival by Nationality 2021														(Preliminary)				2020				Growth (%)	
Nationality	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Jan-Feb (a)	Feb (b)	Jan-Dec	20/21(a)	20/21(b)					
ASIA	155	196	0	0	0	0	0	0	0	0	0	0	351	134,348	32,860	146,693	-99.7	-99.4					
SOUTHEAST ASIA	110	125	0	0	0	0	0	0	0	0	0	0	235	31,209	12,868	41,215	-99.2	-99.0					
Brunei	2	0											2	4,622	1,644	5,494	100.0	-100.0					
Philippines	28	38											66	5,384	2,270	7,278	-98.8	-98.3					
Indonesia	73	76											149	16,860	7,295	22,790	-99.1	-99.0					
Singapore	4	7											11	3,360	1,098	4,357	-99.7	-99.4					
Thailand	2	4											6	751	461	960	-99.2	-99.1					
Vietnam	1	0											1	232	100	336	-99.6	-100.0					
NORTHEAST ASIA	45	71	0	0	0	0	0	0	0	0	0	0	116	103,139	19,992	105,478	-99.9	-99.6					
China	20	51											71	45,297	1,460	46,129	-99.8	-96.5					
Japan	10	10											20	3,295	1,751	4,095	-99.4	-99.4					
Taiwan	2	0											2	6,552	2,622	6,985	-100.0	-100.0					
South Korea	13	10											23	47,995	14,159	48,269	-100.0	-99.9					
OCEANIA	4	3	0	0	0	0	0	0	0	0	0	0	9	4,938	1,567	5,625	-99.8	-99.7					
Australia	3	3											6	4,424	1,423	5,020	-99.9	-99.8					
New Zealand	1	2											3	514	144	605	-99.4	-98.6					
EUROPE	17	10	0	0	0	0	0	0	0	0	0	0	27	13,698	7,519	17,118	-99.8	-99.9					
UK & Ireland	6	2											8	5,262	2,828	6,767	-99.8	-99.9					
Germany	1	2											3	3,345	1,697	2,783	-99.9	-99.9					
France	0	0											0	660	369	915	-100.0	-100.0					
Denmark	0	0											0	431	257	527	-100.0	-100.0					
Finland	0	0											0	247	127	299	-100.0	-100.0					
Norway	0	2											2	195	38	224	-99.0	-94.7					
Sweden	0	0											0	443	202	549	-100.0	-100.0					
Belgium & Luxembourg	0	0											0	231	112	287	-100.0	-100.0					
Italy	0	3											3	385	207	460	-99.2	-98.6					
Switzerland	1	0											1	311	145	385	-99.7	-100.0					
Netherlands	2	0											2	653	364	854	-99.7	-100.0					
Russia	3	0											3	700	273	832	-99.6	-100.0					
Others Europe	4	1											5	1,835	900	2,245	-99.7	-99.9					
NORTH AMERICA	5	2	0	0	0	0	0	0	0	0	0	0	7	5,450	2,384	6,045	-99.9	-99.9					
U.S.A	3	1											4	3,854	1,673	4,279	-99.9	-99.9					
Canada	2	1											3	1,596	711	1,776	-99.8	-99.9					
India	8	9											17	743	350	1,077	-97.7	-97.4					
Pakistan	14	11											25	228	128	411	-89.0	-91.4					
Middle East	1	9											10	248	79	376	-96.0	-88.6					
OTHERS	27	22											49	1,933	811	2,938	-97.5	-97.3					
Total International	231	264	0	0	0	0	0	0	0	0	0	0	495	161,586	45,698	180,284	-99.7	-99.4					
Total Malaysian	18,082	12,152											30,234	405,522	173,576	797,176	-92.5	-93.0					
GRAND TOTAL (GROSS)	18,313	12,416	0	0	0	0	0	0	0	0	0	0	30,729	567,108	219,274	977,460	-94.6	-94.3					

(Source: Sabah Tourist Arrivals, 2021)

### Operations of Tourism Industry during COVID-19 Outbreak

The prohibitions during this pandemic urge many tourism-related businesses to shut down their business as they have no income to pay the employees. Less demand in passenger caused Malaysian airlines to operate fewer than 50 flights a day because of the globally imposed travel ban to prevent the spread of the deadly virus (Yusuf, 2020). Hotels are allowed to run their business for the purpose of quarantine but strictly has to follow the Standard Procedures (SOP). The shortage of manpower due to the termination of staff has to be endured as the business also needs to be run.

### Operating in the midst of COVID-19 outbreak

Operating in the midst of COVID-19 outbreak create awareness to all related party as this pandemic really hit the industry. Operating with a new norm is allowed as the current situation is still under recovery and preventing. While struggling in containing the spread of this virus, tourism related business in Malaysia also increase the investment in healthcare. Before this, the operation of business is with the absence of vaccine. After almost a year battling with this virus, the vaccines finally touched down at the Kuala Lumpur International Airport (KLIA) at 9am on Saturday (Feb 27) on flight MH319 which operated by MASKargo (The Straits Times, 2021). The immunization programme will runs through three phases, starting from front-liners, high-risk groups and senior citizens aged 60 and above, and lastly the rest of Malaysian population aged 18 years and above.

The Malaysian Government has unveiled a stimulus package to provide some respite for the stakeholder who are severely affected by the outbreak, especially in tourism industry (Lee-

Peng Foo et al., 2020). The tax incentives, postponement of repayments to bank and restructuring of loans to ease the struggle of tourism industry players. To curb potential rising unemployment, a wage-subsidy programme has been introduced and subsidizes RM600 per month for each retained employee for a maximum of three months. Up to 17 May, the government had approved application for 128,000 employees (Ministry of Finance, 2020b).

As little is known where and when is the end of this pandemic, tourism practitioners have to come up with their tourism recovery plan as well as crisis management plan. As the pandemic has had staged impacts globally, some countries have started to implement response and recovery plans for the tourism sector, based on guiding recommendations and policies issued by the various travel industry bodies (WTTC, 2020a). This is important for the resilience of the business and sustainability.

## **RESEARCH METHOD**

In developing this conceptual paper, systematic literature review method is used. A systematic review collects all possible studies related to a given topic and design, and reviews and analyzes their results (Kang, 2018). This study applies quantitative approach in collecting primary data through online survey. The study mainly uses comprehensive review on COVID-19 and its impacts towards tourism sector in Sabah from academic writing, online news portal and also online platforms.

## **CONCLUSIONS**

Overall, this paper highlighted some impacts resulting from the COVID-19 outbreak all over the world. COVID-19 gives negative impacts to the economy, especially tourism industry as this virus affect the employment rate, revenue loss, declining in tourist count and also slow down the tourism related business operation. All of these components are the key success in the development of tourism as well as economy. Operating by practicing a new norm and also stimulus package introduced by the Malaysian Government helps tourism practitioners to withstand in this current situation. Thus, this COVID-19 era really hit the tourism sector hard.

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# The Conceptual Framework of Factor Influencing Behavioural Intention in Social Commerce

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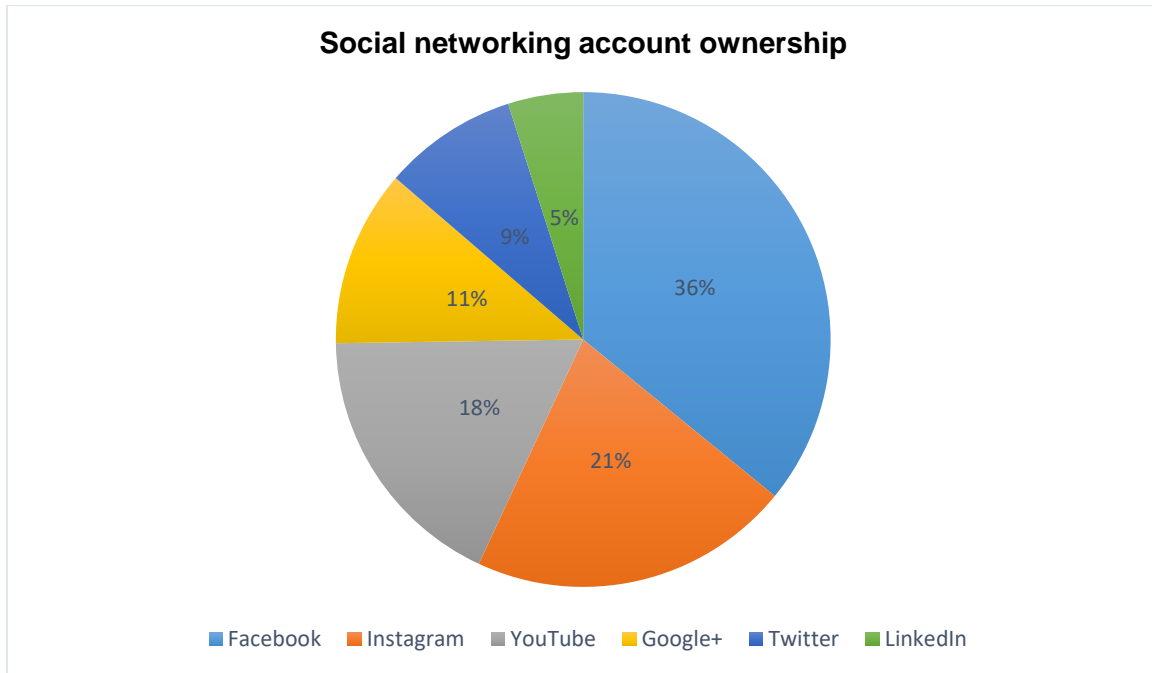
## ABSTRACT

New possibilities for electronic commerce have arisen as a consequence of the worldwide development of social networking sites. In the world of e-commerce, social commerce has evolved into a new platform for engagement. One of the most significant areas of marketing study has been social commerce and behavioural intention. Marketers must comprehend and develop a solid strategy plan in order to survive in a constantly changing marketplace. The significance of social commerce and user behaviour is being recognised by an increasing body of literature. The goal of this article is to provide a conceptual framework that explains how social commerce works and how it relates to behavioural intention. It incorporates social commerce, behavioural intention, and a comprehensive literature review, as well as a number of prior research. This article will be useful to academics and marketing practitioners since it will provide a thorough understanding of behavioural intention and its relationship to its factors. Further study for empirical testing and validation may be built from this conceptual article.

**Keywords:** Social commerce; Perceived usefulness; Perceived ease of use; Trust; Behavioural intention.

## INTRODUCTION

According to the Malaysian Communications and Multimedia Commission (MCMC), the number of people with social networking accounts grew by 81 percent from 21.9 million in 2016 to 24.6 million in 2018. (MCMC, 2019). As per report, 97.3 percent of people in the nation have a Facebook account, making it the country's most popular social networking site, followed by Instagram (57.0 percent) and YouTube (48.3 percent), Google+ (31.3 percent), Twitter (23.8 percent), and LinkedIn (23.8 percent) (13.3 percent). This digitally savvy population represents a huge potential consumer base for digital economy social commerce (s-commerce) businesses.



**Figure 1: The summary statistics for social networking account ownership of the year 2018**  
(Source : MCMC, 2019)

The Malaysian government is driving the growth of social networking account ownership in the country by establishing the Multimedia Super Corridor (MSC). To encourage internet use, the MSC offers cheap telecommunications rates, removes Internet restrictions, and develops information technology infrastructure. Consumers and companies will profit significantly from a high-speed fiber optic network.

According to the World Bank's World Development Report (WDR), a ten-percentage-point increase in fixed broadband penetration would boost GDP growth by 1.2 percent in affluent countries and 1.38 percent in emerging economies. Malaysia's annual GDP growth rate is projected to be 1.38 percent, or RM 17.9 billion (USD4.3 billion) (World Bank, 2016).

## LITERATURE REVIEW

### Social commerce

Social commerce (s-commerce) is a term that refers to platforms that "allow people to participate actively in the marketing and selling of products and services in online marketplaces and communities" (Stephen and Toubia 2010, p. 215). The rise of social media technologies such as SNSs has created new possibilities for s-commerce and has been important in its growth, since it promotes interaction among online social communities (Liang and Turban, 2011). New retail behaviours have been impacted by Web 2.0 technology, with companies and consumers using social networking to streamline transactions.

According to Hajli (2015), social commerce is a new subset of e-commerce which enables customers to take part in the creation of content on social media platforms. "Social commerce" is a new kind of company that combines commercial and social activities (Busalim and Hussin, 2016). Lin et al. (2017) pointed out that s-commerce goes a step further by including a variety

of consumer tools for socialising and exchanging commercial information. It is s-commerce that will provide the groundwork for future d-commerce possibilities.

### **Perceived usefulness**

"Perceived usefulness" is described as "a prospective user's subjective likelihood that utilising a particular application system would improve his or her work performance within an organisational environment" (Davis et al., 1989, p. 985). According to Technology Acceptance Model (TAM), the behavioural notion of perceived usefulness is a vital part of information technology (IT) adoption. As a result, it's safe to assume that users' perceived usefulness will have a significant impact on their intents to engage in s-commerce behaviour.

Many studies have pointed out that perceived usefulness is important and may have a beneficial impact on one's behavioural intentions (Ramayah et al., 2002; Moon and Kim, 2001). Hajli (2014) conducted an empirical research to determine the impact of social media on customers. Additionally, the results show that perceived usefulness has a larger effect on purchase intention than trust and has been recognised as a determinant. Elkaseh et al. (2016) demonstrate that a greater perceived usefulness will lead to a stronger propensity to use new technology.

### **Perceived ease of use**

People's perception of how effortless it is to utilise a particular system is called perceived ease of use (Davis et al., 1989). Perceived ease of use is a behavioural construct in information system (IS)/IT research. Davis (1989) asserts that perceived ease of use has a direct effect on the performance and usefulness of a technology, and in turn causes better results. This implies that, in the context of online purchasing, customers will engage more with certain technologies if they perceive ease of use with such technologies.

If a technology is considered perceived ease to use, it will be adopted as a new option to be used (Juniwati, 2014). Study by Yahia et al. (2018) has focused on social networking websites, including Facebook and Twitter, for S-commerce features, such as News Feed, likes, and comments. This study is based on how s-vendor attributes affect trust and associated with how much intention to purchase from the s-commerce experience. It is also claimed that perceived ease of use has a direct effect on perceived usefulness and leads to higher performance by Davis (1989). Behavioural intention seems to be favourable impacted by perceived ease of use.

### **Trust**

"Trust" refers to an individual's readiness to rely on others based on their views in their competence, benevolence, and integrity (Gefen et al., 2003). According to Pavlou (2003), trust has a direct effect on online purchase intention and reduces behavioural ambiguity in the context of s-commerce sites. The degree to which consumers believe they can trust their merchants and continue to purchase over the internet is referred to as trust.

Lu et al. (2016) investigated how social presence and trust influence social commerce purchase intention. According to research, trust plays an important influence in s-commerce transactions. "Trust in internet" and "trust in firms", according to Sharma et al. (2017), have a major impact on consumer trust and their intention to engage in s-commerce. According to a recent study by Li (2019), social commerce elements have an impact on virtual consumer experiences and social purchasing intentions. Social purchasing intention is significantly influenced by trust in product recommendations, according to the results.



### **Behavioural Intention**

Since the advent of the theory of reasoned action (TRA) by Fishbein and Ajzen (1975), behavioural intention has been a subject of study in consumer behaviour research. Behavioural intention is described as “the strength of one's intention to perform a specified behaviour” (Fishbein & Ajzen 1975, p. 288). Behavioral intention was defined by Davis et al. (1989) as a person's desire to do a certain behaviour or conduct. User behaviour and intents to participate in s-commerce platforms are referred to as behavioural intention. Intention, according to Ajzen (2005), has been claimed to be the best predictor of behaviour.

According to Sheikh et al. (2017), factors such as performance expectancy, facilitating conditions, hedonic motivation, and habits all have a positive effect on s-commerce behavioural intention. Gan and Wang (2017) assert that customer satisfaction has a beneficial impact on consumers' purchasing intentions in an s-commerce environment. According to Li's (2019) results, social commerce constructs have a substantial impact on social presence, familiarity, closeness, and social purchasing intention.

### **THEORETICAL BACKGROUND**

This research draws from modified TAM. Because attitude does not fully mediate the correlation between PEOU and PU with BI, Venkatesh and Davis (1996) modified the TAM by excluding it from the model. Since both perceived usefulness and perceived ease of use directly affect behaviour intention, the attitude construct is no longer needed. TAM was created by Davis et al. (1989) to predict an organization's adoption of computer-based technologies. TAM was developed originally from Ajzen and Fishbein's theory of reasoned action (TRA) (1980). TAM states that users' adoption of an IS is affected by their desire to use it, which is impacted by their attitude, which is influenced by the system's perceived usefulness (PU) and perceived ease of use (PEOU). According to the hypothesis, there is a causal relationship between two variables (PU and PEOU) that are significant predictors of user attitude toward computer technology usage.

According to Zikmund et al. (2013), causal research is determined to pinpoint the cause-and-effect relationships for the chosen research variables. A causal research method will be used to examine the proposed hypothesis and establishing causal relationship between variables. Causal relationship show that an independent variable causes a change in dependent variable. Thus, causal research is the best in nature since the primary objective is identify variables that might influence behavioural intention in s-commerce.

S-commerce has a significant impact on consumer behaviour, despite the fact that the research on this subject is still fragmented and dispersed (Zhang and Benyoucef, 2016). There has been much debate about the commercial advantages of ICT, most notably s-commerce. Statista (2020) stated that worldwide income from online orders referred through social media was an average of US\$79.01 in the second quarter of 2019, indicating a significant market opportunity. Asian marketers have used SNSs as their primary platform for commercial activities, with 48% of companies able to decrease expenditure and 45% of traders, large or little, having a presence on SNSs to increase income (Akman and Mishra, 2017), demonstrating the importance of s-commerce. Malaysia has a high penetration rate of social networking account ownership of 81 percent (MCMC, 2019), which would create tremendous possibilities for s-commerce in the future. To close this gap, it is necessary to understand customer behaviour on s-commerce by examining the process and distinctive characteristics of how consumers interact in this environment.

## CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESIS

This research utilised a modified TAM to better understand the s-commerce user's behavioural intentions. As previously stated, the attitude construct has been removed from this study model, while trust has been added to examine the claim that trust is essential, and that customers feel they can trust their merchants and continue to buy through s-commerce. It has prompted the researcher to offer research hypotheses and build the conceptual framework for this study based on prior researchers' findings.

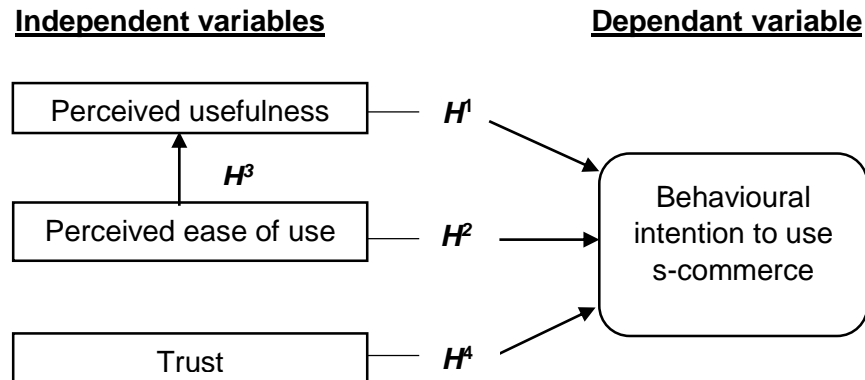


Figure 2: Conceptual framework

### Relationship between Perceived Usefulness and Behavioural Intention

According to Hajli (2014), perceived usefulness has a larger effect on purchase intention than trust and has been recognised as a contributing element. Shen (2012) discovered a significant and beneficial linkage between perceived usefulness and behavioural intention. Shin (2013) found that perceived usefulness had a significant effect on the behavioural intention to utilise s-commerce. On the basis of the previous study, the following hypotheses are formed:

H1: Perceived usefulness is positively associated with behavioural intention of s-commerce.

### Relationship between Perceived Ease of Use and Behavioural Intention

According to Shen (2012), perceived ease of use has a favourable effect on perceived usefulness. Noh et al. (2013) finds that individuals' intents to utilise s-commerce are favourably influenced by perceived ease of use. The researchers discovered that the perceived ease of use of the platform had an impact on social commerce intent on the site (Yahia et al., 2018). On the basis of the previous study, the following hypotheses are formed:

H2: Perceived ease of use is positively associated with behavioural intention of s-commerce.

### Relationship between Perceived Ease of Use and Perceived Usefulness

Shen (2012) combined the elements of social comparison, social presence, perceived enjoyment, perceived ease of use, and behavioural intention to investigate the variables that contribute to an online shopper's future use of a social commerce platform. According to the results, perceived ease of use has a significant effect on perceived usefulness. On the basis of the previous study, the following hypotheses are formed:

H3: Perceived ease of us is positively associated with perceived usefulness of s-commerce.

### **Relationship between Trust and Behavioural Intention**

Yahia et al. (2018) found that price advantage, reputation, language efforts, and hedonic efforts are all significant and positively related with s-vendor trust, and that these factors are all important and positively associated with price advantage. When it comes to online shopping, trust in the seller is very important. According to Li (2019), consumer trust in product recommendations has a significant impact on social shopping intentions on s-commerce platforms. On the basis of the previous study, the following hypotheses are formed:

H4: Trust is positively associated with behavioural intention of s-commerce.

### **CONCLUSION**

Hence, this paper attempts to help bridging the gap in s-commerce and contribute to the literature in s-commerce by determining the impact of s-commerce on usage behaviour. Future study in s-commerce should assess actual buying behaviour rather than intention to purchase and provide greater insight into customer behaviour in the setting of s-commerce and can be developed for empirical testing and validation. There is a need for scholarly insights into the economic viability of s-commerce businesses, such as their capacity to drive actual transactions, in order to cope with the fast changes in technology.

### **ACKNOWLEDGEMENT**

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# The Sustainability of Batik Industry in Malaysia in Relation to 4<sup>th</sup> Industrial Revolution

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## ABSTRACT

Through numerous industrial revolutions, the focus and attention of the world shifts accordingly. Collectively, through these industrial revolutions, changes occur through technological, socioeconomic and cultural aspects. Each change challenges the industries to adapt to the new need of revolution, which brought in the fundamental concerns of all, namely sustainability. With new opportunities, come new challenges. And the challenges become greater as to the industry this relies heavily of appreciation of tradition and culture. Changes that being brought by time eventually have push tradition to the corner on how should it reacts to ensure its sustainability without jeopardizing its fundamentals. Similar situation occurs as to the batik industry in Malaysia. With the objective of the study that to propose sustainability steps necessary for batik industry in Malaysia, the focus is to study on how the Triple Bottom Line (TBL) approach able to assist Malaysian batik industry to go through the industrial revolution changes with the assurance of its sustainability. Also, what changes is necessary need to be looked into, from TBL point of view, to be used by batik industry in Malaysia in order to ensure that its relevancy can be preserved.

**Keywords:** Triple Bottom Line (TBL); Sustainability; Industrial Revolution; Batik Industry.

## INTRODUCTION

Throughout the world history, the changes of business environment could be seen through a few historical occurrences, especially industrial revolution. The main features involved in the Industrial Revolution were technological, socioeconomic, and cultural changes. First Industrial Revolution took place between 1760-1840 that saw a rapid growth of machines and industrialization. This revolution holds a crucial place in history as it indicated the time of mechanization. With introduction of machineries in industries, people start to shift their working style from depending solely on human labor towards integrating machineries. Machine use as well may increase the productivity of a product and indirectly influence buying behavior of the people. The Second Industrial Revolution took place between 1870 and 1914 saw developments of communication, transport, and manufacturing industry. To begin things off into the second revolution, a striking development in the field of communication was made which was the innovation of the telegraph (Vyas, 2018). It made use of electricity, which was still somewhat of a novelty at the time, to transmit messages. The telegraph revolutionized long distance communication, it become more possible. Then indirectly it shows that the market for product are expending. The market is growing as communication grows.



The Third Industrial Revolution took place between 1969 and 2000, where manufacturing start to go digital. During this era, internet, technology and sustainable power sources start to merge to fall a framework of Third Industrial Revolution that had change the route of 21<sup>st</sup> century business that has changed (Rifkin, 2012). Introduction of computer may effect of working mechanism system, which is the people more organized, transaction time can be shorten. It also customer satisfaction increases because of process in business become faster and more organized work movements. The Fourth Industrial Revolution is the revolution of the current era, which is going on with the combination of physical, digital and biological paradigms, affecting numerous disciplines and industries, and economies (Schwab, 2016). There is demonstrating that changes in current era with the different perspectives and also will influence the economies. The Fourth Industrial Revolution's technologies such as artificial intelligence is rapidly changing the way humans create exchange and distribute value. Human can be more creative because a lot of job that been done by human previously, now been done by machines. From that situation, it can create a creative exploration in business perspective.

Trend in business, what which included changes in technology, marketing, finance or public policies are uncontrollable in nature. There are factors that will affect the business environment, which is an economic, social, legal, technological and political factor. The operational of business will be affected based on the factors changes in business (Uzialko, 2018). Business approaches changes from time to time due to a few different factor mainly technology developments (Mercer, 2009). This can be seen through the changes of business approaches that happened through time.

Sustainability refers to the achievements of the Triple Bottom Line (3BL), which includes environment, society, and economy. According to Environmental Protection Agency (2013):

*“Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment”.*

Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations (Environmental Protection Agency, 2013). The concept of sustainable development is an effort to combine growing concern about a range of environmental issues with that of socio-economic problems (Indarti, Rahayu, & Peng, 2020).

Nowadays, the creative and craft industry is not only one of the most rapidly growing sectors of the world economy (Palanivel, 2019). The creative and craft industry are those based on individual creativity, skill and talent, or which have the potential to create wealth and jobs through the development or production of intellectual property (Stelk, 2013). The term 'creative industries' describes businesses with creativity at their heart, for example design, music, publishing, architecture, film and video, crafts, visual arts, fashion and so on. "Creative industries' refers to a range of economic activities that are concerned with the generation and commercialization of creativity, ideas, knowledge and information (Moore, 2014).

One part of the product in creative and craft industries is Batik Industry. Batik is the creative industry sector which is to be recognized as the diversity of activities that are rooted in traditional knowledge and cultural heritage including arts, crafts and cultural festivals as well as technology and service-oriented small as audiovisual products and new media (Ramirez & Ottone, 2018). Batik is one of the works of ancient art in some countries. The origins of batik are various in origins, but overtime the ancient art has become closely associated with the identity of Indonesia and several others from Malaysia and also some parts of Thailand (Akhir,

Ismail, Kaliappan, & Said, 2017). In Malaysia, batik has existed around 1921 which contributed to Malaysian economic and business opportunities in a rural area (Indarti et al., 2020). Traditional batik can be promoted to tourist and foreign direct. This is because the uniqueness in variety of designs and colors also the process of making batik (Akhir et al., 2017).

## RESEARCH METHOD

The philosophical approaches empower to choose which approach should to be received why the researcher and why, which is derived from research questions (Saunders, Lewis, & Thornhill, 2015). Research philosophy divided to two categories which is ontology and epistemology. In this research, the researcher uses the epistemology philosophies which is the interpretivism because of those philosophies one of included in business and management field (Saunders et al., 2015).

Research approaches are plans and the strategies for research that range the means from expansive presumptions to detail methods of data collection, analysis, and interpretation (Williams, 2007). Since the point of this research is to pick up knowledge into the sustainability in facing the changes of Industrial Revolution. This research is by capturing the views method of business in Batik Industry, also changes in industrial revolution, the induction research strategy will choose. The researcher has to move in the other way from research question to observation and description to analysis before finally getting on the theory (Agee, 2008). Qualitative research is primarily exploratory research. This method is ordinarily used to understand perspectives and observations. It offers visions to different issues and helps in creating ideas or theories for potential quantitative research (Carol, 2016).

The research designs that will be adopted in this study are exploratory and qualitative. The study is on the sustainability ability of traditional method of businesses of entrepreneurs in Kelantan in relation to digital business environment with focus to 4<sup>th</sup> Industrial Revolution. Due to this, qualitative method will be used for this study. According to (Merriam, 2009), qualitative studies are to understand the perspective of participants on certain phenomenon of interest. Similarly, (Rozmi, 2013) stated that qualitative research emphasizes on descriptive, inductive, development of grounded theory and study on how people give meaning to their life. Based on past research, most of the method of study uses was quantitative in nature. In this research it is appropriate to conduct a qualitative study with selected 15 Batik companies focus in Kelantan. There are involved the top management and administration staffs in their companies to be the informants in that research.

In this research, researcher chooses the case study to collect data. In the context of qualitative, case studies refer to an in-depth description and analysis of a single or small number of units (Saunders et al., 2015). A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (K. Yin, 2014). From that statement, it is mean by the researcher want to do case study because want to understand a real-world case and assume that such an understanding is going to include important contextual conditions appropriate to related case.

Since this research will adapt the qualitative research thus a few method of data collection being as an integral part in research designs. There are three method of data collection that involved in this research, which are interview, observation and documentary analysis. In this research, semi-structured interview will choose, which is one set of questions will create, it is

about on environment in business and also based on situation that business will adapt on changes in current revolution. The rules in that method, which is depend on the flow of the conversation. In additional, during the interview session, if researcher has an additional question, there are only add on the questions on that time. It shows that, it is easy to researcher and also to informant to answer as soon as possible. While doing interview, the informant are agree to be interviewed, instead of complete the interview questions, particularly where the topic are interesting and related with their present work.

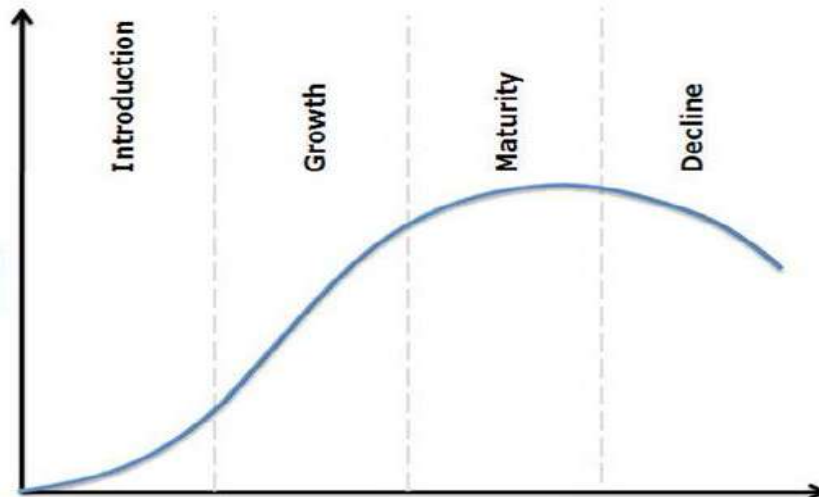
Observation is incorporating the exercises of watching, recording, examination, and translation of conduct, activities or occasions (Kawulich, 2005). Observation is what happens every day either consciously or unconsciously. it is a routine in humans understand what is happening around them (Lebar, 2009). Documentary analysis is one of the main data collection techniques in qualitative research (Creswell, 2014). There is a precise procedure for looking into or assessing documents, which is both printed and electronic (computer-based and Internet-transmitted) material (Bowen, 2009). Documents that might be used for efficient assessment as part of a study take an assortment of structures. They include advertisements, motivation, background papers, books, brochures, journals, newspapers, charts, organizational reports, and various public records (Bowen, 2009).

Probability sampling that is more attractive in choice of respondents, the respondents has been settled and known (Acharya, Prakash, Saxena, & Nigam, 2013). However for non-probability sampling there is no particular individual to be chosen or to be part in research (Tansey, 2007). There have favorable circumstances and detriment both methodologies. Facilitate, there are in particular probability that utilization in quantitative research and non-probability sampling for the most part utilized by the qualitative research. In this research, the researcher will use the non-probability sampling, there is because of it will suitable for the informant, which is involvement the batik industry. The informants involve in this research, it is deliberately chosen because of they are have their experience in the batik industry and been facing in industrial revolution era.

Non-probability sampling is contains the purposive, snowball, quota and convenience. In this research, the researcher chooses the purposive and snowball sampling to get the sample from the informants. Purposive sampling is a non-probability sample that is chosen in light of attributes of a people and the objective of the study. Purposive sampling is generally called judgmental, specific, or subjective sampling (Crossman, 2019). Purposive sampling may give the researcher the direction to know who become their informant depends on their expertise and will help in get some information during an interview process. Snowball sampling can occur in various ways, however by and large it is the time when a gathering of individuals recommends potential individuals for a study, or straight forwardly chooses them for the study (Etikan, Musa, & Alkassim, 2016). The researcher chooses snowball sampling because of it may help researcher get proper informants to give respond with the questions. It also may help to build a good relationship with the people surroundings.

## RESULTS AND DISCUSSION

The research is about the sustainability of batik industry in Malaysia in relation to 4<sup>th</sup> industrial revolution. The ideal business which is will go through the stages of a business lifecycle as below:



**Figure 1: Business Lifecycle  
(Kumar, 2019)**

There are four stages in this cycle which is introduction stages, growth, maturity and decline. In introduction stage is the beginning of the business lifecycle. This is an ideal that may conduct by entrepreneurs when involving in the industry. At this stage, the business is being created, planned and the early days of its operations take place (R.Khera, 2018). The ideal will test through the feedbacks from family, colleagues or industry specialists. The second stages is growth, there are currently in its survival stage. The business is reliably creating income and including new customers. These repetitive incomes will help pay for working costs and open up new business opportunities (Chen, 2014). In the third stage, there is maturity which is the business is presently stable enough to survive most unexpected conditions. It has enough backing, capital and support to guarantee that regardless of whether the market ends up unsteady, it can pull through (R.Khera, 2018). The last stage of business lifecycle is about decline. Truth be told, it is the simplest stage to go after any business since it is where a beginning business will fail.

Business growth is mostly from the bottom up. Nowadays, in reality of business, there are struggling to run, and the challenges need to face it. Everyone is struggling to be more successful, to make the following quarterly income estimate, to keep their job, to procure a major reward, or to compete effectively (Jenson, 2013). Not all business is looking forward to having such approach when come to business, instead they are still a lot of construction of building developments have been done in order to fulfill the need of having economic centre. As a result of the challenges it faces, a lot of business liquidate or bankrupt and will not last long. More shops unoccupied as compared to before and also sales of shop lot not so encouraging. The business needs to survive because of changing in new era which is affected the country's economic growth.

The issue is establishing a mechanism / an approach by which these factors can enable the businesses to survive in any context. The problem is business sustainability in facing the changes of Industrial Revolution. There has been a change in the landscape of the business environment that has caused businesses to face different challenges. The business sustainability theory which is Triple Bottom Line (TBL), in economics, believes that companies should commit to focusing as much on social and environmental concerns as they do on profits.

Batik industries give rise to some environmental problems. Batik is one industry whose process of production uses synthetic dyes which contained metals, chemical coloring, and wax that can contaminate river water and subsequently causes severe water pollution problems (Indarti et al., 2020). Recently due to the high requests and economic initiatives, industry players switched to affordable raw materials for cost-saving. However, these materials are very crude of low quality and unsustainable and cause pollution of water bodies. Batik industries produce a large amount of highly polluted discharge water into the environment which required an extensive treatment (Subki, 2017).

In terms of society problems, lack of experienced manpower, as the younger generation prefers to work in large factory plants rather than working in the batik industry. In addition, the production of batik depends on the number of workers in batik industry (Redzuan & Aref, 2009). This is because; batik is a labor-intensive craft industry. The batik production process involves various stages such as drawing patterns, coloring patterns, setting colors, removing candles, washing and drying before the batik fabric is fully finished. Therefore, batik management needs sufficient workers in their production so that it does not affect the production quantity and in turn can save the cost of batik production time.

In terms of economy problems, Batik industry also faces a shortage of capital (Akhir, 2017). Financial institutions and banks are not confident in lending to batik industry operators. Lack of capital caused new and advanced technologies cannot be used.

The batik industry also faces competition from the regular textile industry. Apparel fabrics of other cheaper compared to batik. Other fabrics are produced on a large scale at the factory using a cheaper cost on average. The batik market is not as wide as regular fabrics marketed worldwide.

In the uncertainty of the world economy, this situation is alarming because the sole proprietor of the business will bear unlimited liability even structure its business makes it easy for owners to close their businesses. Without systematic management in a sole proprietorship batik firm, then it can threaten the sustainability of the batik industry when the owner can easily close their business and it is not necessarily passed on by the new generation of families.

In addition, the Malaysian batik is difficult to penetrate foreign markets due to intense competition from batik producing countries such as Indonesia and China (Redzuan & Aref, 2009). Local batik entrepreneurs are also facing competition problems from other textile fabrics that are cheaper and can be produced in larger quantities which can ultimately save the cost of production time. This is in contrast to local batik entrepreneurs who still value the characteristics of genuine handicraft products in their batik production, especially batik drawing and batik block.

This study attempt to answer the following questions:

- i. What are the traditional business methods uses by Batik Industry in Malaysia?
- ii. What are the impacts brought by the fourth industrial revolution towards businesses?

- iii. How could the traditional business method being improvised @ improved to ensure the sustainability of the business in fourth industrial revolution?

Previous study on Batik Industry in Malaysia, based on Hanisa Hassan explained the 4<sup>th</sup> Industrial Revolution challenges in creative industries. A creative way of selling product by having a service without inventory has becoming a lucrative business model. But in this new upcoming era, the success of one's business may likely kill the others. It is becoming a painful compete between disruption and opportunity; being optimistic is not an option since the only way to survive is to adapt with the rapid changes. Klaus Schwab wrote:

*'Neither technology nor the disruption that comes with it is an exogenous force over which humans have no control. All of us are responsible for guiding its evolution, in the decisions we make on a daily basis as citizens, consumers and investors. We should thus grasp the opportunity and power we have to shape the Fourth Industrial Revolution and direct it toward a future that reflects our common objectives and values'* (Schwab,2016).

Along these lines the whole process should be around instructed, appropriate planning is key to success. The government should also play an important role in assisting their heritage to sustain or grow by having policies that can support their existence, in addition to adequate funding in promoting them. Heritage products like Batik made by a society should be appreciated by their own people, but commercializing it to the world will be an extraordinary reward.

## CONCLUSION

As a conclusion, there are theories involved in sustainability which are environment to make sure the planet is green. In term of society, there are to create awareness, the intention and also interest on surrounding. And last is economy to business creating profit. So it is very important to ensure that the business especially in Batik Industry to sustain through the changes of industrial revolution. The challenges that have been face by management in business are establishing a mechanism/an approach by which these factors can enable the businesses to survive in any context. There has been a change in the landscape of the business environment that has caused businesses to face different challenges.

Business sustainability is a business rule that is generally perceived as a critical strategic concern for governments and organizations (Mar, 2013). There is a strategy that organizes the long term survival of a business and associated ecological, social and cultural systems. As for batik industry in Malaysia, there is they have own courageous to move forward without the fear of obstacles that allow them to stop doing business.



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# The Effect of Determinants on Social Entrepreneurial Intention

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## ABSTRACT

The purpose of this paper is to examine the effect of empathy, moral obligation, self-efficacy, and social support on social entrepreneurial intention. These determinants are important in the formation of social entrepreneurial intention in Malaysia. The data collected from 297 undergraduate students are analyzed using Partial Least Squares-Structural Equation Modelling (PLS-SEM). The findings reveal that the relationships between self-efficacy and social support with social entrepreneurial intention are positive and significant. This study addresses that self-efficacy and social support are important determinants of social entrepreneurial intention whereas empathy and moral obligation do not play the roles in influencing social entrepreneurial intention. The limitations of the study are discussed and suggestions for future studies are provided.

**Keywords:** Empathy; Moral Obligation; Self-efficacy; Social Support; Social Entrepreneurial Intention.

## INTRODUCTION

The current situation in Malaysia regarding the COVID-19 pandemic is quite critical. The coronavirus infections can occur in many ways. People may be at risk for getting and spreading the virus in the community. Due to that, Malaysia has announced movement control order in all states to reduce the risk and to overcome the uncontrollable situation of this pandemic. The control movement order has been implemented in several phases since 2020 until nowadays. Many sectors are affected by this pandemic either public or private sectors. Some of the sectors has been ordered to close by the government to curb the spread of COVID-19 disease. This situation has given a negative effect to most employers and employees.

Nowadays, a huge number of employees have lost their jobs. This has contributed to the increasing number of unemployed people and indirectly rising the trend of unemployment rate in Malaysia. At present, until April 2021, the nation has an unemployment rate of 4.6% amounting to 742,700 unemployed people (Mohd Uzir, 2021). This shows that the number of unemployed people in Malaysia is quite vast. This number will continue to rise at some point in time and people need to figure out the way or option to survive. This number also comprised graduates who are unemployed or difficult to get a job after their graduation. The number of unemployed graduates is continually increasing from year to year since many students will be graduated from higher learning institutions every year. In order to overcome the issue of unemployment among graduates, Malaysia should offer a good platform for their career path. One of the beneficial platforms is through entrepreneurship or social entrepreneurship. An

individual can start his or her own business, instead of waiting for the employers to offer the jobs. According to Bosma, Schøtt, Terjesen, and Kew (2016), "individuals who are starting activities, organizations or initiatives that have social, environmental or community objectives" can be called as social entrepreneur. The individuals, especially graduates, can be the potential social entrepreneurs in the future. They can give positive influence on others and impact to the societies.

The research on the intention to engage in social entrepreneurship among graduates is crucial to identify either the graduates are interested to be the social entrepreneurs or not. In Malaysia, some studies are focusing on the formation of social entrepreneurial intention (Nga & Shamuganathan, 2010; Noorseha, Ching Seng, Dewi, & Md Zabid, 2013; Moorthy & Annamalah, 2014; Juhaini & Zillah, 2016; Radin Siti Aishah, Norasmah, Zaidatol Akmaliah, & Hariyaty, 2016; Mohd Azizee et al., 2017; Renne Pramila & Adriana, 2017; Shahverdi, Kamariah, & Qureshi, 2018; Hoong, Qureshi, Sajilan, & Halbusi, 2019), but little is known about the determinants of social entrepreneurial intention which may influence the participation of students in the social entrepreneurship field. It is important to study the involvement of graduates in social entrepreneurship since this field has gain attention from several higher learning institutions. Some programs and modules have been implemented in the higher learning institutions to introduce social entrepreneurship as one of the alternatives for students to choose in their career path. Nevertheless, the involvement of students in the social entrepreneurship field is still low. This study makes an attempt to examine the factors that may influence their readiness towards social entrepreneurship.

In general, this paper purposes to study the effect of determinants on social entrepreneurial intention among undergraduates. Specifically, this paper purposes to investigate the relationships between empathy, moral obligation, self-efficacy, social support, and social entrepreneurial intention. This study offers an explanation on the formation of social entrepreneurial intention among university students in Malaysia. This also helps to understand either the students have the tendency to start up their social enterprises or to be the social entrepreneurs or to involve in social entrepreneurial activities at some point in future.

## LITERATURE REVIEW

Intention is an element that can predict an individual's behavior. Basically, social entrepreneurial intention can be claimed to predict social entrepreneurial behavior. Due to that, the interest of scholars in social entrepreneurial intention research are kept rising and many studies have been done in several countries such as China (Wu, Wang, Wei, & Zheng, 2020; Younis et al., 2020; Yu, Ye, & Ma, 2020), Vietnam (Ha et al., 2020; Luc, 2020), Indonesia (Darmanto & Pujiarti, 2020), Bangladesh (Hassan, 2020), Canada (Bazan et al., 2020), South Africa (Urban, 2020), Thailand (Wannamakok & Chang, 2020), India (Tiwari, Bhat, & Jyoti, 2020; Tiwari, Bhat, & Tikoria, 2020), Nigeria (Igwe et al., 2020), Spain (Ruiz-Rosa, Gutiérrez-Taño, & García-Rodríguez, 2020), and others. A little number of the research on social entrepreneurial intention also has been conducted in Malaysia by several scholars (Mohd Azizee et al., 2017; Shahverdi, Kamariah, & Qureshi, 2018; Hoong, Qureshi, Sajilan, & Halbusi, 2019).

In the field of social entrepreneurship, the behavioral intention is referred to the degree of readiness to take part in further social entrepreneurial activities (Forster & Grichnik, 2013). Social entrepreneurial intention is also related to a belief, desire, and determination of an individual to set up his or her new social venture (Tran & Korflesch, 2016). An individual would be intended to become a social entrepreneur and plan a social enterprise that can contribute

towards the community if he or she had a desire to help the disadvantaged people and marginalized groups that were neglected by the society. The previous research has highlighted a few theories and models to study on behavioral intention. One of the most popular theory in behavioral intention formation is the Theory of Planned Behavior (TPB) by Ajzen (1991). In this study, TPB is utilized in formulating the theoretical framework in which TPB explains that the behavior of individual is determined by his or her intention to accomplish a certain task. The selection of determinants such as empathy, moral obligation, self-efficacy, and social support is based on the three determinants in TPB which are attitude toward behavior, subjective norm, and perceived behavioral control.

One of the determinants of social entrepreneurial intention is empathy. Empathy is an ability of an individual to imagine the feelings of another person (Preston et al., 2007). It also addresses as the ability to intellectually recognize and emotionally share the emotions or feelings experienced by other people (Decety & Jackson, 2004; Mair & Noboa, 2006) or compassionately (Goetz, Keltner, & Simon-Thomas, 2010). Individuals who have high empathy towards socially disadvantaged people tend to have a desire to be the social entrepreneurs. In the past studies, empathy was positively associated to social entrepreneurial intention (Forster & Grichnik, 2013; Urban & Teise, 2015; Hockerts, 2017; Ip, Wu, Liu, & Liang, 2017; Tiwari, 2017). Thus, the following hypothesis is developed:

H1: Empathy is positively related with social entrepreneurial intention.

Besides, moral obligation is one of the determinants of social entrepreneurial intention. Moral obligation is known as the cognitive process that motivates an individual to help others in search of a common good (Mair & Noboa, 2006). Individuals with high sense of moral obligation may have better aspiration to launch a social enterprise; an enterprise with a social purpose (Wallace, 1999) or voluntary organization contracted to deliver public services (Di Domenico, Tracey, & Haugh, 2009) that acts as a community enterprise founded by local people working to combat a shared problem (Williams, 2007). In the previous studies, moral obligation was positively influenced social entrepreneurial intention (Forster & Grichnik, 2013; Tiwari, Bhat, & Tikoria, 2017a). As such, the following hypothesis is established:

H2: Moral obligation is positively related with social entrepreneurial intention.

Apart from that, one of the determinants of social entrepreneurial intention is known as self-efficacy. Self-efficacy is an individual's belief that he or she can start a new social venture (Tran & Korfflesch, 2016) and contribute towards solving societal problems (Hockerts, 2017). Self-efficacy also can be measured as an individual's belief of whether he or she can create crucial social impact within the context of unresolved problems or issues that occur in the societies (Hockerts, 2015). A social entrepreneur may take that opportunity as a platform to start-up a social enterprise; an enterprise that aimed to give a social impact and enhance social change in the society. In the previous studies, self-efficacy was positively affected social entrepreneurial intention (Forster & Grichnik, 2013; Urban & Teise, 2015; Tran & Korfflesch, 2016; Cavazos-Arroyo, Puente-Diaz, & Agarwal, 2017; Hockerts, 2017; Tiwari, Bhat, & Tikoria, 2017b). Therefore, the following hypothesis is formulated:

H3: Self-efficacy is positively related with social entrepreneurial intention.

Last but not least, one of the determinants of social entrepreneurial intention is social support. Social support is referred as one's beliefs about how easy the context of the behavior became an individual's will (Hockerts, 2017). Social support is also considered as the support an individual expected to receive from his or her surroundings (Mair & Noboa, 2006). According

to Sequeira, Mueller, and McGee (2007), individuals with high perceived social support were more likely to engage in entrepreneurial activity than those without perceived social support. Individuals who have social support will be able to deal with the socially marginalized group of people and help them to have a better life. In the past studies, social support was positively connected with social entrepreneurial intention (Tan & Yoo, 2011; Forster & Grichnik, 2013; Hockerts, 2017; Ip et al., 2017). Hence, the following hypothesis is developed:

H4: Social support is positively related with social entrepreneurial intention.

## RESEARCH METHODOLOGY

The respondents of the present study were 297 undergraduate students from public universities in East Coast Malaysia. A non-probability sampling method was emphasized to select the targeted respondents. Specifically, a judgmental sampling approach was used, in which a certain criterion was set to ensure an appropriate sample was selected. In this study, a quantitative approach using self-administered questionnaire was adopted to collect the data from selected respondents. The measurements for empathy, moral obligation, self-efficacy, and social support were adopted from Hockerts (2015) with six items, four items, four items and four items respectively. Meanwhile, social entrepreneurial intention measurement was adopted from Liñán and Chen (2009) with six items. All items were measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Apart from that, the data collected throughout the survey was analysed using SPSS version 25 and partial least squares structural equation modelling (PLS-SEM). The software of SmartPLS version 3.3.3 was utilised to assess measurement and structural model (Ringle, Wende, & Becker, 2015).

## RESULTS

Table 1 showed the demographic profile of the respondents. Among them, 23.6 percent was male whereas 76.4 percent was female. They comprised of different ethnic groups; Malay (90.2%), Chinese (7.4%), Indian (1.3%) and others (1.0%). Besides, they were aged between 19 and 20 years (19.5%), 21 and 22 years (57.6%), and 23 and 24 years (22.9%).

**Table 1: Respondents Profile**

Demographic Profile		Frequency (N=297)	Percentage (%)
Gender	Male	70	23.6
	Female	227	76.4
Ethnic Group	Malay	268	90.2
	Chinese	22	7.4
	Indian	4	1.3
	Others	3	1.0
Age	19 - 20 years	58	19.5
	21 - 22 years	171	57.6
	23 - 24 years	68	22.9

A reflective measurement model was assessed through convergent validity and discriminant validity. Convergent validity is the degree to which various items measuring the same constructs are in agreement (Hair, Hult, Ringle, & Sarstedt, 2017). As recommended by Hair et al. (2017), factor loadings and AVE were used to assess convergent validity. In this study, most of the loadings exceeded the threshold value of 0.708 (Hair, Risher, Sarstedt, & Ringle,



2019) Meanwhile, the AVE value of each construct also exceeded the threshold value of 0.5 (Hair et al., 2019). Figure 1 and Table 2 showed that the result for measurement model exceed the threshold value, in which indicating sufficient convergent validity.

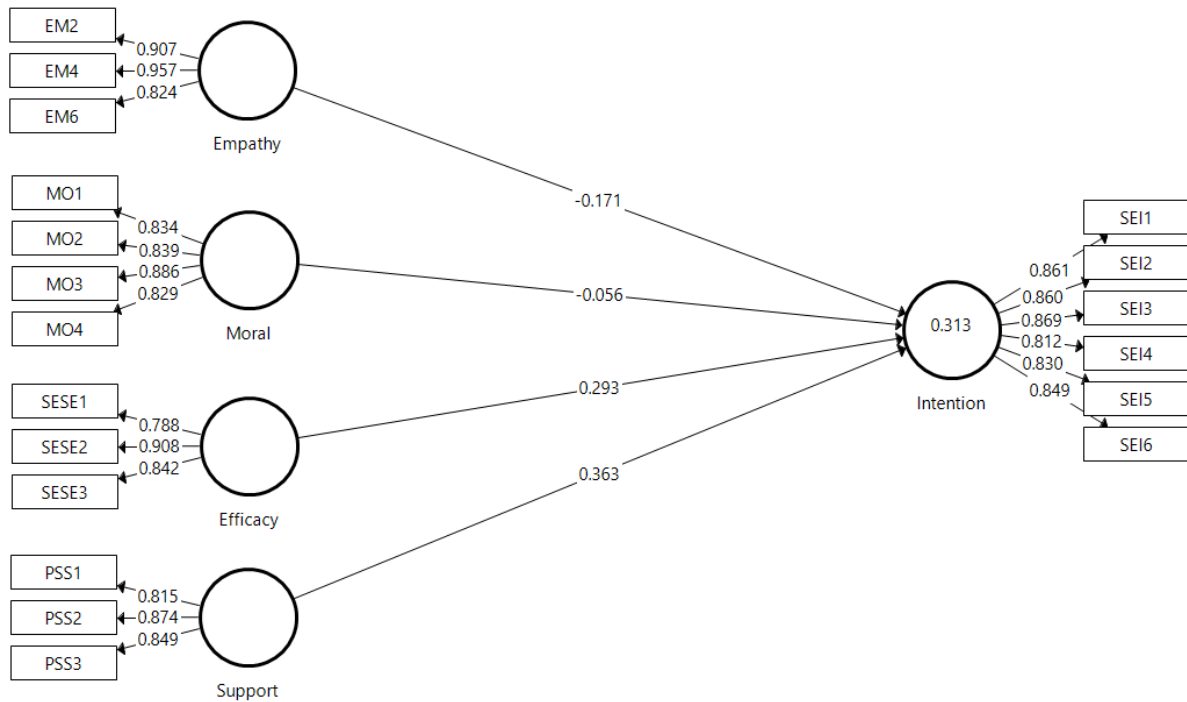


Figure 1: Measurement Model

Table 2: Measurement Model Result

Construct	Items	Loadings	CR	AVE
Empathy	EM2	0.907	0.925	0.806
	EM4	0.957		
	EM6	0.824		
Moral	MO1	0.834	0.911	0.718
	MO2	0.839		
	MO3	0.886		
	MO4	0.829		
Efficacy	SE1	0.788	0.884	0.718
	SE2	0.908		
	SE3	0.842		
Support	SS1	0.815	0.883	0.716
	SS2	0.874		
	SS3	0.849		
Intention	SEI1	0.884	0.938	0.717
	SEI2	0.893		
	SEI3	0.882		
	SEI4	0.848		
	SEI5	0.840		
	SEI6	0.851		

Notes. CR = Composite Reliability, AVE = Average Variance Extracted

Discriminant validity is the degree to which a construct is different from other constructs (Hair et al., 2019). HTMT technique developed by Henseler, Ringle, and Sarstedt (2015) was used to assess discriminant validity. Table 3 showed that all the values fulfil the criteria of HTMT.85 (Henseler et al., 2015), in which reporting less than 0.85. This indicated that discriminant validity had been achieved.

**Table 3: HTMT Criterion**

	1	2	3	4	5
1 Efficacy					
2 Empathy	0.140				
3 Intention	0.517	0.131			
4 Moral	0.592	0.259	0.207		
5 Support	0.713	0.144	0.563	0.484	

Prior to assessing the structural model, the model is examined to address collinearity issues by using variance inflation factor (VIF). For this study, the VIF values for all constructs were less than the threshold value of 5.0 (Hair et al., 2017), in which indicating lateral multicollinearity is not a concern in this study.

Table 4 showed the results of structural model and hypotheses testing. Based on the results of hypotheses testing, empathy was found to be significantly related to intention ( $\beta = -0.171$ ,  $p < 0.05$ ) but had a negative relationship. Meanwhile, self-efficacy was found to be significantly related to intention ( $\beta = 0.293$ ),  $p < 0.05$ ). Moreover, social support was found to be significantly related to intention ( $\beta = 0.363$ ,  $p < 0.05$ ). However, moral obligation was found to not significantly related to intention ( $\beta = -0.056$ ,  $p > 0.05$ ). As a result, H3 and H4 were supported whereas H1 and H2 were not supported. In addition, empathy, moral obligation, self-efficacy and social support explained 31.3 percent of variance of intention. Besides, the effect size ( $f^2$ ) is also evaluated to determine the substantive effect of the constructs based on the computation of effect size established by Cohen (1988), in which 0.02, 0.15, 0.35 represented small, medium and large effects respectively. In this study, empathy, self-efficacy and social support were found to have small substantive effect on intention with 0.041, 0.075 and 0.127 respectively. Nevertheless, moral obligation did not have substantive effect on intention.

**Table 4: Hypotheses Testing**

Hypothesis	Std Beta	Std Error	t-value	p-value	R <sup>2</sup>	f <sup>2</sup>
H1: Empathy → Intention	-0.171	0.046	3.727	0.001	0.313	0.041
H2: Moral → Intention	-0.056	0.061	0.933	0.176		0.003
H3: Efficacy → Intention	0.293	0.073	4.007	0.001		0.075
H4: Support → Intention	0.363	0.076	4.746	0.001		0.127

## DISCUSSION

Social entrepreneurship has gain interest from many people in the worldwide. Many people are focusing on social entrepreneurship agenda to provide an alternative for a better life either for underprivilege group of people or community or society. Academically, this leads towards the increasing number of research on social entrepreneurial intention formation. In this paper, the objective of the study was to determine the effect of empathy, moral obligation, self-

efficacy, and social support on social entrepreneurial intention. The result of this study revealed that empathy had a negative and significant association with social entrepreneurial intention (H1 was not supported). This finding was not in line with the past studies on empathy and social entrepreneurial intention (Forster & Grichnik, 2013; Urban & Teise, 2015; Hockerts, 2017; Ip et al., 2017; Tiwari, 2017). Apart from that, the result disclosed that moral obligation had no significant association with social entrepreneurial intention (H2 was not supported). This finding was not in line with the previous studies on moral obligation and social entrepreneurial intention (Forster & Grichnik, 2013; Tiwari et al., 2017a). Meanwhile, the result reported that self-efficacy had a positive and significant association with social entrepreneurial intention (H3 was supported). This finding was similar with the past studies on self-efficacy and social entrepreneurial intention (Forster & Grichnik, 2013; Urban & Teise, 2015; Tran & Korflesch, 2016; Cavazos-Arroyo et al., 2017; Hockerts, 2017; Tiwari et al., 2017b). Besides, the result proven that social support had a positive and significant association with social entrepreneurial intention (H4 was supported). This finding was in line the previous studies on social support and social entrepreneurial intention (Tan & Yoo, 2011; Forster & Grichnik, 2013; Hockerts, 2017; Ip et al., 2017). In overall, the students who feel empathy towards unfortunate people will think that having empathetic feeling is not sufficient to be the social entrepreneurs because many aspects should be considered in order to be the successful social entrepreneurs. Moreover, the students who feel morally obliged towards their societies are not necessarily have tendency to involve in social entrepreneurship because many people will indirectly have moral responsibility when facing with the social problems in the communities. However, the students who have high self-efficacy will trigger them to be the social entrepreneurs because they have the desire to help the community and society. Apart from that, the students who gain countless social support from their surroundings will encourage them to take part in social entrepreneurial activities. Therefore, the elements of self-efficacy and social support are important to enhance social entrepreneurial intention among the university students.

## CONCLUSION

The research on the determinants of social entrepreneurial intention offers new knowledge in the social entrepreneurship field. Based on this study, it is proven that students' social entrepreneurial intentions are not influenced by empathy and moral obligation. The factors such as self-efficacy and social support able to build students' intention towards social entrepreneurship. Moreover, the students need to have high desire to be the social entrepreneurs in the future because the existing of the pandemic in the country has contributed towards several unresolved issues in the societies. Therefore, the participation of students in social entrepreneurship may help the government to address the critical issues and offer a good platform for a better environment of the society. This study also contributes a significant prospect towards higher learning institution in formulating an impactful modules or syllabuses related to social entrepreneurship. Besides, the implementation of social entrepreneurial activities in the education sector can be introduced to boost students' readiness towards social entrepreneurship. However, this study has a few limitations. This study only focuses on undergraduate students from public universities in East Coast Malaysia. This study also only examines the effect of empathy, moral obligation, self-efficacy, and social support on social entrepreneurial intention. Future studies should investigate the participation of undergraduate and postgraduate students from all public universities in Malaysia as the respondents. Future studies should also examine other potential determinants of social entrepreneurial intention such as human capital and social capital to provide a better understanding on social entrepreneurial intention formation among students.

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# Self Efficacy and Financial Literacy Shape Future Financial Behavior Among Private Sectors

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## ABSTRACT

Financial literacy can enable individuals in making good financial decisions and changing financial behavior, where it can have a huge impact on individuals' financial wellbeing. This may depend on the time horizon regardless of whether financial education is effective in achieving the desired objectives. Financial literacy is most concern now during this Covid-19 pandemic to avoid financial stress on individuals. A smart financial literacy is essential to help individual manage and plan ahead their financial properly without any difficulties. However all age groups do not even have financial education at all, but much less than a third of young adults have those basic knowledges. The main objective of this research is to explores self efficacy and financial literacy that will affect financial behavior among employees in Malaysia. A multi-staged sampling method was chosen to such a sample of 202 public sector employees from Kota Bharu Kelantan. The self-administered survey was designed to collect data. The data was analyzed using Statistics is a powerful statistical software (SPSS). Therefore, researcher using regression and correlation analysis data. The finding of the analysis shown that self efficacy factor affects the most financial behavior the results indicate a significant positive relationship between financial self efficacy and financial behavior among working individuals. The contribution of the variables to the model was 46 percent, according to the regression analysis. From the study it will provide policy maker what kind of strategy should take in order to provide and ensure financial education is effective for Malaysian.

**Keywords:** Financial Behavior; self efficacy; Financial literacy.

## INTRODUCTION

In our current study, we examined the effect of self efficacy and financial literacy to financial behavior among Malaysian workers. Human resource is considered as an important source for economic development. People who is having a high self-efficacy can help them to achieve a positive financial behavior and deal with any challenges especially in term of financial matters(Widyastuti et al., 2020). Atkinson, Monticone and Mess (2016) found that financial behavior of adults across many countries had also been considerably lower.

Thus this issue of financial literacy though is very clearly visible. Therefore, high levels of self-awareness will help individual to perform themselves effectively in managing their finance. Nowadays, policymakers had also commonly become more concerned about the way how to improve financial literacy(Grohmann & Menkhoff, 2015). From previous scholar especially low-income working individual as well as for low and lower-middle-income economies, financial literacy is less effective. In conjunction with behaviors, which including financial management,

seems to be tough to impact and enforced financial literacy has become less effective tentatively. Accordingly, the effectiveness of involvement primarily depends on improving the skills of education by providing financial education in a 'productive time.'(Kaiser & Menkhoff, 2017)

Financial literacy can be defined as "sufficient knowledge with someones which provide and also was crucial with someones individual financial management. Conversely, this same lack of adequate literacy and time constraints in their discussions is assumed to become a stress or a barrier for them today, due to the obviously huge range of products they have available on the market. The financial literacy level and the demographic access to financial instruments differs from a country to another as each country has different strategy to enhance their citizens financial literacy for better quality of life later (Baranova et al., 2020). The lack of financial knowledge leads someone to make poor financial decisions unconsciously and also to cope less when facing with unexpected financial crises in this Covid-19 pandemic(Dewi et al., 2020). Individual with good financial literacy tend to be more aggressive in decisions making in saving,spending,and investing in stock these will give maximum benefit for their future life(Kadofa & Khan, 2018).

*H<sub>1</sub>: There is a relationship between financial literacy and financial behavior among employees in private sector in Kelantan.*

Self-efficacy is defined as "belief in one's abilities to start organizing and activities tasks which required Self-efficacy beliefs which is important to engage in and follow through with self-regulatory behaviour and are unique to the behavioural domain under it (Asebedo et al., 2019). Individual who is high self efficacy will produce outcome of positive behavior(Kim & Beehr, 2017).Financial self-efficacy is an individual 's belief in, or belief in, this same possibility to accomplish it. Financial self-efficacy is an individual 's belief in, or belief in, this same possibility to accomplish his financial goals. When a person's level of confidence is high, he or she will be encouraged to do everything possible to achieve his or her goals as this was supported by theory of self efficacy.There are a significant relationship between self efficacy and financial behavior(Asebedo et al., 2019a; Putri & Pamungkas, 2019). If the concept of self-efficacy ought to be practiced toward the context of the financial management of individuals, people who have a higher sense of self-confidence in their financial management ability are much more likely to view financial difficulties than to avoid obstacles which must be overcome in their life(Farrell et al., 2016)

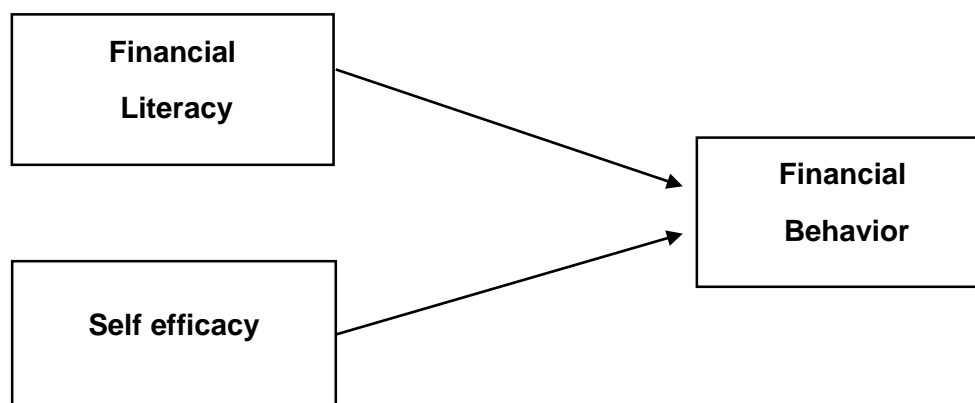
*H<sub>2</sub>: There is a relationship between self-efficacy and financial behavior among employees in private sector in Kelantan.*

Financial behaviour leads to individual behaviour related to money management. Beside that it also states that cash, credit and savings management are part of common financial behaviour activities. Therefore poor behaviour in making financial decisions could have serious long-term, negative cultural and social negative effects (Kumar et al., 2017). In this study individuals who are working in the private sector are aware of the importance of financial behaviour nowadays consequently they plan their saving for the future. Good financial behaviour can minimize financial hardship and therefore reduce the negative effects, such as initiatives to minimize personal debt, spending complying, reduce costs of living, financial management and retirement savings, make and increase savings, minimize financial hardship and have a direct impact on financial satisfaction (Ahmisuhaiti et al., 2017).

*H<sub>3</sub>: There is a relationship between financial literacy, self-efficacy effect financial behavior among employees in private sector in Kelantan.*

### Theory Self Efficacy Bandura 1977

Theory of self efficacy (SET) beliefs are really a significant, clear and specific explanation for inspiration, based on the current Bandura SET (Bandura, 1977, 1986,1997). Across other words, self-efficacy is the perception that are fit to perform or accomplish a particular purpose(Tuhardjo et al., 2016). This belief is clearly affected the processes and practices which somehow encourage yet another discovery for his aim in a task or subject or performance. "This same way in which we are willing to take action required for future situations" Bandura (1977) characterizes our self-efficacy as an individual perceptible.self efficacy is consider a motivational factor that will affect individual action in planning their finance (Tian et al., 2018). This would be surprising to discover such a well positive relationship between education level and level of income discovering that perhaps a higher income level is associated with increased financial self efficacy(Asebedo et al., 2019b).From the previous study suggest that future search can combine booth financial self efficacy and financial behavior beside that it also state that people who have a higher level of education are much more likely to implement taking responsibility financial planning. (Singh et al., 2019).



(Sources: Framework developed for these study)

### RESEARCH METHOD

The research is using quantitative method. Thus, research sample is 202 from private employees in Kota Bharu Kelantan. The higher SME sector was service sector 89.2% according SME Corp.The sample sized was determined by using Krejcie and Morgan (1970) table.This study was designed as an explanatory for analysis of independent (financial literacy, self-efficacy) on dependent variables financial behavior variable effects. This questionnaire surveys to analyzed 202 sample respondents was chosen through saturated sampling method. The questionnaire was distribute using online google form and offline (Face to face) to the respondents. Total 250 questionnaire is distributed to respondents however only 202 is collected from the questionnaire I only pick up the quality and complete questionnaire which is fully filled.

#### ***Instrumentation***

The survey was typically divided into different segments. Section A involves the demographic and socio-economic background. Section B questions the Financial literacy of the respondents while Section C includes financial self efficacy. In addition, financial behavior measurement is on section D.

### **Profile of the respondent**

For instance, age, gender, educational achievement, ethnicity, income, marital status, household size, and etc

### **Financial Literacy**

Section B was used to gather data from the self-efficacy of respondents in the fourth part of the questionnaire. The self-efficacy scale adopted by Tan and others was used in this section (2015). The answers were evaluated on the Likert scale of five points.

### **Financial Self-efficacy**

Section C was used to gather data from the self-efficacy of respondents in the fourth part of the questionnaire. The self-efficacy scale adopted by Tan and others was used in this section (2015). The answers were evaluated on the Likert scale of five points.

### **Financial Behavior**

Section D was used to gather data from the self-efficacy of respondents in the fourth part of the questionnaire. The self-efficacy scale adopted by Tan and others was used in this section (2015). The answers were evaluated on the Likert scale of five points.

## **RESULT**

**Table 1: Pearson's Correlation Coefficients between financial literacy, self-efficacy with financial behavior**

Variables	Pearson Correlation (r)	p
Financial literacy	.535**	.000
Financial self-efficacy	.644**	.000
Financial behavior	.586**	.000

Significant: \*\*  $p < 0.01$ , \*  $p < 0.05$

Pearson's correlation coefficient has been used to analyze if there would be a link between a financial literacy and self efficacy to financial behavior. A positive relationship between self efficacy, financial literacy, and Financial behavior ( $r=0.644$ ,  $n=202$ ,  $p=0.000$ ) has been identified according to the results of the correlation between Pearson on the above table. The higher result indicated financial self efficacy out of among this three.

**Table 2: Regression Results analysis for the financial behavior**

Construct	B	SE B	$\beta$
Financial Literacy	0.307	0.054	0.337**
Financial self Efficacy	0.460	0.059	0.464**

Note.  $R^2 = .13$  ( $p < .01$ ) \*\* $p < .01$

The regression results of the study for the two factors are displayed in Table 2, and clarified 46% of the variance of financial behavior. Table 2 Beta values show the percentage of independent variables that are involved in describing the dependency variable, and the

significant value can describe regardless of whether as well as seem the impact of independent variables on the dependent variable prediction.

## CONCLUSIONS

The most interesting result shown that self-efficacy has significant effect on financial behavior. We have also noted that self efficacy was defined a belief of individual to perform and organizing the task in order to accomplish his financial goals. Most respondents said that self-efficacy increased their self-confidence in managing their finances. Subsequently, they will have an awareness to act in a wise financial decision to achieve financial welfare. This study suggests exploring the contribution of self efficacy in further research. The different measurement of financial self efficacy enables to give a different evidence. Research and Limitations since this data set is use to conduct this restricted study; financial literacy measures are only questioned that exposure from numerous different source materials to financial literacy. For instance for future research, may test in different sample situation like secondary, college and government sector. This study is using cross sectional study in future research scholar may try to use longitudinal study to gain accurate data set and analysis. Financial self efficacy is important due to it will give individual motivation in managing their hard earn money carefully. Throughout there they will take initiative enhances their financial knowledge. There will be a positive input when individual are in high self efficacy and produce a good financial behavior that will benefit for them in future in preparing their emergency savings funds when they facing financial crisis. That will make easier to policy maker also if they have high self efficacy, they will plan carefully their spending, saving, loan by paying debt on time.

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# **An Overview of Nudge Application for Improving Consumer Lifestyle**

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## **ABSTRACT**

Nudge originate from behavioural science as a means to improve individuals decision making. An individual decision can be improved by presenting a change of options through a choice architecture designed. Nudge approach has been criticised as manipulative or libertarian paternalistic because of the individual targeted is presented with limited choice option available in the choice architecture. However, since Nudge study is still relatively new, therefore more studies are required to help in understanding its applications in the society. Especially, how to apply nudge towards consumer to make calculable purchases and making changes in the consumer behaviour for a sustainable lifestyle. Through nudges it will create an effect of responsible purchasers because it will increases consciousness in the consumption decision making thus have some impacts on the environment, on the consumer's health, lifestyle and the society in general. This paper explores the determinants of nudges strategies can be effective as an encouragement for customers to adopt a more sustainable lifestyle. The interventions with regard to this relationship was highlighted in order to create clearer understanding of how nudges works. This paper presents an overview of the effects of nudging and how it can facilitates improvement to the current lifestyle in today's society.

**Keywords:** Nudge; Consumer; Consumption; Decision-making; Choice Architecture

## **INTRODUCTION**

The efforts for sustainability development goals creates concerns in the consumer market to protect the environment through responsible buying actions. However, the rise for ethical buying or responsible purchase do not match up with the actual buying behaviour. Consumers when faced with options tend to fail to do the rational thinking which consequently create a gap between the concept of ethical buys and actual purchase act. When a consumer fails to act rationally when faced with a lot of options then excess purchase may happen especially occurs during food purchases. Consumers are induced to buy certain products because of social influences. Hence, the existence of social influences usually for social conformity for others to like or be acceptable within the social group (Kaiser, 2018; Rettie, Burchell, & Riley, 2012). Motivation to shop more may also be the result of social influences based on the considerations that it is what other people usually do. Subsequently, consumers are influenced and cognitively motivated to purchase more products in the marketplace. As a result, it is less likely that a consumer would change the existing behaviour since it is a normal behaviour that other people usually act. Therefore, it is highly imperative to address the behaviour because it affects others in society and a global problem. Often people in society ignore irresponsible acts that happen in front of them but did not do anything to prevent it because it is a norm to keep silent (Torma, Aschemann-Witzel, & Thøgersen, 2018).

Consumers daily actions that include their purchasing behaviour are influenced by habits, social norms and other contributing factors that adds to the complexity of the human acts (Mattar, Abiad, Chalak, Diab, & Hassan, 2018; Welch, Swaffield, & Evans, 2018). Thus, the act of wastage has been in ignorant, although, with the abundance of information and value-based information, human behaviours remain unchanged. Food wastage actions occurs on a daily basis in the society and constitute more than 40 percent of the Malaysian Municipal Solid Waste with an anticipated increased of 15 to 20 percent during the festive seasons (Jarjusey, 2017). According to Welch et al. (2017) food wastage occurs both in the social and cultural settings therefore a crucial counterbalance of a political manoeuvres is needed to seek individualise waste reduction obligations. Therefore, individuals' obligations are vital to curb waste since private households are the main contributor of food waste. Supported by Aschemann-Witzel, Hooge, Amani et al. (2015) study that consumers are the main contributor to food waste. In Ghafar's (2017) study states that households in Malaysia wasted in the average of about 0.5 to 0.8kg of uneaten food daily, and it is expected to rise at a higher number responding to the economic development, urbanisation factors, and population growth.

The use of nudging in the environment is expected to create an anticipated change in consumer purchase behaviour, but the effectiveness is still debatable. However, the nudge method is a priority choice because of its effectiveness in facilitating behavioural change in the health sector has shown improvement to smokers and diabetic patients (Hansen & Jespersen, 2013a; Thaler & Sunstein, 2008). Although the consumer is aware that it is wrong to waste, yet it is a growing problem in Malaysia. Food waste harms the economic, environmental, and society. Therefore, it is an issue that needed the attention of all parties' concerns (government, business firms, and society).

## LITERATURE REVIEW

A flexible way of understanding of consumers thinking, making decisions and actions are needed to meet with sustainable challenges in the environment. The flexible approach is visible in Nudge. Nudge through the choice architecture elements can alter people's behaviour; it is an approach to guide consumer behaviour gently towards (Mont, Lehner, & Heiskanen, 2017; von Kameke & Fischer, 2018) being more responsible in their consumption decisions. Nudging strategy is described as pushing gently or reminding of the available choices (Thaler & Sunstein, 2008). Furthermore, according to the authors, it is a form of choice architecture that can enable change of behaviour in a predictable way that will not significantly interfere with the individual's daily routines. Nudging is also known as non-intrusive that has gained policy makers interest in achieving public policy goals in comparison to using harsher policy (Rasmussen & Myrseth, 2017; Reisch, Sunstein, & Gwozdz, 2017). This is supported by Mols et al. (2015) study that by changing people beliefs whether through personal or collectively is better through softer persuasion rather than through instilling fear of penalties for non-compliance. This move is feasible when the trust with the government regulations is low therefore persuasion aid with social marketing campaigns to gain citizens acceptance is highly desirable (Mols, Haslam, Jetten, & Steffens, 2015).

The idea of nudging came from libertarian paternalism coined by Thaler and Sunstein (2003) to respect the freedom of choice. It starts by influencing the individuals of the available options and let them judge it as a better choice for them. There would be a restriction of choice possible, but the individuals are free to choose. This support with Friedman and Friedman (1980) theory that people should have the freedom to choose. The authors argued that

choices create motivation for making the individuals to select the best option possible (Friedman & Friedman, 1980). When the individuals are given prior knowledge before deciding, it will affect the outcome. The element of intervention, such as information of products and the ability to learn and choose (heuristics repertoire) facilitates a behaviour change to the targeted audience. A consumer or an individual would surely choose the best option in whatever they do, and it is reflected in their actions. As a result, the goal-directed behaviour of personal or internal influences will lead to positive outcomes such as choices, efforts, persistence, and achievements (Schunk & DiBenedetto, 2020).

Attractions to branded items will also lead the consumers to make imprudent purchases. Based on Sogari et al. (2015) study, prolong exposure to logos or symbols will shape consumer attitudes and beliefs. As a result, the consumers will behave to acknowledge and determine to acquire an item while dismissing another. The marketing belief captures consumers interest in the market with product offerings that matches the anticipated consumer needs. In some situations, such as fashion and trends, social influences may have some impacts on the consumer buying patterns (Moon, Farooq, & Kiran, 2017). Consumers that are concern with social influence factors will be more conscious when making purchases. They will make comparisons with the society they in and may often be pressured by their peers, friends, and families. Based on the importance of social influence, it is used as a marketing tool to motivate purchases in the market. A consumer who deems acceptance in the social circle will be motivated to accept the social influences (Nekmat, 2020; Salazar, Oerlemans, & Van Stroe-Biezen, 2013). When the shopping behaviour is sanctioned by the society, it will emotionally satisfy a customer thus makes him or her socially acceptable. Consequently, the social reasons will lead to the development of irrational and uncontrollable purchase behaviours. Consumers are irrational when faced with choices and often their frame of minds are influences with factors such as personal or group preferences, purchasing powers and other external influences that impacts on their daily consumptions (Sogari et al., 2015). The irrational behaviour often led to excessiveness especially in food buying that lead to wastage. Consumers will often make more purchases when the items are on sale and during festive or special occasions. According to Jarjusey (2017) study, food waste occurs daily in the society. Welch et al. (2017) concurs that food waste happened both in the social and cultural settings thus making it inevitable for policy makers to take remedial actions to curb the problem. Based on Ghafar (2017) study, the main contributor to food waste mainly comes from the consumers' households with an average waste of 0.5kg to 0.8kg of uneaten food daily. Human behaviour is complex thus making changes from unsustainable towards more sustainable will be a challenge for policy makers.

The choice architecture will be a preferred strategic option to nudge consumers towards the desired sustainability behaviour. Organisations have been applying strategies like nudging to shape consumer purchasing patterns levels through communications strategies using different channels to develop consumer buying behaviour (Mont, Lehner, & Heiskanen, 2014). Starting from 1980 onwards, marketing acts as a social and economic process whilst creating towards a more responsible approach in the market (Vargo & Lusch, 2004). The establishment of a relationship between organisations and customers creates better understanding and communications which led the organisation to be more obligated when producing goods. Organisations should not wait to be pressured by the public and for the consumer to be responsible on their own accord but should willingly apply the organisations' knowledge expertise to nudge individuals towards desired responsible behaviour.

Nudge theory proposed that the architecture of an environment, such as the design or the information supplied will have some influences on the prospective consumer choices (Ashworth, Morris, Giove, & Paxman, 2016). As an example, the information provided on the

nutritional or calorie contents in the product of choice will create a change of choice from unsustainable to sustainable. Originate from Thaler and Sunstein's idea, intervention in nudging strategy should be easy and cheap to avoid or without cost to the targeted individuals (Baisch, 2016). Furthermore, nudging is not mandatory because targeted individuals have the freedom to choose compared to a restriction or a ban. However, nudging intervention is considered as a "catch-all" general term that includes everything thus making it unclear to the types of the intervention that falls within its definition (van Kleef & van Trijp, 2018).

The Nudge approach also has been criticised as a manipulative strategy or libertarian paternalistic because of the individual targeted is being presented with limited choice option available in the choice architecture and motivated into thinking that the choice available as the best option to them (Junghans, Cheung, & De Ridder, 2015). So when it is considered as manipulating the individual choice, then it is not liberty preserving or free to choose as portrayed (Hagman, Erlandsson, Dickert, Tinghög, & Västfjäll, 2019). However, it is still an ongoing research to seek the effects of nudge on individuals and their acceptance of it (Hansen & Jespersen, 2013b; van Bavel, Rodríguez-Priego, Vila, & Briggs, 2019; Zen, 2018).

The nudge strategy is expected to establish an increase in the confidence level of an individual to decide on available food choices such as when the consumers were given knowledge of the food items based on a study by Ashworth et al. (2016) in the United Kingdom. Another example is in the study by Askegaard, Dubelaar, Zlatevska et al. (2017), whereby the authors explore food consumption portion sizes. The authors used a partitioning method for consumers to go for healthier food choices whereby the nudging act will control the portions of purchased food types (Askegaard, Dubelaar, Zlatevska, & Holden, 2017). Based on Thaler and Sunstein (2008) study, it gives the notion that human behaviour change is possible through learning, thinking, reactions and actions. As seen in Table 1 below, the nudge strategy used two system thinking, namely system 1 and 2, to enable change in consumer consumption.

**Table 1: Two-system model**

Type 1 system (automatic)	Type 2 system (reflective)
Uncontrolled Emotional Impulses/ drive Habits beliefs Fast	Controlled Logical Reflection/ Self-aware Planning Problem-solving Slow/ effortful
(Caused) Behaviour	(Actions) Choice

**(Source adapted from: (Kahneman, 2011; Thaler & Sunstein, 2008))**

Nudge two-system model can be used to promote change in consumer consumption (Kahneman, 2011). Kahneman developed model based on two process thinking which are



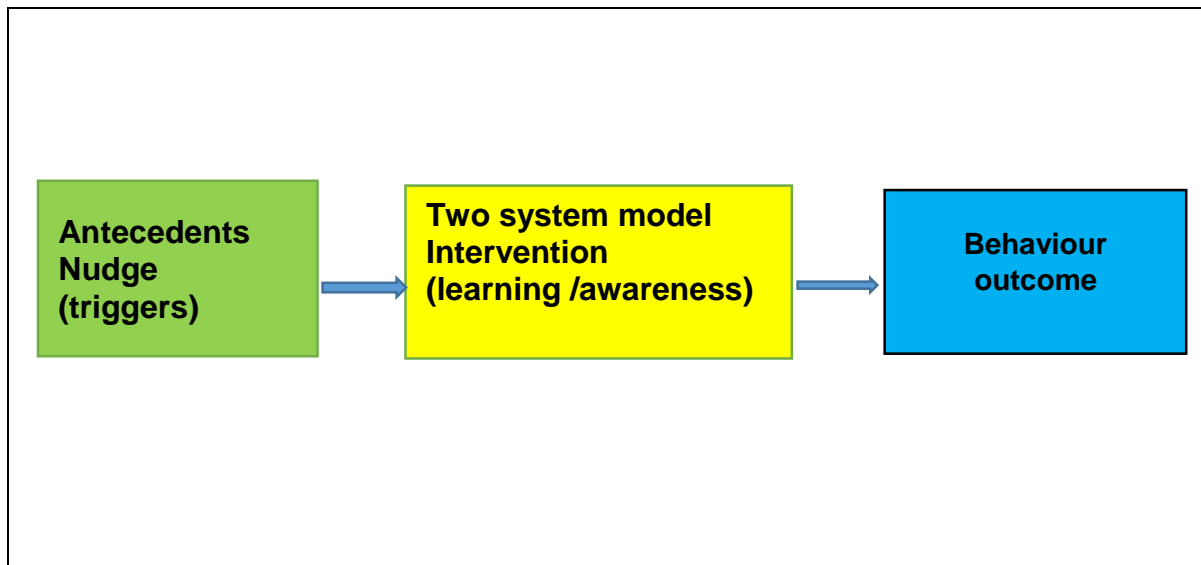
automatic and reflective. System 1 is automatic and fast which includes formed habits, strong emotional bonds, beliefs and impulses; they are difficult to change and manipulate. While System 2 is reasoning (action or choice) which is slower, more unstable, conscious to judgements and attitudes. Individuals' intentions do not necessarily translate into actual behaviour. It led to research using nudge as one of the solutions to help people make better choices in their daily consumption (Torma et al., 2018). Nudge effectiveness using interventions to support automatic and unconscious processes. In a study by Büttner, Florack and Serfas (2014) relate that the effect of self-control would be applicable in consumption decisions when it is relevant. Self-control is a learned process during shopping and consumption.

The interventions are usable in educating consumers through the influence of implicit and overt learning via advertisement effects (Büttner, Florack, & Serfas, 2014). Therefore, based on the authors' remarks, there are possibilities that consumers can implement self-control when indulging in purchase decisions through knowledge supplied and experiences. However, according to Mont et al. (2014), the availability of knowledge or information do not necessarily lead to a change in the individual's action. Consumers' mindsets and behaviour are difficult to change. Although consumers may decide what to buy and what to consume but, intervention in the form of knowledge can create a disillusion of choice that can create an unconscious decision in their best interest (Torma et al., 2018). Furthermore, "system 2" nudge is aimed at influencing the attention and premises of actions as the result of a consequence. It occurs when a consumer goes through visual search performed by automatic (system 1) thinking then progresses or overruled by "System 2" via thoughtful (reflective) attention (Haug & Busch, 2014). The consequence of the reflective actions is to choose whether to act or not to act whereby, in this case, either act responsibly or irresponsibly. The scenario is portrayed in Thaler and Sunstein (2008) as the "fly in the urinal nudge."

In figure 1, it shows that the purposeful (manipulation) changes in the environment are used to guide and enable the targeted individuals to make choices almost automatically while the use of the intervention in the form of knowledge supplied to the prospective consumer will further influence the targeted individuals. As an example, information about calories and ingredients will create awareness that will affect the behavioural outcome, especially for weight watchers' consumers. The weight watchers are steered towards a desired direction, but they are free to make a choice. With the aid of the information (intervention) supplied, the weight watchers can make better choices for them.

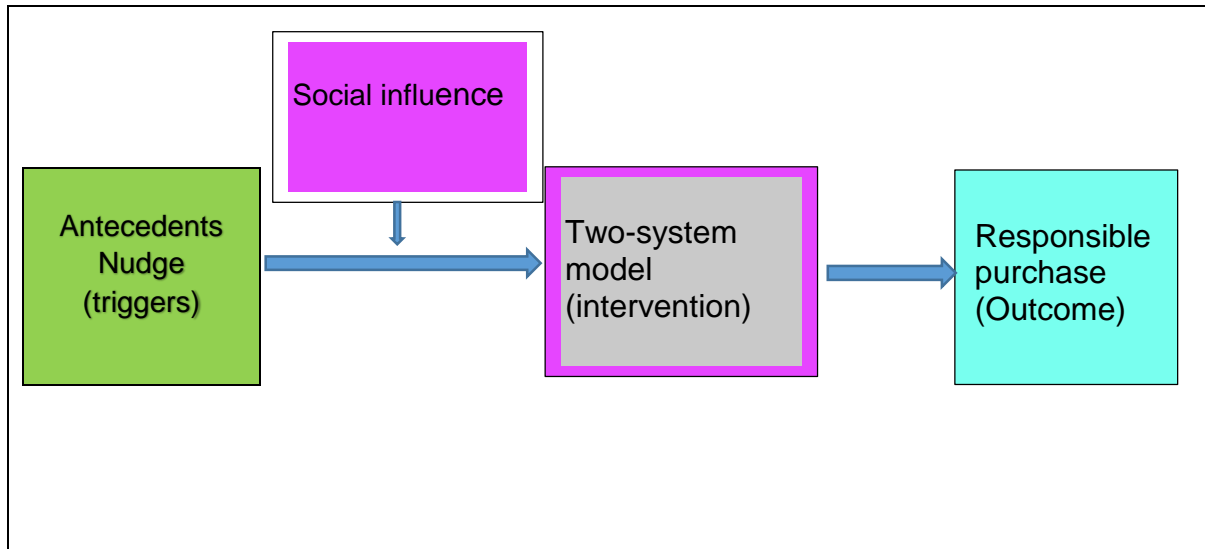
**Figure 1: The use of intervention to create behavioural change  
(Source: Adapted from (Grüne-Yanoff, Marchionni, & Feufel, 2018))**

In figure 2, it shows a nudge through factors of antecedents such as culture, habits or demographic variables that will influence an individual consumption in the market. The nudge through advertisements or government policy will trigger changes in the environment to guide and enable the targeted individuals to make pre-decision on available choices presented through the choice architecture design. The use of an intervention (two-system model) originates from Kahneman (2003, 2011) studies proposed that the knowledge supplied to the prospective consumer will further influence the targeted individuals (Lin, Osman, & Ashcroft, 2017). The information such as expiration date, price, product advantage, calories and ingredients will create awareness that will affect the behavioural outcome. The two-system model through system 1 which is automatic and fast derived from habits and values enables the individuals to make a faster decision but create a resistant to a behaviour change. On the



other hand, for system 2 which based on reasoning thinking is more flexible but slower in terms of deciding however, a possible behaviour change. The change maybe affected due to the reasoning occurrence as a result from the exposure of information that the nudge triggers. However, when the individual is exposed to difficulties in the information making them to employ longer time to decide, the result may backfire because it will be intercepted by their habits and values that they are used to. In accordance with Thaler and Sunstein (2008) study, the propose change must be cheap and easily avoided meaning that the change initiated do not interferes with the individual routines. When the action or changed is unnoticeable then it will be slowly be embedded in the individuals or consumer daily routines.

People are influenced by their surroundings such as what other people do and think that indicates that it is a deliberate action and not a habit (Rettie, Burchell, & Barnham, 2014). Therefore, a responsible behaviour will usually occur within the group or community they belong to. Based on Rettie et al. (2014) it is anticipated that with the introduction of social influence will create a positive assertion towards a responsible purchase decision outcome. Social influences can create changes in a person's attitude and behaviour by the influenced of another person's action, such as through persuasions or threatening (Burnkrant & Cousineau, 1975). Based on the authors definition, the social influence creates pressure towards a prospective buyer for healthy or organic products into making an actual buying act (Zolkepli & Kamarulzaman, 2015). People learn from others in the community or within their group. The use of social media such as Instagram, WhatsApp, twitter and Facebook creates significant impact to the use of information in purchasing goods, place to eat or socialise; thus later influences the changes to marketing communication strategies platform (Verschragen, 2017).



**Figure 2: Shows the relationship of variables**

## CONCLUSIONS

Human behaviour plays a crucial role in long-term global sustainability challenges (Goepel, Rahme, & Svanhall, 2015). According to the authors, the raise of awareness and the public intention to act sustainably by policymakers through using legislation and policy tools requires time and cost-intensive to implement. Thereby, the gap between intention and action is cost and time efficiency that leaves Nudge as a better choice for behaviour modification method. Nudges, when used complementarily in an instrument mix and applied to support the habit formation stage, is a promising option for a behavioural change (Michalek, Meran, Schwarze, & Yildiz, 2016). Nudge strategy in Malaysia is still at the infancy stage, but it is a known method for behavioural modification in the health division in helping people with diabetes and coronary diseases (Hertwig & Grüne-Yanoff, 2017; Sunstein, 2019). Although the research conducted on a relatively general level of specificity, but the results obtained are relevant to many different fields (e.g., health, revenue, or customs). Thus, when Nudge if applied to other fields in general, such as in the environmental and climate policy, it will create a significant impact. However, nudge method of application is argued to create confusion and rendered in adequate to effectively create long term effect for consumer behaviour change from irresponsible buying towards more responsible purchase acts (Sunstein, 2019). Therefore, based on previous findings the use of social influence is expected to act as an assertion to pressure society to be more responsible in their purchase actions in the longer period. The study of nudge has been vaguely described due to its application across disciplines from behavioural economics, political and legal field (Vetter, 2016). Therefore, the effectiveness of Nudge as a remedy to modify behaviour is still questionable thus more research is needed to explore its potential use.

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# **The Perceived Barriers on Social Entrepreneurship Intentions in Public Universities on Education Perspective by Applying the Theory of Planned Behaviour**

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## **ABSTRACT**

This paper attempts to identify barriers of social entrepreneurial intentions by the moderating role of education among research universities in Malaysia. The main issue that contribute to the problem is the need to conduct how social entrepreneurship is actually handled at higher educational institutions in Malaysia, public institutions. Entrepreneurship is regarded as the major factor for economic development while social entrepreneurship is considered as the alternative method of solving social problems. Entrepreneurship is not new for Malaysia as is evident from various policies and programs initiated by the government. However, social entrepreneurship is a relatively new phenomenon in Malaysian context that requires much attention. To promote entrepreneurship we need to know the barriers influencing on entrepreneurship to overcome the barriers and promote new policies and measures to create new ventures. The study used Ajzen's Theory of Planned Behavior as a framework to investigate the barriers of social entrepreneurship intention. This study can provide feedback to the management and policy maker in order to improve the social entrepreneurship education that can increase the level of social entrepreneurial intention among public universities in Malaysia.

**Keywords:** Higher education institutions; theory of planned behaviour; social entrepreneurship; social entrepreneurial intention; entrepreneurship education.

## **INTRODUCTION**

It has been highlighted that social, economic and environmental aspects of development would pose the greatest challenges in the 21st (Jørgensen et al., 2009). Therefore, governments are faced with many problems that they are not well equipped to deal with such rising social needs and issues (Lumpkin et al., 2013). Also, it is believed that the social entrepreneurship represents a new structure and ideology that can capture social, economic and environmental values for society's development (Nga & Shamuganathan, 2010; Noruzi et al., 2010; Zebrowski, 2009; Davari & Farokhmanesh, 2017).

Furthermore, it is believed that social entrepreneurship provides solutions for social, economic and environmental problems through actors, individuals, and organizations acting as new pioneers (Santos, 2012; Tan & Yoo, 2015; Verreynne et al., 2013). In this regard, the emergence of social entrepreneurs is seen as a social change agent who is creating social

value (Simha & Carey, 2012; Swanson & Di Zhang, 2010). Intention is an integral part of any social entrepreneur's life, as he/she seeks to eliminate a social need, a social problem, and goes far beyond his/her purely commercial entrepreneurial spirit (Austin, 2006; Zahra et al., 2009). Even Mair and Marti (2006) speak about an intention formation stage, which is to some extent in line with Ajzen's (1991) theory. Students also need to have such feelings and intentions to initiate social businesses and to continue this behavior (Salamzadeh et al., 2013). Additionally, there is an increase in the creation of awareness about the importance of entrepreneurship education in academic and co-curricular activities.

In Malaysia, social entrepreneurship is in early stages and requires a proper policy to promote social entrepreneurship and its education (Ilhan Ertuna & Gurel, 2011; Kurniawan et al., 2012; Terjesen et al., 2011). Researchers have pointed out that majority of the Malaysians are not aware of the concept of social entrepreneurship and how it can benefit them, thus there is a need to understand this phenomenon in Malaysian context (Al-Mamun et al., 2012; Sarif et al., 2013; Terjesen et al., 2011). However, some educational institutions in Malaysia are involved in the promotion of social enterprises at different levels. but, some academic institution and consultancy systems in Malaysia have not yet undertaken a great deal of research and capacity development in social enterprises, hence, there is an enough room for the improvement in this area (MaGIC, 2015). To promote entrepreneurship we need to know the barriers that affect entrepreneurship intention to overcome the barriers (Yaghoubi, 2010). According to Ajzen's theory Perceived barriers are one of the factors that can effect on social entrepreneurship intention among students (Kirby & Ibrahim, 2011; Salamzadeh et al., 2013).

Furthermore, higher educational institutions have an important role to play in regional development, regional innovation systems and what are termed as learning areas (Morgan, 1997). Lalit (2015) also stated that higher education institutions play a very significant role in developing a nation. Engaging with higher education institutions in designing and delivering curriculum not only allow businesses to influence the education of the future workforce but engage with prospective future employees throughout their educational experience (Plewa, Galan-Muros, & Davey, 2015). Ministry aspires to instill an entrepreneurial mindset throughout Malaysia's higher education system and create a system that produces graduates with a drive to create jobs, rather than to only seek jobs (Malaysia Education Blueprint 2015-2025, 2015).

Few studies examined the limited knowledge is available on the perceived barriers that reduce the social entrepreneurial intentions of the students. These barriers can be the lack of support, lack of adequate knowledge and competency, lack of self-confidence and lack of resources (Shinnar et al., 2012). Studies have already acknowledged the negative effect of these perceived barriers on social entrepreneurial intentions (Giacomin et al., 2011; Shinnar et al., 2012), but still, the role of social entrepreneurial education can play in the mitigating the effect of these barriers is unclear.

The potential of social entrepreneurship intention generate more innovative, creative, socialized and market-oriented among universities students. It is hoped that the ongoing collaboration and commitment of the parties such as educators and management of universities, faculty advisors, industry practitioners, policy makers to improve and evaluate in-depth effects of social entrepreneurial activities towards the importance of social of social entrepreneurial fields in Malaysia.

This study has used the theory of planned behavior as a theoretical framework to investigate the effect of barriers on the social entrepreneurial intention and the moderating role of social entrepreneurial education to mitigate the effect of perceived barriers on the social entrepreneurial intentions.

## PURPOSE OF THE STUDY

Mohd & Syed (2013) in their research found that the entrepreneurship curriculum in polytechnics is not effective. Students are not imbued with entrepreneurial knowledge, skills and attributes during their study. Teaching approaches appear to be inappropriate and polytechnic lecturers do not appear to have relevant entrepreneurial skills, knowledge or training.

In addition to that, there is recent research conducted by local researchers regarding entrepreneurship education programs in Malaysian Polytechnics. Norasmah & Norfadhilah (2016) provide important recommendations to improve some practical aspects of the entrepreneurial activities. The polytechnics' departments can focus on the actual content as well as on the learning experience to implement conducive, positive, and supportive practices that could lead to a maximum participation rate among students. This findings supported research conducted by Eugenia, Aikaterini, & Lida (2009), where there was rich insight into a wide range of stakeholders seeking to improve the field of entrepreneurship, education and economic development.

Thus, research pertaining entrepreneurship education at Malaysian Polytechnics has been conducted since 2013. According to Mohd & Syed (2013), there is a need to conduct a survey of the entire polytechnic institutions and other higher educational institutions in Malaysia to establish how entrepreneurship is actually being handled. Limited studies have conducted for private higher learning institution as regard to entrepreneurship education. This indicates a need to understand entrepreneurial intentions of college students across country. As mentioned by Eugenia, Aikaterini, & Lida (2009), availability of entrepreneurship education programs is a first step towards cultivating tomorrow's entrepreneurs.

Recent news reported that the unemployment rate among fresh graduates is expected to increase to 25% in 2020. In comparison to 2019, it is a jump from 13.8%. The Ministry of Higher Education (MOHE) said 75,000 out of 300,000 fresh graduates are expected to be unemployed in 2020 due to the economic downturn caused by the COVID-19 pandemic. Furthermore, 41,161 out of 330,557 graduates from 2019 are still unemployed. With the addition of 75,000 from 2020, the total unemployment among the group will add up to a whopping 116,161 people (Economic Review on MIDF Research, 2020).

The high level of unemployment and its associated social ills have been traced to poor entrepreneurship and skills development among students in tertiary institutions. This is manifested in a number of deficiencies that these graduates exhibit in their work places such as: lack of analytical and ICT skills; lack of entrepreneurial and problem solving/decision making skills; inadequate technical skills; and ignorance in the use of modern equipment (Ugwu & Ezeani, 2012).

The results of the study will be used by universities to examine the differences in entrepreneurial intentions and perceived barriers to business creation among students (Giacomin et al., 2011). It have been formulated and implemented for the benefit of giving maximum outcome for students. To accomplish this, we believe it is important to study students' perceived barriers on social entrepreneurial intention. The perceived barriers describes how young staff's self-efficacy could be negatively influenced by social exclusion, forecasted on poor academic achievement or debilitating psychological states, which may influence on their capabilities to succeed in enterprising activities.

## LITERATURE REVIEW

### Entrepreneurial Intention

According to Brockhaus (1982) the factors that affect a person's decision to become an entrepreneur are divided into three (3) categories: the psychological effects that the person has been subjected to, the results of his/her experiences (mainly from previous work) and his/her personal characteristics. These effects are characterized as incentives for entrepreneurial action and may be divided into two (2) types: positive incentives (pull motives) or pull factors that attract the person in taking entrepreneurial action, and negative incentives (push motives) or “pushers” driving or forcing the person to move away from other options and start his/her own business. The most important among “positive incentives” are: making profit, the pursuit of independence, the pursuit of social status and desire for achievement (Stamboulis & Barlas, 2014).

One more incentive that compels individuals to pursue an entrepreneurial career is the lack of prospect for progress in other occupations. The failure in some carrier efforts drives the individual to turn to the establishment of an enterprise. Furthermore, there are other situations, for example ‘luck’ (e.g. random acquaintance, etc.), and environmental influences (e.g. existence of family business, studies, etc.), that function as dynamic as other positive or negative incentives (Stamboulis & Barlas, 2014).

### Entrepreneurship Education

Previous studies have reported there was an urgency to fill the gap by identifying problems likely to be faced when integrating entrepreneurship in the education system and give recommendations of what needs to be done for better improvement. The current study is significant because it provides empirical research on student perceptions or tendencies towards entrepreneurship in the Malaysian context. The study was an exploratory one and had the aim of trying to establish challenges faced when embedding EE in the polytechnics system (Mohd & Syed, 2013).

However, this increasingly recognized beneficial role of entrepreneurship education has not been accompanied by a parallel assessment of the effectiveness of the entrepreneurship programs offered (Cox, Mueller & Moss, 2002). Entrepreneurship education is the process of providing individuals with the ability to recognise commercial opportunities and the insight, self-esteem, knowledge and skills to act on them (Mohd & Syed, 2013).

Additionally, the ongoing debate about whether entrepreneurs “are made or born” still attracts the focus of attention, and doubts are raised as to whether entrepreneurial success is a matter of a particular set of innate or acquired human competencies and characteristics (Galloway & Brown, 2002).

According to Eugenia, Aikaterini, & Lida (2009) several attempts have been made to distinguish between male and female in their research to investigate participation rates, attitudes towards involvement in entrepreneurial educational programs and perceptions of skills and competencies that must be possessed to undertake entrepreneurial activity. This research found that, females feel less confident and capable of initiating entrepreneurial activity than males, even when receiving the same education and coming from similar backgrounds. As this paper’s findings also indicate, entrepreneurship education can function as a trigger to entrepreneurial activity initiation, by enhancing students’ entrepreneurial mind-

set and actions. Designers of such programs can significantly benefit from this paper's findings by developing strategies to encourage students who have not been exposed to any kind of entrepreneurial experience (for example, not having been raised by an entrepreneurial family).

In economies with limited creation of private-sector wage jobs, entrepreneurship-support interventions are promising policy options for the creation of more attractive skilled jobs. In this context, many policymakers consider that entrepreneurship education has a strong potential to enable youth to gain skills and generate their own skilled jobs (Premand, Brodmann, Almeida, Grun, & Barouni, 2016).

Entrepreneurship education has advanced as a means to educate the new twenty-first century workforce by giving students the skills to take any area of study or discipline and be creative, innovative, and entrepreneurial (Welsh, Tullar, & Nemati, 2016). Besides that, entrepreneurship education can show students the paths to their goals. Moreover, EE can provide problem solving techniques to help the student to figure out how the path to a business might work (Welsh, Tullar, & Nemati, 2016). Moreover, entrepreneurship education can help students to manage their own self attribution and thus their self-efficacy (Welsh, Tullar, & Nemati, 2016). This could also serve as an evaluation of the effectiveness of the current entrepreneurial curriculum already offered (Eugenia, Aikaterini, & Lida, 2009).

Entrepreneurship education could promote entrepreneurial attitudes and mindsets (Toledano & Urbano, 2008). Countries who have taken a serious call on the front of entrepreneurship education have been seen to get encouraging results. Kenya, for instance, like many developing African nations, faced substantial unemployment issues accompanied by limited social amenities and infrastructure-related issues. One of the first efforts to move in the new direction to entrepreneurial development in Kenya involved introducing entrepreneurship education into all technical training institutions in the country (Lalit, 2015).

According to Lalit (2015), a number of countries in Europe such as Norway, Finland and Denmark have already recognized the benefits of an entrepreneurship education strategy and have successfully implemented policies to ensure that all students receive some form of entrepreneurship education during their formal schooling years.

### **Social Entrepreneurship Education**

With the increased social problems the world is facing, there has been a demand of increased social entrepreneurship related program (Scott, 2013). These programs and activities are not only focusing on creating awareness and providing services for development but are also concerned with developing social entrepreneurial culture and skills (Abdou et al., 2010). In addition, for a fast developing country like Malaysia, there is an essential need of understanding the social entrepreneurship phenomenon (Sarif et al., 2013) especially when Malaysia is looking to move towards knowledge based economy. Students are very crucial for developing cogent global sustainability practices and principles giving a balanced emphasis to the economic, environmental and social concerns a majority of these students will immediately contribute more to being a process of change in the delivery of public goods and social or environmental services. Despite the criticism, studies have shown that education influences students' inclination and behavior towards entrepreneurship (Min et al., 2012). Furthermore, Tracey and Phillips (2007) highlighted that there is an increase in a number of social entrepreneurs who are enrolling in universities to learn the skills for building sustainable ventures. In this regard, It has been highlighted that universities by developing social entrepreneurship education have the opportunity of not only acting as change agents but also



are in a position to develop human capital that could be used for transforming the world and addressing the social challenges (Brock & Kim, 2011). Moreover, some articles emphasize the importance of collaborating with many partners in society when students learn to think and behave as social entrepreneurs (Jensen, 2014; Prieto, 2011). Studies have suggested that higher education would influence student's intention of becoming entrepreneur (Shankar, 2014) and local development and poverty reduction and the economic growth after they graduate, not as salary workers but as social entrepreneurs (O'Connor, 2013). While much research has focused on entrepreneurial intentions a large amount of literature concerning the social entrepreneurship education has been produced (Pache & Chowdhury, 2012; Salamzadeh et al., 2013) and some research studied the effect of Social entrepreneurship education on intention (İlhan Ertuna & Gurel, 2011; Salamzadeh et al., 2013) but there is little study to investigate the direct effect of perceived barriers on social entrepreneurial intention, by the moderating role of Education.

### **Social Entrepreneurship Intentions**

The terminology of social entrepreneurship in Malaysia should be addressed and focused through education an entrepreneurial culture that can make social entrepreneurship as a platforms or mechanisms for enhancing a community. In addition, social entrepreneurship can develop and polish the universities students with their skills and efforts to pave the way for good integration of social entrepreneurship approach in teaching and learning in the context of higher education institution in Malaysia.

The government directly responsible seek the best approach to balance the socio-economic status for its citizen from the beginning of New Economic Policy (NEP) until the National Transformational Policy and 2017 Budget. Through the establishment of Malaysian Global Innovation and Creativity Centre (MaGIC) can bring good opportunities and also help social entrepreneurs take advantage of financing, skills and services that be offered for public. However, the study focus on the groups who are employed, single mothers, homeless people and impoverished people who need financial help for ensure better living. By the way, the collaboration of Government Linked Corporation (GLC) with other private firms are involved to perform their corporate social responsibility (CSR) to achieving goals and objectives on social entrepreneurial projects.

In general, social entrepreneurship have a different concepts on social enterprises which Defourny & Kim (2011) stated that social enterprises as non-profit organisations (NPOs) which adopting a market-oriented approach. In other types regard social enterprises as profit making enterprises to address social mission that involved the economic value of the sustainability of social ventures and also create social value to solve the social problems in the community (Dacin, Dacin, & Tracey, 2011).

From the perspective social entrepreneurship, Huq and Gilbert (2013) indicated that social entrepreneurship education and training focus the specific social entrepreneurship characteristics and culture among the students that help students develop their skills and knowledge relating to their career goals and expectations. Thus, social entrepreneurship activities brought the opportunities to apply the knowledge, in addition understand the real-social problems within the non-for-profit sector will enhance the graduate employability as well.

Therefore, the social entrepreneurial intensions in this study can be described as the self-acknowledged conviction and directly prepare to establish a new social venture. When consider with the study, it focus on Wang, Peng, and Liang's (2014) which based on the concepts of conviction and preparation. The study shows that the antecedents of social



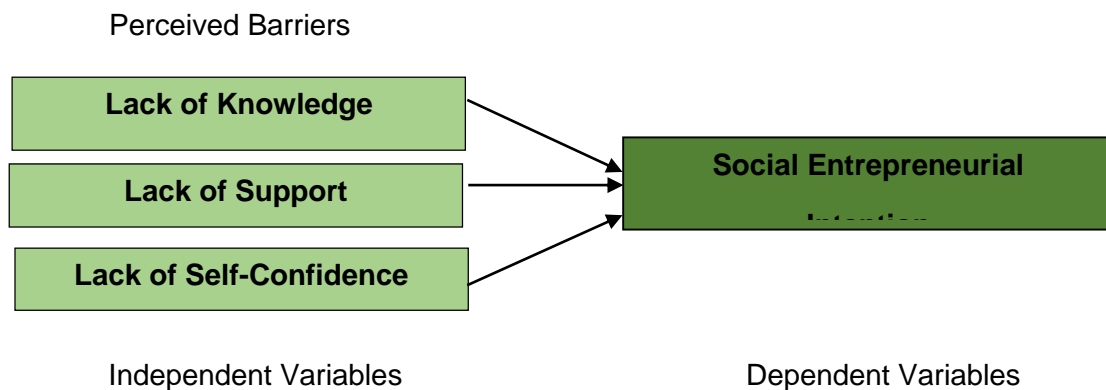
entrepreneurship such as empathy, moral obligation, perceived social support, social entrepreneurial self-efficacy, and real experience with social problems based on the social entrepreneurial intentions among universities students in Malaysia.

### **Perceived Barriers**

Perceived control of behavior is one of the dimensions of the theory of planned behavior related to the perception of an individual regarding the easiness or difficulty of a certain behavior. In fact, it proposes that a person's intention to perform the behavior will increase with his/her perceived behavioral control. This suggests that people will try to start a business if they believe they have the ability to do so and the activity is deemed to be socially acceptable (Kirby & Ibrahim, 2011). Some people believe that some barriers (ex: fear of failure, irregular income, and having to work too many hours) have negative effects on student intention and these barriers should be taken into consideration when developing entrepreneurship education programs. In this regard, previous studies conducted in the Malaysian context revealed that students lack explicit knowledge of entrepreneurship and social entrepreneurship and the intention to start their own entrepreneurial venture (MaGIC, 2015; Terjesen et al., 2011; Zakaria, 2011).

Furthermore, a study referred to some problems relates social entrepreneurship programs among the Malaysian students. These problems do not have motivating students towards social entrepreneurship programs, the problem of different perceptions among the students, lack of knowledge and skills of students have also slowed down the process of social enterprise creation, lack of active involvements of government, private agencies, local and national companies in social enterprise process and lack of specialized training for the educators. Further, despite the implementation of various policies and programs by the Malaysian government to enhance entrepreneurial activity in the country, students are still lacking the awareness, confidence, abilities, and competencies required for the success of (social) entrepreneurial venture (Kurniawan et al., 2012). Barriers to entrepreneurship can include difficulties in obtaining institutional support for aspiring social entrepreneurs, receiving family support, securing financing from lenders, building a relationship with suppliers, and/or a solid customer base.

This study would expect that the perceived absence of such support may act as a barrier. Miller (2012) proposed that resource providers entrepreneurs depend on (i.e., consultants, lenders, suppliers, customers) frequently make decisions under uncertainty without access to complete information. Therefore, there be especially vulnerable to the influence of challenges social entrepreneurs. Specifically, Onwuegbuzie and Collins (2007) found the fear of failure to be negatively related to entrepreneurial propensity. Furthermore, Miller (2012) identified the lack of knowledge and competency is another potential barrier for the social entrepreneur intentions. Additionally, Tukamushaba et al. (2011) argued that the lack of self-confidence and resources are also the potential barriers to the social entrepreneurial intentions. Moreover, According to Tukamushaba et al. (2011) the main barriers, as perceived by students who had yet to start their own venture, would appear to be the lack of awareness or information/knowledge. Of those who claimed that they would be interested in setting up a social enterprise, most indicated that they would need support or encouragement, particularly training and mentoring. However, the effect of social entrepreneurial education on social entrepreneurship intention to mitigate perceived barriers is still unclear.



**Fig. 1: Theoretical Framework**

The study of this research provided for analysing social entrepreneurial intentions. The standard theoretical model to explain students' social entrepreneurial intentions and ultimately social entrepreneurial behavior is theory of planned behavior (TPB) (Ajzen, 1991). The theory adopted for understanding the effect of perceived barriers of social entrepreneurship intentions, which are lack of knowledge, lack of support and lack of self-confidence. Through this research, intention is used to determine social entrepreneurial behavior and also to measure intentions in terms of social entrepreneurship field like among of universities students (Noorseha, Ching, Dewi & Md. Zabid, 2013).

According to Dyer, W.G. & Jr. (1994) explained most of the researchers found that entrepreneurial research can influence the individual motivation and aspiration to be success with the learning and experience based on entrepreneurial line. When Theory of Planned Behaviour is applied to social entrepreneurship, there is wide recognition that attitudes towards social entrepreneurship represent one of the main antecedents of entrepreneurial intent explaining a significant amount of the variance in entrepreneurial intentions (Schlaegel & Koenig, 2014). In practice, the research is conducted to enhance the theory of theory of planned behavior (TPB) in social entrepreneurship fields to vary the contribution to practice and body of knowledge.

Based on the Theory of Planned Behaviour (TPB) framework (Fig. 1) above, the following hypotheses have been developed.

- H1: lack of knowledge has a negative effect on social entrepreneurial intention.
- H2: lack of support has a negative effect on social entrepreneurial intention.
- H3: lack of self-confidence has a negative effect on social entrepreneurial intention.

## RESEARCH METHOD

This study used multilevel sampling design with purposive sampling scheme as highlight by Yunus (2007) that multilevel sampling involves sampling in all levels being purposive or sampling in all levels being random. Purposive sampling technique is preferred for the selection of the public universities. Criteria for the selection of the universities were the research universities. Research universities have more appropriate M. Shahverdi et al./Management Science Letters 8 (2018) 345 resources for encouraging students to be social entrepreneurial through the spinoffs and commercialization of their research opportunities.

The technique is preferred as prior researchers have also used the purposive sampling technique in collecting data (Jensen, 2014; Tukamushaba et al., 2011; Yasir et al., 2013). For the analysis in the current study, students of the research universities of Malaysia were used. A quantitative method adapted in this study by conducting a literature study and use of a survey questionnaire. Therefore, a literature study on social entrepreneurship intention was conducted to identify factors that determine social entrepreneurship intentions.

We used social entrepreneurship education as a moderator between the relationship of the perceived barriers and social entrepreneurship intention. Social entrepreneurship education refers to various programs and training conducted to inculcate the awareness and skills and abilities required to establish and successfully run a social enterprise.

## CONCLUSIONS

The aim of this study was to investigate the relationship between the barriers with the social entrepreneurial intention of the students in Malaysian Research University along with moderation effect of social entrepreneurial education. The profile of social entrepreneurship in this study can be used as reference by entrepreneurial education policy makers to improve the quality for first class human capital development through national education.

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## **Validity and Reliability of an Instrument to Measure Sustainable Performance in Manufacturing Firms**

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### **ABSTRACT**

This study aims to discuss the “validity and reliability” of an instrument to measure the sustainable performance measurement in manufacturing firms with ISO 14001 certification in Malaysia. The “validity and reliability” of the research instruments are essential to ensure the scale's internal consistency for the credibility of the research. SPSS is used to evaluate the outcome from the pilot study via assessing the validity and value of the reliability of the questionnaire. The survey findings show the instrument's level of validity is high based on the feedback from the expert. In contrast, the instrument's reliability is very high, with the Cronbach alpha (CA) value above the value of 0.7. While, the indication of the validity of the instrument represents by the degree to which each item correlates are shown very high, with the value of correlation is above 0.3 indexes of correlation.

**Keywords:** Validity; Reliability; Sustainable performance; Instrument; Manufacturing firms.

### **INTRODUCTION**

Sustainability is an essential indicator of Malaysia and Globally's twenty-first-century business landscape (Nor-Aishah, Ahmad, & Thurasamy, 2020). The emerging sustainable development (SD) field has influenced the concept of business and policies worldwide (Hall, Daneke, & Lenox, 2010). The industrial performance indicator was also shifted from the economic focus merely to the sustainable concepts, emphasising three indicators of economic, environmental and social or known as sustainable performance. Sustainable performance was derived from the idea of sustainable development. The concept of sustainable development is not considered new in Malaysia. It was used as fundamental indicators or guidelines of the country's development approach since the 1970s for eliminating poverty, improving the life and social well-being of the people, providing the equal access to the education and taking care of the environmental. In 2009 Malaysia was introduced New Economic Model which emphasize by three goals which is achieving high income, inclusivity and sustainability. These three goals are to in line with the three components of the Sustainable Development Goals, namely economy, environment and social (SDGs Voluntary Report, EPU 2017).

The manufacturing sector is a vital sector of Malaysia's economy. It contributed to the gross domestic product (GDP), export market, and employment creation with different skills (Ngu, Lee, & Bin Osman, 2020). In 2019 the manufacturing sector contributed about RM194.4 billion or 21.3% of GDP, making it the second-largest contributor after the services sector (Press Release, Department of Statistics Malaysia, 23 July 2020). However, in 2019, the manufacturing industry grew slower at 1.9 per cent from 7.0 per cent in the previous year (RM232.9 billion or 23% of GDP in 2014 GDP). The slower growth was contributed by Petroleum, chemical, rubber & plastic and Food, beverages & tobacco which recorded a

slower growth at 0.7 per cent (2018: 14.3%) and 2.8 per cent (2018: 6.3%) respectively. (Press Release, Department of Statistics Malaysia, 23 July 2020). Even though the slower growth in the economy in 2019, the manufacturing sector recently in the revolution process towards Fourth Industrial Revolution or Industry 4.0 also contributed the environmental degradation, pollution and also waste generation in Malaysia and other developing countries (Ghazilla et al., 2015, Carvalho, Chaim, Cazarini, & Gerolamo, 2018).

With the new revolution and the consequences of the growth in the manufacturing sector, it must be balance with the country's environmental issues. The proper approach also needs to be alleviated via well-organized use of energy and resources and reducing waste. The manufacturing industry contributes to environmental degradation, destruction, and pollution generation in Malaysia (Ghazilla et al., 2015). Currently, most manufacturing firms in Malaysia have not implemented sustainable practices in their manufacturing business. (Ngu et al., 2020). To support the manufacturing development growth towards achieving sustainable performance, the Government has identified green technology as catalysing for sustainable economic growth (KeTTHA, 2017). Green technology offerings the solution in balancing economic development as well as accountability towards the environment. More opportunity is created by the development and production of green technology, such as rousing economic activities in various sectors, creating jobs, and attracting investment. Green technology proposed the capability to mitigate the environmental degradation generated from the economic actions.

In term of sustainable performance research, there are volumes of literature discussed on the topic, however, there is a lacking of study focusses on sustainable performance, which is considered the three indicators simultaneously of the economic, environmental and social composed in the research (Gong, Simpson, Koh, & Tan, 2018; Nor-Aishah et al., 2020). Most of the literature focuses on economic performance (Soto-Acosta, Cismaru, Vătămănescu, & Ciochină, 2016), economic and environmental performance (Habib, Bao, & Ilmudeen, 2020), environmental and social performance (Hosseininia & Ramezani, 2016), social (Hamann, Smith, Tashman, & Marshall, 2017) and environmental performance (Hamann et al., 2017).

To obtain the data of the sustainable performance in the manufacturing firms, the instruments to measure the level of the sustainable performance were developed by considered four constructs under sustainable performance. The questionnaire was adopted and adapted from the literature and the interview session with the three-experts panel in sustainable entrepreneurship and green technology was conducted. The four constructs are: economy performance (economic outcome & operational outcomes), environmental performance and social performance. Thus, the main objective of this research is to measure the “validity and reliability” of the measurement of sustainable performance in manufacturing firms in Malaysia.

## VALIDITY OF RESEARCH INSTRUMENT

After the research instrument was developed, it was tested to ensure that the instrument has the "ability of a measuring what is intended to be measured" (Sundaram, V. P. K., Chandaran, V.G.R., Atikah, S. B., Rohani, M., Nazura, M. S., Akmal, A. O., Krishnasamy, 2016). In this study, the construct was developed based on the objectives to be achieved. There are three basic approaches of validity, namely face or content validity, criterion-related validity and construct validity.

Face or content validity is referring to the professional judgment by the expert on the related field of the measurement instrument based on their expertise in the related field of the study and also prior knowledge and experience in the same field. The opinion from expert seems to be accurately reflecting what is intended to be measured (Sundaram et al., 2016). The experts will evaluate the instrument by determining whether the instrument suitable to be used for the study, such as objectives of the study, relevancy of the questionnaire, flow and formatting of the instrument that meets the respondents' requirements to be used in the instrument research. Criterion-related validity refers to the "ability of the measure to correlate with other measured of the same construct" (Sundaram et al., 2016). It can predict the outcomes based on the information from other variables and it can be done by establishing concurrent validity and predictive validity. Concurrent validity is the criterion validity for new measure correlates with the criterion measure taken simultaneously dan predictive validity is opposite from concurrent validity whereby the ability to differentiate among individuals regarding a criterion (Sundaram et al., 2016). Meanwhile, construct validity, a measure to confirm a network of related hypothesis generated from a theory based on the concept of the research issues. Construct validity is divided into convergent validity and discriminant validity (Sundaram et al., 2016).

In this study face validity was used to measure the level of sustainable performance among the manufacturing firms with ISO 14001 certification. The instrument developed was assessed at a glance by an expert. Face validity is considered acceptable and appropriate to use in the research (Stoner et al., (2011). Other two approach, which is criterion and construct validity not use in this study due to no comparison between other variable and only use survey. The instrument to measure the level of sustainable performance was referred to three (3) expert panel from academic and industry. The verification form is given to the expert to verify the instrument via face validity method. The feedback from the expert was used to improve the instrument.

The validity of the was measurement by determining the degree to which each item correlates with the total score. Low values (less than 0.3) indicate measuring something different from the scale as a whole (Pallant 2013). Nunnally and Bernstein (1994) stated the correlation value of the correlation value between an "item with a total score" of more than 0.25 is considerably high. Cohen (1988) classifies the value of correlation coefficient into three classes, small (0.10 to 0.29), medium (0.30 – 0.49) and high (0.50 to 1.00). According to Pavot, Diener, Colvin and Sandvik (1991), the scale has good internal consistency with the CA coefficient reported of 0.85. In this study, the value of the instrument's validity to measure sustainable performance among manufacturing firms with ISO 14001 based on the correlated "item with the total correlation".

## RELIABILITY OF RESEARCH INSTRUMENT

Reliability means the ability of a measuring instrument to give accurate and consistent results (free from error) and hence ensures consistent measurement across time and the various items in the instrument. The measure's reliability indicates the stability and consistency with which the instrument measures the concept and helps to assess the "goodness" of the measure (Pallant, 2013).

There are four approaches to measure reliability: "test-retest reliability, internal consistency reliability, split-half reliability, and equivalent-form reliability". Test-retest reliability is applied using the same respondents, same measurement but managed at the two separate points in time. For internal consistency reliability, it measures the total score of the instruments and it focuses on the internal consistency of the set of items creating the scale. For split-half reliability is a "method to measures the degree of internal consistency by checking one-half of the results of a set of scaled items against the other half. For equivalent-form reliability is a method that measures the correlation between alternative instruments designed to be as equivalent as possible administrated to the same group of the subjects" (Sundaram et al., 2016). In this study, the approach of internal consistency reliability is used to measure reliability.

The commonly accepted rule for describing internal consistency is CA (Pallant, 2013). As cited in Pallant (2013), Cronbach's value should be above 0.7 (DeVellis, 2012) and is considered high reliability and acceptable. Cronbach's value below 0.6 is deemed low, while Cronbach's range 0.8 and up to 1.0 is considered very good. (Nunnally and Bernstein 1994).

## PILOT TEST

The pilot test was conducted to determine the scale's internal consistency, stability, and consistency of the reliability instrument (Uma Sekaran and Roger Bougie, 2016). In this study, the questionnaire was distributed using conventional mail and web-based survey tools and the questionnaire was distributed to the manufacturing firms with ISO 14001. Follow-up by call also was conducted to increase the responses rate. The list of the firms was referred to in the Federation of Malaysian Manufacturers Directory 2019. The manufacturing firms with ISO 14001 were selected due to the environmental initiative and implementation of good environmental practices (KeTTHA, 2017); these firms also were adopted the environmental practices. The questionnaires were randomly distributed to the leaders of the firms, including the owner of the firms, Chief Executive Officer (CEO), Managing Directors General Manager, Senior Managers, Senior Executive and Senior Engineer.

The constructs for sustainable performance consist of four sub-sections of economy performance (economic outcomes) consisting of 4 items, economy performance (operational outcomes) consisting of 8 items, environmental performance consisting of 7 items, and social performance consisting of 4 items. The value of CA for each construct are in Table 1. A 5-point scale was used for the measurement ranging from "extremely low" and "extremely high" the measurement forms this study were adopted and adapted from (Abdul-Rashid, Sakundarini, Raja Ghazilla, & Thurasamy, 2017). SPSS 22.0 statistical software were used to analyse the data. The analysis was conducted are descriptive and reliable.

**Table 1: The value of CA**

No	Constructs	Cronbach Alpha
1	Economy performance (economic outcomes)	.946
2	Economy performance (operational outcomes)	.956
3	Environmental performance	.959
4	Social performance	.926

For the pilot study, only 25 companies were received. The questionnaire was emailed to the respondent using the standard email and the web-based tool also attached in the email. After two weeks, the response was follow-up with a phone call in order to increase the response rate. The Company were asked the time that they required to answers the questions. Based on the feedback, they took an average of 25 minutes to answer the question. The responses were also asked about the comments and suggestion for improvement of the instruments. The feedback received from the Company were analysed.

### **FINDINGS AND ANALYSIS - RELIABILITY OF RESEARCH INSTRUMENTS**

The findings of this study are to determine the “validity and reliability of the questionnaire” for the measurement of sustainable performance in manufacturing firms. The validity of the items in the questionnaire uses “Correlated Item-Total Correlation”. This value indicates that the degree to which each “item correlates with the total score”. The CA value is used to obtain a reliability index for related constructs. The results of this analysis are summarised in the table below.

Table 2 shows the constructs for economy performance (economic outcomes). The correlation number of each “item with the total score” is reaching 0.791 to 0.941. Whereas the total value of the CA is 0.946.

**Table 2: The values of the construct of the economy performance - economic outcomes**

Construct	Item	Corrected Item-Total Correlation	Cronbach Alpha's if item Deleted	Cronbach Alpha's
Economy Performance (Economic Outcomes)	1	.882	.925	.946
	2	.791	.953	
	3	.941	.912	
	4	.884	.925	

Table 3 shows the constructs for economic performance (operational outcomes). The correlation value of each “item with the total score” is reaching 0.690 to 0.925. Whereas the total value of the CA is 0.956.

**Table 3: The values of construct of the economy performance - operational outcomes**

Construct	Item	Corrected Item- Total Correlation	Cronbach Alpha's if item Deleted	Cronbach Alpha's
Economy Performance (Operational Outcomes)	1	.690	.958	.956
	2	.805	.951	
	3	.922	.944	
	4	.925	.944	
	5	.738	.955	
	6	.869	.947	
	7	.890	.946	
	8	.823	.950	

Table 4 shows the constructs for environmental performance. The correlation value of each “item with the total score” is reaching 0.547 to 0.969. Whereas the total value of the CA is 0.959.

**Table 4: The values of the construct of the environment performance**

Construct	Item	Corrected Item- Total Correlation	Cronbach Alpha's if item Deleted	Cronbach Alpha's
Environmental Performance	1	.959	.944	.959
	2	.944	.946	
	3	.916	.948	
	4	.910	.948	
	5	.969	.943	
	6	.758	.961	
	7	.547	.974	

Table 5 shows the constructs for social performance. The correlation value of each “item with the total score” is reaching 0.722 to 0.872. Whereas the total value of the CA is 0.926.



**Table 5: The values of the construct of the social performance**

Construct	Item	Corrected Item- Total Correlation	Cronbach Alpha's if item Deleted	Cronbach Alpha's
Social Performance	1	.807	.909	.926
	2	.722	.924	
	3	.809	.908	
	4	.832	.905	
	5	.872	.895	

## CONCLUSION

This study aims to identify the “validity and reliability” of the instrument developed for this study. The results shown the correlated “item with a total correlation” is larger than 0.30. It can be decided that it has a high validity value, as suggested by Cohen (1988) & Nunnally & Bernstein (1995). Meanwhile, the CA value exceeds 0.60, which conclude that the items have good internal stability and consistency (Nunnally and Bernstein, 1994). According to Pavot et al., (1991), satisfaction with life scale has good internal consistency with an alpha coefficient reported of 0.85. In this study, the CA coefficient were 0.946 for the economic outcome, 0.956 for the operational outcome, 0.959 for environmental performance and 0.926 for social performance. The instrument of the sustainable performance shown the value of the correlation and CA a very high value of the instrument's reliability. The instrument is vital in quantitative research.

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## **Assumption of Unlimited Want in Islamic Economics in the Context of Islamic Tasawur**

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### **ABSTRACT**

The purpose of this research is to determine if the assumptions of Islamic economics are compatible with the concept of Islamic Tasawur. The assumption here is an unlimited human wants. Islamic economic philosophical pillars have been borrowed from Western or conventional economics, then Islamized and converted into an Islamic philosophy. This research is using qualitative method and the data will be analyze using ATLAS.ti software. As a result, mainstream Islamic economic scholars' assumption of resource scarcity and unlimited human wants can not be generally accepted because it differs slightly from the Qur'an and Hadith in the core. In conclusion, it is important to discuss the Islamic economic assumptions that are parallel to the Islamic Tasawur.

**Keywords:** Economic Assumptions; Mainstream; Islamic Tasawur; Scarcity of Resources; Unlimited Human Wants.

### **INTRODUCTION**

The Islamic tasawur represents the primary form of Islam and explains the accurate and complete principles of Islam in its entirety so that the person who understands it is instilled with them (Hanapi, 2020; Noor Hisham & Burhan, 2019). The essential elements of the Islamic tasawur are Allah SWT as the Creator, human beings as creatures, and natural resources as creatures (Mohd Zulkifli, 2020). According to previous scholars, Islamic law is derived for justice, peace, and goodness for humanity's benefit. Also, Islamic law is divided into several categories, including worship and muamalat. Muamalat is divided into several sections, one of which is economical. According to previous scholars, Islamic law is derived for the sake of justice, peace, and goodness for the benefit of humanity (Ika Yunia & Abdul Kadir, 2018; Sarmiji, 2020).

Islamic economics is a study of human behavior concerning the diversity of desires and scarcity of resources with alternative uses to maximize falah, human well-being, both in today's world and in the hereafter (Zubair Hasan, 2020). Eventually, the Islamic economic system began to evolve, and the rule of Khulafa'ar-Rasyidin continued (Addi Arrahman, 2020). Economic problems are not so prominent at this point, and Islamic economic theories are still undeveloped.

The diverse contributions of these Islamic scholars have also led to the development of Islamic economics and its use in dealing with society's economic problems. They analyze existing knowledge to learn more about the nature of the relationship between the economic aspects and Sharia law rules and the causes and effects of specific common economic issues. These scholars also develop a better understanding of knowledge or theory on economic and non-

economic matters. Thus, the emergence of different views and assumptions to find answers to economic problems, but there are still theories and assumptions of Islamic economics that are still bound up with the Western economy, or conventional economics, and are slightly in conflict with Islamic principles and values. Moreover, current Islamic economics is said to have no theory of its own, instead of relying on borrowed mainstream worldviews, where Islamic ethics and morality are not incorporated into Islamic economic methods and models (Choudhury, 2018; Rafikov & Akhmetova, 2020). This study will therefore identify the Islamic economics that is in line with the Islamic tasawur.

### The Concept of Economics According to Islamic Tasawur

Islamic and Western scholars often discuss the origins of things. Similarly, the meaning of the tasawur and 'worldview' in specific terms has yet to be discovered in the tradition of classical Islamic thought. Even so, this does not exclude the use of the tasawur as a systematic basis for the understanding of reality by classical Islamic scholars. However, it differs from the use of specific terms by Islamic scholars in the twentieth century to describe the meaning of this tasawur (Mohd Shukri Hanapi, 2014).

**Table 1: Differences in the Use of the Islamic Term Tasawur**

Islamic Scholars	Terms
Al-Faruqiy (1995)	Al-tasawwur al-tawhidiy (More prone to the concept of Allah SWT's power and oneness in shaping all aspects of human life.)
Al-Attas (1995)	Ruqyah al-Islam li al-wujud (More prone to philosophical and epistemological meaning.)

Based on Table 1, the difference in these Islamic scholars' terms is due to a lack of more appropriate and accurate definitions. Islamic scholars, therefore, use the terms "tasawur" and "Worldview" to describe a way of life that encompasses both worldly and eternal realities within its scope, as well as Islamic adjectives. With the combination of the word tasawur and Islamic values, then the existence of the Islamic tasawur means a full or accurate picture of Islam, which seeks to explain the basic principles of Islam properly and comprehensively, to become the basis for a life-view and to be instilled in a person (Mohd Zulkifli, 2020). It is, therefore, necessary to determine the correct term tasawur in order to play a role in the formation of civilization because it affects the beliefs, opinions, and actions of society.

The Qur'an, Hadith, Ijma (agreement between jurists), and Ijtihad (analogy and creative reinterpretation of legal issues) have been established as sources of reference in the Islamic era, which began in the 7th century (Aan Jaelani, 2018). Islamic economics is a term that refers to Islamic commercial law based on Islamic Sharia law (Al Harethi & Salem, 2019). The application of Islamic values to the Muslim community's economy is crucial, as it serves as a guide to success in this world and the next and gains the pleasure of Allah SWT. The difference between the conventional economic tasawur and the Islamic economic tasawur is that the conventional economic tasawur is based solely on conventional tasawur and epistemology. In contrast, the Islamic economic tasawur is based on Islamic tasawur and epistemology, including the Qur'an, Hadith, ijmak, and qiyas (Mohd Shukri Hanapi, 2014). As a result, the application of economics based on conventional economic philosophy will

produce conventional economic concepts and theories. In contrast, the application of Islamic economic philosophy-based economics will produce Islamic economic concepts and theories. As a result of this mixing, the Islamic economy is still linked to the conventional economy and thus not classified as a true Islamic economy. Moreover, mainstream Islamic economists who are influenced by Western values of neglect or Eurocentrism argue that conventional economic theories can be used as long as they are not incompatible with Islamic beliefs and sharia (Mohd Shukri Hanapi, 2014). Moreover, Islamic economics assumptions are said to be inconsistent with the genuine concept of Islam because philosophy has not been adopted from the outset. Therefore, this research is crucial to the resolution of the parallelism of Islamic economics theories based on the Islamic *tasawur*. It is said that Islamic economics assumptions, such as unlimited human needs and scarcity of resources, have been derived from conventional economic theory. Since its nature is a premise, this means that the assumption can still be debated and disputed (Mohd Zaid & Mohammad Taquiuddin, 2018). The use by mainstream Islamic economists of two dominant thought streams is responsible for the assumptions of Islamic economics that are said to be linked to conventional economic theory (Muhammad Syukri Salleh, 2011). These are accommodative-modification and eclectic-methodological thought streams.

On the other hand, because of their acceptance of conventional economic philosophy, Mohd Shukri Hanapi (2014) and Muhammad Syukri Salleh (2011) are opposed to the method. This clearly shows that mainstream Islam is changing only in terms of its implementation, while the core of mainstream Islamic economics remains rooted in conventional economic theory (Mohd Haidzir, 2017; Mohd Shukri Hanapi, 2017). As explained in the previous study, this research is necessary to propose an appropriate theory of Islamic economics assumptions.

### **Unlimited Human Wants**

Previous studies on the assumption of unlimited human wants have not been discussed in depth by previous Islamic economic scholars, most of them focusing solely on the assumption of the scarcity of resources. Human wants or desires may be defined as inherent desires and maybe temporarily fulfilled either on their own or in more complex combinations through the use of appropriate goods in appropriate quantities, and desires to satisfy desires that are driven by other activities (Mohd Zulkifli, Hanudin Amin, Dzulkifli Mukhtar, Shah Iskandar, & Noormariana, 2020). In addition, Yan and Spangenberg (2018) argue that wants can be unlimited, changeable, grow along with income, social position, and advertising stimulus, while needs are being continuously analyzed as anthropogenic and essential. Komala (2019) explains the difference between needs and wants from al-Ghazali's point of view: needs are all basic human needs for life, while will or desire is a human will come in every matter.

It is clear from the arguments of Mohd Zulkifli et al. (2020), Komala (2019) and Yan and Spangenberg (2018) that human will is something continuous and will not end because it is instilled or has become part of a human being. It can also be attributed to the human attitude of never being satisfied with the desire for something (Sloman, Garratt, & Guest, 2018) and the onset of this unlimited human wants. The basis of unlimited human wants to be rooted in the will of human lust alone. Human wants to follow desire is a will that is difficult to control because it seems ungrateful to what it has and always feels dissatisfied with. In Islam itself, the importance of prioritizing needs over desires to take care of human *maslaha* (goodness), such as following the *maqasid sharia*, has been emphasized and can at the same time help control lust. The three (3) categories of *maslaha*, which are stressed in *maqasid sharia*, are *daruriyyat* (basic needs), *hajiyyat* (complementary needs), *tahsiniyyat* (luxury). The philosophy of unlimited human will be slightly contradictory to the Islamic *tasawur* because a good Muslim will keep within the limits of his relationship with Allah the SWT will always try to control his



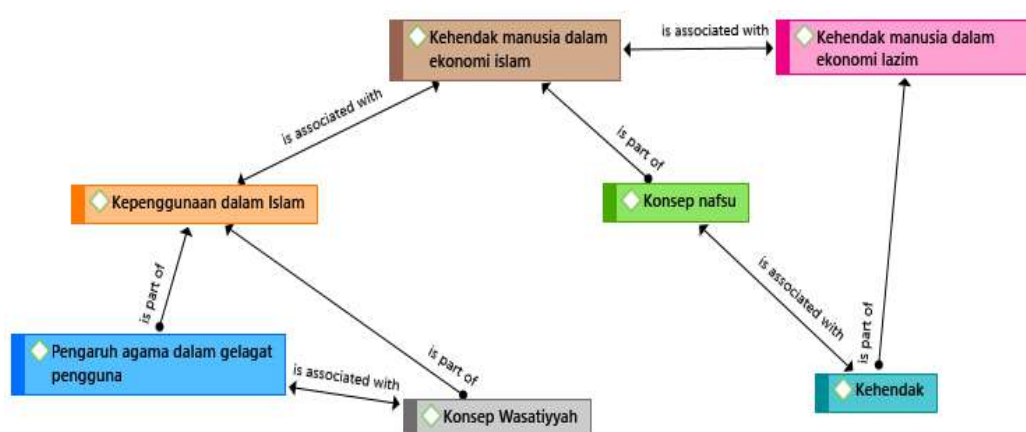
will and lust while at the same time fulfilling his wishes. Therefore, this study is essential for identifying the assumption of unlimited human desires that are compatible with Islamic tasawur economics.

## RESEARCH METHOD

This study uses a qualitative method research methodology. The use of these qualitative research methods can provide a more detailed understanding of the field under study (Ronzani, Da Costa, Da Silva, Pigola & De Paiva, 2020). Qualitative research uses an inductive logic approach that allows researchers to form concepts, hypotheses and theories from the data collected (Othman Lebar, 2018). An inductive approach is needed because this study requires an in-depth process of understanding and observation to form the theory from observation or thought in general to something more specific (Bernard, 2017). Furthermore, researchers use exploratory and descriptive research design methods because they are suitable for studying the phenomena being studied.

Data collection was based on documentation studies. Secondary data can refer to data that has been collected by other researchers (Hua, 2016). The documents referred to are related to the assumptions of unlimited want in Islamic economics. Researchers use database search methods and also reading materials such as Hadith translation, journals, articles, books and proceedings. Moreover, researchers are an important research tool in the data collection process (Othman Lebar, 2018). Additionally, triangulation methods are used by researchers to enhance the quality and accuracy of the data studied. Furthermore, the data in this research study is analyzed using the ATLAS.ti software.

## RESULTS AND DISCUSSION



**Figure 1: Network View Between Human Want in Islamic Economic and Human Want in Economic Mainstream**

Based on the network view developed from the results of the analysis using ATLAS.ti, it can be identified that the practice of economic concepts that are applied together with religious values to some extent can control unlimited human wants. This is because the application of

the concept of moderation in consumerism will make people more vigilant and not more excessive. Human will based on a conventional economy that does not place any boundaries in human want is contrary to Islamic values.

## CONCLUSIONS

The philosophical origins of Islamic economics assumptions are said to have been taken from Western philosophy or conventional economics, which was then Islamized and transformed into Islamic philosophy. In conclusion, the belief that Islamic mainstream economic scholars have a scarcity of resources and unlimited human wants cannot be universally accepted, as it is a little contradictory in the Qur'an. It is important to study these Islamic economic assumptions based on the Qur'an and the Hadith. In addition, it is important to address the Islamic economic assumptions that are consistent with the Islamic tasawur in this research.

## ACKNOWLEDGEMENTS

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# The Determinants of Entrepreneurial Behavior among Students in Higher Education Institutions: A Conceptual Framework

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## ABSTRACT

The purpose of this paper is conceptually exploring the influencing factors of entrepreneurial behavior (EB) among students in Higher Education Institutions (HEIs). This paper reviewed literature on Entrepreneurship Education (EE), Entrepreneurial Skills (ES), and Theory of Planned Behavior (TPB). The detailed literature review undertaken formed the basis for the development of conceptual framework for this study. In line with education philosophy, the development of entrepreneurial behavior among students in HEIs is very significant to deal with unemployment issues. Entrepreneurial mindset should be developed for all students to motivate them to turn into entrepreneur as a career after graduation. Many courses of entrepreneurship have been offered in academic curriculum to give an overview and knowledge for students to cultivate entrepreneurship skills. The whole systems including government, higher education institutions, parents and society must play important role in dealing with unemployment issues because by developing entrepreneurial mind-set in the entire system of education will results in job creator among graduates.

**Keywords:** Entrepreneurial Behavior; Entrepreneurship Education; Entrepreneurial Skills; Theory of Planned Behavior.

## INTRODUCTION

In Malaysia, the Minister of Higher Education revealed that out of the 298,551 graduates in 2019, a large number of hold bachelor's degree and diploma, 41.8% and 41.07% of all graduates, respectively as shown in Table 1.1. Among all graduates, 63.5% of them were employed, 16.7% chose to pursue studies, 1.3% upgrading skills, meanwhile 4.7% waiting for work placement and 13.8% were unemployed (Ministry of Higher Education, 2020).

There are wide range of programs were introduced by government to help the development of graduates' entrepreneurs. In 2015, the government launched the Malaysia Education Blueprint 2015-2025 (Higher Education) or MEB (HE), outlining a comprehensive transformation program for the higher education system. For instance, the government aims to improve system outcomes on the dimensions of access, quality, equity, unity, and efficiency. From a student outcome perspective, the vision is to foster graduates who are holistic, balanced, and entrepreneurial with the relevant knowledge and skills, and ethics and morality to meet the needs of Malaysia's growing economy and to be competitive internationally.

Youth unemployment in Malaysia has been increasing in the recent period because majority of the employers' demand to recruit experience workers. It was reported that unemployment

rates for young graduates are higher than non-graduates where Bachelor's degree holders recorded the highest unemployment rate amongst graduates (Annual Report of Bank Negara, 2016).

A survey conducted by the World Bank and Talent Corporation (2014) in Malaysia reported that employers view soft skills as a key factor in recruiting new graduates. According to the survey, employers agreed communication skills as the major deficit among graduates, followed by creative/critical thinking, analytical and problem-solving skills. This is due to majority of graduates learn through lectures and academic textbooks and are academically sound but they have limited opportunity of acquiring practical experience by using machinery, equipment and practical techniques associated with a profession (Anumnu, 2014). Therefore, developing of soft skills among students is crucial for knowledge development, understanding, added values and skills development. However, research for measuring soft skill is very limited and under-research constructs (Chell, 2013). Therefore, it is significant to study the development of entrepreneurial skills that influences the entrepreneurial intention and entrepreneurial behavior among students in HEIs.

As one of the government initiatives is to produce graduates with entrepreneurial skills who are be able to create their own job and become entrepreneurs. The entrepreneurs created more employment and production growth and at the same time stimulate high-quality innovation (Subotic et al., 2018). For this reason, students in HEIs are encourages to instill entrepreneurship as their career path no matter what programs/courses they learned in HEIs. Accordingly the institutions should be proactive in transforming their delivery system to be more flexible and entrepreneurial, and fulfilling the needs of local yet global in nature to create a higher education system that is able to produce individuals with a holistic, balanced and have an entrepreneurial mindset that seeks to act as job creator as envisaged under the Shift 1, the MEB 2015-2025 (HE) (Dato' Seri Idris Jusoh, former Minister of Higher Education). Undoubtedly, educators in HEIs play important role in developing entrepreneurial skills among students. According to Farooq (2018), the possession of entrepreneurial skills among students creates a pressing desire to be independent and being one's own boss. However, the issue may arise if the ability of educators who do not possesses the skills and experiences themselves to train those who aspire to be entrepreneurs (Chang & Rieple, 2013). Furthermore, skills once learnt are discounted, undervalued, and largely ignored, excepting when they are not executed (Chell, 2013). Therefore, the educators should play their role to ensure that the students preserve the skills learned in classroom.

The TPB proposes that the human behavior is guided by four cognitive factors namely entrepreneurial intention, attitudes toward behavior (ATB), subjective norms (SN) and perceived behavioral control (PBC) (Trivedi, 2016). The TPB is widely used in many disciplines to understand individual human behavior. The numerous of the recent research have investigated on the entrepreneurial intention among students by using TPB (Hongyi, Choi, Bo, & Yuen, 2017; Linan, 2008; Bereket & Wasihun, 2015; Gieure, Benavides-Espinosa, & Roig-Dobon, 2019; Trivedi, 2016; Tsordia & Papadimitriou, 2015; Zollo, Laudano, Ciappei, & Zampi, 2017; Farooq, 2018; Aloulou, 2016; Manning, 2018; Varamaki, Joensuu, Tornikoski, & Viljamaa, 2015; Joensuu-Salo, Varamaki, & Viljamaa, 2015; Feng, Liqun, Hongyi, & Lo, 2019; Buli & Yesuf, 2015; Galvao, Marques, & Marques, 2018; Soomro & Shah, 2015), however, in previous studies the effect of these three factors on entrepreneurial intention is contradictory and inconsistent (Trivedi, 2016; Linan & Cohen, 2006). To the researcher's knowledge, there is very limited study on the determinants of factors leading towards entrepreneurial intention and entrepreneurial behavior especially on the entrepreneurial skills among students. Moreover, a lot of the academic studies reported that entrepreneurship education is one of the contributors to students' entrepreneurial intention (Feng, Liqun, Hongyi,



& Lo, 2019; Hongyi, Choi, Bo, & Yuen, 2017; Tsordia & Papadimitriou, 2015; Joensuu-Salo, Varamaki, & Viljamaa, 2015; Galvao, Marques, & Marques, 2018). Despite that, according to Yen-Chun & Tienhua, (2017) only 17.3 percent of the researchers in Asia Pacific adopted TPB in their study and majority of them emphasized that entrepreneurship education directly or indirectly contributes to increase entrepreneurial intentions.

## LITERATURE REVIEW

### The Theory of Planned Behavior

According to Ajzen (1991), intentions to perform behaviors of different kinds can be predicted with high accuracy from attitudes toward the behavior, subjective norms, and perceived behavioral control; and these intentions, together with perceptions of behavioral control, capable for considerable variance of actual behavior. The TPB indicates that behavior of individual is determined by three motivational independent variables namely attitude towards behavior, subjective norm, and perceived behavioral control (Ajzen 1991). The performance of behavior is determined by the individual's intention to engage in any situation. Antecedents of intentions can also have a direct effect on actual behavior (Joensuu-Salo, Varamaki, & Viljamaa, 2015). It is a reflection from intention to behavior. For instance, the stronger the intention is, the more likely behavior will be performed. Therefore, the TPB offer a great deal to entrepreneurship research because entrepreneurial activity is a planned behavior and understanding intentions can help detect potential actions (Gieure, Benvides-Espinosa, & Roig-Dobon, 2019b). According to the theory, attitude towards behavior is an individual's judgements about the impact of the desired behavior either it is good or bad (Ajzen, 1991). More positive a person's attitude towards an action, more likely he will develop intention to engage in that action (Trivedi, 2016). Meanwhile, subjective norm refers to what the social group that is important to that individual thinks about performing the intended behavior (Ajzen, 1991). Lastly, perceived behavioral control is an individual's perception of the ease of difficulty of performing the intended behavior (Ajzen, 1991). It refers to the individual's control over the actions that are necessary to perform behaviors (Gieure, Benvides-Espinosa, & Roig-Dobon, 2019b). Meaning that, it can be used as a direct predictor of intended behavior and individuals who have a strong belief towards entrepreneurship will be able to control and master the behaviors. Furthermore, entrepreneurial intention represents an important step in formation of entrepreneurial behavior and thus, considered as a determinant of actual entrepreneurial behavior (Ajzen, 1991).

### Previous Studies of Theory of Planned Behavior

Numerous of previous studies have examined entrepreneurial intention among students in higher educations. However, there is very little attention has been given on entrepreneurial behavioral studies. Table 1 summaries the selected of previous study on entrepreneurial intention and entrepreneurial behavior by using three independent variables of TPB.

**Table 1: Selected Studies on Entrepreneurial Intention and Entrepreneurial Behavior**

Author	Constructs of TPB				Behavior	Focus of the study
	ATB	SN	PBC	Intention		
Hongyi, Choi, Bo, & Yuen (2017)	✓	✓	✓	✓		The impact of entrepreneurial education on entrepreneurial intention of engineering students in Hong Kong
Linan (2008)	✓	✓	✓	✓		The effects skill and value perceptions on entrepreneurial intentions
Bereket & Wasihun (2015)	✓	✓	✓	✓		Determinants of entrepreneurial intentions among students technical-vocational education and training in Ethiopia
Gieure, Benavides-Espinosa, & Roig-Dobon (2019a)	✓	✓		✓	✓	The relationship between entrepreneurial intentions and behavior
Gieure, Benvides-Espinosa, & Roig-Dobon (2019b)	✓	✓	✓	✓		Entrepreneurial intentions in an international environment
Trivedi (2016)	✓	✓	✓	✓		The role of university in shaping entrepreneurial intention
Tsordia & Papadimitriou (2015)	✓	✓	✓	✓		The role of theory of planned behavior on entrepreneurial intention of Greek business students
Zollo, Laudano, Ciappei, & Zampi (2017)	✓			✓		Factors affecting universities' ability to foster students' entrepreneurial behavior
Farooq (2018)	✓	✓	✓	✓	✓	The significance of social support and entrepreneurial skills for determining entrepreneurial behavior
Aloulou (2016)	✓	✓	✓	✓		Predicting entrepreneurial intentions of final year Saudi university business students
Manning (2018)	✓			✓	✓	Enabling entrepreneurial behavior in a land-based university
Varamaki, Joensuu, Tornikoski, & Viljamaa (2015)	✓	✓	✓	✓		The development of entrepreneurial potential among higher education students

Author	Constructs of TPB					Focus of the study
	ATB	SN	PBC	Intention	Behavior	
Joensuu-Salo, Varamaki, & Viljamaa (2015)	✓	✓	✓	✓	✓	Factors influencing student to start a firm
Feng, Liqun, Hongyi, & Lo (2019)	✓	✓	✓	✓		The impacts of entrepreneurial learning on entrepreneurial intention
Buli & Yesuf (2015)	✓	✓	✓	✓		The determinants of entrepreneurial intentions: technical-vocational education and training students in Ethiopia
Galvao, Marques, & Marques (2018)	✓	✓	✓	✓		Antecedents of entrepreneurial intentions among students in vocational training programs
Soomro & Shah (2015)	✓	✓	✓	✓		Developing attitudes and intentions among potential entrepreneurs

## Entrepreneurship Education

Entrepreneurship education is about teaching entrepreneurial skills and developing new and innovative plans (Rahim, et al., 2015). The aim of entrepreneurial programs/courses is to stimulate entrepreneurship awareness among students that, in turn, would increase their interest in entrepreneurship (Keat, Selvarajah, & Meyer, 2011). Entrepreneurship education is crucial in developing students' mindset, behaviors, skills, and capabilities, which will create the entrepreneurs of the future (Chang & Rieple, 2013). Course contents like effective communication, entrepreneurial negotiation, locating sources of finance, leadership, new product development, creativity and service-based and technological innovation and related activities could prove to be crucial in enhancing students' abilities to identify, evaluate and exploit business opportunities (Bereket & Wasihun, 2015).

In the Malaysia context, the Ministry of Higher Education has taken action to make entrepreneurship courses as compulsory to all students in HEIs. In addition, these students are encouraged to get involved in entrepreneurship activities such as trainings, seminars, short courses, conferences, live projects, business simulation and many more. By receiving entrepreneurship education students have the opportunity to develop entrepreneurship knowledge, skills and attitudes to transform ideas into action, thus improving their employability chances (Zollo, Laudano, Ciappei, & Zampi, 2017). The educational approach practiced in HEIs in Malaysia must emphasize more on the learning outcomes that focuses on the broadening of knowledge, skills, manners, and attitude. For instance, the Malaysian Qualification Framework (MQF) learning outcome domains (LOD) namely (Malaysian Qualification Agency, 2015) outlined eight learning outcome domains that to be achieved by students. One of them is managerial and entrepreneurial skills (PLO 8). The entrepreneurial skills outcomes in this context are ability to learn through entrepreneurial experience, creativity, innovation, recognizing opportunities and entrepreneurial strategies, risk tolerance, internal locus of control, high achievement and endurance, and financial management. From this point of view, the behavior approach assumes that entrepreneurs can and should

assimilate entrepreneurial skills from entrepreneurship education (Farhangmehr, Goncalves, & Sarmiento, 2016). According to Banai & Tulimieri (2013), conducted research among business consultants, consultant's effective engagement calls for knowledge, skills, abilities and personality traits that could be identified in the selection process and enhanced through education and training.

## **Entrepreneurial Skills**

According to Anumnu (2014) entrepreneurial skills refer to entrepreneurial competencies which enable an entrepreneur to be successful in his/her field. Najafi Auwalu & Abdulsalam (2016) defined entrepreneurial skill as the skill in developing or creating a new thing that will add value to the society and generate monetary benefits to the entrepreneur. Meanwhile Chell (2013) stated that entrepreneurial skills incorporate behavior which maybe strategic, tactical and personal. From these definitions, we can assume that skill is a behavior of individuals develops to add value among themselves especially students may develop their skills from information received at the university from courses, lectures, seminars, trainings and many more. Therefore, students should be able to develop identical skills as they attended classes, trainings, courses or seminar to add value for themselves when they are graduated from HEIs. The entrepreneurial skills are not limited to certain skills; however, the skills are varied depending on one's individuals.

The review of the type of entrepreneurial skills based on previous researchers are discussed and interpreted. As studied by Anumnu (2014), she acknowledged seven entrepreneurial skills namely creative skill, innovative skill, managerial skill, analytical skill, marketing skill, communicative skill, and career skill among students in vocational technical institution in Nigeria. Communicative skill, marketing skill and creative skill were among the top three skills possessed by these students along with other skills. On the other hand, Sameh M., Abdalmuttaleb Musleh, Sherine, & Allam (2019) recognized six entrepreneurial skills in their study among accounting undergraduates namely, risk taking, critical thinking, problem solving, innovation, autonomy and need for achievement. The results of the study revealed that the important entrepreneurial skills perceived by accounting students to start their own business are risk taking, critical thinking, problem solving and innovation. Besides that, Sameh, Sherine, & Allam (2019) were examined the effect of entrepreneurial skills on self-employment practices to provide accounting university students with more opportunities in their future careers. The entrepreneurial skills for their study included communication, teamwork and collaboration, leadership, problem solving, enthusiasm, focusing on end goals, innovation and venture creation. The study revealed that all the variables of entrepreneurial skills had an effect of self-employment practices. The top three of entrepreneurial skills are communication skill, focusing on end goals, and teamwork and collaboration. Alcaraz-Rodriguez, Alvarez, & Villasana (2014) studied 13 competencies of entrepreneur profile among undergraduate students through entrepreneurship program namely creativity and innovation, perseverance, motivation to work, need of achievement, risk-taking, initiative, leadership, problem-solving skills, tolerance, teamwork, negotiation, self-confidence and self-knowledge. However, creativity and innovation, negotiation skills, initiative and need of achievement have the great impact on development of characteristics of participating students.

Table 2 below shows constructs and major findings of selected prior studies related to entrepreneurial intention and entrepreneurial behavior in entrepreneurship studies.

**Table 2: Finding of Previous Studies**

Author	Constructs studied	Major findings
Hongyi, Choi, Bo, & Yuen (2017)	Entrepreneurial education, attitude, social norm, self-efficacy and entrepreneurial intention	The four components of EE (why, what, how and who) do influence attitude, social norm, self-efficacy and EI. The four EE components and the three TPB antecedent variables are also interrelated with each other.
Linan (2008)	Entrepreneurial skills, closer valuation, social valuation, personal attraction, subjective norms, perceived behavioral control and entrepreneurial intentions	ES were significant predictors of the three motivational antecedents of intention (PA, SN & PBC).
Bereket & Wasihun (2015)	Attitude toward behavior, subjective norm, perceived behavioral control and intention	The two most predictable variables of EI were personal attitude and PBC
Gieure, Benavides-Espinosa, & Roig-Dobon (2019a)	Entrepreneurial skills, personal attitude, subjective norms, entrepreneurial intention and entrepreneurial behavior	PA don not directly and positively influence EI. SN had a highly significance on EI. Meanwhile ES strongly and significantly influence PA and SN. EI have a positive effect on individuals' behavior of starting a business.
Gieure, Benavides-Espinosa, & Roig-Dobon (2019b)	Entrepreneurial skills, university environment, personal attitudes, subjective norms, perceived behavioral control and entrepreneurial intention	PA and SN directly and positively influence EI but not PBC. ES were found to influence EI directly and positively whilst influencing PA. ES was sig to PA. UE has insignificant influence on skills development.
Trivedi (2016)	University environment and support, attitude towards behavior, subjective norms, perceived behavioral control and entrepreneurial intention	ATB and PBC have a strong and highly significant effect on EI. However, SN does not have any significant effect on EI. SN are significantly and positively related to ATB and PBC. UES is found to have statistically significant relationship only with PBC. For ATB it is found to have non-significant relationship.
Tsordia & Papadimitriou (2015)	Entrepreneurial curriculum and content, attitude towards entrepreneurship, subjective norm, perceived behavioral control and entrepreneurial intention	ATE & PBC have a significant influence on EI whereas SN proved to be insignificant in the process of intention formation. The role of ECC was insignificant in influencing intentions of business students to pursue a self-employed career.
Zollo, Laudano, Ciappei, & Zampi (2017)	University environment, risk-taking propensity, locus of control (internal control, powerful others & chance), entrepreneurial attitude and entrepreneurial intention	Students' EI is mainly affected by their EA, which is in turn influenced by some of the personality trait namely risk-taking propensity and locus of control. University environment significantly influences students' EA and EI.
Farooq (2018)	Social support, entrepreneurial skills, attitude towards entrepreneurship, subjective norm, perceived	SS has a positive and significant direct effect on ATE, PBC, EI and EB. The significance of ES for explaining the overall variance in EB through EI. ES have a positive and significant direct effect on ATE, PBC and EI.

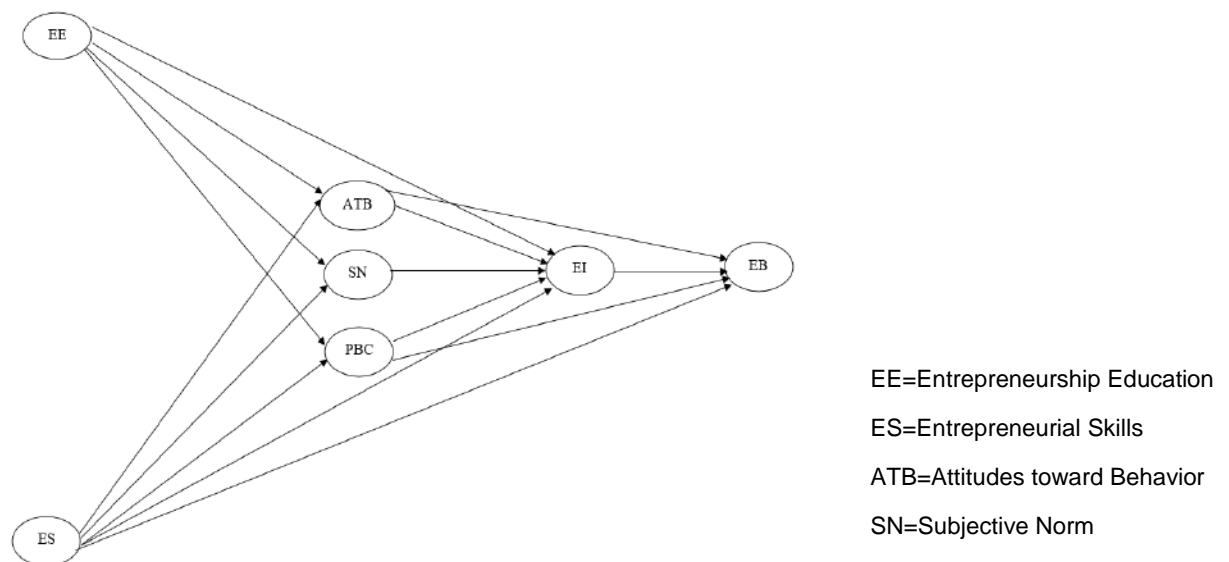
	behavioral control, intention and behavior	However, non-significant relation between SN and EI is also found.
Aloulou (2016)	Demographic characteristics, attitudes toward behavior, subjective norm, perceived behavioral control and entrepreneurial intention	All the main antecedents of EI contribute significantly to the explanation of intentions. SN has more influence than ATB and PBC on EI. SN has a more significant influence on attitudes and less on PBC. Demographic characteristics have an indirect influence on EI through SN and PBC.
Manning (2018)	Entrepreneurial orientation, social learning, entrepreneurial knowledge and information, attitude toward behavior, intention and behavior	Literature review
Varamaki, Joensuu, Tornikoski, & Viljamaa (2015)	Entrepreneurial pedagogy change in entrepreneurial attitude, change in perceived behavioral control, change in subjective norm, and change in entrepreneurial intention	Change in EA and change in PBC have a significant and positive impact on the change of EI. Whereas the relationship between change in SN and change in EI was not significant. EP had a significant and positive impact on the change in EA. The change in EA has also a positive impact on the change in PBC.
Joensuu-Salo, Varamaki, & Viljamaa (2015)	Entrepreneurial characteristics, attitudes, subjective norm, perceived behavioral control, entrepreneurial intention, behavior, gender, role models and basic education	The best antecedents of EI was attitude followed by PBC. EC and SN are also significant, but their role is quite small. Gender, basic education, EC and PBC were significant to EB. Meanwhile ATB n SN were not significant to EB.
Feng, Liqun, Hongyi, & Lo (2019)	Entrepreneurial learning, attitude toward entrepreneurship, subjective norm, perceived behavioral control and entrepreneurial intention (MV-Prior exposure to entrepreneurship (PEE))	EL was significantly and positively associated with EI. The mediating effect of ATE, SN and PBC have a positive and significant relationship between EL and EI. The moderating role of PEE for the effects of education on ATE and PBC were significant meanwhile the moderating effect of PEE for the effects of education on SN was not significant.
Buli & Yesuf (2015)	Attitude toward behavior, subjective norm, perceived behavioral control and intention	The findings indicate that the two most predictable variables of EI were personal ATB and PBC. SN has insignificant relationship with EI. However, SNs have a significant and greater influence on students' ATB and PBC.
Galvao, Marques, & Marques (2018)	Family background, entrepreneurship education, personal attitude, subjective norms, perceived behavioral control and individual entrepreneurial intention	Students' family background of entrepreneurship increases their IEI. Among three antecedents of TPB, only PBC had significant relationship with FB. PA and PBC have a significant and positive relationship with IEI but not SN. Surprisingly EE does not influence students' IEI. EE also has no effect on PA, SN and PBC.
Soomro & Shah (2015)	Attitudes towards entrepreneurship, attitudes towards behavior, subjective norms, perceived behavioral control and intention entrepreneurship	Entrepreneurship intention was found to be significantly and positively correlated to ATE. A high correlation was found between EI and ATB. ATB, SN and PBC were found positively and significantly related EI.



Inconsistency findings in previous studies could become the gaps for this study. The TPB consists of three components (attitude toward behavior, subjective norms and perceived behavioral control) to determine individual entrepreneurial intention. Majority of the past researchers used the three components of TPB in predicting entrepreneurial intention (Hongyi, Choi, Bo, & Yuen, 2017; Bereket & Wasihun, 2015; Gieure, Benvides-Espinosa, & Roig-Dobon, 2019b; Trivedi, 2016; Tsordia & Papadimitriou, 2015; Aloulou, 2016; Farooq, 2018) however, there are some of the researchers used one component of TPB to determine entrepreneurial intention (Zollo, Laudano, Ciappei, & Zampi, 2017; Manning, 2018) or two components (Gieure, Benvides-Espinosa, & Roig-Dobon, 2019a), of TPB in their studies. The findings discovered the three TPB components are interrelated with each other. A few of researchers found that attitude toward behavior is significant to entrepreneurial intention while others are not significant. There are also found that subjective norms highly significant, moderately significant and insignificant to entrepreneurial intention. On the other hand, more or less researchers found that perceived behavioral control has positive influence or was not significant to entrepreneurial intention. For these inconsistency result, this study will use the three components of TPB with the adding two external variables (entrepreneurship education and entrepreneurial skills) to the theory. Therefore, the following conceptual framework has been constructed in this study.

### Conceptual Framework

The conceptual framework exploits the established model based on theoretical contributions adapted from The Theory of Planned Behavior (Ajzen, 1991). The framework proposes to extend the TPB by incorporating two new constructs namely entrepreneurship education and entrepreneurial skills. Therefore, figure 1 is configured to show the relationship the following framework is representing the conceptual framework for this study:



**Figure 1: The Conceptual Framework Entrepreneurial Behavior Development Model**

## Research Hypotheses

Based on the conceptual framework develop, there five hypotheses formulated as follows:

- H<sup>1</sup>: EI significant positively related with EB
- H<sup>2</sup>: ATB, SN, PBC are significant positively related with EI
- H<sup>3</sup>: ATB, SN, PBC are significant positively related with EB
- H<sup>4</sup>: EE significant positively related with ATB, SN, PBC
- H<sup>5</sup>: ES significant positively related with ATB, SN, PBC
- H<sup>6</sup>: EE, ES are significant positively related with EI
- H<sup>7</sup>: ES significant positively related with EB

## CONCLUSIONS

This paper conceptually explores the determinants of entrepreneurial behavior among students in HEIs. In measuring entrepreneurial behavior, the TPB by Ajzen (1991) has been used widely by researchers. However, the past literature still has a gap regarding the relationship between intentions and behaviors. Moreover, a lot of entrepreneurship studies uses entrepreneurial intention as dependent variable. As recommended by past researchers, this study is undertaking to examine the entrepreneurial behavior of the students who take the entrepreneurship course and who intend to start a business and are about to do it or have recently started the business. Due to the rising rate of unemployment in Malaysia, the entrepreneurial behavioral development among students in HEIs is advantageous to them in order to be self-employed after graduation. If the students want to take advantage of knowledge and education received from HEIs, they should manage and fully utilize the knowledge in innovation and practices.

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# The Phenomenon of B40 Business Venturing Survival: A Symbolic Interactionism Perspective

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## ABSTRACT

This study aims to explore and explain the phenomenon of the Bottom 40 business venture's survival. B40 group refers to the "bottom 40 per cent" members of the population, with a monthly household income of RM4,850 and below. The B40 group is further sub-divided into B1, B2, B3, and B4 and earns a monthly payment of RM2,500 and below, RM2,501 - RM3,170, RM3,171 - RM3,970, and RM3,971 - RM4,850, respectively. Previous studies on business venture survival indicate that the performances of B40 are not as good as expected. Most of them cannot survive and sustain their enterprises for an extended period, and some have faced bankruptcy. Therefore, this study uses symbolic interactionism as a foundation to interpret the interaction between social actor in terms of self and mind, self and society, and self and environment. This study employs qualitative research methods with interpretive perspective using idealist ontology and constructivism epistemology. This study employs an abductive approach, inquiry strategy, and thematic data analysis technique to achieve the objectives—thirty cases of B40 business venture involved in this study. The primary data source was the semi-structured interview. The interview transcripts analyze by using thematic data analysis. This study finally comes out with a new model of B40 business venturing survival.

**Keywords:** Bottom 40; Bottom 40 Business Venture; New Venture Survival, Symbolic Interactionism.

## INTRODUCTION

Entrepreneurship is one of the essential activities in global economic development. The expansion of entrepreneurial activities creates lots of opportunities in various sectors of society among Bottom 40 (B40) household group. The government formulate policies which is National Entrepreneurship Policy (DKN) 2030 that emphasizes the development of inclusive and competitive entrepreneurial community, especially the SME sector, capable of competing on the global market and encouraging the development of the B40 group and social entrepreneurs (SME Corp, 2021). The government encourage B40 to involve in business venture. Most B40s are involved with micro-enterprises (11<sup>th</sup> Malaysian Plan). The business is more into the manufacturing, retail, wholesale and transportation sectors.

The micro enterprise has been the backbone of economic growth of many economies (Student & Robu, 2013). The micro entrepreneurship that the B40 involved has an essential and strategic role in improving the country's economy (Suraya, 2020). The micro enterprises refer to the sector that is easy to enter because it focuses on local resources (Nxumalo & Kaseeram,



2017) . The micro enterprises are informal, usually run by owners and families (Al-Shami, Mamun, Sidek, & Rashid, 2019 & Bushe, 2019). Most of them are survivalists with income generated below the poverty line and trying to provide needs of their families only (Alvarado Lagunas, Dávet al, 2018, Xi, Lasch, Thurik, & Robert, 2020). The B40 business venture have to survive their business with the support provided heavily by Amanah Ikhtiar Malaysia (AIM), The Council of Trust for the Bumiputera (MARA) and The National Entrepreneurial Group Economic Fund (TEKUN) (Zainol, Al Mamun, Hassan, & Muniady, 2017). Therefore, the B40 enable to have a strong performance, as evidenced by an increase in total sales and assets, the business's survival is guaranteed (Suraya, 2020).

Furthermore, the B40 business venture able to achieve survival when good in the business performance (Korunka, Kessler, Frank, & Lueger, 2010; Bruöderl & Schuössler, 1990; Mohamad Radzi, Mohd Nor, & Mohezar Ali, 2017 & Schmidpeter & Weidinger, 2014). Some indicators contribute to business venturing survival among these B40s. This study highlighted based on symbolic interactionism, which shows the interaction between self and mind (entrepreneurial attitudes, entrepreneurial mind-set and knowledge), self and society (business networking, business collaboration and customer feedback) and self and environment (innovation, digital marketing and government support). These indicators contribute to B40 business venturing survival. However, most of B40 business ventures struggle to survive their first years of operation and thus do not contribute to society's benefits (Neneh, 2011). Some of B40 business venture closed their businesses after operating for at least three years (Mahdin, Saleha, Majid, Campus, & Selangor, 2019).

The B40 business owner experienced difficulties and many problems while succeeding in the market. The majority of these B40 business plans found to fail after five years in the market. They usually last less than five years and were shut down (Wong et al., 2013; Noor Hazlina & Pi-shen, 2009). Meanwhile, approximately 60% of Malaysian SMEs failed to remain in the business (Nurulhasanah, Zulnaidi, & Rafisah, 2014). Abu, Rohani, Subarna, and Azrai (2011) claimed that the failure of new companies was significant. Start-up enterprises fail in the vast majority (nearly 90%) of new businesses after just five years. Only 10% of these new startup companies survive beyond five years. Thus, the objective of this study is to explore and explain the phenomenon of B40 business venturing survival. In particular, this study focuses on how the B40 survive in their business. The rest of the study is preceded in the following sequences. Section 2 provides the literature review on the relevant theories and previous studies on phenomenon of business venturing survival. Section 2, in turn, highlights the methodology of the study. Finally, Section 3 concludes the study.

## **New Venture Survival**

It is a well-known fact that many new ventures fail within the first few years of operation, thereby hurting themselves, their investors, and the economy (Headd 2003; Wiklund et al. 2010). New venture survival is defined as a continuation of a new business organization's operations, which refers to managing to remain in business (Gandolph, Elijah, Lateef, Joshua, & Gbolahan, 2021 Akindele et al., 2012). The new venture survival also refer to reflection of a company's ability to respond to rapidly changing environments successfully (Phornlaphatrachakorn & Na Kalasindhu, 2020; Korunka, Kessler, Frank, & Lueger, 2010). Therefore, the new venture survival is measured by the company's ability to include employees internally, create a favorable business climate, build the image and brand of products, develop product innovation, and have a social impact on society (Geraldina and Rossieta, 2011).

The new venture survival also refer to a measurement of new venture's business performance (Korunka, Kessler, Frank, & Lueger, 2010; Bruderl & Schussler, 1990; Mohamad Radzi, Mohd Nor, & Mohezar Ali, 2017; Schmidpeter & Weidinger, 2014). The survival is also associated with business performance and business success. When a venture can survive to sustain the products in the industry for a particular time, it can achieve business success. The new venture survival also facing a lack of ability to realize profits or sales could even become the indicator for measuring performance (Josefy et al. 2017). Researchers have contemplated survival in the context of certain expectations (such as the expectations of entrepreneurs, investors, or the general public) to interpret survival better and make inferences about new venture performance in terms of success and failure, among other things (Soto-Simeone, Sirén, & Antretter, 2020).

### **B40 Business Venture**

In Malaysia, the household group is categorized into different income groups: bottom 40% (B40), middle 40% (M40) and top 20% (T20). B40 group refers to the "bottom 40 percent" members of the population, with a monthly household income of RM4,850 and below households (Department of Statistics Malaysia, 2019) . The B40 group is further sub-divided into B1, B2, B3, and B4, and earns a monthly income of RM2,500 and below, RM2,501 - RM3,170, RM3,171 - RM3,970, and RM3,971 - RM4,850 respectively (Department of Statistics Malaysia, 2019). This classification allows more focused planning, tracking and services to reduce the income disparity between households (Department of Statistics Malaysia, 2019).

Based on the, the B40 group is the group with the smallest pattern of change in consumption compared to the M40 and T20 groups (Department of Statistics Malaysia, 2020). The B40 have low wealth and non-financial asset ownership, vulnerable to economic shocks and highly dependent on government assistance (UNDP 2020) to affect the situation (Ibrahim & Othman, 2020). Therefore, the government has to encourage the B40 to engage and create a new venture in order to increase their income (11<sup>th</sup> Malaysia Plan, 2020). As such, the establishment of MSEs would be the best platform for uplifting B40 households into middle-class society by providing family members with business opportunities to improve their living standards (SME Corp., 2021).

The B40 household group has initiatives to increase income. The B40 has been heavily involved and opened new businesses to fulfil their living needs. Typically, B40s start small-scale businesses with capital derived from their savings and loans from their friends and family (Sohns & Diez, 2019). Thus, their business categorized as a micro enterprise. B40 business ventures established traditionally have fewer barriers upon start-up and can function across diverse sectors of the economy with lower capital and skill requirements (Munoz, Welsh, Chan, & Raven, 2015). Hence, majority number of SMEs establishment in year 2018 came from the micro-enterprises (76.5%). Whereas, the number of establishments for small and medium enterprises is 21.2% and 2.3% of total SMEs respectively (SME Corp., 2018).

These B40 entrepreneurs are less likely to hire non-family employees and make smaller initial investments than entrepreneurs who founded their businesses out of the opportunity (Brünjes & Revilla Diez, 2012; Gottschalk et al., 2010). Most of the time, these B40 business ventures have little inventory and access to money; thus, they operate on a bootstrapped basis (Munoz et al., 2015; Eversole 2004). These companies also helped create jobs by providing opportunities for those unable to find employment while helping to eliminate poverty through profitability (Rogerson 2004; Servon 1999). The B40 business venture also provide the

community with cheaper products and services because the price is usually lower (Munoz et al., 2015). However, the B40 business venture in particular faces the following risks: financial, operational, strategic, hazard, human comfort, succession, equipment failure and health. Risk impacts are lower revenues, higher business operating costs, and inability to expand business and lower-income (Sum, R. M., 2020).

However, this study will explore and explain the phenomenon of B40 business venture's survival (see Figure 1). This study based on three foundations of symbolic interactionism which self and mind, self and society and self and environment. Firstly, the indicators of self and mind are individual attributes, entrepreneurial mindset and skill and knowledge. Secondly, the indicators of self and society are business networking, customer feedback and business collaboration. Thirdly, the indicators of self and environment are innovation, digital marketing and government support. Moreover, this tentative framework may restructure during and after data collection due to the new themes of this study will be appear.

The entrepreneurial attitudes are described at the individual level by a combination of fear of failure and understanding of regional start-up potential and to set up a firm often vary across regions (Bosma & Schutjens, 2011). The entrepreneurs react to risk-taking, creativity, proactive in the business situation, and intent to survive in their business. Thus, when the entrepreneur encounters belief, feeling and intention, they have a roadmap to plan and adequately manage the new business venture. The study revealed a strong and positive correlation between risk-taking and organizational survival measures. Thus, a firm's risk-taking ability may be able to assess its business performance and success level (Amah & Okoisama, 2017). Concerning risk-taking is an essential tool of B40 business venturing survival. The manager is willing to take risks to achieve higher business performance and achieve growth in the business irrespective of the business environment in which they operate Taylor (2013). Furthermore, the study indicate that the proactive of entrepreneurs contribute to a good impacts of operational risks on business operations. This shows that this situations able to minimize in ensuring the survival of the business (Fadhilah, Yusoff, Hayati, & Samad, 2020). Thus, the individual attribute will contribute to the B40 business venture's survival.

The entrepreneurial mind set comprised of four characteristics. They have the ability to take risks, learn from their mistakes and successes, be constantly on the lookout for innovative ideas, and be proactive and motivated (Rekha, Ramesh, & Jaya Bharathi, 2014). The high failure rate of SMEs in South Africa is due to a lack of an entrepreneurial mind set (Rekha et al., 2014) . Our findings indicate that knowledge-based factors also have a significant influence on decisions to start a business (Arenius, 2006).

There is a linkage between entrepreneurial education and small business survival and success (Candiya Bongomin et al., 2018) . Furthermore, discovered a shift in productivity, especially in the small and medium business field, with a direct relationship between entrepreneurial education and entrepreneurs' ability to operate their businesses (McCormick and Ongile, 1996, Thapa, 2007 & (Candiya Bongomin et al., 2018).

According to Raza, Nurunnabi, & Minai (2019), social networking defined as a networking provides a channel to build business partnerships, recognize, establish or act toward business opportunities, share experiences and investigate potential business partners for ventures. The study's findings reveal that market networking, financial networking and political networking provide an essential and beneficial contribution to new venture success and competitive advantage (Anwar, 2018). An entrepreneurial team consists of two or more persons who have an interest, both financial and a commitment to a venture's future and success. The collaboration is interdependent in work to the pursuit of common goals and venture success

(Box & Larsson Segerlind, 2018) the collaboration among the entrepreneurs with a network is effect on new venture survival. For instance, the findings indicate that 273 entrepreneurs, initial resources at start-up, network density, and time to first collaboration affect survival probability (Song, Dana, & Berger, 2019). The business trends that are changing the direction of high technology, the small business has the initiative to try the latest marketing strategy to increase the demand of a product, Thakkar, 2015). Also, the feedback from the customer to introducing new products or services, enhancing existing products or services, avoiding undesired features, accentuating trending characteristics, and increasing sales are all possible outcomes of good client feedback usage (Mustansir, Shahzad, Muzaffar, & Malik, 2018)

The product innovation is a critical driver of business competitiveness (Porter and Ketels, 2003) and firm productivity (Lichtenthaler, 2016; Oh et al., 2015), particularly for SMEs (Love and Roper, 2015; Pett and Wolff, 2009). The significance of innovation indicates that especially new technologies, non-patented and domestic ones, have been found to have a positive effect on the probability of a company's survival (Ortiz-Villajos & Sotoca, 2018). Digital marketing is an alternative trending method in marketing their products Digital marketing has evolved into a new phenomenon that combines innovation with mass development to ensure marketing objectives (Savira & Suharsono, 2013). One of the key goals of digital marketing is to learn how customers use emerging technology and how they can benefit the business, allowing for more efficient interaction with their target market in digital environment (Teixeira et al., 2018, Reino, L. S. A.,2010). The entrepreneurs have ability to innovate their business by undertaking the survival mechanism for manage the impact of crisis, namely digital marketing through distribution channel (Yu-Lian, 2008), product reengineering and use of cheap and effective online campaign (Bourletidis & Triantafyllopoulos, 2014) and product delivery (Busalim, Che Hussin, & lahad, 2019).

Government support for B40 business venturing is provided through local, regional, and national levels of policies. The developing country are striving to vitalize start-ups through active government support policies (Lee & Kim, 2019). There is some rationale for the government support for B40 business venturing. The study's findings revealed that, in government-supported start-ups, entrepreneurship had a positive effect on business survival (Lee & Kim, 2019). The government assistance programmes also to assist B40 business venture to overcome financial and nonfinancial constraints that inhibit their business operations and enhance their entrepreneurial practices (Nakku, Agbola, Miles, & Mahmood, 2020). Thus, this study will use this tentative framework into fieldwork to obtain the data from the B40 business venture to explore the phenomenon.

### TENTATIVE FRAMEWORK

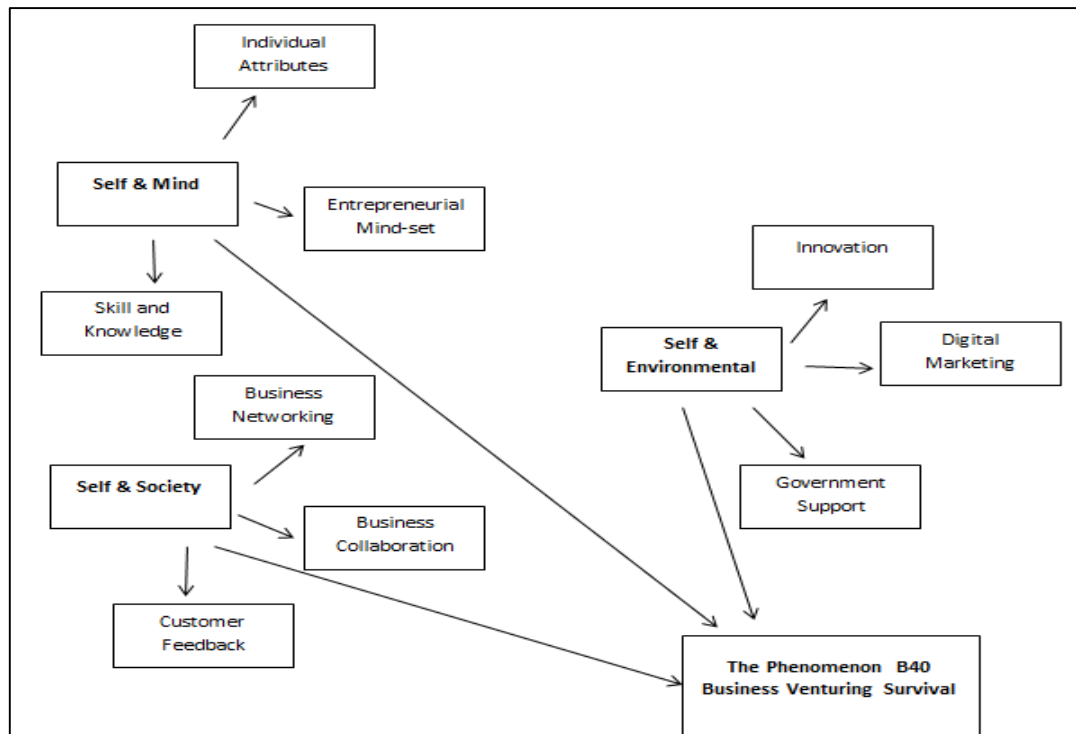


Figure 1: Tentative Framework

From the proposition of symbolic interactionism, the tentative framework of this study can be illustrated as in Figure 1. Symbolic interactionism is a sociological micro-level theoretical perspective that examines how individuals create and maintain society through frequent, meaningful interactions (Carter & Fuller, 2015). Symbolic interactionists are frequently more concerned with subjective meaning than with objective structure – with how repeated, meaningful interactions between individuals come to define the makeup of society (Blumer, H., 1980). Symbolic interactionism upholds the fact that individuals act based on the meanings of objects. The interaction occurs within a particular social and cultural context in which physical and social entities (persons) and situations must define or classified based on personal meanings (Blumer, 1969). Blumer's theoretical approach toward symbolic interactionism can be summed up in three proposition; (1) Human beings act toward things based on the meanings they have for them; (2) the meaning of things is derived from, or arises out of, one's social interactions with others; (3) meanings are handled in, and modified through, a person's interpretive process when dealing with the things they encounter (Blumer, 1969). Thus, this study apply this foundation to explain the interaction between social actor, self and mind, self and society, and self and environment of the phenomenon of B40 business venturing survival.

First, symbolic meaning understands as an indicator of business venturing survival. For example, the B40 business owner develops an understanding of social norms, develops beliefs, reflects their belief, and evaluates the symbol. The B40 business owner uses a symbol to making meaning of business venturing survival. Individual attributes, entrepreneurial mind-set, skill, and knowledge are used as symbols and indicators for business venturing survival.



The B40 will use their sense alike entrepreneurial mind-set to understand and reflect to the uncertainty that's come during business survival. Symbolic meaning derives from interactive interpretations and is shared by groups of people, rather than simply developing from the cognition of an individual.

Secondly, Mead argues that people engage in role taking, which is imaginatively assuming the point of view of others and observing their own behaviour from this other perspective (Blumer, H., 1980). Accordingly, frames are schema about how individuals interpret the meaning of a situation, and thus are constructed individually based on personal experiences and knowledge. For instance, the B40 that involve in business venturing interact with the supplier, customer, stakeholder, financial institution and government in order to achieve the business objectives. The business collaboration and customer feedback also create an experiences and knowledge between B40 business venture and society. Therefore, the interaction B40 and society appear in this interaction. Thirdly, Mead believed that through such symbolic interaction, humans cease being puppets controlled by environmental strings and instead, become co actors who have control in creating their social reality (Blumer, H., 1980). Even though researchers realize the important impact of symbolic meaning on use behaviors, most researchers choose to focus on only general use behaviors, such as innovation, digital marketing and government support.

## RESEARCH METHOD

This study employs qualitative approach with interpretive perspective using idealist ontology and constructivism epistemology. Interview technique with purposive sampling technique has been utilized to achieve the research objectives. Thirty cases of B40 business venture involved in this study. The interview transcripts analyze by using thematic data analysis.

The research philosophy adopt contain important assumptions about the way in which the study view the world. These assumptions will underpin the this research strategy and the methods that choose as part of that strategy. This study use interpretivism as a research philosophy. Interpretivism advocates that it is necessary for the researcher to understand differences between humans as social actors. In this study, the social actors refer to the B40 business owner that has a role in which they interpret the phenomenon of business venture survival. Interpretivism shows that social reality is socially constructed. For instance, Participant 1 interpret that the business venture survival is about the total sale of business. While, the participant 2 interpret that the business venture survival is about the years of business establishment. The participants as an social actor will impose subjective meaning. Then, the researcher will interpret the lay language into technical or academic language. The actors have a role to explain the meanings and the researcher just an a mediator. The researcher needs to focus on meaningful social action.

Research paradigm is a way of examining social phenomenon from which particular understandings of this phenomenon can be gained and explanation attempted. This study is using idealist ontology and constructivism epistemology. The idealist ontology refers to the researcher's view of the nature of reality or being (Saunders, 2007). It is refuses "to adopt any permanent, unvarying standards by which truth can be universally known" (Guba & Lincoln, 2005). The idealist ontology is related to the social reality created by the actor in this research. In this study, the researcher is an observer and the social actors are B40 business owner. The business owner will tell the phenomena they face about how to survive in the business venture.



The researcher is responsible for agreeing to the ideas expressed by the social actors. Based on the idealist ontology, the study will apply purposive sampling technique. The purposive sampling enables to answer the research objective. This sampling used with very small samples is particularly informative, in depth and illustrative. Then, when returning from the field, the researcher has to report which one is agree and disagree.

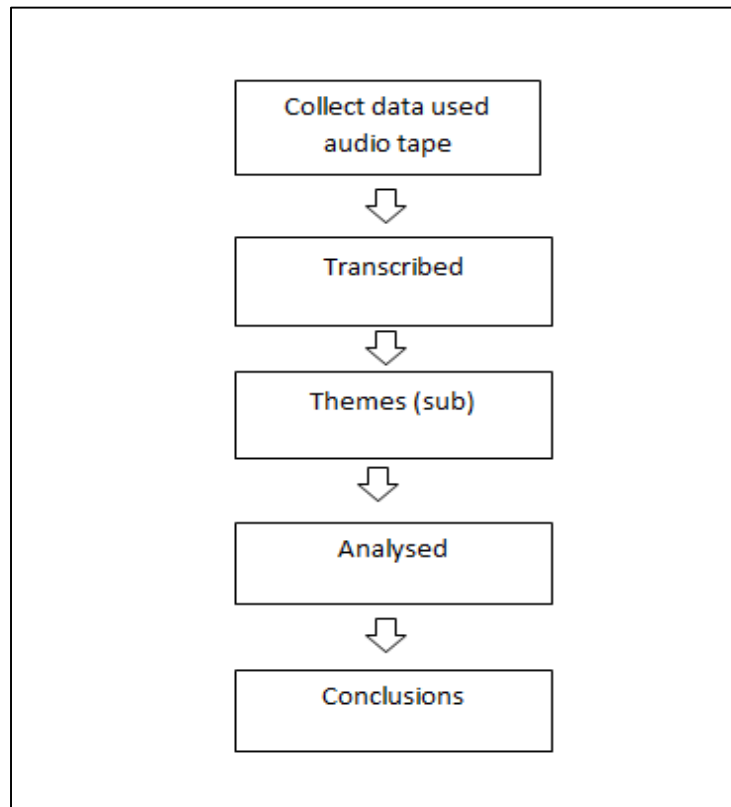
Epistemology concerns what constitutes acceptable knowledge in a field of study. The aim to choose this paradigm is to enhance the understanding the way of this study. In this paradigm, the researcher who considers data on resources needed is likely to be more akin to the position of the natural scientist. The researcher would place much less authority on the data collected by the feelings researcher and attitudes of the participants towards their business ventures (Saunders, 2007). The resources researcher would view the objects studied by the feelings and attitudes as social phenomenon which have no external reality. The researcher in this study has to change the lay language of the answer during interview into the technical language. For instance, the researcher will interpret what the B40 business owner's explanation during interview session. It is because sometimes the participants use lay language to answer the questions. Thus, this is the role of researcher in this paradigm.

The research strategies provide difference ways to answering research questions by specifying a starting point, a series of steps and an end point. In the particular of these points and steps that distinguishes the strategies. This study will used the abductive research strategies to answering the research questions. The aim of this strategy is to describe and understand social life of B40 business venture motives and how the social actor survives in their business. The strategy is from to discover the social actor everyday lay concepts, meanings and motives which the indicator of the B40 business venture survival. Besides that, this strategy to produce a technical account for lay language to technical language by the researcher or observer. Then, this strategies end to develop a theory and test it iteratively. Thus, the abductive strategy shows that the researcher will be exploring the everyday language of social actor that use in their business and interpret of the phenomenon under investigation.

The sources of data commonly used in the qualitative research are documentation, archival records, interviews, direct observations, participant's observation and physical artifacts. This study will used an interview as a data sources during data collection. There are three type of interview which is structured interview, semi-structured interviews and unstructured or in depth interviews. Thus, this study will used the semi-structured interviews. In semi-structures interviews the researcher will have a list of themes and questions to be covered, although these may vary from interview to interview (Saunders, 2007). On the other hand, the study have additional questions may be required to explore the research question and objective. The semi-structured interview also provide the study with the opportunity to probe answer in order to the participants to explain, or build on their responses.

The interviews were analysed using thematic analysis. The thematic analysis is a process for encoding qualitative information that requires an explicit code that may be a list of themes (Alhojailan & Ibrahim, 2012)). A theme is a pattern can be found from interview data in a minimum or maximum that describes and organizes the possible observations to interpret aspects of the phenomenon (Boyatzis, 1998; Saldana, 2021).The thematic analysis is also considered the most appropriate for any study that seeks to interpret using interpretations. It provides a systematic element to data analysis. It allows the researcher to associate an analysis of the frequency of a theme with one of the whole content (Alhojailan & Ibrahim, 2012). The themes develop the clues and then adapt or connect them to the raw data as summary indicators for deferred analysis (see Figure 2). First, use audio tapes during the

interview. Second, transcribe the conversations. From the transcribed dialogues, patterns of experience can be listed by going through direct quotes or common ideas. The researcher is able to identify data to classify patterns, then combine and catalogue related patterns into sub-themes, and gather sub-themes through the emerging patterns (Saunders et al, 2009; Saldana, 2021). Third, the researcher gets feedbacks from the transcribed conversations and then can do a thematic analysis by building a valid argument for choosing the theme Saunders et al, 2009). Finally, the researcher gains the information to make conclusions from the theme statements to develop a story line (Saldana, 2021).



**Figure 2: Thematic Analysis Process**  
(Source: Saldana, 2015)

## CONCLUSIONS

To summarize, the formation “body of knowledge in entrepreneurship literature” will be create based on literature of “B40 business venture survival in Malaysia. The B40 business venture is an important sector to the development of Malaysian’s economy. The government has initiatives to bring out the B40 business venture in order to them survive in their business. The B40 business venture increases their business survival throughout several of indicators that highlighted in this study. This study is to explore and explain the phenomenon of B40 business venture by using the symbolic interactionism. The symbolic interactionism is summed up in three proposition; self and mind, self and society and self and environment. There are indicators of business venture survival included individual attribute, entrepreneurial mindset, knowledge and skills, business networking, customer feedback, business collaboration, innovation, digital marketing and government support.

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# Measuring Financial Efficiency of Nonprofit Organisation: A Literature Review

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## ABSTRACT

In an era of globalisation, nonprofit organisations operating environment has become more competitive, and their goals and priorities are constantly being adjusted to reflect changing trends. The prevailing view on essential financial measurement surprises researchers and practitioners working with nonprofit organisations partially due to a general lack of empirical tests of existing measures. Past literature on nonprofit organisations employs a variety of methods for calculating financial efficiency. Among the techniques are the use of financial ratios. Hence, there is a need to reveal how efficient nonprofit organisations are regarding their financial performance. Therefore, the purpose of this paper anticipates providing a literature review on financial efficiency focusing on financial ratios measurement on nonprofit organisations.

**Keywords:** Financial efficiency; Financial ratio; Nonprofit organisations; NPOs.

## INTRODUCTION

A nonprofit organisation is one whose primary objective is not profit maximisation. In the book *Managing a Nonprofit Organisation* (Wolf, 2012), the term nonprofit organisation refers to those legally constituted, non-governmental entities incorporated under state law as charitable or not-for-profit corporations set up to serve some public purpose and are tax-exempted by the Internal Revenue Service (IRS). Nonprofit organisations are hugely diversified, including religious institutions, universities, museums, homeless shelters, civil rights groups, labour unions, political parties, and environmental organisations, healthcare organisations, charitable organisations, voluntary agencies, aid agencies, foundations, trade unions, cooperatives, social enterprises, humanitarian disaster relief agencies and organisations of the third sector (Boris and Eugene Steuerle, 2006; Moxham, 2009). While Lettieri, Borga, and Savoldelli (2004) define a nonprofit organisation as an organisation whose primary objective is to create social value for society and not prioritise profit for stakeholders. Corresponding to Moura, Lima, Deschamps, Van Aken, Costa, Treinta, and Cestari (2019), a nonprofit organisation has financial management restrictions and does not share benefits with stakeholders, regardless of whether they are the organisation's owners, investors, or financiers. As we know, nonprofit organisations' funds are derived from public donations. They actively seek funds to cover the cost of administration, and the expending of nonprofit organisations activities in return will benefit society. This necessitates that the nonprofit organisation's budget is dedicated primarily to charitable purposes. Donations made to nonprofit organisations are typically tax-deductible to individuals and businesses that make them. The organisations themselves pay no tax on the received donations or any other money earned through fundraising activities.

Efficiency is associated with achieving an economic goal in the sense of achieving the optimal cost-benefit ratio (Ruhli and Sauter-Sachs, 1993). According to Ku-Mahamud, Ghani and Kasim (2010), efficiency measurement is concerned with how effectively an organisation

utilises its resources to generate output. Therefore, resource optimisation can significantly improve an organisation's efficiency and competitiveness. Overall, efficiency theory is concerned with the relationship between resources used and results obtained. For a nonprofit organisation, efficiency can be interpreted as accomplishing its mission at the lowest possible cost (Ecer, Magro and Sarpa, 2017). So it is an ideal that guides how an organisation decides to spend its funds or allocate its resources to maximise its value.

Financial efficiency plays a vital role in showing the effectiveness of an organisation in managing its finances. According to Prentice (2016), financial measures provide an empirical basis for analysing organisational capacity, financial health, and efficiency by nonprofit researchers and practitioners. The financial efficiency measure refers to financial ratio, a principle component of two identified data variables obtained from an organisation's financial statements. Often used in accounting, there are many standard ratios used to attempt to evaluate the overall financial health of a company or other organisation. Hence, it is understandable why individual donors and funding institutions are concerned with the financial efficiency of nonprofit organisations. So that, nonprofit organisations need to maintain enhancing their efficiency (Lettieri et al., 2004).

Financial ratios provide an organisation with a means of assessing its performance. Ratios are used to quantify the relationship between two or more financial statement components. They are most effective when comparing results over multiple periods. Financial ratios can be classified based on the information they provide to the specific purpose for which they are being used—financial ratios are valuable indicators for measuring the financial efficiency of nonprofit organisations. By relying on financial ratios, nonprofit organisations have largely emphasised definitions of efficiency centred on cost minimisation and the presence of cost structures (Coupet and Berrett, 2019). As such, the purpose of this study is to conduct a review of prior research on evaluating the financial efficiency of nonprofit organisations through the use of financial ratios. A systematic approach was used to review the published literature on this topic. The remainder of this paper is organised by detailing the method following with analysing the financial ratios used to measure the financial efficiency of nonprofit organisations—finally, the recommendations for future studies.

## RESEARCH METHOD

A review of the literature was carried out in this paper by searching, collecting, and analysing relevant published articles on nonprofit organisations' financial efficiency. The author began the review by describing the search strategy, divided into three stages: identification, screening (inclusion and exclusion criteria), and eligibility.

Identification is a process that entails searching for synonyms, related terms, and variants of the study's primary keywords, efficiency, financial efficiency, and nonprofit organisations. It aims to extend the database's search functions for finding additional relevant articles for the review. The initial step is to identify the keywords that will be used. Next, similar keywords related to nonprofit organisations were used based on previous research. Finally, the author improved existing keywords and created a complete search string (using phrase searching, wild card, truncation, Boolean operators, and field code functions) for the two major databases, Scopus and Web of Science (Table 1).

Why did the author choose these two databases? Scopus is one of the largest abstract and citation databases, peer-reviewed journals in high-level subject areas such as life sciences, social sciences, physical sciences, and health sciences. Additionally, it is user-friendly.

Similarly, Web of Science is a subscription-based website that provides access to multiple databases containing comprehensive citation data for various academic disciplines, including science, social science, the arts, and the humanities. After searching using these two databases, Scopus and Web of Science, 17 articles were discovered.

**Table 1: The Search String**

Databases	Keywords used
Scopus	TITLE-ABS-KEY(("financial efficiency" ) AND ("nonprofit organi?tion*" OR "non-profit organi?ation*" OR "NPO*") AND ("financial ratio*"))
Web of Science (WoS)	TS=(("financial efficiency") AND ("nonprofit organization*" OR "non-profit organization*" OR "NPO*")) AND ("financial ratio*"))

This study screened all 17 selected articles using automated criteria selection based on the database's sorting function. To ensure the review's quality, the author includes only articles containing empirical data published in a journal. Additionally, the review includes only articles written in English to avoid reader misunderstandings (Table 2). This process had excluded two articles as they did not fit the inclusion. Therefore, the remaining articles were used for the third process - eligibility.

**Table 2: The Inclusion and Exclusion Criteria**

Criteria	Inclusion	Exclusion
Document type	Article journal (empirical data)	Article review, chapters in the book, book series, book, conference proceeding
Language	English	Non-English

Eligibility refers to the author manual screening of the articles retrieved to ensure that all articles that passed the screening process met the criteria. This process was accomplished by reading the articles' titles, abstracts, and conclusions/discussions. This process excluded nine articles due to the focus on financial ratio indicators. Thus, there were a total of six articles chosen.

## RESULT

The review was able to obtain six articles. This paper's subsequent analysis focused on financial efficiency measures using financial ratios. First, the author reviewed the study done by Omondi-Ochieng (2018a, 2018b). The first study focused on the United States Table Tennis Association (USTTA), while the second examined the United States Triathlon

Association (USA Triathlon) (UST). Financial efficiency for both organisations was assessed by program services ratios and support services ratios measured in three aspects: program services ratio, support services ratios, and return on asset ratio. The findings discovered that USTTA was highly ineffective, spending an average of more than 81 per cent of its revenues on programs. In 2015, the organisation was most ineffective, spending 89 per cent of total revenue on programs and suffered a -29.7% Return on Assets (ROA). However, 2009 was perhaps the most effective year, with 70 per cent of revenues spent on program services and a high ROA of 4.3 per cent. In 2007, the organisation effectively utilised its assets, achieving a ROA of 12 per cent. In contrast, UST showed a different result of financial efficiency. UST provided inefficient program services at a rate of 77 per cent on average but presented efficient support services at 18 per cent on average. In addition, with an average ROA of 14 per cent, the organisation was highly efficient at converting assets to revenue (ROA).

Secondly, the same authors expanded their research on this subject by examining another Nonprofit National Sports Organisation (NNSO) in the United States, US Hockey Inc. (USH). They used the same financial efficiency measures, namely the program services ratio and ROA ratio, as in their previous research on USTTA and UST, but did not include support service ratios in the calculation. USH was highly ineffective in this study, spending an average of more than 79 per cent of total revenue on the program. In 2009, the organisation was largely ineffective, with the program accounting for 87 per cent of total revenue. On the other hand, USH struggled to convert its assets to revenue, as evidenced by a low average ROA of 1.45 per cent and a - 12.2 per cent ROA in 2014.

Thirdly, other nonprofit organisations associated with professional sports teams were reviewed. The study by Sparvero and Kent (2014) compares two classifications of sports team nonprofit organisations: public charities and private foundations. Financial efficiency was computed using expense ratio, working capital ratio, operating margin, and debt ratio. The non-parametric independent samples Mann-Whitney U test was used to calculate the ratios. The result indicated that public charities had a significantly higher program expense ratio ( $U=390$ ,  $p=.015$ ) and a significantly higher debt ratio ( $U=358.5$ ,  $p=.005$ ) than private foundations. Furthermore, no significant difference was detected in the working capital ratio or operating margin. Additionally, the findings indicate that some sport team nonprofit organisations are not concerned with financial efficiency and may exist primarily for public relations purposes.

Another study examined how individual donors make donation decisions based on financial and non-financial information of nonprofit organisations. The sample for this study consisted of undergraduate students at two universities in the Eastern United States. Individual donors are more likely to acquire non-financial information than financial information, according to the findings. After acquiring both types of information, individual donors incorporate non-financial information into their donation decisions, but not program or fundraising expense ratios. It demonstrates that an organisation's financial efficiency indirectly affects individual donations and their impact on donors' confidence. Additionally, it discovered that financial efficiency and participant donations interact to some extent: Allowing participants to set donation limits can compensate for a nonprofit organisation reported inefficiency and thus significantly increase their donations. Allowing donors to restrict their contributions, on the other hand, has a more negligible effect on individual donations if the organisation reports high efficiency (Li, McDowell, and Hu, 2012).

Lastly, a study done on a large group of nonprofit organisations consisted of higher education, arts, culture, and humanities, education, health, human services, religion, public and societal benefit, mutual benefit and hospitals. These authors adopted three metrics commonly used in

nonprofit organisations: overhead ratio, administrative expense ratio, and fundraising ratio, then create a metric that measures nonprofit organisations program service revenue. The study found that higher revenues from program services are typically associated with lower overhead ratio and administrative expense ratio values, thus higher efficiency. Simultaneously, the coefficient of program service revenue is significantly consistent with the hypothesis that nonprofit organisations rely heavily on donations for revenues specialising and capable of fundraising than rely more on program services revenue. According to the magnitude of the assessment, a ten percentage point increase in revenue from program services ratio corresponds to a 0.29 percentage points increase in fundraising ratio. In general, larger organisations are more efficient as measured by both ratios (Ecer et al., 2017).

## CONCLUSIONS AND RECOMMENDATION

A paper set with six articles related to the research field was examined. This review provided a surface understanding of the study of measuring financial efficiency in nonprofit organisations based on a literature review by focusing on financial ratios. This review also further contributes to understanding the research in nonprofit organisations by highlighting the various findings discussed related to measuring the financial efficiency of nonprofit organisations and keeping track of changes in the organisation's measurement of financial efficiency. Furthermore, integrating multiple research streams and then analysing the variations within them will extract their most important and relevant insights and provide a rule base for discussing their findings. Furthermore, the findings contribute to a better understanding of the extent to which this field develops on previous research by employing financial efficiency measures, including such program services ratio, support services ratio, ROA ratio, overhead ratio, administrative expense ratio, fundraising ratio, debt ratio, total assets ratio, working capital ratio, and operating margin.

The present study contributes to several future research directions. It is recommended that a research agenda for other financial efficiency measurement methods in nonprofit organisations be structured in the future, identifying the primary research teams and primary research questions to be studied to contribute to the integration of research in this area of study. Additionally, the literature review design should be refined by using a more detailed content analysis of the articles and the creation and analysis of case studies that demonstrate the application of these factors in nonprofit organisations.

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# Entrepreneurial Competencies of Owner-Manager in Urban Informal Sector in Malaysia: An Exploratory Factor Analysis

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## Abstract

The aim of this study is to explore the influence of the entrepreneurial competencies among owner-manager in urban informal sector in Malaysia. The entrepreneurial competencies dimensions suggested by Kyndt & Baert were tested in the context of the study in measuring owner-manager's entrepreneurial competencies in the urban informal sector. The underlying structure was analysed by using Exploratory Factor Analysis (EFA). The respondents were 120 owner-managers who have operating own business more than 5 years. Purposive sampling was used to select the respondents. The result of the exploratory factor analysis (EFA) revealed five underlying components of entrepreneurial competencies with 24 indicators. The components are opportunity, administrative, relationship, personal and commitment. Evidently, the five components explained 74.35% of total variance. The reliability of the entrepreneurial competencies construct was 0.95, whereas that other constructs range from 0.821 to 0.888. Moreover, to contributing further comprehension to the literature on entrepreneurial competencies, the results also provide a reliable source of information to researchers and practitioners for upcoming research in entrepreneurial competencies.

**Keywords:** Entrepreneurial Competencies; Opportunity; Administrative; Relationship; Personal and Commitment.

## INTRODUCTION

Studies on business permanency can generally be categorised into two comprehensive groups, which are highlights the role of external factor determinant and the internal factor individual ability. Thus, this categorised have a diverse impact of business durability on the different position, for example, external factor highly impact on medium and large of firm while micro and small very much impacted by internal factor. Besides, micro or business that operated illegally known as informal sector has been stealing the researcher interest over a decade ago. Informal sector commonly define as unregistered business and have no legal protection. The informal sector was divided into two broad categories, rural and urban. This study focus on the urban informal sector as it contributed 82.1% of employment than 17.9% in the rural informal sector (Dos, 2017). Services industry denoted the highest to the urban informal sector which including retail trade, food and beverage, human health and social work activities. This sector extremely impacted by internal factor as the owner and the business is equally the same entity and it contention that a skilled entrepreneur is one who can manage the business challenge (Ahmad, Ramayah, Wilson & Kummerow, 2010). In the past study, an entrepreneurial competency was denoted as a prime ability for business endurance in the undersized scale operation. The management structure and independence of an undersized business took the entrepreneur in a critical position in the business stability (Bird, 1995; Capaldo, landilo & Ponsiglione, 2004). Some authors have recommended that understanding of competencies that are exercised by the entrepreneurs can be used to support the development of those competencies and has potential to maintaining the business (Churchill & Lewis, 1983; Low & MacMillan, 1988; Mitchelmore & Rowley, 2013).

## **Objective and Rationale of the Study**

The aim of this study is to explore and determine the factor structure of an instrument that the researcher adapt and adopt to measure the entrepreneurial competencies of owner-managers in urban informal sector in Malaysia. The specific objectives of the study are:

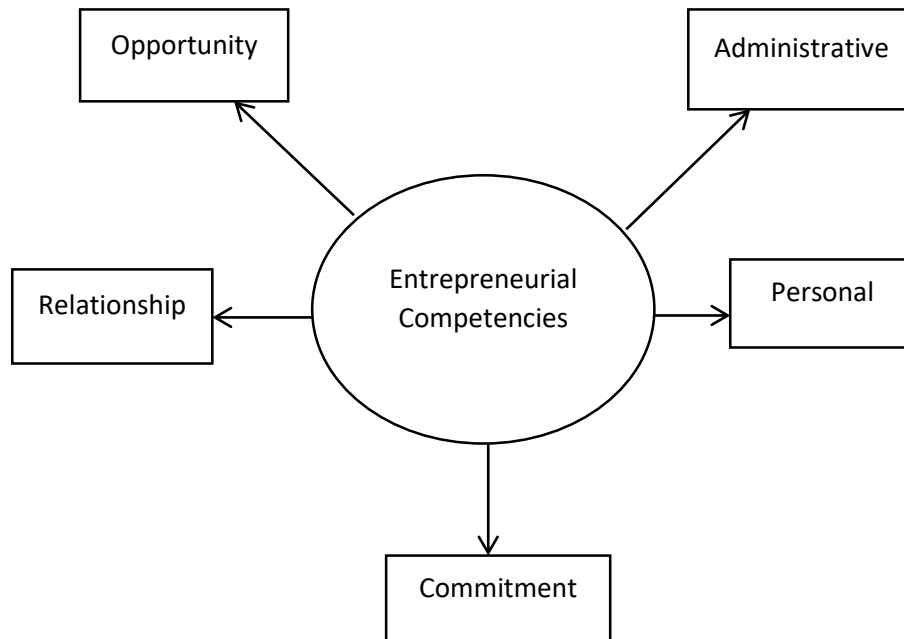
1. To determine whether the items measuring the entrepreneurial competencies construct were appropriate and embrace an interpretable underlying factor structure.
2. To ascertain the reliability and the validity of the factor structure that represents the skill of the owner-managers on entrepreneurial competencies.

Hence, establishing the factor structure that influences the success of the entrepreneurial competencies construct is vital, suitable and creditable.

## **Conceptual Framework**

Researchers defined competencies in many ways. Some scholars agree that entrepreneurial competencies can be define as the ability or credibility (Baum, 1994; Boyatzis & Boyatzis, 2008) to perform tasks in order to achieve specific goal (Bergevoet & Cees Van Woerkum, 2006; Inyang & Enuoh, 2009; Mitchelmore & Rowley, 2009) and the output of the competencies in a person can be measured through their performance (Mitchelmore & Rowley, 2009). Entrepreneurial competencies is an individual knowledge, skill and capability that directly affect business performance, including competencies of technical, marketing, financial competence, and human relations (Sundah, Langi, Maramis & Tawalujan., 2018). Moreover, an entrepreneur also needs to have a skill which is the readiness capabilities that can improve in any situation and argument (Herronn & Robinson, 1993), the competencies that an entrepreneur must possess are skills like managerial, human, decision making and time managerial. According to Man & Lau (2000) there are six key areas of entrepreneurial competencies like opportunity competencies, relationship competencies, conceptual competencies, organising competencies, strategic competencies, and the commitment competencies. Entrepreneurial competencies are required to achieve excellence in performance and to get sustainable growth in a competitive business environment. Later the key have been improvise according to the current research field, Markman & Baron (2003) listed only four main key; opportunity competencies, conceptual competencies, organising competencies, strategic competencies.

The main fundamental keep changing until there are studies using micro level business as a focus by Kyndt & Baert (2015) listed the suitable entrepreneurial competencies; recognize opportunity, relationship, personal (conceptual), administrative and commitment. This study suggests using the recommended dimension by Kyndt & Baert as it seems to be appropriate as the informal sector have a very similar characteristic with the micro business. Figure 1 illustrates the conceptual framework of the entrepreneurial competencies construct measured in this study.



**Figure 1: Conceptual Framework of Owner-Manager's Entrepreneurial Competencies**

## METHODOLOGY

### Research Design

This study implements the quantitative research design as it studies the correlations between construct. This occurs in the population of interest, establishes the cause and effect in highly controlled situations and testing the hypotheses (Sekaran & Bougie, 2016). To address the two research objectives, the cross sectional survey method was utilised. The survey involved the administration of a questionnaire that required obtaining data on the ability of owner-manager in the urban informal sector in Malaysia on their entrepreneurial competencies at a specific point in time.

### Population and Sample

According to Department of Statistic Malaysia, in 2017 there are 1.36 million individual engage in the informal sector and 1.12 million in the urban area. This individual was accounted with the informal sector characteristic mainly not registered with professional organization, does not have a fix structure of business operation and small scale of production for example the hawker, business operating in the night market and stand stall. Hence, the ideal population of this research comprised owner-manager who operated in urban area especially in the capital city. By using individual unit analysis, a sample of 320 owner-managers' data was collected based on judgmental sampling. However, only 200 owner-managers returned the given questionnaire.

## **Sampling Procedures**

Purposive sampling based on states in peninsular Malaysia was employed to select the sample of owner-managers. Four states were chosen based on statistic data released by Department of Statistic Malaysia indicating the top four highest numbers of employments in the urban informal sector. The states were Selangor, Johor, Kelantan and Kedah. Purposive sampling is an appropriate when the study crosses a large geographical area. After the states were determined, judgmental technique was employed to choose the owner-manager in the capital city of each selected state.

## **Instrument**

A self-administered questionnaire comprising 24 closed-ended Likert's scale questions was used to gather the information of owner-managers in urban informal sector in Malaysia about the skill of entrepreneurial competencies. The entrepreneurial competencies model by Kyndt & Baert (2015) were revised and modified to suit the context of the study in measuring the entrepreneurial competencies of owner-manager in urban informal sector in Malaysia. The 24 items measuring entrepreneurial competencies were presented on a 10-point interval scale range from 1= Strongly Disagree to 10=Strongly Agree.

## **Data Collection**

The survey was administered manually and the respondents were given a 25 minutes to complete the questionnaire and will be collected by the researcher. Prior to the questionnaire distribution, the researcher had obtained an approval from local authority of the four identified states. Total of 200 samples were collected from the 320 distributed. But, 80 sets of questionnaire were discarded due to incomplete responses, where the questions answered less than 30% of the total questions. After data cleaning and screening process, the total number of sample finalized for the analysis was 120 with a response rate about 37.5% were found to be valid to analysed using IBM-SPSS for Exploratory Factor Analysis.

## **Data Analysis**

In order perform EFA, Gorsuch (1990) and Kline (2010) recommended that the 'Rule of 100' need to be followed, which in order to perform EFA there must be at least a minimum of 100 samples. In this study, 120 samples were used to conduct the EFA analysis. To test the appropriateness of the data for running factor analysis, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity (BTOS) were checked. Indicator that were used as a data factorability are KMO and BTOS where the cut off value for KMO is 0.60 and above while BTOS statistically significant at p-value (Bartlett, 1950; Kaiser, 1974; Pallant, 2016).

Total data from 120 owner-managers were subjected to the procedures of Principal Component Analysis (PCA) with Varimax rotation since this rotation method extracts factors based on the correlation among the items (Gaskin & Happell, 2014). The Varimax was favourable than others since the factors were independent of each other and yet PCA is recommended to be used when no prior theoretical basis or model exists (Gorsuch, 1990). Moreover, Pett, Lackey & Sullivan (2003) recommended the use of PCA is in determining preliminary solution in EFA.

There are few rubrics has to be followed when perform PCA, which are factor must have an eigenvalue greater than one. Next, for practical significance, items should have a factor

loading greater than 0.50, then the number of items per factor must be at least three for the factor to be retained (Hair et al., 2014) and finally no item cross loading greater than 0.50 to be accepted. Still, this study had opted to retain items with cross factor loading greater than 0.60 since the items in the questionnaire were previously adapted from a parcel of established items (Awang, 2012). Besides, the used of scree plot also can determine the number of factor to be retained (Cattell, 1966) as well as a value of factor loading which exceeds 0.40 and is not cross loaded with other factors can also be considered (Tabachnick & Fidell, 2007).

### Reliability Analysis

Reliability of a construct or variable refers to its consistency, stability and dependency of the scores in the questionnaire. The construct or the variable that is being measured must be stable or constant. The reliability of a measurement is achieved when it consistently and without bias measure the aimed concept (Sekaran & Bougie, 2016). Based on the decree, the reliability of the entrepreneurial competencies construct was estimated using internal consistency reliability. The coefficient of internal consistency gives an estimate of the reliability of the measurement and is constructed to be convincing that items determining the same construct which need to be correlated. The acceptable level of coefficient alpha in order to maintain an item on a scale is more than 0.70 (Nunnally, 1978; Nunnally & Bernstein, 1994; Hair et al., 2014; Sekaran, 2016).

## RESULTS

In this study, the entrepreneurial competencies was measured by using 24 items with the interval Likert's scale from 1 as strongly disagree to 10 strongly agree. The constructs that measure the entrepreneurial competencies are opportunity, administrative, relationship, personal and commitment was tested for the reliability and the validity. All the results of this study have shown in the following subtopic.

### Descriptive Statistics for the Factor Structure

Table 1 shows the descriptive statistics that include the number of items, means and standard deviation of the five factors. The lowest mean were belong to commitment (M=7.37) and the highest belong to administrative (M=7.70). The standard deviation for the five sub-constructs is not more than two standard deviation of the mean, which is indicating that the data for entrepreneurial competencies of owner-managers are gathered tightly around the mean and reliable.

**Table 1: Descriptive Statistics of the Factor Structure**

No.	Sub-Construct	No. of Items	Mean	SD
1	Opportunity	4	7.62	.972
2	Administrative	6	7.70	.837
3	Relationship	6	7.57	.781
4	Personal	4	7.57	.739
5	Commitment	4	7.37	.899

### Reliability Analysis for Entrepreneurial Competencies

Table 2 have shown the value of reliability estimation for the underlying constructs of entrepreneurial competencies. The reliability index ranges from 0.821 to 0.888, suggesting that the items strongly reliable and highly acceptable in representing the constructs. The 24 items used to measure the entrepreneurial competencies construct has a reliability value of 0.953, denoting that the items are an outstanding measure of the constructs.

**Table 2: Reliability Analysis for Entrepreneurial Competencies Constructs**

Sub-constructs	No. of Items	Cronbach's Alpha
<b>Entrepreneurial competencies</b>	<b>24</b>	<b>0.953</b>
Opportunity	4	0.880
Administrative	6	0.858
Relationship	6	0.852
Personal	4	0.821
Commitment	4	0.888

### Exploratory Factor Analysis Results

According to Kline (1994) and Hair et al. (2014), the value of KMO for the entrepreneurial competencies construct was 0.923 (marvellous) which mean it higher than the cut off value of 0.50. While, the BTOS was also significant with the value of Chi-square = 2955.698 and p-value < 0.001. As the KMO value is close to 1 and significance value of BTOS is near 0.000, it can be recommended that the entrepreneurial competencies construct with 24 items is factorable and adequate to proceed with factor analysis as shown in Table 3.

**Table 3: KMO and Bartlett's Test for Entrepreneurial Competencies Construct**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.923
Bartlett's Test of Sphericity	Approx. Chi-Square	2955.698
	df	435
	Sig.	.000

While, Table 4 shown the PCA with Varimax rotation result for 24 items under entrepreneurial competencies construct. The result show that the PCA procedure has extracted five components with eigenvalues exceeding the value of 1.0, with the total variance explained for all five components to be 74.35%, greater than the recommended 60% for a constructed to



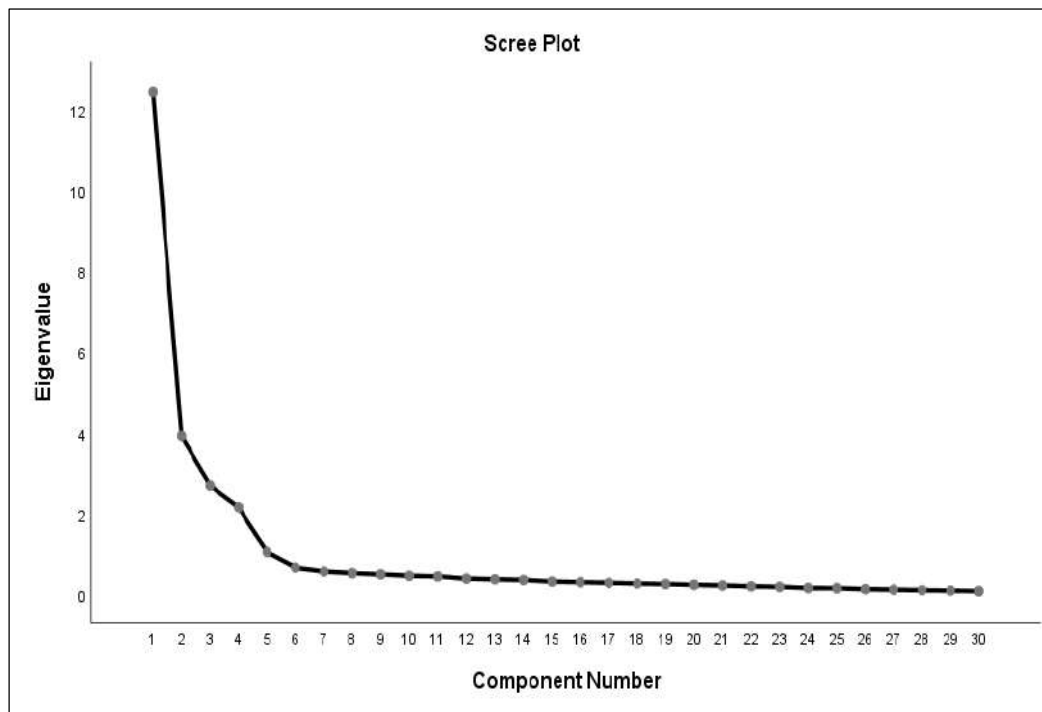
be valid. Hence, the five components explained 74.35% of the total variance where the component 1 contributes 41.47%, component 2 contributes 13.11%, component 3 contributes 9.01%, component 4 contributes 7.22% and component 5 contributes 3.54%.

**Table 4: Total Variance Explained For Entrepreneurial Competencies Construct**

Component	Total Variance Explained					
	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.441	41.469	41.469	7.379	24.597	24.597
2	3.934	13.113	54.582	6.519	21.730	46.328
3	2.704	9.012	63.594	4.576	15.252	61.580
4	2.165	7.215	70.809	2.647	8.823	70.403
5	1.062	3.539	74.349	1.184	3.946	74.349

Extraction Method: Principal Component Analysis.

On the other hand, the scree plot for the entrepreneurial competencies construct had sorted the 24 items into five components as shown in Figure 2. The examination of the scree plot shows an obvious point of inflation after the five factors.



**Figure 2: Scree Plot for Business Sustainability Construct**

The rotated component matrix results for entrepreneurial competencies construct suggested a five component solution. Table 5 have shown the 24 items collapse into five components that measure entrepreneurial competencies. All items have factor loading greater than 0.60. There were no cross loadings items with the value more than 0.50 among the five components. Therefore, the result granted the study to retain the five components as they named in entrepreneurial competencies literature. Table 4 shows the final EFA result for entrepreneurial competencies construct with 24 items and its factor loadings.

**Table 5: Final EFA Result for Entrepreneurial Competencies Construct**

Rotated Component Matrix <sup>a</sup>							
Sub-construct	Item label	Item statement	Component				
			1	2	3	4	5
Opportunity		I am able to:					
	OPP1	Identify goods or services customers want.	.806				
	OPP2	Perceive unmet consumer needs.	.836				
	OPP3	Actively look for products or services that provide real benefit to customers.	.649				
	OPP4	Seize high quality business opportunity.	.656				
Administrative		I am able to:					
	ADM1	Plan the operations of the business.		.824			
	ADM2	Plan the organization of different resources		.754			
	ADM3	Keep the organization run smoothly.		.764			
	ADM4	Organization resources.		.650			
	ADM5	Coordinate tasks.		.827			
	ADM6	Supervise subordinates.		.822			
Relationship		I am able to:					
	REL1	Develop long term trusting relationship with others.			.667		
	REL2	Negotiate with others.			.798		
	REL3	Interact with others.			.766		
	REL4	Maintain a personal network of work contacts.			.859		
	REL5	Understand what others mean by their words and actions.			.815		
	REL6	Communicate with others effectively.			.663		

Personal	I am able to:				
PER1	Apply ideas, issues and observations to alternative contexts.			.622	
PER2	Integrate ideas, issues and observations into more general contexts.			.638	
PER3	Take reasonable job related risks.			.824	
PER4	Monitor progress toward objectives in risky actions.			.840	
Commitment	I am able to:				
COM1	Dedicate to make the venture work whenever possible.			.841	
COM2	Refuse to let the venture fail whenever appropriate.			.828	
COM3	Possess an extremely strong internal drive.			.714	
COM4	Commit to long term business goals.			.809	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 7 iterations.

## DISCUSSION AND CONCLUSION

Results from this study reveal that the scale to measure entrepreneurial competencies of owner-manager in urban informal sector has an impressive reliability and validity. The entrepreneurial competencies construct measure five sub-constructs that correlate to the capability of owner-manager's entrepreneurial competencies to perform in implementing skills towards business longevity. The content validity of the scale was established by three experts who provided their professional judgment on 24 items assessing the construct of entrepreneurial competencies. An EFA was subsequently employed to identify its underlying factor structure to establish the construct validity of entrepreneurial competencies. The extracted factor of internal consistency was also estimated using Cronbach's Alpha to determine the reliability of the scale.

The objective of this study was to explore and assess the owner-manager's entrepreneurial competencies in urban informal sector in Malaysia. The analysis show that as a construct, entrepreneurial competencies is defined by five sub-constructs which is in this study was shown to demonstrate acceptable psychometric properties. The five sub-constructs structure was discovered in the EFA procedure that the scale may be used to assess the capacity needed for great skills among owner-manager in urban informal sector specifically and other owner micro business generally. In other words, the owner-manager in urban informal sector ought to have the five abilities indicated being opportunist, administrative, excellent relationship, superb personal and exceptional commitment in order to sustain in their business.

The validated dimensions are valuable for practitioners as it would spread their awareness to improve the entrepreneurial competencies. This element can be used to determine whether the owner-manager in informal sector have the required abilities to implement entrepreneurial competencies in order to realising the country's entrepreneurship goal. To further validate the existence and contribution of the current factor structure, an extended study should be involving the use of confirmatory factor analysis, as the aim of which is to produce a more comprehensive validity of entrepreneurial competencies.

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# The Impact of the Minimum Wage on Employment, Productivity and Poverty: Conceptual Discussion

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## ABSTRACT

The minimum wage is a contentious debated issue which there are numerous studies and opinions on the minimum wage. Some argue that having a minimum wage has a positive impact but despite the fact that some research suggests that a minimum wage has mixed results. Therefore, the goal of this paper is to discuss about the impact of minimum wage on employment, productivity and poverty. Articles is a comparison analysis studies from various research about the impact of the minimum wage towards employment, productivity and poverty retrieved from various database. More importantly, the outcomes have varying effects on employment, productivity, and poverty and to achieve consistent economic growth, employers should consider either continuously raising wage levels or raising them every two years.

**Keywords:** Minimum Wage; Employment; Productivity; Poverty.

## INTRODUCTION

One of the most contentious issues in labour market economics is the minimum wage. There has been a large amount of international empirical research on its effects over the last few decades. In principle, minimum wage should act as protection to all labour in an employment relationship, including women, youth and migrant labour. Exclusions should be kept to a minimum certainly for vulnerable categories of labour. However, in practice, not all level of employees enjoys the minimum wage protection due to certain reason – for instance, domestic labour, informal labour, or non-standard forms of employment including self-employed or part timer.

However this minimum wage policy tools is still debatable among the scholars regarding the effectiveness of minimum wage. As demonstrated by Stigler (1946) in his classic article on the minimum wage concluded that if miscalculate the minimum wage and it pegged above the market wage, will leads to fewer jobs, higher unemployment, higher inflation, reduced profit for firms, lower wages in the uncovered sector, and most critically, a general misallocation of resources and loss efficiency in the overall economy (M. Zaini, S. Chan, 2016).

### Minimum Wages

Despite abundant studies of minimum wage across developed countries, minimum wages is originated in the 1890s in New Zealand and Australia, and then spread to the U.K in 1909 before it comes to U.S states in the next twenty years. It is about one-third of U.S. states has

been introduced with the minimum wage and after that, in 1938, the U.S. Congress passed a federal minimum wage law as part of the Fair Labour Standards Act (FLSA). Since that time, minimum wages have been set up in different form or another in numerous other industrialized countries, as well as in some developing countries. Consequently, by the 1990s, minimum wages existed in over a hundred countries of the world and the study regarding the minimum wage is increasing among scholars to look forward the impact and the effectiveness of minimum wages implementation. As a result, the International Labour Organization (ILO) has designed the minimum wage as an international labour standard (International Labour Organization, 2006).

According to International Labour Organization (ILO), minimum wages have been stated as “the minimum amount of remuneration that an employer is required to pay wage earners for the work performed during a given period, which cannot be reduced by collective agreement or an individual contract.” The minimum wage represent a basic salary which not including overtime, allowances and other benefits. According to history, New Zealand was the first country introducing the minimum wage in 1894 resulting from the Industrial Conciliation and Arbitration Act, with the objective to arbitrate industrial labour disputes. Subsequently, New Zealand set a nationwide minimum wage with the main purpose to prevent employers from hiring children or apprentice at no pay.

The Second country set up a minimum wage was Australia in 1896. The minimum wages in Australia were determined at the state level and took two basic forms. In 1896, the state of Victoria established a set of “wage boards”, each of which consisted of equal numbers of employee and employer representatives from a particular trade, and was chaired by an impartial third party. These boards would meet to determine the appropriate minimum wage rate for that trade, and the agreed-upon wage would then become binding for all employers in that trade in the state (Neumark and Wascher 2009).

Eventually, this form was followed by South Australia, Queensland, Tasmania and could be set as part of compulsory arbitration between employer associations and unions. Sooner or later, the minimum wages order is spread to developed countries followed by developing countries including Malaysia and the studies of minimum wage become accepted and debatable regarding its effectiveness.

## **RESEARCH METHODOLOGY**

This study conducted a review of the literature in order to find, collect, and analyse relevant published articles on minimum wage. The authors started the review by outlining the search strategy, which was divided into three stages: identification, screening (inclusion and exclusion criteria), and eligibility.

### **Identification**

Identification is the process of looking for synonyms, related terms, and variations of the study's main keywords, which are minimum wage, productivity, employment, and poverty. It aims to broaden the database options available for searching for additional relevant articles for the review. The first step was to choose the keywords that would be used in the search. Following that, based on previous research and a thesaurus, similar keywords related to minimum wage, productivity, employment, and poverty were used. Finally, the authors

improved existing keywords and created an entire search string (using phrase searching, wild card, truncation, Boolean operators, and field code functions) for the two major databases, Scopus and Web of Science (Table 1). The primary databases used in this review were Scopus and Web of Science. After using these two databases, Scopus and Web of Science, the search yielded 3,502 articles.

**Table 1: The Search String**

<b>Databases</b>	<b>Keywords used</b>
Scopus	TITLE-ABS-KEY (("minimum wage" OR "minimum pay") AND ("employment*" OR "productivity*" OR "poverty*"))
Web of Science	TS = (("minimum wage" OR "minimum pay") AND ("employment*" OR "productivity*" OR "poverty*"))

### **Screening**

To screen all 3,502 selected articles, this study used automated criteria selection based on the database's sorting function. Furthermore, to ensure the review's quality, only articles with empirical data that have been published in a journal are included. Furthermore, to avoid reader misunderstandings, articles published in English are included in the review.

### **Eligibility**

The authors' eligibility refers to how they manually screened the retrieved articles to ensure that all of the articles that passed the screening process met the criteria. This was accomplished by reading the titles, abstracts, and conclusions/discussions of the articles.

## **RESULTS AND DISCUSSION**

Although there has been a great broadening of researches on the effects of the minimum wage in OECD countries, this has not been as marked in studies of developing countries (Belman, D., and Wolfson, P., 2016). With notable exceptions, research on these countries has been focused issues on employment, productivity and poverty.

### **Minimum Wage on Employment**

The question of how a minimum wage affects employment remains one of the most widely studied and most controversial topics in labour economics. According to Neoclassical economic theories present a clear prediction: as the price of labour increases, employers will demand less labour. There is existing apparent consensus based on essentially time series evidence and surveyed articles by Brown, Gilroy and Kohen (1982) that typically found that a 10% increase in the minimum wage reduces teenage employment by 1% to 3% for the period up to 1979. By using the observation method of relation between minimum wage and employment from last decades studies, Brown, Gilroy and Kohen (1995) tend to estimate the

range value found in the time series research. The study also found a consistent feature of negative employment effects in the studies of low-wage manufacturing and agriculture, but finding quite mixed in other industries. Thus, at that time, most of study found a negative impact minimum wage on employment.

However, at the contrary, the result of study from Card and Krueger (1995) which becomes widespread and debatable among the economist until now regarding the effects on employment. The study by David Card and Alan Krueger of the effect of a rise minimum wage in New Jersey fast-food restaurants had marked impact on the economics profession (Stephen Bazen, 2005). They found that the increase in minimum wage legislation exactly hiked on employment. This result conflicts most of the earlier studies which indicate negative impact on employment.

As mention, the result of the study by Card and Krueger (1994) not only found no significant effects but also analyzing the operation of the labour market with new approach and abandoning of the competitive model. Their study undertook a telephone questionnaire survey of the effects on employment, wages and other variables in a sample of fast foods restaurants in the state of New Jersey and followed by the state of Pennsylvania between the first and fourth quarters of 1992. Thus, a continuous study among researchers regarding this issues either to come up with explanation for this evidence or find fault with their research.

Most recent US evidence indicates a small negative impact of minimum wage changes on employment when Neumark and Wascher (2000) reanalyze the study of Card and Krueger by using payroll data. Their study shows a small decrease on employment in both state of New Jersey and Pennsylvania. Correspondingly, Bukhauser, Couch and Wittenburg (2000) re-examine the debatable of US studies on the effects of minimum wage on employment indicate the results of significant and modest negative effects of minimum wage on teenage employment.

Further study on minimum wage and employment in China as developed countries and strong economy by Fang and Lin (2015). China issued its new minimum wage regulations in 2004. The empirical study look into a few cross section effects which are employment effects of min wage across three geographical regions, gender and age cohort, and skill level. The study concludes that in the more developed and prosperous East China with large population has a statistically negative impact on employment for young adults, particularly female (age 15-29) are the most affected with statistically negative when the minimum wage is increasing. The results show the same in the developing central region with strong negative employment effect on young adults, at-risk group and the entire working population. However in the less developed West China, indicate no effect of the min wage on employment.

In Poland, the same finding show an adverse impact on employment during 1999-2010 by econometric model with the unemployment rate as the dependent variable. The main group which affected by minimum wage are young labour especially during the period of substantial increase of the minimum wage (2005-2010). Minimum wage in Poland is set uniformly across the regions but Poland is a country with considerable regional wage inequalities and also with substantial diversification of unemployment rate across regions and employees groups (especially, with respect to age, skills, etc.). These characteristics of labour market provide some rationale for considering setting of minimum wage at regional basis (Majchrowska A. Etc., 2012). Those factors make some limitations into the study and have been suggested as for the potential policy recommendation. Since the finding show the effect of minimum wage on employment is more harmful in the poorer regions, there is some room for consideration

the regional differentiation of minimum wage level which follows to local labour market conditions.

The other developed country such Japan also attracted with the same reason (Card and Krueger 1995) to do research on minimum wage because of the low-wage labour market and high level of poverty in Japan (Abe, 2011). In his study explain the problem facing in Japan as the globalization affect the Japanese labour market to a greater degree than before. Some of Japanese firms are likely to migrate outside Japan due to owing to high corporate tax rates and strong Yen. Thus, job loss seems more serious since jobs seem to be migrating from Japan to overseas location. Reflecting this type of mismatch such the concern of globalization issues, certain service sector industries (low-wage sector) facing labour shortage in the long term and minimum wage worker not necessarily member of poor household, thus the minimum wage not effectively resolve.

The result of study in Vietnam shows adversely impact of minimum wage on employment, wages and welfare (Del Carpio, X., Nguyen, C., Nguyen, H. and Wang, C, 2013). The study finds that minimum wage rises reduce the total number of wage labour especially in domestic firm and increase of self-employment. The number of wage labour declines because many labour with informal contracts lose their jobs. The profile of labour who earn below the minimum wages find that they tend to be young, relatively uneducated and of ethnic minorities.

The study in Indonesia wage is in differ scope with the impact of change in minimum wage on hours worked of paid employment, a category of employment legally covered by the minimum wage policy in Indonesia, using the Indonesian Labour force Survey Sakernas from 1996-2003. As in Indonesia, the official standard working hours for labour, based on government regulations, are 40 hours per week which slightly lower than other developing countries etc. 44 hours per week in South Korea, Chile and Mexico are 48 hours per week while it is the same with Malaysia. Generally, the study found that an increase in minimum wage is positively related with the hours worked across gender and residences. Compared to male labour, the effects of the minimum wage on hours worked are much stronger for female labour. This evidence supports the previous finding that female labour are more likely to be affected by minimum wage. The reason is the fact that female labour particularly in urban area are employed in industries with low-wage labour such as manufacturing.

In Thailand, the minimum wage decreases the probability that older employees and women will be working, but in a limited amount (Del Carpio et al., 2014). A minimum wage is the lowest hourly, regular or monthly remuneration that employers in different industries can legally pay to some employees. However, Del Carpio et al (2014) found that less research on the effect of minimum wage on future employment in South East Asia in particular in Malaysia. The study on minimum wage in Brazil presents new empirical evidence and takes into account the cross-section of formal and informal sector by using a monthly household panel survey. The finding shows the minimum wages strongly compresses the wage distribution of both sectors but does not affect employment which in line with the previous study.

In conclusion, most of the study which related to developed countries found a negative effect or no effects on their economic growth by introduction of the minimum wage. Majchrowska et al. (2012) make some general conclusions from the large body of empirical studies on employment effect of minimum wage. First, the majority of authors find an adverse impact of the minimum wage legislation. E. g. according to Neumark and Wascher (2007) two-thirds of 102 studies surveyed resulted in negative employment effect and only eight studies found positive. Second, the significant impact of minimum wage on employment was found, then respective elasticities were dispersed along wide range of estimates (-0.1 to -0.3 range) as

suggested by Neumark and Washer (2007), following Brown et al. (1982) survey study. Third, the adverse labor market effects of minimum wage legislation concentrate in particular segments, mostly low-skilled and young workers.

### **Minimum Wage on Productivity**

Instead of only raising the wages of low-paid employees to the Minimum wage rate or higher, Malaysian employers might also need to raise the wages of employees earning above the minimum wage rate for maintaining staff morale and productivity, and preserving wage differentials in the hierarchy - this knock-on effect would likely be particularly pronounced in sectors and firms with multi-layered grade structure. (Ghee T.C. et. al., 2018). One of the intentions in introducing minimum wage is to improve productivity for low skilled employees. The policy of minimum wage should be a measure to correct market failure and must be balanced back by changes in increased productivity, real added value, more output and etc. These factors will make the policy of minimum wage sustainable in the long run.

The essence of the theory is that wages do not only determine employment but also affect employees' productive behaviour or quality and that is why, under certain conditions, it is optimal for employers to set compensation above the market clearing level in order to recruit, retain or motivate employees (Dobija, 2011). One of the main point to be highlighted is the risk of the short term cost is expected to be well contained. However, these challenge could be mitigated through improvement in productivity, through improves the overall cost is reduced and also the numbers of labours are reduced. Further complementation's to minimize the challenges are by productivity-enhancing measures such as improvement the quality of education, worker provision for up-skill training and also facilitation of automation and advanced technology investment.

Studies of minimum wage regarding implication of productivity are still limited as most of scholars consent more on employment effect when minimum wage is increased. These studies masked many potentially important effects that an increase in the minimum wage may have on a variety of labour-market outcomes. A firm's ability to adjust its production process to economize on low-skilled labour when, laced with a minimum wage increase will differ greatly depending on industry or occupation (Bradley et. al., 2000). Labour productivity will be difficult to improve in industries and occupations where the service is essentially the labour input itself. Consider for example, janitorial or maid services. These crews can only clean so many rooms in an hour. Similarly, waiters and waitresses may not be able to increase the number of tables served during a shift. In these instances, labour productivity is essentially capped, and the firm's ability to substitute away from low-skilled labour is limited.

Back a decade ago, there is a study regarding the efficiency wage and the economic effects of the minimum wage by Georgiadis, (2013). The purposes of his study is to provide an empirical test of the shirking model by exploiting the link between efficiency wage and the minimum wage in a very low-wage sector, the UK residential care homes industry. This paper found that the higher wages costs generated by minimum wages were partly offset by a reduction in supervision costs, thus minimum wage operated as an efficiency wage in the care home sector. The result also support a non-negative employment effect of the minimum wage which can explain the recent evidence from the care homes sector that minimum wage introduction generated only moderate employment effect (Georgiadis, 2013).

Similarly with the paper of Rusly et al., (2017) choosing childcare industry as one of the most affected sector by the minimum wage implementation. However, this paper more focuses on how the implementation of minimum wage legislation affects the existing operating cost



structure, and consequently business sustainability of Malaysian childcare industry. This is because of the service sector is the main contributor of Malaysian SMEs is risking their business operation to lose in order to comply the minimum wage legislation. The effect is more significant for small business operators and surprisingly there is an increasing numbers of childcare centers have to stop their operation. This study collects the data by interviewing among childcare operators in Malaysia. As a conclusion, the paper propose a conceptual model of minimum wage policy implementation for childcare sector and highlight the importance of effective cost management to ensure business sustainability.

At Recent, there is few number of researches regarding minimum wage impact on productivity. One of them, Riley and Bondibene (2015) examine the relationship between the national minimum wage and UK business outcomes; including labour cost, productivity, profitability and the probability of exit. They found evidence that firms have positive responses to the introduction and uprating of the national minimum wage with improvements to productivity. They also found that these improvements have come not from workforce reduction or capital–labour substitution but have been associated with a growth in total factor productivity. From this finding, increase in labour costs from national minimum wage is consistent with efficiency wage and training provided. However, this paper has no evidence that national minimum wage increase the rate of business exit. This study is exactly corresponding study of Riley and Bondibene (2015) which examine the impact of national minimum wage on several indicators of firm performance during recession period. Both study used the datasets FAME (Financial Analysis made Easy) and ARD (Annual Respondents Database).

The same method (difference-in-difference technique) used by Rizov et al, (2016) which empirically evaluated the national minimum wage impact in UK on firm and sector productivity. The study used a multiple channel analytical strategy comprising two stages-estimation and validation. Firstly, they modeled the link between firm level total factor productivity and national minimum wage based on the Olley and Pakes theory (1996) and then applied a difference-in-difference analysis to validate and illustrate the effect of national minimum wage on productivity. The study shows that security and retail sector are the highest aggregate productivity and social care is the lowest productivity based on the result of total factor productivity measure. The difference-in-difference results report that the national minimum wage had a positive impact on aggregate productivity in low-paying sector. Thus the paper highlight that 'living wages' may also enhance productivity even the increased wage incentive affect for management practices.

### **Minimum Wage on Poverty**

The main implication of study by Sara Lemos in Brazil believes that the minimum wage could be an effective policy tools in the fight against poverty and equality without destroying too many jobs in Brazil. The previous studies of minimum wage impact on poverty mostly covered in developing countries. One of the purposes of minimum wages legislation is to protect low wage labour, so that they will be able to afford better living and higher education (Tin Pei Ling et. al, 2014). However there are some studies do not always find welfare increases with a rise in the minimum wage. By implementation of minimum wages may help to reduce poverty in developing countries, but the impact is limited because of two reason, first, a large of share labour is not covered by minimum wage or many of labour with low-wage are covered by informal sector, second, some low-income households lose with the higher of minimum wage (Saari et. al, 2013, Gindling and Terrel, 2010).

Bird and Manning (2008) analyse the efficiency of minimum wage as a tool of poverty reduction in Indonesia, one of developing country. As study by Sagat, 2001, there are two

main keys that justify the minimum wages as an effective instrument of poverty reduction. First, the unskilled labour make up a large share of poor households' income in developing countries and thus, most poor households will benefit from increases in minimum wage. Second, the minimum wage has little or no social cost. This study carried out simulations of the distribution of benefits assuming that all sub-minimum wage labour in 2002 received the new minimum wage in 2003. By choosing the data from manufacturing and agriculture sector as proxy of low household income, this paper concludes that minimum wage legislation is not an effective target as anti-poverty instrument. Only about 17% of the additional earnings from the minimum wage hike in 2003 flow to poor households, another 34% of the benefits flow to the near-poor, while half of the benefits accrue to non-poor households. Furthermore, the result reveals that only one in four poor households gain through higher incomes, while three out of four poor households lose through higher prices. However this paper noted the limitations and further study is recommended. One of the limitation is they assume that producers finance the minimum wage hike through higher consumer prices and not through employment cuts or profit reductions (Bird and Manning, 2008).

On the contrary, the paper of Saari et al (2016) agrees that the minimum wages as an effective instrument of poverty reduction if the informal sectors are included. The paper of Saari et. al, (2013) is focusing the issues of the effectiveness of minimum wage as a mechanism of income distribution among the ethnic group in Malaysia. The five of most sectors affect by the increasing of minimum wage are manufacturing sector, forestry and mining sector, building and construction sector, wholesale and retail trade sector and transport and storage sector. All these sectors demonstrate 19%-61% of low-wage labour receive income below the poverty line. After the implementation of minimum wage, the finding of this paper shows the wage policy has potentially boost the incomes of ethnic Indians and Malays but marginally affects ethnic Chinese. However, the effectiveness of the minimum wage legislation is constrained by its limitation to account for informal sector labour.

## CONCLUSION

Other than employment, common observations by many studies have concluded that FDI Inflows cause growth within the given country, in which it may be transferred through economic changes in human capital, skills, employment, export trade, and import trade. FDI flows can also have transfers through institutional changes, market integration, innovations of technology transfer, and spatial agglomerations (A. M Fuangfoo, 2016). Looking into the research from developing countries, a study of A. M. Fuangfoo, (2016), take into account the indicator of FDI (Foreign Direct Investment) for the impact of minimum wages in Thailand. The result from the study found that Minimum Wage and Inflation positively affect FDI Inflows; however, they are not statistically significant. The other indicators such Aggregate Demand (GDP), Trade Openness (export/import ratio), and Internet Users (per 100 people) negatively affect FDI Inflows, but are not statistically noteworthy.

There is very little study which related the minimum wage and effect to inflation factor. A study by Cuong (2011) examined either the minimum wage increase causing inflation in Vietnam by using the method of Generalized Least Squares (FGLS) regression. The results show a positive impact to inflation insignificantly by two possible explanations. Firstly, the number of labourers who are affected by minimum wage increases might be small. Secondly, the number of enterprises affected by minimum wage increases, and under market competition these enterprises are unable to pass through to prices the higher costs due minimum wage

increases. So a reasonable increase in minimum wages is a result of inflation, not a cause of inflation.

The risk of minimum wage policy on inflation is expected too as a challenge for Malaysian economy. Increase in the income of the affected labour can be expected to result in higher consumer spending and economic activity; given that low-wage households tend to have a higher marginal propensity to consume. On the other hand, this policy is looking ahead to be a positive step in encouraging a fairer wage structure and also would help to contribute for higher-skilled jobs and also the promotion of higher value-added economic activities.

The minimum wage literature in developing countries contains limited evidence in the last decade, as noted by Harisson and Leamer (1997) and Gidling and Terrell (2010) among others. Recently, the study on minimum wage among economists is emergent to present new empirical evidence. In developing countries a large proportion of labour is outside the umbrella of minimum wage legislation, Sara Lemos (2006). Thus, it becomes interesting research to explore the results. The wage inequality is mostly the problem facing in developing countries. Such Philippines, wage inequality shows moderately high where the high earners (top decile) earn about 7 times more than low earners (bottom decile), thus resulting to slower change for economic growth (Rutkowski, 2015). Similarity in Thailand encounter with the risen of wage inequality. Consequently, Leckcivilize, attakrit (2015) objectively to assess the role of minimum wage policy in narrowing the wage gap of low-paid. However, the result suggests that the minimum wage does not significantly affect overall wage distribution and the minimum wage also does not help compressing the lower part of wage distribution towards the median. As for policy implication, the weak law enforcement seems to partly sustain sub-minimum pay among small firms in the covered sector causing the ineffective minimum wage policy observed.

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# Financial Literacy and Financial Well-Being: Evidence from Malaysia

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## ABSTRACT

Researchers, governments and professional organizations are concerned about how consumers, households, students, and employees handle their finances. A large percentage of people in both developed and developing countries are said to be financially illiterate. Everyone today is confronted with significant financial decision-making issues. This current study therefore seeks to critically review the literatures from Malaysia context, a developing country, which published from 2015 to 2021 to highlight gap in financial literacy and financial well-being. Findings from the review indicate that, psychological factors, socio-demographic factors, socio-economic background, financial literacy, financial socialization, financial knowledge, financial attitude, financial behavior, financial capability, financial management, financial planning, retirement planning, work environment, financial aid and debt may have association with financial well-being. Knowledge about savings and Islamic financial instrument are revealed low among young employees. In addition, Islamic financial literacy study is scarce, while digital financial literacy study has become vital in financial technology era. It is also found that workers are the common subject of study in the literature. Therefore, this current study brings guidance for future research that related to financial literacy and financial well-being as well as practical implications.

**Keywords:** Financial Well-Being; Financial Literacy; Theoretical Literature Review; Empirical Literature Review; Malaysia

## INTRODUCTION

The topic of financial well-being has piqued the interest of scholars, government, employers, and professions. Individuals who are adequately financially prepared are able to handle the many obstacles they face, such as personal bankruptcies, health issues, early retirement, and job losses, among others, with greater ease than those who are ill financially prepared (Kamakia et al. 2017). One of the main target of every individual or household is to achieve financial well-being (Iramani and Lutfi, 2021).

The raised household debt level in Malaysia is a cause for concern as the potential to slide up despite the slower growth in household loans in 2016 (The Star, 2017). Despite reduced increase in household debt due to borrowings being scaled back to be in accordance with loan affordability, according to Bank Negara Malaysia (BNM), the risks associated with household lending have remained substantially manageable. In 2016, total household debt as a percentage of GDP was 88.4 percent, down from 89.1 percent in 2015 (Bank Negara Malaysia, 2016).

Current critical pandemic, novel coronavirus disease 2019 (COVID-19) has become a global disaster. Many workers around the world have been laid off cause by the recent COVID-19 outbreak (Althnian, 2021). The pandemic not only affected the world economy but also the family economy (Yuesti et al. 2020). They highlighted that good financial literacy will help individuals to avoid financial problems, especially during the COVID-19 pandemic as well as manage their income well even in demanding situations. In addition, according to Malaysian Deputy Finance Minister II, Mohd Shahar Abdullah, the absorption of financial literacy aspects into daily life and concerns is becoming increasingly vital in the period of the COVID-19 (BERNAMA, 2020).

Financial well-being is a condition where a person able to control day to day or month to month finances, capable to absorb financial shock, in the right track to meet the financial goals and have financial freedom to make the choices that will make life much more enjoyable (Consumer Financial Protection Bureau, 2015). Financial well-being is defined by Mokhtar et al. (2015) as an abstract notion used to explain an individual's or family's financial status. Financial well-being is still in its infancy as a philosophy, with applications in a variety of fields (Mahendru, 2020). There are other terms that are used interchangeably with financial well-being, include financial wellness and financial satisfaction. Financial wellness is defined as satisfaction with material and non-material aspects of one's financial situation, perception of financial stability, including adequacy of financial resources, and the objective amount of material and non-material financial resources that each individual possesses (Delafrouz and Paim, 2011). Financial satisfaction, according to Shim et al. (2009), is a behavioral indicator that is displayed as a result of happiness or discontent with financial concerns.

Financial literacy is a fundamental requirement in the form of knowledge and ability to manage personal finances in order to make sound financial decisions and avoid financial difficulties (Munoz-Murillo et al. 2020). Besides, financial literacy is a measure of one's ability and confidence to manage personal finances through appropriate, short-term decision-making and sound, long-term financial planning, while keeping life events and changing economic conditions in mind (Remund, 2010). Financial literacy, according to Abdullah and Chong (2014), is defined as the ability to make informed decisions about the use and management of money and other assets.

## **METHODOLOGY**

This study is aiming to review and reveal research gap from financial literacy and financial well-being's studies for future study or work. This study relies on secondary sources of data. This study reviews findings of current studies that had been done in Malaysia from 2015 to 2021 related to financial literacy and financial well-being. Underlying theories for this study also will be discussed. This study provides theoretical literature review and empirical literature review. Conclusion and recommendations for further study and practical implications are also provided.

## **KEY THEORIES**

This study is grounded from three theories, theory of planned behaviour by Ajzen (1991), prospect theory by Kahneman and Tversky (1979) and social learning theory by Bandura (1976). Theory of planned behaviour explains how belief derived behaviour and this is important component that can relate with financial literacy. Then, prospect theory that links with emotion will influence rational or irrational behaviour and social learning theory that

continue by people learn behavior by watching others' behaviour and ultimately all of these theories will lead to financial well-being or financial distress as a result of literate or illiterate in handling their money.

### THEORETICAL LITERATURE REVIEW

It is expected that once individuals become financially literate, their financial well-being become better. Financial literacy teaches not just the fundamentals of finance, but also financial planning, money management, budgeting, debt management, creditworthiness, saving, and investing (Rahman et al. 2018). Financial literacy, financial stress, and financial well-being are all linked (Osman et al. 2018). There was, however, no significant link between financial behaviour and financial well-being. Financial literacy, debt, and demographic characteristics (gender, age, and education) are all contribute to financial well-being, however, among the five variables only financial literacy, debt and age have a substantial relationship with financial well-being (Muhamad and Norwani, 2019). The findings were not consistent with the findings by Chikezie and Sabri (2017) where they found that there was no significant relationship between financial well-being and financial literacy, but there was association between financial well-being with financial socialization, financial behaviour and money attitude.

Besides, previous studies had revealed that financial literacy among the young was low, and research on Islamic financial literacy was relatively sparse, according to Rahman et al. (2018). In response to these concerns, they wrote a report aimed at determining the elements that influence Islamic financial literacy. Financial knowledge, financial behaviour, financial attitude, demographic characteristics, and personality traits were identified as components for Islamic financial literacy and their determinants. Other than that, Piaw et al. (2020) mentioned that financial literacy alone is no longer adequate to ensure individual and societal financial well-being, while in the financial technology (FinTech) era, part of education, Digital Financial Literacy (DFL) has become an increasingly vital component.

### EMPIRICAL LITERATURE REVIEW

This section discusses empirical literature review. Table 1 is about summary of empirical literature review.

**Table 1: Summary of Empirical Literature Review**

Author(s), year	Title	Methodology	Findings/ suggestions
Sabri and Zakaria (2015)	The Influence of Financial Literacy, Money Attitude, Financial Strain and Financial Capability on Young Employees' Financial Well-Being	Respondents: 508 young public and private sector workers aged 40 and under.  Setting: 4 urban areas in central Peninsular Malaysia i.e. in the states of Perak	Individuals with modest financial literacy, financial capability, and financial well-being had high effort and retention money attitudes and low financial strain.  Financial well-being differed statistically between those of different marital status (married and

	and Selangor, the Federal Territory of Kuala Lumpur and the Federal Territory of Putrajaya.	single) and household income groups (lower, middle, and high-income), and there were significant association between financial well-being and financial literacy, type of money attitude, financial strain, and financial capability.
	Approach: multi-stage sampling technique.	Financial well-being was influenced by demographic factors (gender and monthly household income), financial literacy, retention-money attitude, effort-money attitude, financial strain, and financial capability. Financial strain being a major element leading to financial well-being. Many of respondents less knowledgeable about savings and Islamic financial instruments. Therefore, financial education must be designed carefully to educate Malaysian about saving to make sure they understand its concept and application, also Islamic financial instrument education should be disclosed more to Malaysian people especially among young employees.
Abdullah et al. (2019)	The Relationship between Attitude Towards Money, Financial Literacy and Debt Management with Young Worker's Financial Well-Being	Respondents: 508 people under the age of 40. Setting: Malaysia's central zone. Approach: multi-stage random sampling.
		Financial literacy, debt management, and attitudes about money (inadequacy, effort/ability, and retention) all had favourable correlations with financial well-being, according to Pearson's correlation analysis. Findings of multiple regression revealed that all eight variables explained 27.4% of the variance in

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			<p>financial well-being, with the variable of attitude toward money, which is a dimension of ability/effort, making a distinctive contribution to financial well-being.</p> <p>Thus, psychological factor such as attitude towards money and other psychological factors should be test in financial well-being's study as they may have significant impact on financial well-being.</p>
Hazudin et al. (2018)	<p>The Relationship between Previous Mathematics Performance, and Level of Financial Literacy and Financial Well-Being of University Students</p>	<p>Respondents: 239 Undergraduate students.</p> <p>Setting: Universiti Teknologi MARA Pahang, Malaysia.</p> <p>Approach: descriptive and correlation studies from survey responses.</p>	<p>Although having strong math and financial literacy scores, respondents' total financial well-being was barely above average, indicating financial breakeven. Although there were positive correlations between variables, none of the associations were judged to be statistically significant (<math>p&gt;0.05</math>). Scholarship holders demonstrated a substantial difference in past mathematics performance among three types of major university funding (family support, study loan, and scholarship) and they were also the top performers in terms of financial literacy and financial well-being.</p> <p>This suggests that having campus life fully funded could be heavenly enough to achieve financial success, as the average amount of money received is typically more than a study loan, which indebted students must repay and which would be a financial burden for many years.</p> <p>It portrays that free financial aid such as</p>

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			scholarships is vital for attain good financial literacy and financial well-being for student and therefore other free financial aid such as grants may also beneficial.
Mahdzan et al. (2019)	Determinants of Subjective Financial Well-Being (SFWB) across Three Different Household Income Groups in Malaysia	Respondents: 1867 Malaysian households.  Setting: Malaysia.	SFWB scores for the total sample are 5.2 out of ten, with substantial variations noted across the B40, M40, and T20 groups, with SFWB scores of 4.3, 5.1, and 6.2, respectively. SFWB has a large positive link with financial behaviour and LOC across all households, whereas financial stress and financial knowledge have a strong negative relationship with SFWB. Financial knowledge, on the other hand, had no significant association with SFWB among the B40 group. This indicates income is crucial component to achieve financial well-being. Financial knowledge solely is not a major contributor to financial well-being.
Wahab and Yaacob (2018)	The Strategy for Financial Well-Being among Public Servants in Malaysia	Respondents: 139 questionnaires were collected from public servants.  Setting: Malaysia.  Approach: simple random sampling.	Three independent variables, namely financial literacy, financial management, and attitude toward savings had a strong link with financial well-being based on regression analysis. Thus, financial literacy, financial management and psychological factor are crucial components that should be concerned in financial well-being's study.
Mohamed (2017)	Financial Socialization: A Cornerstone for	Respondents: 391 Malaysian young	Findings revealed that the frequency with which participants observe and



Young Employees' Financial Well-Being	<p>employees aged 20 to 40 years old.</p> <p>Setting: Malaysia.</p> <p>Approach: systematic random sampling.</p>	<p>interact with socialization agents, such as parents, at an early age, was positively connected to the acquisition of financial information.</p> <p>The acquisition of financial information from observation and conversation with peers, on the other hand, showed no association.</p> <p>However, the study found that the frequency of witnessing and talking with parents and peers about money had a favourable link with the participants' adoption of financial behaviour.</p> <p>The data revealed that financial knowledge, financial behaviour, and financial well-being all have a positive link. Finally, this study demonstrated how the financial socialization hypothesis is useful in characterising the financial well-being of young employees.</p> <p>Thus, financial socialization may be good predictor of financial well-being and should be concerned by future studies.</p>	
Mokhtar and Husniyah (2017)	<p>The Factors Affecting Financial Well-Being Among Public Employees in Putrajaya, Malaysia</p>	<p>Respondents: 207 completed questionnaires from public employees.</p> <p>Setting: Putrajaya, Malaysia.</p> <p>Approach: collects data through a series of online structured questionnaires.</p>	<p>Financial stress, work environment, locus of control, and financial behaviour were all found to be significantly linked to financial well-being.</p> <p>Financial stress was found as the most powerful factor influencing financial well-being, followed by the work environment.</p> <p>As a result, psychological factor and work environment are good predictors that can affect</p>

		Analysis: Statistical Package for Social Science (SPSS) version 21.	financial well-being. In depth study related to financial well-being should be include psychological factors and work environment as well as financial literacy.
Muhamad and Norwani (2019)	The Influence of Financial Literacy, Debt and Demographic Factors on Financial Well- Being	Respondents: 403.  Setting: Malaysia's Central and Northern Zones.  Approach: information was gathered by sending a questionnaire to those working in Perak, Selangor, Kuala Lumpur, and Putrajaya.	Financial literacy, debt, and demographic characteristics (gender, age, and education) all play a role in financial well- being, according to the findings. However, out of the five variables, only financial literacy, debt and age have significant association with financial well-being. Therefore, financial literacy, debt and age should be concerned in future studies.
Zaimah (2019)	The Probability Factor Influences The Level Of Financial Well- Being Of Workers In Malaysia	Respondents: 415 married workers.  Setting: Malaysia.  Approach: the study's sample consisted of married public- sector workers, with an emphasis on workers who are part of a dual- income family. In this study, the individual is the analysis unit.	The likelihood components of various levels of financial well-being (low, moderate, high) were identified using multinomial logistic regression analysis, which included socio-economic background, financial knowledge, financial behaviour, and financial decision-making characteristics. The husband's socioeconomic background (age, monthly income, home ownership, and financial product ownership), financial behaviour, and financial decision-making have a significant relationship with the respondents' various levels of financial well- being, according to the logistic regression analysis. Financial well-being was found to be influenced by

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			<p>factors such as age, monthly income, property ownership, financial product ownership, and financial behaviour. The author suggested that financial education should be incorporated in the workplace to encourage employees to exercise sound financial habits, vital in order to protect workers' financial well-being. Therefore, socio-economic background, financial literacy (include elements of financial knowledge, financial behaviour) and psychological factor (financial decision making) are necessary factors to include in financial well-being study.</p>
<p>Md and Ahmad (2020)</p>	<p>The Financial Literacy among Malaysian Muslim Undergraduates</p>	<p>Setting: Malaysia.  Approach: The questionnaires were created using a multi-dimensional financial literacy model and sent to 330 people in a timely manner. Selected students were also interviewed afterward to have a better understanding of the social background.</p>	<p>The findings revealed that financial literacy scores are influenced by students' exposure to financial education and practice. Students who took muamalat-related classes scored higher on financial literacy tests. Post-interview findings show that a student's social environment and interactions are equally significant in improving their financial literacy. As a result, it is thought that embedding Islamic-based measurements to equip students with financial literacy in tandem with their pedagogic growth is critical. The findings indicate the importance of Islamic-based finance and business knowledge for all tertiary students, extending earlier research. In addition, the curricula</p>

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			<p>should be tailored to their learning environment as well as their beliefs and traditions. According to the findings, personal financial and muamalat-based information and behaviours should be introduced in relation to their Islamic programme focus. This should happen during the students' academic years and during the orientation of all academic programmes. The report also emphasises the significance of adopting Islamic financial literacy assessments that are consistent with Muslims' specific Islamic identity. As Islamic financial literacy's study is scarce, it is vital for any future study in Islamic financial literacy.</p>
Tan and Singaravello (2020)	Financial Literacy and Retirement Planning Among Government Officers in Malaysia	<p>Respondents: 320 Malaysian government officers working in the federal government administrative centre in Putrajaya and Kuala Lumpur.</p> <p>Setting: Putrajaya and Kuala Lumpur, Malaysia.</p>	<p>The findings suggest that financial literacy is high, financial behaviour is good, but retirement planning behaviour is mediocre, and only education and personal income have a favourable impact on financial literacy. Officers' age and gender have no bearing on their financial literacy. Malaysian government personnel have a high degree of financial literacy and good financial behaviour in general, with the exception of their retirement planning behaviour, which is said to be average. Although there was no significant association between age and gender and financial literacy, the study indicated that education and personal</p>

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			<p>income level have a significant impact on financial literacy among Malaysian government officers.</p> <p>It was also discovered that among Malaysian government officers, there was no significant association between financial literacy and retirement planning. Furthermore, the research found that financial literacy had no effect on the association between financial behaviour and retirement planning.</p> <p>The data acquired for this study allegedly showed no significant differences across major factors within the same group of respondents because the study population in this study concentrated on only one specific group of government employees, the Management and Professional group.</p> <p>Need of financial literacy in retirement planning, particularly among Malaysian government employees and the general public.</p> <p>Thus, financial literacy's study in retirement planning should be concerned in future study and may focus on multi-group.</p>
Piaw et al. (2020)	Digital Financial Literacy: A Case Study of Farmers From Rural Areas in Sarawak	Respondents: 252 Sarawak farmers, a specific group of people who come from rural areas.  Setting: Sarawak, Malaysia.	Respondents have moderate understanding of digital financial products and services but low expertise in the other three areas (awareness of digital financial risks, knowledge of digital financial risk management, and knowledge of consumer

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			rights and redress procedures). This shows that many of the country's most disadvantaged people have been left behind by the FinTech revolution. It emphasises the importance of promoting DFL to underserved populations through targeted programmes in order to achieve more equitable financial and economic growth. Therefore, DFL should be concerned more by short-term future study as it parallel with current era.
Nawi and Hussin (2020)	A Good Cop is Never Cold or Hungry: Antecedents and Consequences of Financial Literacy among Members of The Royal Malaysia Police	<p>Respondents: 400 self-administered questionnaire surveys.</p> <p>Setting: Malaysia.</p> <p>Approach: the study employs a positivist paradigm.</p>	<p>Financial literacy is influenced by financial stress, financial socialization, and personal motivation in addition to socio-demographic variables.</p> <p>Financial literacy is linked to both financial behaviour and financial planning. The author also suggested that findings of the study should aid policymakers and police top brass in developing and executing programmes to improve personal financial management among police officers, as stated in the government's National Strategy for Financial Literacy 2019-2023.</p> <p>As a result, socio-demographic variables, financial stress, financial socialization and personal motivation can be concerned as predictors of financial literacy, then financial planning and financial behaviour as consequences of financial literacy and eventually</p>

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			which can lead to financial well-being can be test in future study.
Rafien and Ismail (2021)	The Relationship of Financial Attitude, Financial Knowledge and Financial Capability toward Financial Well-Being Among Workers: An Empirical Investigation	Respondents: 109 people aged 21 to 40 years old.  Setting: all states in Peninsular Malaysia.  Approach: purposive sample technique (gathered through online form).	No significant link between financial attitude and financial knowledge and worker financial well-being. However, there was a strong relationship between financial capability and worker financial well-being. The author suggested that the findings could be utilised as a reference for various government organisations, financial institutions, and individuals in recognising the importance of financial well-being in avoiding financial problems and maintaining a high quality of life.  As a result, future study should test again financial attitude, financial knowledge and financial capability toward financial well-being and try to find out why financial knowledge and financial attitude are not significant with financial well-being and perhaps there are any factors contributed.

Source: Developed by researchers for this study.

## CONCLUSION

Different metrics have been utilised by different researchers, yielding inconsistent results because there are so many diverse definitions of financial literacy. Financial literacy and knowledge are often used interchangeably, according to Huston (2010), however financial knowledge is an important component of, but not the same as, financial literacy. Both academic literature and popular media have frequently used the terms financial literacy, financial knowledge, and financial education interchangeably. Personal finance basics, borrowing, saving/investing, and protection are the four primary categories that emerged from these research' definitions of financial literacy and understanding, according to Huston (2010). Financial literacy, according to Huston, has two dimensions: knowing personal finance knowledge (theory) and applying personal finance knowledge (practise) (application). Financial behaviour, according to Dew and Xiao (2011), is an application aspect of financial

literacy that is seen to positively contribute to people's financial well-being and may be separated into two categories: consumption and financing. The first is concerned with how money will be spent on consumption, while the second is concerned with how money will be invested and saved.

Besides, psychological factors, socio-demographic factors, socio-economic background, financial literacy, financial socialization, financial knowledge, financial attitude, financial behaviour, financial capability, financial management, financial planning, retirement planning, work environment, financial aid and debt may have association with financial well-being. Financial stress was found as major factor that contributing to financial well-being. Financial socialization also found to have unique association with financial well-being. Free financial aid (scholarship) also may have association with financial literacy and financial well-being. Then, socio-demographic factors also had been discussed in previous studies and had significant relation with financial literacy and financial well-being for instance, age, education and personal income. Income is vital component to achieve financial well-being. Financial knowledge solely is not a major contributor to financial well-being. Other than socio-demographic characteristics, the financial literacy is also influenced by financial stress, financial socialisation and personal motivation. Moreover, financial literacy does not correlate with retirement planning and neither does it mediate the relationship between financial behaviour and retirement planning.

Next, study of Islamic financial literacy also should be concerned in future study as the study field is sparse. Knowledge of Islamic financial instrument also should be inculcated among Malaysians especially young workers as finding from previous study found that their knowledge is lacking regarding the subject. Other than that, FinTech development has left many of the country's vulnerable people behind and it is suggested to target this group for specific initiatives in order to achieve a more inclusive financial and economic development. Moreover, knowledge of savings must be taught to Malaysian as some are having wrong interpretation of savings. Savings should be included in spending plans (budgeting) and some are expect savings were extra income after deducted expenses. A saving mindset must be cultivated. The spending plans actually portrays how a person financial attitude is, as Fabrigar et al. (2006) had mentioned that financial attitude reflects a person's mindset about finance. For further study and work, financial literacy also should be include correct measurement, which include both theory and application such as, (combination of financial knowledge, financial attitude and financial behaviour). Many of studies that had been conducted in Malaysia focusing on workers or employees as their respondents. Chan et al. (2018) stated that employees and financial well-being are two aspects that are closely related to each other, and have been deeply studied by researchers. They also suggested, not only can financial well-being directly affect an individual, but it can also indirectly affect his/her organization as well as employer and any level of financial employees' well-being, either low or high, will change their job performance. The statement is true however, since world is under COVID-19, there may have also other target respondents for future studies such as individuals and households that also affected by the pandemic whose need to improve their financial well-being.

Therefore, government and professional bodies as well as future researchers should highlight the findings, gaps, limitations and suggestions that had been discussed. For instance, to test psychological factors, socio-demographic factors, socio-economic background, financial socialization, financial knowledge, financial attitude, financial behavior, financial capability, financial management, financial planning, retirement planning, work environment, financial aid and debt in financial literacy and financial well-being study. Also, there is a need to revise and

use financial literacy measurement to test specific knowledge, attitude and behaviour items in future studies, highlight FinTech study and vulnerable groups, increase awareness and knowledge about savings and Islamic financial instrument and also individual and household groups are also important to highlight in future studies and also in practical implications.

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# **Examining Behavioral Intention of Internal Shariah Auditors in Remote Auditing during Covid-19 and beyond: Adaptation of UTAUT2 model**

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## **ABSTRACT**

The social distancing and commercial restrictions during Covid-19 pandemic obliged Internal Auditors (IAs) to think and act differently in the execution of audits. For IAs, remote auditing is not an option anymore, it has become a necessity (KPMG, n.d.). The study is conducted to explore behavioral intention of Internal Shariah Auditors (ISAs) to use audit technology in remote auditing during Covid-19 pandemic and beyond. This conceptual paper attempts to explore how UTAUT2 model helps in examining the behavioral intentions of ISAs. The study is expected to contribute to the body of knowledge of Islamic Accounting on Shariah Audit (SA) and also expected to have a positive implication to the management or policy makers of SA in Malaysia.

**Keywords:** UTAUT2, Covid-19, Internal Auditing, Shariah Audit and Islamic Financial Institutions Malaysia

## **INTRODUCTION**

From the start of the COVID-19 pandemic, the international audit community acted to provide the expanded use of remote auditing (Daniella, 2020). Remote auditing is defined as the process by which IAs combine information and communication technology (ICT) with data analytics to gather and assess electronic evidence, interact with the client, and report on the accuracy of financial data and internal controls, independent of the physical location of the auditor. Remote audits also referred to the use of information and communication technology (ICT) to gather information, interview a client, when face-to-face methods are not possible or desired (ISO & IAF, 2020). Study conducted by Aidi et al. (2016) found that the level of IT adoption by Internal Audit Unit in Malaysian public sector is high. However, when it comes to the usage specifically in auditing, it is considerably low despite the huge benefits that have been offered by IT. It is supported by a study that observed the lack of IT skills among auditors in Yemen also contributed to the inaccuracies in audit reports issued for companies. For example, the collapse of the National Bank for Trade and Investment, one of the major banks in Yemen, was caused by fraud committed by the bank's board of directors. Their external auditors faced difficulties and obstacles in accessing, interpreting and analysing the information systems of the clients' data because of their lack of skills and knowledge in IT (Mokhtar et al., 2021). Following this, we try to zoom the audit technology adaption from the eyes of Internal Shariah Auditors (ISAs) in performing Shariah Audit. Shariah Audit (SA) came into picture when Bank Negara Malaysia issued a Shariah Governance Framework in 2010



which categorically made Shariah audit function as one of the required functions in IFIs in addition to Shariah Review, Shariah Research and Shariah Risk Management (Fatihu et al., 2020). Though SA it has been existed since 2010, there is substantial research on Islamic finance, less attention has been paid to Shariah Auditing. Auditing in Islam implies monitoring and inspecting activities, which include the process of reviewing, managing, and reporting transactions and managing in accordance with the shariah regulations to provide useful, accurate, timely, and fair reporting for decision-making. There are several challenges have been discussed by researchers on Shariah audit function such as absence of specific Shariah audit framework (Nurazalia et al., 2019) and competency of Shariah auditor (Khalid et al., 2019). Increasing trend in adoption and use of ICT in business, upsurge the importance of upgrading competency level among accounting and auditing professionals. Accounting professionals should competent enough to meet the challenges of contemporary business environment (Thottoli, 2019). Venkatesh et al. (2003) utilised UTAUT model to understand human acceptance behaviour across a range of disciplines. This study utilises the same model to understand ISAs' behavior intention to use of audit technology in performing remote auditing during this global pandemic time. This model is chosen for its quite robust ability in predicting the acceptance and use of technology and it has been digitized and published by more than 60 reputable international journals (Venkatesh et al., 2016). However, previous studies regarding technology in the Islamic Finance Industry are still limited to the implementation of the UTAUT model and the addition of new variables for model development (Alex, 2021).

## **BACKGROUND**

### **Unified Theory of Acceptance and Use of Technology (UTAUT)**

UTAUT was known as one of the best known models of technology acceptance. Unified Theory of Acceptance and Use of Technology (UTAUT) popularized by Venkatesh et al. (2003) is a theory that focuses on the basis of integrating the dominant constructs of eight prior prevailing models that range from human behavior, to computer science. These eight theories explaining acceptance of technology, namely Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), the Motivational Model (MM), Theory of Planned Behavior (TPB), the Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), the Social Cognitive Theory (SCT), and the Integrated Model of TAM and TPB. There are four constructs influencing the behavioral intention (BI) in using technology, namely Performance

Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Condition (FC). After that, Venkatesh et al. (2012) expands it by adding three constructs consisting of Hedonic Motivation (HM), Price Value (PV), and Habit (Hb), so it becomes a UTAUT2 model (Alex, 2021). The UTAUT2 model postulates 7 constructs below as the determinants of behavioural intention of users towards adoption of technology (Rahi et al., 2018; Venkatesh et al., 2012).

#### **1.1 Performance Expectancy**

Performance expectancy is a UTAUT construct aimed at measuring a person's confidence level that using a system can help a person achieve his or her job performance. Performance expectancy is a variable that can be referred to as the ability to gain significant benefits after using a system. Performance expectancy is a representation of five constructs including perceived usefulness (technology acceptance model), external motivation (motivational model), work correlation (model of personal computer utilization), relative advantage

(innovation diffusion theory) and expectancy to the achievement (social cognitive theory) (Marsosiyati et al., 2019).

### **1.2 Effort Expectancy**

Effort expectancy is the level of effort of each individual in the use of a system to support doing his work. According to Venkatesh et al. (2003), effort expectancy refers to how easily one thinks in using a system. Effort expectancy is a representation of three constructs including consciousness of easy to use (Technology Acceptance Model), systematic complexity (Model of Personal Computer Utilization) and operating simplicity (Innovation Diffusion Theory). In the success of receiving a technology, the design of a system such as a virtual platform can allow users to navigate easily or not.

### **1.3 Social Influence**

Social influence is the degree to which one considers it important to others convincing themselves in using the new system. The behaviour of individuals are also affected by the way in which they believe that others will see them as a result of using a technology. Social influence by Venkatesh et al. (2003) is a representation of the three constructs including subjective norm (theory of reasoned action, technology acceptance models and theory of planned behavior), public image (innovation diffusion theory) and social factors (the model of personal computer utilization). Social influence depends on the influence of the environment that includes volunteerism, and other contexts between individuals and the effect on the organization (Marsosiyati et al., 2019).

### **1.4 Facilitating Condition**

Interest in the utilization of a system is the intention of the user using the system Facilitating conditions is the level of one's belief that the company's and technical infrastructure is available to support the use of the system. In addition, facilitating conditions are also included in a person's beliefs about the facility's environment including coverage, network and device availability to make a person's beliefs accept a technology. Facilitating conditions are able to describe an individual's level in accepting a technology based on the support of facilities provided by organizations and technical devices that support the use of a system. The device can be a system used, training, manuals or other (Venkatesh et al., 2003).

### **1.5 Hedonic motivation**

Hedonic motivation is defined as the "happiness attained from using technology" (Venkatesh et al., 2012).

### **1.6 Price Value**

Price value can be referred to as "apparent worth or advantages of using the technology, in comparison to the cost for utilizing them" (Venkatesh et al., 2012).

### **1.7 Habit**

Habit is explained as the level at which individual actions can be prompted instinctively (Venkatesh et al., 2012).

## **Audit Technology**

Farida et al. (2018) found that the review indicates that reasons for the slower adoption of technology-enabled auditing has yet been investigated, although the importance of audit technology in improving the auditors' task in the electronic environment has been recognised widely. In her study she explained the auditor needs to incorporate 'state-of-art' audit

technology to enhance the audit process (Rose et al., 2017). Advanced technologies are impacting the audit profession, referring to both the tools available to auditors and the systems that need to be audited. The rapid increase in the volume of data also requires auditors to be equipped with the latest available technological tools to analyse a much higher volume of data in their audits than has previously been the case. In April 2019, ACCA surveyed members and affiliates about their understanding of audit technology terms such as artificial intelligence (AI), machine learning (ML), natural language processing (NLP), data analytics and robotic process automation (RPA). On average for any given term, 62% of respondents had not heard of it, or had heard the term but did not know what it was, or had only a basic understanding. On average, only 13% of respondents claimed a 'high' or 'expert level' of understanding of these terms. There's a need for greater awareness of what these technologies are and their implication<sup>6</sup> for the audit profession. Data analytics was found to be the most mature of the technologies currently used by most firms, while machine learning is still not at the stage where it is embedded in everyday practice (ACCA, 2019).

### **UTAUT2 and Internal Auditing (IA)**

The pandemic gives a dramatic effect on internal auditors who could no longer perform planned audits using traditional face-to-face methodologies. IA functions have shifted from performing audit procedures from a different location to remote auditing, which means using clients' information and communication technology with data analytics to assess and report on accuracy of financial data and internal controls, gather electronic evidence and interact with the client (KPMG). Several studies have discussed that an increasing the reliance on technology and using modern methods and tools of auditing and data analytics in planning and implementing audit tasks contributes to better conclusions, reduces the costs of performing audit activities, excludes activities that do not add value to the enterprise, and enable auditors to expand their consulting services (Asma & Mona, 2021). Using modern methods and tools of auditing achieves many advantages and these included increase the speed and efficiency of the audit process and helps in expanding the audit scope and increasing audit coverage. Audit technology helps to save time and efforts, reducing the number of auditors needed to implement the audit programs (ACCA, 2019) In addition to that, it will help to increase the productivity of the audit team and the quality of the audit. UTAUT2 model introduced in year 2012, it has already garnered more than 6000 citations in Google Scholar alone spanning from IS field and beyond emphasising on its predictive ability This provides relevance for researchers to employ UTAUT2 as theoretical lens for understanding technology adoption related issues in variety of settings either stand-alone, or in combination with other theories, or with addition of external variables (Tamilmani et al., 2021).

## **LITERATURE REVIEW**

The fear of losing a job during this pandemic time is mostly scared by senior auditors, especially the elderly, who have been working long hours in the audit field. This is due to their lack of absorption of information technology to assist their work. Besides that, they have been working the same way for years, that is manually, even if using computer, but not using database system. In order to adapt to the development of information technology, they must be willing to learn and change the mindset about the pattern of work that has been formed over the years. Dimitris in her statement supported that in order to meet society's expectations of today and to remain relevant within the environment, auditors have the responsibility of transforming the way they deliver on their obligation to the public. This transformation includes auditors' response to the advances of technology-based solutions (ACCA, 2019)

Study by Felix et al. (2021) explains that the phenomenon of audit digitization has two dimensions. One dimension is the digitization of audit tasks that relate to the management of audits such as the organization and delegation of work packages communication with the client of the documentation of the audit. The digitization of the management of audit is already at an advanced stage. The second dimension is the digitization of the 'fieldwork' that is the assessment of risks and the obtaining of audit evidence used to support the audit opinion. The digitization of the latter has a greater impact on the profession and continues to have vast potential. The study indicates that the digitization of the audit fieldwork is progressing rather slowly and despite the potential of audit technology that being discussed in the literature is rather limited particularly from Shariah Audit perspectives.

The prior model of the UTAUT has been used to describe users' technology adoption behavior in organizational context (Venkatesh et al. 2003). Instead, the UTAUT2 model was extended from the UTAUT and was focused on individual perspectives in technology adoptions. The new model was significantly an enhanced one for explaining variances in users' technology intention. In 2012, Venkatesh, Thong and Xu proposed the inclusion of new variables in the model, indicating new relations since the technological context that makes possible the employment of UTAUT2 will always be an optional adoption of a technology by the user. The 2012 study was conducted in Hong Kong, and applied to the study of the acceptance of mobile Internet technology. Since the purpose of this research is to explore the possible factors influencing individual users' adoptions of audit technology by ISAs in remote auditing, the UTAUT2 framework can provide more insights and, thus, will be adopted as the research model of this work. Research done by Tamilmani et al. (2021) classified the downloaded articles for UTAUT2 into four broad themes based on usage:

#### **a) General Citation**

General citation is the major UTAUT2 citation category with 503 studies. These studies cited Venkatesh et al. (2012) paper for generic reason without using theory in substantial manner as compared to other three categories. An earlier related study on these 650 articles titled "A Systematic Review of Citations of UTAUT2 Article and Its Usage Trends" found as much as 77 % of the articles cited UTAUT2 for general purpose. Meanwhile, the remaining 23 %, even if they utilised UTAUT2, did so in combination with external theories with rare inclusion of moderators (Tamilmani et al., 2021).

#### **b) UTAUT2 Application**

These studies utilised only UTAUT2 constructs and its moderators in their research model either in part or as whole. In total, 24 empirical studies fell under UTAUT2 application category. For instance, Hsieh et al. (2014) employed UTAUT2 model as is with all main and moderating effects to examine consumer use of smartphones and tablets in Taiwan; On the other hand, Mtebe et al. (2016) employed all the main effects of UTAUT2 except use behaviour and moderators' effects to examine teachers' adoption of multimedia content in Tanzanian schools (Tamilmani et al., 2021).

#### **c) UTAUT2 Integration**

UTAUT2 integration category comprises of both empirical (43 studies) and conceptual (14 studies). Studies in this category integrate entire UTAUT2 or part of the model with at least one other theory of theoretical significance in their research model. For instance, Oliveira et al. (2016) integrated Diffusion of innovations (DOI) with UTAUT2 to empirically examine consumer's intention to recommend mobile payment technology in Portugal. Similarly, Rosli et al. (2012) integrated Technology-Organization-Environment (TOE) framework with

UTAUT2 and proposed conceptual model to evaluate factors influencing individual's computer-assisted auditing tools (CAATs) acceptance in public audit firms.

#### **d) UTAUT2 Extensions**

UTAUT2 extension also comprises of both empirical (65) and conceptual (1) studies. The major difference is studies in this category did not include external theories instead they included external variables through one or combination of seven mechanisms such as new exogenous, endogenous, moderation, mediation, outcome, internal or external mechanisms retaining the entire or part of the UTAUT2 as a baseline model. Such instance includes but are not limited to Alalwan et al. (2017) extension of UTAUT2 with trust as the external variable to empirically examine customer's adoption to mobile banking in Jordan. Meanwhile, Alazzam et al. (2016) was the only conceptual study in this category, which extended UTAUT2 with trust in storage data as an external variable to examine medical staff's acceptance of electronic health record in Jordanian context.

In this paper we proposed UTAUT2 2012's model to explore the desire of ISAs to adopt the latest technology in their remote auditing during pandemic. This is a good model to use as majority of the studies applied UTAUT2 in its original context (i.e. consumer) with some studies employing them in the organisational context. Tamilmani et al. (2021) shared UTAUT2 model used in an organisational context involved variety of institutions such as hospitals (Alazzam et al., 2015), schools (Mtebe et al., 2016), a large multinational company (as cited in de Oca and Nistor, 2014) and public university (Raman & Don, 2013). These organisations comprised a range of technological users such as healthcare professionals, schoolteachers, employees and pre-service teachers performing their respective tasks of accessing electronic health record, teaching using multimedia content, learning at workplace through virtual community of practice and learning through management system (MOODLE). According to Tamilmani et al. (2021), besides organisational users, researchers also focused on variety of consumers such as small scale farmers (Alemu & Negash, 2015), students (Kaba & Tour'e, 2014; Sharifi fard et al., 2016; Wong et al., 2014) and young elderly people aged between 60–75 years (Carlsson & Walden, 2016). UTAUT2 application studies also involved user's engagement in plethora of technologies such as commodity exchange platforms (Alemu & Negash, 2015), mobile social networking sites (Guo, 2014), ReWIND: lecture capturing system (Nair et al., 2015), Mobile TV (Wong et al., 2014), branchless banking technology (Kurila et al., 2016) and Mobile Internet (Ramírez-Correa et al., 2014; Rondan-Cataluna et al., 2015).

Papers that examine UTAUT2 application in Islamic Accounting are rather scarce, therefore the closest study was on the adoption of digital banking of Islamic banks during the COVID-19 for researcher to see the relationship between constructs and BI. In this study it was found that PE is one of the most significant variables influencing behavioral intention (BI) to adopt and to use information systems (Alalwan, 2018) especially internet banking (Rahi et al., 2019) and mobile banking (Nawaz et al., 2020). According to Hassanudin et al., (2019) the easier the use of internet banking, the higher the customers' adoption rate will be. If the use of technology makes customers' lives simpler and easier with less interaction with humans, it will increase the intention to adopt digital banking (Raza et al., 2019) which explained EE as a significant variable for BI. The easier the digital banking operation, the higher the intention to use this technology will be. As for SI, the role of SI in increasing consumers' intention in digital banking has been widely analyzed in previous studies (Alalwan, 2018; Nawaz et al., 2020; Raza et al., 2019; Rahi et al., 2018). The study conducted by Akhtar et al. (2019) shows the intention to use digital banking in a cultural context influenced by the closest people, and specifically SI has a higher effect in Pakistan than in China (Alex, 2021). According to Hassanudin et al. (2019) in the context of internet banking, individuals need support or



guidance in terms of usage skills, facility descriptions, security, FAQs, etc. The technical support available to individuals while using technology is called the Facilitating Condition (FC) (Venkatesh et al., 2003). According to Alalwan (2018), Johar & Suhartanto (2019) and Nawaz et al. (2020), FC has an impact on behavioral intention and sustainable use of digital banking. The better the availability of FC support for customers, the higher the willingness to use and to adopt the technology (Hassanudin et al., 2019). A study conducted by Hassanudin et al. (2019) shows that Hb has a positive impact on the intention to use digital banking. This is in line with the research conducted by Nawaz et al. (2020), Venkatesh et al. (2012) and Venkatesh et al. (2016) stating that habit is a significant variable in influencing consumers' intention to use technology. Alex (2021) in his research explained habit is formed when the behavior often repeats itself in a stable context and when the behavior leads to satisfactory results. Thus, the more the individuals get used to using digital banking, the higher their intention to continue using this technology (Alex, 2021). Venkatesh et al. (2012) in his study revealed that several factors such as playfulness, joy, and enjoyment capture the hedonic motivation (HM) and are significant determinants of customer acceptance of technology. In addition to customers who perceive using the technology that comprises of fun, playfulness, and enjoyment, they are more than likely to perceive using this technology in a more productive manner requiring less effort, and hence, will contribute to value perceived by using such a system. Based on the marketing literature, perceived value is usually identified by how the customer cognitively compares how much he/she should pay instead of utilities and quality attained (Dodds et al., 1991). Therefore, if the utilities, which a customer can attain by adopting a high-tech product, are higher than the financial cost, the price value will positively predict the customers' intention to use the technology (Venkatesh et al., 2012). According to study done by Azizi et al., (2020), it was found that habit (HT) had a positive effect on the students' intention to use blended learning. In addition, HT had a positive effect on the students' actual use of blended learning. This was in line with the results of Tarhni (2017) and Moorthy et al. (2017). Therefore, this study articulates the following hypotheses for the proposed model below:

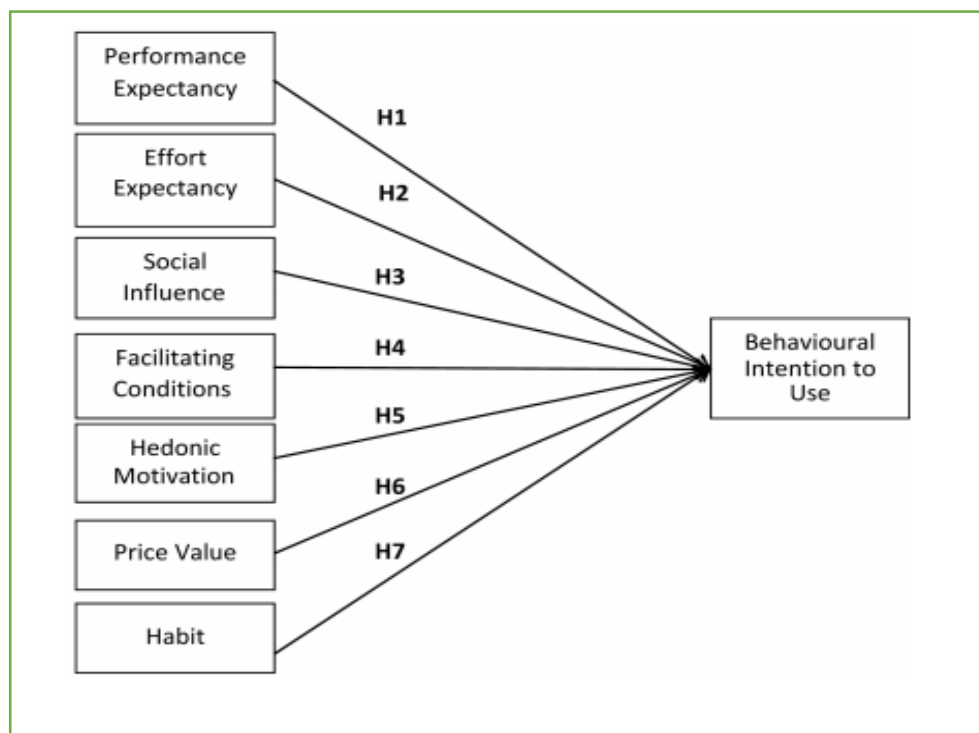


Figure 1: Proposed Model



- H1: Performance Expectancy (PE) has significant effect on Behavioral Intention to Use
- H2: Effort Expectancy (EE) has significant effect on Behavioural Intention to Use
- H3: Social Influence (SI) has significant effect on Behavioural Intention to Use
- H4: Facilitating Condition (FC) has significant effect on Behavioural Intention to Use
- H5: Hedonic motivation (HM) has significant effect on Behavioural Intention to Use
- H6: Price Value (PV) has significant effect on Behavioural Intention to Use
- H7: Habit (Hb) has significant effect on Behavioural Intention to Use

## CONCLUSIONS

ISAs must adapt to current condition. Nowadays, the audit work has to be done remotely. Computer assisted audit techniques help the remote auditing become more effective and efficient. ISAs should be willing to learn to use computer assisted audit techniques to improve their skills and knowledge. ISAs are willing to study computer assisted audit techniques if they assume that their performance can improve with audit technology. The auditor will able to learn and use audit technology if it is supported by the latest IT infrastructure. Based on this, the need for the role of IFIs to provide adequate facilities for the ISAs to learn and can adopt the development of information systems. In order to enhance ISA's skill and knowledge in information system, audit technology training should be conducted. Prior to the training, the trainer must be able to demonstrate and convince the ISA that audit technology can improve their work performance. UTAUT2 model helps in measuring ISAs' confidence level that with audit technology, they can achieve his or her job performance. Aside to that, we can explore how ISA think audit technology is easy to use then it will increase the ISA's intention to use the audit technology. This model is expected to also demonstrate ISAs readiness whether they are willing to learn audit technology seriously or not to improve their work performance. In addition, the IFIs in Malaysia must also upgrade the computer used by the auditor to work, both hardware and software to fully support the remote auditing with audit technology. There is also an opportunity of future research in exploring the other antecedent factors of ISAs' performance expectancy in remote auditing with audit technology by adapting another study variables. UTAUT2 is a well-known baseline model which can be potentially extended to link with different individual outcomes and can contribute to the body of knowledge of Islamic literature. As part of ongoing research, this study will be continued to measure the items from the literature and validate the proposed model empirically.

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# **The Relationship Between Financial Management, Financial Literacy and Cooperative Performance in Malaysia.**

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## **ABSTRACT**

In Malaysia, cooperative firms face a lot of business management challenges and it is alleged that they suffer, mostly, in terms of their financial management practices and entrepreneurial orientation. This study attempts to review the specific financial management practices and cooperative firms, especially how the organisation or firm enhance their business performance. It has been show within past studies that financial management are significant associated with business performance. Previous finding shows the evidence most of the shareholder in cooperative firms did not understand the meaning of financial management, in addition to several interesting revelations. It can conclude that financial management have positive relationship towards business performance of cooperative firms. The conceptual model is developed based on prior research done in the area as well as from the literature review of relevant articles from various journals. The originality of this paper is it discussed the role of financial literacy as a moderator on the relationship of financial management and cooperative performance, something that ignore by the previous study. The study recommends shareholder collaborative efforts involving with the relevant agencies and NGOs in building the financial management skills and capacities of the shareholder. The shareholder has been advised to urgently take steps to acquire these relevant skills since they need and benefit most. Future research recommendations need to better understanding of financial management practices and it will improve business performance in the other sectors.

**Keywords:** Financial Management; Financial Literacy; Cooperative Performance.

## **INTRODUCTION**

The cooperative firms play an important role in generating a country's economy beside the government and private sectors (SKM, 2010; Muhd Nusi, 2007). The importance of the cooperative firm sector can be shown through the participation of its members in various business activities (SKM, 2010), which have been recognised to improve the country's economic performance ('Aini, Hafizah, & Zuraini, 2012). Such as, the cooperative firm sector is projected to be dominant contributor to the national economy with a target of 10% of Gross Domestic Product in 2020 (SKM, 2013).

However, the performance of the cooperative sector in Malaysia can be considered quite backward if we refer to the earning indicator. In Malaysia, the cooperative movement showed the positive growth from year to year. In 2019, there were 14625 cooperative compared to

14247 and 13899 in 2018 and 2017, reflecting that number of cooperatives in Malaysia is increasing annually (SKM, 2020). However, the growth in the number of cooperatives is not an indicator of success.

The issues of the cooperative performance has been written in Khan, Yaacob, Abdullah, & Ah, (2016); Othman, Mansor, & Kari, (2014), state that the cooperative sector performance in Malaysia is relatively weak and slow movement. This is raised concern about the factors are affecting the cooperative capability to overcome its weakness through effective policy implementation and management their businesses. Official statistics from MCSC, in 2015, the cooperative firm has a loss, it is slightly declined -4% from 8.44%, there are because one of the factors, Malaysia had decline of currency and political has not stable at that time (Wong, 2015). However, for the following years 2016 it was inclined 18.21% until 2017 for a while, although in 2019, current statistics show that the value of turnover is increased dramatically compared in 2018.

The second issue in the Cooperative sector are the total amount of asset and revenues. The important of the cooperative in Malaysia can be seen from the total amount of the asset that they owned and also in terms of the total revenue generated by their business activities. In terms of their total revenue and asset, the Malaysia Cooperative Societies Commission (MCSC) disclosed that in the 2019, cooperative collectively owned assets valued at RM146.78b and their total revenue valued RM45.80b, (MCSC, 2020). It is shows that the cooperative performance in Malaysia almost achieve the target in 2020 but it is still in sluggish.

Through globalization market processes it has influenced the economy in Malaysia. This shows that Malaysia's gross domestic product (GDP) has declined in 2009 to -1.7%, but in 2011 GDP grew only a modest percentage of close to 2%, (BNM, 2011; SKM,2013). Furthermore, in 2016 and 2017 it showed a positive growth in Malaysia's GDP, up 6.3% (RM1231.0b) and 9.9% (RM1353.4b). This shows that the Malaysian economy is growing and stable. However, that percentage is only temporary because, in the fourth quarter of 2018 Malaysia's GDP growth slowed to 4.6%, following the trade war, the end of global technological advances and the tightening of the monetary policy environment of the world, (KIB, 2018).

In terms of the value added to the national economy, their contribution is considered as important as those provided by the other business organizations. Of these organizations, cooperative are increasing their being recognized as an important source of domestic investment by the Malaysian Government, (Hashim & Zakaria, 2015). This study has a various issued need to be analysed.

Having said so, based on the importance of cooperatives to our country, there are various issues related to the factors that affect the performance of cooperatives that have been discussed in previous studies (Khan et al., 2016; Othman et al., 2014). Among various factors involved are financial management (Hunjra, Butt, & Rehman, 2011; Kunovskaya, 2010; Mulinge Nthenge & Ringera, 2017; Yogendrarajah, R., Kengatharan, L., & Jeyan, 2017), and financial literacy (Adomako, Danso, & Damoah, 2016; Bongomin, Ntayi, Munene, & Malinga, 2017; Fatoki, 2017; Ibrahim, 2017) that are being discussed.

According, Hunjra et al. (2011), when follow the comprehensive financial management practices, organization can achieve better resources utilization and profit maximization. Thus, Hassim, Talib, & Bakar (2011) , state that the entrepreneurial orientation is essential to being proactive and willing to take risks while implementing those approaches to deal with the



competitors. Besides, financial literacy are obtained more importance in the early parts of financial distress and became a prerequisite for the objective of avoiding financial crises by achieving economic stability (Kamal Gupta & Jatinder Kaur, 2014).

The originality of this paper is it discussed the role of financial literacy as a moderator on the relationship of financial management and cooperative performance, something that ignore by the previous study (Laghari & Chengang, 2019; Mathew, 2013; Mulinge Nthenge & Ringera, 2017; Yohanes, Lemie, & Shibru, 2018). Hence, this study proposes to provide a conceptual model for the relationship between financial management and cooperative performance. Later, in this study financial literacy may use as moderator to examine on how it moderates the relationship between financial management and cooperative performance.

## THE THREE CONSTRUCTS

### Cooperative Performance

In this context, dependent on this study focusing the Cooperative performance in Malaysia. Carton and Hofer (2010), R. Hassan, Marimuthu, & Johl, (2015) observed that most of the research have attempted to use performance as a dependent variable. Many researchers are given different definition and opinion of the cooperative performance. According, Shamsuddin, Mahmood, Ghazali, Salleh, & Nawi (2018), performance measurement in cooperatives has mostly remained within its financial dimension and focuses on financial stability.

The cooperative performance is the final outcome of the partners ' collaboration. It is normally measured by objective output indicators including absolute indicators and relative indicators (McGee, 1995). By Ganesa (1994), absolute indicator is measured by customer satisfaction, cost, earning capacity and relationship continuity, while relative indicators are measured by the target rate of achievement, profit rate and net profit growth rate. Some of these qualities are determined by metrics of the short and long-term. The short-term indicators focus on duration expenses, revenues and profit and the long-term indicator focus on relationship stability and ongoing value maximisation.

Thus, in this study cooperative performance is consist of two indicators, there are financial and non-financial indicator of performance. These performance measures are used by some researchers to measure the firm performance (Abbas, Bashir, Manzoor, & Akram, 2013; Amir, Burhanuddin, & Priatna, 2018; Lazar, 2016).

### Financial Management

Financial management may be defined as the area or function in an organization which is concerned with profitability, expenses, cash and credit, so that the 'organization may have the means to carry out its objective as satisfactorily as possible'. This were be supported by Meredith (2006) and Jennifer & Dennis (2015), financial management is one of several functional areas of management that is central to the success of any business. It is also control of a company's finance to achieve its financial target. Nazir & Afza (2009), stated that practices of financial management include how a company handles its financial resources to ensure proper planning and optimum returns. Financial management is generally concerned with the short term working capital management, focusing on current asset and current liabilities, and managing fluctuations in foreign currency and product cycle, often through hedging. To further

the context of the area of this study, this study adapted the financial management that has been applied in performance literature. So, in this paper the financial management focuses among the three component which always debate by previous studies which are working capital management (Richards and Laughlin, 1980; Wang and Yan, 2007; Deloof, 2003; Aktas et al., 2015; Kieschnick et al., 2011), capital structure (Brounen & Eichholtz, 2001; Pandey, 2009) and capital budgeting (Yadav, 2015; Quirin (1967) are included as indicator for financial management.

### *Working Capital Management*

Working capital is involved in firms' daily operations, such as those related to procurement, production and sales, and it is cyclically invested in various areas such as in accounts payable, inventory, accounts receivable and so on (Richards and Laughlin, 1980; Wang and Yan, 2007). Working capital management literature comprises two distinct views for investment in working capital. Under the opinion of one view, high investment in working capital allows a firm to enhance sales, acquire higher discounts for early payments and increase firm value (Deloof, 2003; Aktas et al., 2015).

### *Capital Budgeting*

Capital budgeting can be defined as the "total process of generating, evaluating, selecting and following up on capital expenditures". Hence, capital budgeting techniques would be the set of tools with which financial managers use to establish criteria for investing capital into available opportunities. A mistake in its capital budgeting process thus would cause a detrimental effect to the financial position of the company in the future (Yadav, 2015). Quirin (1967) pointed out that capital budgeting is a stipulated avenue to invest present sum of funds more efficiently and effectively to generate future fund flows in the long run.

### *Capital Structure*

Capital structure is one of the most puzzling issues in corporate finance literature (Brounen & Eichholtz, 2001). The concept is generally described as the combination of debt & equity that make the total capital of firms. The proportion of debt to equity is a strategic choice of corporate managers. Capital is a vital part of that statement. The term "capital structure" of an enterprise is actually a combination of equity shares, preference shares and long-term debts. A cautious attention has to be paid as far as the optimum capital structure is concerned. With unplanned capital structure, companies may fail to economize the use of their funds. Consequently, it is being increasingly realized that a company should plan its capital structure to maximize the use of funds and to be able to adapt more easily to the changing conditions. (Pandey, 2009).

### **Financial Literacy**

Financial literacy is the convergence of financial, credit and debt management and the knowledge that is necessary to make financially responsible decisions. A lack of financial literacy is not only an issue in developing economies but also people in developed or advanced economic countries fail to demonstrate a strong knowledge of financial principles in order to understand and negotiate the financial matters, manage financial risks effectively and avoid financial difficulties (Xu & Zia, 2012). Many types of research from all over the world showed many individuals have low levels of financial literacy and this issue has a relationship with lack of financial planning and insufficient savings for retirement (Lusardi & Mitchell, 2014).

## **THE CONSTRUCT RELATIONSHIP: A MODEL FOR COOPERATIVE PERFORMANCE**

### **Financial Management and Cooperative Performance**

It has been found that the significant relationship between financial management and business performance by previous researcher. Yohanes et al. (2018), examine the effect of financial management practice on profitability of Small Scale Enterprise in Hawassa City Administration. They found that a positive and significant relationship between financial management and performance. Similarly, Hunjra et al. (2011), shows that positive and significant relationship between financial management and organizational performance that practices in Pakistani Corporate Sector. Apart from that, Mathew (2013), confirmed a significantly and positively affect between financial management and financial performance on SMEs. Laghari & Chengang (2019) and Usama (2012) initiate that working capital management has significant and positively effect on performance in different sector. On the other hand, various researchers (Abor, 2007; Cohn, Mills, & Towery, 2012; Park & Jang, 2013; Whiting & Gilkison, 2000; C. C. Yang, Lee, Gu, & Lee, 2010) emphasized the significance of the firm's capital structure in determining the performance of the firms. Meanwhile, Pearce (2019) examine the capital budgeting technique on commercial bank financial performance in Sierra Leone. The result shows a capital budgeting is positively significant relationship with financial performance among employee. Previous finding shows the evidence most of the shareholder in cooperative firms did not understand the meaning of financial management, in addition to several interesting revelations. The following hypotheses are proposed:

- H1: Financial management has positively significant relationship to cooperative performance.
- H1a: Working Capital Management has positively significant relationship to cooperative performance.
- H1b: Capital Structure Decision has positively significant relationship to cooperative performance.
- H2c: Capital Budgeting has significant negatively relationship to cooperative performance.

### **Financial Management, Financial Literacy and Cooperative Performance**

Financial literacy has become essential in the running businesses and operations of organization in the complex and dynamic environment today. The lack of financial literacy or financial illiteracy may lead to making poor financial choices that can have negative consequences on the financial wellbeing of an individual (Nicholas, 2014). Previous studies have found that there is a relationship between financial literacy and business performance, and the studies show a positive relationship (Adomako et al., 2016; Eniola & Entebang, 2015; Fernandes, 2015; M.Njoroge, 2013; Mutiso & Muigai, 2018). Bongomin et al. (2017) found a positive and significant moderating effect of financial literacy in the relationship between access to finance and growth of SMEs in developing economies. In contrast, financial literacy could bring negative effect towards performance, whereby prior studies found that financial literacy was to be insignificant to performance (Eresia-Eke & Raath, 2013; Green, 2013). Hence, the hypothesis of this study is proposed as follows:

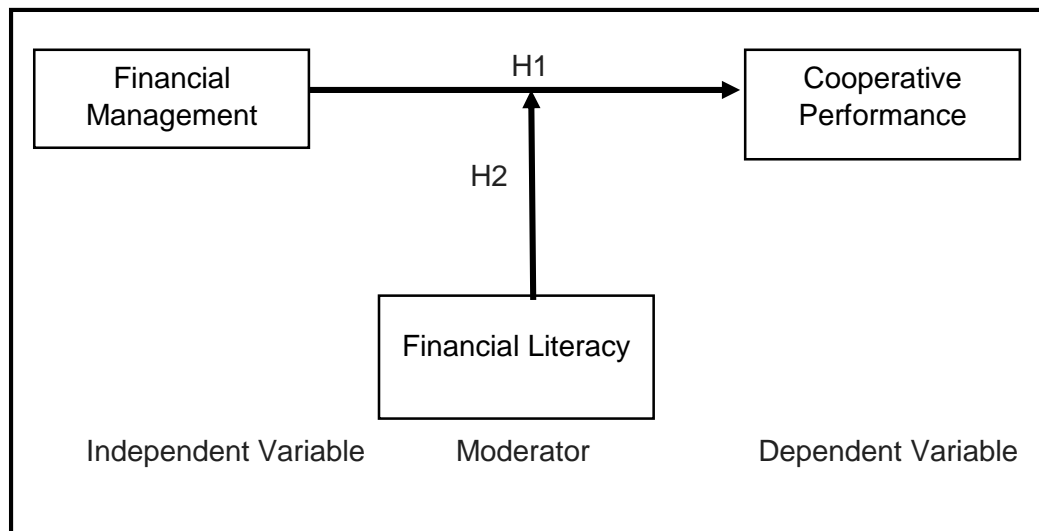
- H2: The financial literacy has a significant moderating effect on the relationship between financial management and cooperative performance.

H2a: The financial literacy has a significant moderating effect on the relationship between working capital management and cooperative performance.

H2b: The financial literacy has a significant moderating effect on the relationship between capital budgeting and cooperative performance.

H2c: The financial literacy has a significant moderating effect on the relationship between capital structure and cooperative performance.

From all the hypothesis above, a conceptual model can be formed as in Figure 1.



**Figure 1: Conceptual Model of Cooperative Performance**  
(Source: *Fatoki, 2017; Shusha, 2017; Bongomin et al., 2017; Okafor, 2012*)

## RESEARCH METHODOLOGY

The selection sample of this study will be conducted in Malaysia by using stratified sampling method based on Cooperative firm in Malaysia. Quantitative approach in data analysis and collection will be used as suitable approach since this research will test the relationship among construct. Therefore, the unit of analysis in this study is an organisation represent by Cooperative firm in Malaysia. The targeted respondent is someone who involved in the operation of the cooperative that responsible in financial management, entrepreneurial orientation and performance. These firm were approach through their chairman/deputy chairman/secretary/treasury as representative for their firm to answer the constructed questionnaires. The sample size of this study is referring to Krejcie & Morgan (1970) sample size table. From the Krejcie & Morgan (1970) table, they recommended minimum of 375 of sample size from a total of 12625 populations.

The instrument to be applied in this study is questionnaire. The questionnaire will be prepared in five part that will be adapted from previous study which is (Dahmen & Rodríguez, 2014; Fatoki, 2014; Mathew, 2013; Sagita, 2018). Data will be collected via electronic mail. To increase the response rate, follow-up is a gentle reminder by the researcher to retell the respond about the survey that has been answered (Fox et.al, 1989).

To analyse data SPSS 25 will be used for demographic analysis or also known as descriptive statistics to distinguish the frequency distribution, means, and standard deviation of the cooperative profile. The data of this study will be analysed using Structural Equation Modelling (SEM). The data reliability and validity of each variable will be analysed using SEM. SEM is suitable for the study that provides prediction (hypotheses), theory development, theory testing and confirmation theory (Hair et al., 2014).

## CONCLUSION

Financial management, and including financial literacy as a moderator, will be effective tools for improving cooperative performance. The efficiency of financial management practice can bring about higher performance in the cooperative sector. Therefore, recognising this importance, vital strategies need to be generated, while certain practices of cooperatives need to be revamped. This is to ensure the cooperatives continue to gain support from members and the general public to improve cooperative performance. Among other suggestions that can be considered by cooperatives include shareholder collaborative efforts involving with the relevant agencies and NGOs in building the financial management skills and capacities of the shareholder. The shareholder has been advised to urgently take steps to acquire these relevant skills since they need and benefit most. Past studies show that the financial management are the main variables that found significant to the cooperative performance. Suggested for future research, researchers may have considered to do an empirical study since data is required to prove these connections. Besides that, future research also should consider other core variable that may influence the organization such as size, age and industry types. Therefore, by improving the literacy in financial management, cooperative performance can be operating much longer for generation.

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# Accountability and Organizational Performance in Perspective of Public Governance: A Conceptual Paper

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## ABSTRACT

Accountability is important pillar in modern public governance and needs to be addressed by government actors. Concept of public accountability traditionally has been related to the relationship between politicians and people, as well as relationship between politicians and public officials. However, based on institutional theory, the institutional environment will influence organizations activities, thus definition of accountability will be broader and more complex based on institutional environment. Therefore, along with heterogeneity and complexity of interests in public organizations, accountability is no longer like agency relationship, but becomes broader because it involves a broader spectrum of stakeholders, and public officials can be provided information to various parties of organization. Some researchers and policy makers argued that increasing accountability will be improve organizational performance. However, increasing accountability to improve performance should be studied carefully, because accountability is a complex and multifaceted concept, so possible influence of accountability on performance is still debatable and inconclusive and tends to create an “accountability paradox”. This paper explores issues of accountability to improve organizational performance bases on particular references in peer-reviewed journal. The aim is to provide theoretical framework and discourse for scholars to study more specific topic of form of accountability in public governance context.

**Keywords:** Accountability; Performance; Public Governance; Institutional Theory.

## INTRODUCTION

In recent years in the context of public sector organization, the concept of new public management (NPM) has been extensively studied by scholars and researchers in the field of public governance and management accounting (Tran & Nguyen, 2020; Tallaki & Bracci, 2019). However, their studies focus more on the context of developed countries and less attention on developing countries (Tallaki & Bracci, 2019; van Helden & Uddin, 2016). In addition, over 30 years of running the NPM concepts, the effect of NPM has been complicated in many countries, some of them have positive and negative impact, depending on institutional context (Hood & Dixon, 2016). Therefore, the study and conclusion about NPM reforms, especially in the context of public governance should be further explored and investigated carefully, both in developed and developing countries.

In Indonesia, the public governance reform as part of the bureaucratic reform agenda has been running for more than two decades and is still leaving “homework” because it has not shown satisfactory results (Sofyani et al, 2018; Kemenpan, 2019). The public governance system has been unable to produce efficient, effective, and productive governance in realizing

good governance and clean government, and is even considered an area of inefficiency and wastefulness (Mardiasmo, 2006; Sofyani et al., 2018). Therefore, the public governance in Indonesian have shifted to adopting the concept of new public management (NPM) as has been done in Europe since the 1980s. This is in response to accusations by public sector institutions that so far have been considered too bureaucratic, inefficient, and ineffective. In general, the purpose of implementing the NPM concept is to increase the efficiency and effectiveness of public services provided by public organizations (Editorial, 2013). Furthermore, according to Christensen & Lægheid (2014), the implementation of NPM concept in governance is aims: (1) to improve the public organizations efficiency; (2) increase the public institutions responsiveness to their customers or society; and (3) increase the public accountability.

The concept of NPM is a form of modern public governance implementation that changes different views on public administration and public accountability. The NPM concept specifically focuses on the output of an individual organization (result-orientation). However, the NPM concept applied in Indonesia after the reform era has not shown significant changes in public governance. This is reflected in the index value of bureaucratic reform in Indonesia provincial government which is still in category B (good) from the seven assessment categories, namely AA (very satisfying), A (satisfying), BB (very good), B (good), CC (good enough), C (slightly less), and D (less). Even, index value of bureaucratic reform in district/city governments in Indonesia are still in the CC category (good enough) (KemenpanRB, 2019). In addition, the achievement of performance accountability value of district/city governments in Indonesia is still below the target with the CC category (good enough).

Based on performance report of the Ministry of State Apparatus Empowerment and Bureaucratic Reform in 2019, the low performance accountability value is due to a lack of leadership commitment, low quality of human resources, as well as a mindset that is not results oriented and the emergence of resistance to changes made by the organization (Kemenpan, 2019). The impact from this problem is the performance of public governance that has not met expectations because it has not been able to show the level of effectiveness and efficiency of budget use in realizing result-oriented government (Kemenpan, 2019). This condition is also reinforced by the results of empirical research which reveal that the performance of government in Indonesia is still low (Sofyani et al, 2018), and tends to form pseudo performance (Ahyaruddin & Akbar, 2017; 2016, Akbar et al., 2012; Nurkhamid, 2008).

Therefore, accountability as one of the important pillars in modern public governance needs the attention from government actors. Bovens (2007) defines accountability as a social relationship in which an official or power holder has a responsibility to provide an explanation and truth for his or her actions to others. Traditionally, the concept of public accountability has been about the relationship between politicians and the citizens, and also the relationship between politicians and public officials (Barberis, 1998; Mulgan, 2000). However, along with the heterogeneity and complexity of interests in public sector organizations, accountability is no longer like the agency relationship between agents and principals, but becomes broader because it involves a broader spectrum of stakeholders. The public officers can provide accountability to various groups in the inside and outside of organizations (Andre, 2010; Barberis, 1998; Sinclair, 1995). So that public accountability can be distinguished into various forms, for example: internal and external accountability (Romzek, 2000; Romzek & Dubnick, 1987); direct and indirect accountability (Polidano, 1998); and vertical and horizontal accountability (Barberis, 1998; Bovens, 2009; Mulgan, 2000; Hodges, 2012).

Some researchers and policy makers assume that good public governance performance can be improved through improved accountability (Han & Hong, 2019; Christensen & Lægheid,

2014). Setyaningrum (2018) argues that accountability is one of the important principles of good public governance. The better the level of accountability will positively affect the performance of public organizations (Christensen & Lægreid, 2014; Brewer et al., 2014). However, the relationship of accountability on performance of public organizations has not been extensively studied in the context of public administration and public governance (Dubnick & Yang, 2010; Christensen & Laegreid, 2014; Lyrio et al., 2018; Han & Hong, 2019; Mizrahi & Minchuk, 2019).

Previous research has examined the effect of accountability on the performance of public organizations, but in the context of accountability in the human resource management (HRM) system, it does not measure accountability itself (Han & Hong, 2019). This study wants to examine accountability based on the form of accountability applied by government organizations in Indonesia, so that it really measures the real accountability. Accountability in this study is vertical accountability and horizontal accountability. Vertical accountability refers to the legal structures of the public organizations related to the processes of authorization base on the given mandates. Based on liberal political theory, bureaucrats deliver output to the public while politicians responsible for outcomes. Horizontal accountability is about the moral and social obligations for organizations to report public services to stakeholders or the mutual arrangement between bodies of equal standing (Hodges, 2012; Bovens, 2007). Throughout the literature search conducted by researcher, study about the impact of vertical and horizontal accountability on the performance of public sector organizations in the context of public governance has not been explicitly studied. For examples, Mizrahi & Minchuk (2019) who examined the influence of citizens factors to monitor the accountability and public official's performance. Their research focuses on the horizontal structure of accountability in the context of performance management mechanisms and it based on individualistic perspective. Then the study conducted by Kurniasih et al., (2018) focuses on public accountability both vertically and horizontally in Village Enterprises (*Badan Usaha Milik Desa – BUMDes*) from the perspective of stakeholders. They revealed that vertical and horizontal accountability in Village Enterprises (BUMDes) is still centered on the headman and has not run optimally. Furthermore, study conducted by Fernandes et al. (2020) focuses on the federative dimension of accountability, namely horizontal accountability in Brazil. They revealed that horizontal accountability in Brazil is still a challenge because it has failed at the sub-national level as the largest democracy in Latin America (Fernandes et al., 2020). Therefore, this study wants to examine two forms of public accountability, namely vertical and horizontal accountability, which may impact on organizational performance base on perspective of public governance.

## **THEORETICAL PERSPECTIVE**

The theoretical framework of this study is based on institutional theory. Modell (2001) reveal that in organization and management theory, institutional theories are considered as critical views. Many researchers in public organization context uses this theory and distinguished into two streams: the old institutional economic theory (OIE) and the new institutional social theory (NIS) (Tallaki & Bracci, 2019; Tran & Nguyen, 2020). In relation to organizational life which is heavily influenced by the external environment, the new institutional social theory (NIS) approach is widely used by researchers, especially in the public organizations context (Tran & Nguyen, 2020; Sofyani et al., 2018; Ahyaruddin & Akbar 2018; 2016). The NIS theory explains the organizational structure that an organization tends to adopts conformity with a cultural ethics in the institutional environment and then attempt to gain legitimacy from external organizations (DiMaggio & Powell, 1983). DiMaggio & Powell (1983) reveal that organizations tend to move towards a homogenization process which known as "isomorphism". In the public



organizations, there are two types of isomorphism occur, namely: competitive and institutional (DiMaggio & Powell, 1983).

Competitive isomorphism is related to the concept of efficiency in an organizational activity, namely the organization will tend to looking for an approach that is considered cheaper and better based on the influence of the competitive power. Meanwhile, institutional isomorphism is formed through three mechanisms pressure within the institutional environment: coercive, mimetic, and normative (DiMaggio & Powell, 1983). Coercive isomorphism refers to a pressure that occurs in the institutional environment so that the organization makes changes based on that pressure. Mimetic isomorphism refers to an environmental uncertainty faced by organizations and they try to imitate other organizations in order to continue to carry out their activities so that they can survive in the midst of uncertainty. Normative isomorphism refers to a strong desire from inside organization and their professional cognitive understanding to change for the better (Ahyaruddin & Akbar, 2018; DiMaggio & Powell, 1983). Institutional isomorphism occurs due to the influence of external environmental factors in which the organization operates, and then the environmental factors shape organizations behavior. Accordingly, institutional isomorphism requires public organizations to perform their activities and provide performance information to institutional environment or stakeholders, so that public can enhance monitoring and assess accountability (Akbar et al., 2012). It also aims to reduce the occurrence of information asymmetry between stakeholders and organizations (Behn, 2003).

## **Hypothesis Development and Conceptual Schema**

### *Accountability and Performance: Tensions, Ambiguities, and Dilemmas*

Over the 30 years of running NPM, many scholars in the field of public administration and public governance have still discussing about the concept of accountability (Christensen & Laegreid, 2014; Kurniasih, et al., 2018; Mizrahi & Minchuk, 2019; Fernandes, et al., 2020). The concept of accountability has a various perspective and the definition can change from time to time. Sinclair (1995) reveals that accountability has a special discipline of meaning and its definition can be done from different perspectives. Meanwhile, Bovens (2007) argues that accountability is a form of conveying the image of transparency and trust so that it is widely used in political discourse and policy documents. Many researches on NPM initiatives are based on assumption that increased accountability will enhance the performance (Chistensen & Laegreid, 2014). However, Dubnick (2005) expresses a different view that accountability increases performance is an assumption that has not been studied carefully and thoroughly, thus he claims that there is an “accountability paradox”. Therefore, many recent studies have tried to explore in more detail the concept of accountability from a specific forms or types. This is because accountability is a multifaceted concept, so the possibility effect of accountability to the performance is still debatable and inconclusive (Demirag & Khadaroo, 2011; Hyndman & Eden, 2001).

Base on public organizations context, the influence of institutional environment is also very dominant, so that the definition of accountability will be broader and more complex based on the influence of institutional environment. In institutional theory, the influences of institutions within an organizational environment will shapes organizational behavior, because the institutions have interests, identities and appropriate practice models so that they pressure the organizations to changes (Dobbin, 1994; Scott, 2001). Therefore, along with the heterogeneity and complexity of interests in public organizations, accountability is no longer like the agency relationship, but becomes broader because it involves a broader spectrum of stakeholders,

and public officials can be providing information to various parties of the organization, both internal and external (Andre, 2010; Barberis, 1998; Sinclair, 1995). Thus, studies on the effect of accountability on performance need to be specifically examined based on the form of accountability itself in order to obtain valid and reliable conclusions.

#### *Vertical and Horizontal Accountability: Indonesian Public Governance Context*

In the era of democratic system and public governance, accountability is very important to be adopted in the implementation of public services. This is based on the argument that the existence of a country depends on its citizens, and therefore the obligation of the state is to provide good and responsible services (Rahakbuw & Firdausy, 2018). Accountability refers to the obligation of each individual, group or institution to fulfill the responsibilities of their mandates, namely ensuring the realization of public values. In the context of the Indonesian government, accountability is a form of obligation to account for the success or failure of implementing the organization's mission in achieving predetermined goals and objectives, through a medium of accountability that is carried out periodically. This definition is closely related to performance, so the concept of government bureaucratic reform has changed the mindset from implementing work-oriented bureaucracy (output) to be performance-oriented bureaucracy (outcome). The main objectives are how to create a bureaucracy that is free from inefficiency and wastefulness and produces quality public services (Rahakbuw & Firdausy, 2018).

Accountability can be realized and enhanced through various forms of different control systems in each country. For example, in Malaysia there is the Malaysian Institute of Integrity (IIM) whose role is to coordinate the implementation of the National Integrity Plan (NIP) as a way to increase the accountability of public sector institutions (Said et al., 2015). In Indonesian government context, accountability can be realized through a "work contracts system" between government officials who receive the mandate and the community as recipients of public services to reports their activity through Performance Reports (Laporan Kinerja). This performance report is a form of accountability and the embodiment of transparency in the implementation of tasks, activities and programs of government agency to report its performance to the public or wider stakeholders (Kemenpan, 2019). This performance report is also a formal obligation regulated by Presidential Regulation of the Republic of Indonesia Number 29 of 2014 concerning the Performance Accountability System of Government Agencies.

The role of accountability in improving organizational performance must be seen carefully based on the form of accountability itself. According to Mardiasmo (2006) and Hodges (2012), accountability is distinguished into two forms: vertical accountability and horizontal accountability. Vertical Accountability is accountability for the management of funds to a higher authority. For example, the accountability of work units (offices) to the regional government, the accountability of the regional government to the central government, and the central government to the People's Consultative Assembly (MPR) (Mardiasmo, 2006). Vertical accountability reflects the legal structures underlying public sector organizations and which conform to the processes of authorization and defined mandates (Hodges, 2012). In the traditional concept, this form of accountability also known as hierarchical accountability, where a superior demands accountability from a subordinate (Schillemans, 2008).

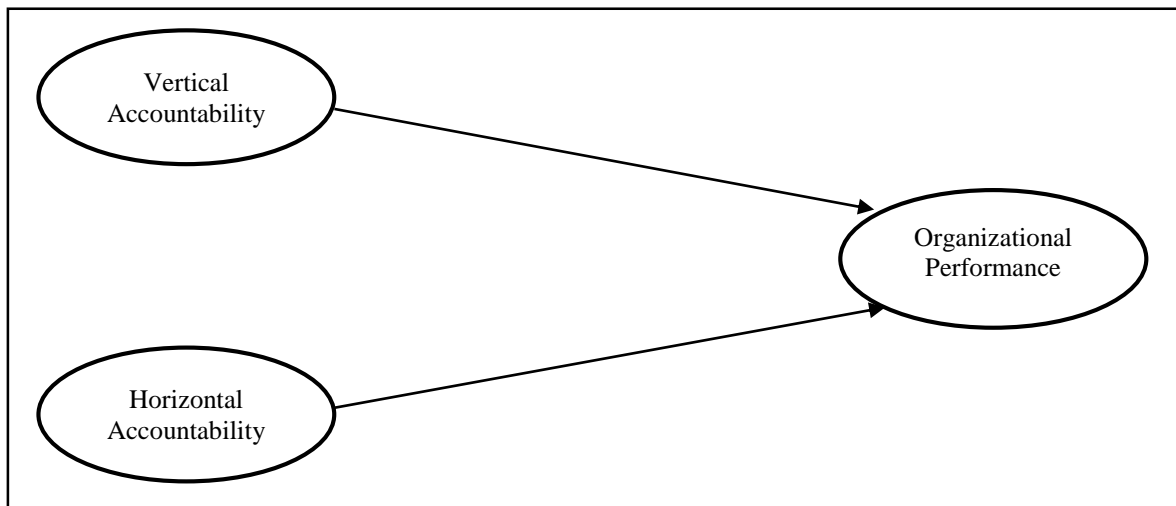
Horizontal Accountability is accountability to the broader community. It is inherent in every state institution to account or provide information for all their mandates to be communicated to stakeholders and the environment (Mardiasmo, 2006). Horizontal accountability can also be

referred to as a form of moral or social obligation carried out by organizations or bodies that have an equal position in providing public services to be responsible to stakeholders (Bovens, 2007). These obligations may be voluntary or may be imposed by higher authorities (Hodges, 2012). In addition, Schillemans (2008) argues that accountability arrangements provide consequences about horizontal relationships between peers, stakeholders, or other relationship that are different from hierarchical relationships between central government and executives.

Several researchers have conducted studies on accountability in the public sector with different forms and concepts. For examples, Schillemans (2011) says that increasing the horizontal accountability of the executive branch may enhance the organizational learning. Pollitt (2008) critically examines the proposition that performance management system will improve institutional accountability for citizens and political representatives. In addition, Brewer et al. (2014) revealed that countries with higher scores of accountabilities and control of corruption index have better government effectiveness. This is implying that more open and transparent societies are likely to be more effective at delivering public services (Brewer et al., 2014). Brusca et al. (2017) also found that governments systems with more accountable and more transparent tend to produce the less corruption level. Their research findings provide consequences that in order to improve public management, politicians must elaborate and make accounting information as a tool or medium for disclosure (Brusca et al., 2017). Furthermore, the results of study conducted by Heinrich & Brown (2017) revealed that vertical and horizontal accountability play an important role in practice in the field as an element of anti-corruption reform.

Recent studies conduct by Han & Hong (2019) reveal findings that the levels of accountability manifested in staffing, performance evaluation, and compensation have positive affect on organizational performance. Then the study conducted by Kurniasih et al. (2018) focuses on public accountability both vertically and horizontally in Village Enterprises (*Badan Usaha Milik Desa – BUMDes*) and revealed that vertical and horizontal accountability in Village Enterprises (BUMDes) is still centered on the headman and has not run optimally. Furthermore, the latest study by Fernandes et el. (2020) focuses on the federative dimension of accountability, namely horizontal accountability in Brazil. They revealed that horizontal accountability in Brazil is still a challenge because it has failed at the sub-national level as the largest democracy in Latin America (Fernandes et el., 2020). Base on the explanation and results of study above, the proposition can be formed:

- H1: There is a relationship between vertical accountability and organizational performance.
- H2: There is a relationship between horizontal accountability and organizational performance



**Figure 1: Proposed Research Model**

## **METHODOLOGY**

This research recommends that future empirical studies could be conducted quantitatively with primary data. This study attempts to get understanding the framework of relationship the variable of vertical and horizontal accountability on organizational performance. It is suggested that future empirical studies should target a sample of government agencies in local governments, especially in Riau Province, Indonesia.

## **CONCLUSIONS**

This conceptual paper explores the issues of accountability to improve the organizational performance bases on particular references in peer-reviewed journal. The aim is to provide theoretical framework and discourse for scholars to study more specific topic of form of accountability in public governance context. The concept of accountability has been discussed by scholars and practitioners in public administration and public governance over the past 30 years and still being important issues. This is because accountability can be defined from various perspectives and has a special discipline of meaning and its definitions may change from time to time. Many researchers have studied accountability in public organizations in many countries and it is clear that the relationship between accountability and performance continues to be debated and it is increasingly clear that research needs to be carried out using the multidimensional concept of accountability that goes beyond accountability in democratic systems.

The relationship between accountability and performance is still debatable and inconclusive and tends to create an “accountability paradox”, because accountability is a multifaceted concept. The assumption of accountability increases performance has not been studied carefully and thoroughly. Researchers should concentrate on determining under which circumstances different types of accountabilities can have an overall positive effect on performance. In the institutional context, the influence of institutions in organizations environment are very dominant and can shapes organizational behavior. Thus, future studies about accountability and performance should considered institutional factors and need to be

specifically examined based on the form of accountability itself in order to obtain valid and reliable conclusions. Referring to Hodges (2012) and Mardiasmo (2006), accountability is distinguished into two forms: vertical accountability and horizontal accountability. These forms of accountability may be important topic for further research in public governance context.

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## Practice of Accounting Information Systems in Indonesia Private Universities

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### ABSTRACT

According to the law, all Higher Education (HE) institutions in Indonesia need to submit financial reports to the government. This could be an easy task for state-owned universities because it is already their practice from the very beginning. In contrast, private universities found this regulation is difficult to follow which accompany by a particular reason behind this, which is the limitation of private universities in terms of adopting good Accounting Information System (AIS) for record keeping, organizing and reporting financial information. In Indonesia, the financial management of private universities is entirely left to the institution's administrator, which highlighting the missing of AIS and the need of a suitable accounting information system. Out of 3,129 private universities in Indonesia in 2019, only 388 successfully submitted their financial reports to the government. This data is an indication of unpreparedness of the Private Universities (PTS) to produce and submit financial reports as requested. This phenomenon is draw from the perspective of Technology Acceptance Model (TAM). According to TAM, there are several factors that influence the intention and action of PTS to adopt or not to adopt a particular AIS which eventually affect the performance of PTS in fulfilling the law requirement.

**Keywords:** Accounting Information System (AIS); Private Universities (PTS); Technology Acceptance Model (TAM);

### INTRODUCTION

Higher Education (HE) in Indonesia, is regulated in the Law of the Republic of Indonesia No. 12 of 2012. Article 1 paragraph (8) states that private universities, hereinafter referred to as PTS, are universities established and/or organized by the community. In Article 62 paragraph (1) of the Law on higher education, it is stated that universities have the autonomy to manage their own institutions as the center for the implementation of the Tridharma.

In Indonesia, there are 3 (three) accounting systems required in PMK No. 76/PMK.05/2008, namely: financial accounting system, fixed asset accounting system, and cost accounting system. From this accounting information system will produce the main financial reports for the purposes of accountability, management, and transparency for management decision making, and financial transparency (Ramadan et al., 2013). Among the many theoretical perspectives developed, the Technology Acceptance Model (TAM) is considered very suitable to handle the adoption and use of information systems. (Hong et al., 2006). TAM is considered

the most influential and commonly used theory to describe individual acceptance of information systems (BalaKrishnam, 2017).

### **Towards Achieving the Institutional Goals of Higher Education: Clear Management of Public Resources**

The institutional goals of the Higher Education System are through teaching activities and discovery/innovation through research activities. Each University is committed to pursuing academic priorities. The main objective of the higher education sector is to advance knowledge and understanding through students and researchers as well as to contribute to a successful economically and culturally diverse nation. Universities should play a central role in the process of economic and social development so that they must be accountable to stakeholders and to communicate clearly how they manage public resources (Del Sordo et al., 2012).

Based on the research carried out, in Italy since 1989 introduced significant changes in the higher education sector in the aspect of resources, budgets, to increase autonomy in deciding teaching programs and accounting and reporting systems. The increase in autonomy and decentralization that has been carried out, on the one hand has provided new opportunities for universities, but on the other hand poses challenges for management and academic boards, due to the difficulty in defining and developing their strategies. To practically, This study provides knowledge to readers in general about the application of accounting information systems in PTS, This research can be a reference for private universities in determining the right accounting information system; The results of this study can provide data for other researchers, Besides that, both those who examine the focus of accounting information systems and the field of researching problems that occur in private universities (Del Sordo et al., 2012).

The same is true for higher education in the UK. The complexity of the UK university environment today is illustrated in the shift from elite to mass colleges, greater levels of government involvement through regulatory arrangements, and ongoing cuts in public funding (K. Hutaibat & Alhatabat, 2020). One of the causes of problems in universities in the UK is increasing tuition fees (Kenyon, 2011). So that the problems faced by universities in the UK respond internally to manage pressure from external parties through the design of new funding allocation methods, such as transparent cost approaches (TRAC) and full economic costs (FEC) (K. Hutaibat & Alhatabat, 2020). Meanwhile in Jordan, the problems faced by higher education are due to lack of financial resources and academic staff who are often attracted to neighboring countries negara (KA Hutaibat, 2011).

In Indonesia, Higher Education (HE) is regulated in the Law of the Republic of Indonesia No. 12 of 2012. In Article 1 paragraph (2) it is stated Higher Education is a level of education after secondary education which includes diploma programs, undergraduate programs, master programs, doctoral programs, and professional programs, as well as specialist programs, organized by universities based on Indonesian culture. Article 1 paragraph (7) states that state universities, hereinafter abbreviated as PTN, are universities established and/or organized by the government. Furthermore, in article 1 paragraph (8) it is stated that private universities, hereinafter abbreviated as PTS, are universities established and/or organized by the community. Still in the same law, article 1 paragraph (9) states that the Tridharma of Higher Education, hereinafter referred to as Tridharma, is the obligation of universities to provide education, research, and community service.

In Article 62 paragraph (1) of the higher education law it is stated that HE institutions have the autonomy to manage their own institutions as the center for the implementation of the Tridharma.

Under the law Republic of Indonesia number 20 of 2003 concerning the national education system states that education is a shared responsibility between the government, parents and society (National, 2003). So that the right to manage higher education in accordance with applicable laws and regulations can be owned by the community (Official & Mekarsari, 2017).

Furthermore, the organization and management of higher education is regulated in Government Regulation No. 4 of 2014. Article 8 paragraph (1) *State Universities (PTN)* are established by the Government and Article 8 paragraph (2) PU are established by the community by establishing an Organizing Body with a non-profit principle and must obtain a permit from the Minister. The community took advantage of the opportunity to establish PTS, so PTS mushroomed everywhere which resulted in very high competition (Official & Mekarsari, 2017).

### **Issues in Managing Operational Cost**

In Indonesia, problems have arisen in recent years when private universities have found it difficult to balance operational costs due to a decrease (fluctuation) in the number of new students as a result of PTN opening many new departments or study programs, thereby reducing the interest of prospective new students in PTS. (Setyabudhi, 2017). In an article in the daily *Republika* Friday, September 24, 2010 stated that there are several private universities that have unhealthy finances.

In 2019 Indonesia had 3.129 private universities and 2019 only 388 (three hundred and eighty-eight) submitted financial reports to the Ministry of Research, Technology and Higher Education regarding circular letter number 38/A. A3/SE 2019 from the Ministry of Research, Technology and Higher Education.

One measure of a university's good or not good is seen from its accreditation. There are 9 criteria that will be assessed to get an accreditation score, one of these criteria is finance (BAN-PT, 2019). This requires universities to submit financial reports that describe the financial position of universities, from planning to financial reporting systems. There are 3 accounting systems required in PMK No. 76/PMK.05/2008, namely: financial accounting system, fixed asset accounting system, and cost accounting system. From this accounting information system will produce the main financial reports for the purposes of accountability, management, and transparency for management decision making, and financial transparency (Ramadan et al., 2013).

Factors that weaken private universities, There are several challenges faced by the PTS in terms of being competitive in higher learning sector, including: 1) The freedom of PTN to open various majors and educational programs (Official & Mekarsari, 2017), this privilege given to PTN caused PTS to always be ready for facing curriculum changes and having sufficient resources if new programs is going to be offered; 2) Law Number 12 of 2012, concerning Higher Education, which requires tertiary institutions to be accredited, both institutions and study programs, in a feasibility assessment carried out by the National Accreditation Board with the same assessment indicators between PTN and PTS; 3) Government regulations (PP) Number 04 of 2014 article 24 paragraph (1) the states early wealth of PTN Legal Entities



comes from separated state assets except land, while Article 26 states that management autonomy in PTS is regulated by the PTS themselves in accordance with the provisions of laws and regulations, this means that PTS assets are considered by the organizers themselves; PP Number 04 of 2014 article 27 paragraph (1) PTN with a general pattern of state financial management and article 27 paragraph (3), the determination of PTN with the pattern of financial management of public service bodies is carried out by stipulating the minister who carries out government affairs in the financial sector at the suggestion of the Minister. Meanwhile, PTS financial management is completely left to the PTS themselves so it doesn't have the same standard (Indonesia, 2014); In order to guarantee the implementation of PTS based on article 63 Law of the Republic of Indonesia No. 12 of 2012 concerning higher education, private universities are required to submit financial reports to the Ministry of Research, Technology and Higher Education (Kemenristekdikti) through letter number 38/A.A3/SE/2019. This law enforcement has caused a reaction from Association of Indonesian Private Higher Education Organizing Bodies who requested an explanation from the kemenristekdikti regarding the new policy.

The university has many study programs so that accountability for higher education management based on the principles: accountability, transparency, non-profit, quality assurance, effectiveness and efficiency will be even greater. Out of these challenges, both PTN and PTS are struggle in supplying good and adequate financial information to the authorities because of its current practice that might not be in a ready state. Hence, the outcomes of this review alerted both higher institutions and authorities on the missing part of good accounting information system for the purpose of recording, managing, analyzing and reporting operational cost of the higher institutions which regarded as necessary to provide adequate financial reports according to the laws.

## **CONTRIBUTION**

The results of this study are useful in enriching the understanding of the scientific treasures of accounting in general, and specifically for the study of accounting information systems. Considering the study of accounting information systems, not many have studied in universities, and more have studied accounting information systems in companies. Furthermore, as a multidisciplinary study, this research is also projected to create new rules and methods in accounting research. Conceptually, this study of accounting information systems requires studies of other theories and practices in the field of accounting.

To practically, this study provides knowledge to readers in general about the application of accounting information systems in PTS. This research can be a reference for private universities in determining the right accounting information system; the results of this study can provide data for other researchers. Besides that, both those who examine the focus of accounting information systems and the field of researching problems that occur in private universities.

## **CONCLUSIONS**

Starting from the problem of difficulties in defining and developing higher education strategies, increasing tuition fees, lack of financial resources and human resources, many private universities are unable to submit financial reports due to the absence of standards, and it is not clear which system is the most dominant used by students. PTS. Plus, there are not many

studies that are similar to previous research in Indonesia, making researchers interested in conducting research on private universities in Indonesia regarding the information systems used and the cost accounting techniques used in making financial statements in order to get rational decisions.

This paper acknowledges there are several challenges faced by higher learning institutions in Indonesia, especially to the private sector institutions, the PTS. Among the primary issues are its rivalry with the state universities, the PTN and the challenges to meet the law requirement such as in providing sufficient financial information to the authorities. Furthermore, the state of readiness for the PTS to supply adequate financial information to the authorities rooted by its limitation in adopting a good accounting information system. This is the core of the issue and has motivated the researcher to embark with this study.

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# **The Role of Strategic Management Accounting Techniques (SMATs) and its Relationship with Innovation and Dynamic Environment on Manufacturing Performance**

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## **ABSTRACT**

This paper aims to determine the effects of innovation, dynamic environments, and strategic management techniques on organizational performance. A dynamic environment can affect the performance of a manufacturing company, therefore comprehensive information is needed to assist managers in the decision-making process. The business environment also requires companies to continue to innovate in order to survive. Both the dynamic environment and the innovation carried out by the company can change the design of strategic management accounting techniques used by the company, and ultimately affect the company's performance.

**Keywords:** Manufacturing Performance; SMATs; Innovation; Dynamic Environment

## **INTRODUCTION**

The development of manufacturing businesses is deemed as very important in many countries including both developed and developing countries because the manufacturing industry plays an important role in economic development. Industrial activities, especially the manufacturing industry, consistently provide a broad chain effect on the economy both locally and nationally. For example, an increase in the added value of domestic raw materials, absorption of local labor, and foreign exchange earnings. This is in line with the scenario of increasing investment in the manufacturing sector (Airlangga, 2019). Thus, the Indonesian Ministry of Industry targeting increment of 5.67% in the manufacturing industry in 2019.

However, this new target would be jeopardized by the current situation faced by manufacturing industry. The data shows the performance of the manufacturing sector in Indonesia worsened at the beginning of the fourth quarter of 2020. According to the IHS Markit's Indonesian Manufacturing Purchasing Managers' Index <sup>TM</sup> (PMI <sup>TM</sup>) survey data, it slightly increased from 47.2 % in September to 47.8 % in October. Meanwhile, according to BPS Riau, the manufacturing industry both large and medium scale have also experienced a decline of 4.11 percent since the fourth quarter of 2019 against the third quarter of 2019. The decline in the performance of manufacturing companies is a form of the company's powerlessness in facing the changing environment and uncertainty (Suriyanti & Aristi, 2020; Suriyanti, 2015; Samsir, 2012). The strategic management paradigm states that the

industrial environment will affect business strategy which in turn will affect performance (Pearce and Robinson, 2005). This is caused by several factors, including increased competition, technological advancement and unexpected increase in customer demands (Lee, Kim, Seo, & Hight, 2015). These factors are interrelated with each other and to find a way out, the company has to acknowledge and take action towards the root cause of this phenomenon which is to respond well to the technology changes and to embrace innovation. The best strategy for the company is to know and to start with the anticipation of satisfying customer tastes is an innovation that can generate a positive response from customers.

To be innovative, the company has to be equipped with the best information system and sufficient information about the past and current data. With that, the company can do analysis to project future trend and work with the best innovation strategy. Hence, the survival and growth of a company depends on the information system used. Management accounting systems help to provide required information, both financial and non-financial, to managers and employees within the company. A management accounting system is an information system that collects operational and financial data, processes, stores and reports the information to the users. The product produced by the management accounting system is called management accounting information (Atkinson, 1995). In contrast to financial accounting, management accounting information is not normative, but dynamic, future-oriented and generates ideas according to its uses.

Many researchers argue that in order to achieve competitive advantage and improve the performance of a company, it is necessary to have clarity in the selection of business strategies and must be supported by appropriate organizational factors, both internal and external, such as manufacturing processes, organizational design and management accounting systems (Latan et al., 2018; Solovida and Latan, 2017; Kasravi et al., 2017; Waterhouse and Svendsen, 1998; Shank and Govindarajan, 1993), organizational configuration (Jermias and Gani, 2004), competitive environment, management accounting techniques, management accounting practices, and organizational structure (Mat, 2010).

### **Strategic Management Accounting Techniques (SMATs)**

The strategic management accounting technique, which was then abbreviated as SMAT, was first introduced by Simmon in 1981, which defined SMA as 'the provision and analysis of management accounting data about businesses and their competitors for use in the development and monitoring of business strategies (Peters, 2019). SMAT are essential to a company's success. It is even possible to postulate that the importance of high school engineering is growing in today's, dynamic business environment. The use of SMAT can help management in strategic decision making (Witek-Crabb, 2016) and thus can contribute to the sustainable development of the company and improve organizational performance (Turner, 2017).

SMAT is a management accounting approach that is considered to be a solution to the limitations of traditional management accounting. Traditional management accounting is considered unable to answer the needs of technological change and a competitive environment, besides that the traditional product costing system is also believed to provide misleading information in decision making, financial orientation and almost entirely focuses on internal activities, while very little attention is paid to the external environment in which the business operates (Fowzia & Afroz, 2016). Egbunike et al., (2014) view strategic management accounting as monitoring and analyzing management accounting information of companies and their competitors in order to develop and control strategies.

SMAT has several comprehensive techniques, some studies state that there are 12 techniques in SMAT (Guilding et al., 2000) which consist of; attribute costing, brand value budgeting and monitoring, competitor cost assessment, competitive position monitoring, competitor appraisal based on published financial statements, life cycle costing, quality costing, strategic costing, strategic pricing, target costing, and value chain costing. Meanwhile, other researchers identified 19 techniques, such as Cravens and Guilding (2001) which said that activity-based costing, benchmarking and integrated performance measurement are part of SMAT. Guilding and McManus (2002) also argue that customer accounting is one of the techniques in SMAT (Ward, 1993; Hoque, 2001; Cadez, 2002). The reason for this difference of opinion has not yet been found, whether if it is because of the type of company that using it, business environment or other reasons. However, Apak (2020) said that differences in the use of SMATs tools could be due to differences in business demographics such as the number of employees, length of operation and legal status of the business and the use of management accounting tools.

### **Innovation and dynamic environment for manufacturing performance**

Many experts in management state that innovation is one of the guarantees for companies or organizations in increasing their competitiveness. Therefore, innovation becomes a must (Drucker, 2011). The concept of innovation has a long history and different meanings, mainly based on the competition between companies and the different strategies used by the companies themselves. With the innovations made by the company, it can lead to changes in the management accounting system (Johnson and Kaplan, 1987; Langfield, 2008). Innovations made by the company can also be due to changes in the dynamic business environment.

As it is currently happening, the covid-19 outbreak has turned the business environment with tiny chance to be control. This forces companies to innovate as a form of strategic policy in an effort to improve performance. As the results of research conducted by Projo (2016), show that a dynamic environment strengthens the influence of product innovation on business performance. The innovation strategy allows companies to innovate products and processes to a higher level, and it has a positive impact on performance. However, different results were found from the results of Turulja's research (2019) which stated that environmental turbulence did not moderate the relationship between innovation and business performance. However, environmental turbulence affects innovation rather than moderating the relationship between innovation and performance. These differences in results have resulted in researchers being always interested in environmental issues, innovation, smat and performance.

Innovation can be implemented effectively if the company can embrace change and adapt to a dynamic environment. As the results of a study (Dotun, 2018) which says that the innovative ability of products and processes is positively related to manufacturing performance. The more companies can manage their innovation capabilities coherently, the more companies can improve innovation performance (Sony, 2019; Rangus, 2017).

### **THEORETICAL PERSPECTIVE**

The resource-based view (RBV) developed by Barney (1991) is one of the perspectives that has contributed greatly to various strategic management research and studies. Strategic management is applied in a business or business entity so that the business or business entity runs well in achieving the goals that have been set. With strategic management, it is expected that organizational performance will increase. Resource-based



view discusses the resources owned by the company and how the company can manage and utilize the resources it has.

According to RBV's view, companies will excel in business competition and get good organizational performance by owning, controlling and utilizing important strategic assets, namely tangible assets and intangible assets (Siregar, 2016). Meanwhile, contingency theory argues that organizational effectiveness depends on the suitability of the type of technology, business environment, organizational size, organizational structure and information systems. The contingency approach attracts the interest of researchers because the researcher wants to know whether the level of reliability of management accounting information will always have the same effect on performance under different conditions.

The dynamic environment forces managers to think of new strategies to improve performance and win the competition (Suriyanti and Aristi, 2021). Companies must be able to generate and utilize more strategic information regarding external and future events to support and update their business strategies and achieve organizational performance levels (Holm, Kumar, & Plenborg, 2016). Contingency factors are considered to be capable of being the key to success in the midst of uncertain environmental conditions, namely by identifying the organization's external environment, based on design, accounting approaches and techniques. (Soheilrad & Sofian, 2016). SMAT is a modern management accounting approach that has various accounting techniques whose designs and systems can change due to the influence of the dynamic business environment (Gordon and Narayan, 1976) and other factors such as strategy (Cadez and Guilding, 2012). Innovation is one of the company's business strategies that aims to improve company performance.

### **The Role of Strategic Management Accounting Techniques (SMATs) to Enhance Manufacturing Performance.**

In a situation of environmental uncertainty, the manufacturing industry mobilizes all its resources to survive. The management accounting system is an important internal company resource, the survival and growth of a company depends on the information system used. Management accounting systems provide information, both financial and non-financial, to managers and employees in making decisions. Failure to provide the right information can lead to ineffective resource management and decreased performance (Mat, 2010). SMTAs are a new management accounting technique to meet corporate challenges. (Dang et al, 2021). In addition, SMATs information and techniques can ease the task of managers and employees carrying out organizational functions in decision making (Rausch, 2011) so that companies can achieve goals and improve their performance (Chung et al., 2012; Ismail & Isa, 2011).

In addition, MAS has a main goal: achieving organizational goals (Rasid, Isa, & Ismail, 2014) through providing managers and employees with information and techniques to control, coordinate, and facilitate decision making. In other words, MAS is a type of system that helps managers access and use management accounting information to achieve goals and improve managerial performance in the organization (Robert H. Chenhall, 2003; Chung et al., 2012). Other findings also support this statement, that a formal system designed to provide information to managers (Bouwens & Abernethy, 2000), will influence managers' decision making (Rausch, 2011).

## CONCLUSIONS

Various efforts have been made by organizations to improve their performance, one of which is by adopting various techniques in SMAT. The relationship between SMAT and organizational performance has been proven by many researchers in the last 3 decades ago. When companies face uncertainty in the business environment, the information produced by SMAT is needed by companies in the decision-making process in order to improve organizational performance. Likewise, the innovations made by the company must include SMAT as the best strategy that provides information and eventually improves the company's performance.

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# **A Review on Cyber Entrepreneurship and Issues Towards Adoption Among SMEs in Malaysia: Proposed Concept Paper**

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## **ABSTRACT**

This paper aims to convey a review regarding the issues of Cyber entrepreneurship adoption among SMEs entrepreneurs in Malaysia. Relatively, this paper defines the SMEs and Cyber entrepreneurship from different views and goes to the general discussion about the significant roles of Cyber entrepreneurship for SMEs entrepreneurs. The adoption of Cyber entrepreneurship in Malaysia is still in infancy stage (Badaruddin, 2018). This paper setting out to analyse the existing literature review trends and outlining early issues in Malaysian context. A systematic review from the Web of science, Scopus, and Google scholar database as well as the PRISMA statement brings about various terms of cyber entrepreneurship as such digital entrepreneurship, online entrepreneurship, social entrepreneurship and also e-entrepreneurship. This study also emphasized some relevant recommendations for conducting more research as well as to depth specific. Accordingly, a typical systematic review technique was used for guiding the analysis within the perspective of Cyber entrepreneurship to use technologies. The findings of this study will open the golden opportunity to the SMEs entrepreneurs as well as policy makers finding strategies to inculcate the Cyber entrepreneurship culture for SMEs betterment and sustainability.

**Keywords:** Systematic review; Cyber entrepreneurship; Entrepreneurship; New Frontier Entrepreneurship

## **INTRODUCTION**

Entrepreneurship activity is a fundamental role for socioeconomic development through the creation of wealth and new job opportunities (Shabbir, Mohd Shariff, Kiran, Ahmad Zaidi & Shahzad, 2016). It has been acknowledged by a number of researchers and practitioners (Edwards- Schachter, Garcia- Granero, Sanchez-Barrioluengo, Quesada- pineda, & Amara, 2015) as it fuels the economic growth in all the national economic development which is observed as one of the strategies to maintain the competitiveness in the globalization trend (Volery & Schaper, 2007). In fact, the continuous research on entrepreneurship spotted an emerging theme in entrepreneurship (Badaruddin, Mohamad, Awee, Mohsin & Abdul Kadir, 2015) parallel towards the technology advancement. Yet, the advancement of technology brings vast changes that make business exposed to the digitalization and social media (Omar, Rahim & Othman, 2017). Generally, in the mid of 2000s, movement towards new technologies has begun where the development of Internet and information technology triggers various models, innovations, and ecosystems of



entrepreneurship. Due to the movement, it was a beginning of an enterprise, retail business or small business innovation with a small boundary technology (Krueger, Reilly and Carsrud, 2000). Assimilating the new technologies upbringing and promoting such new entrepreneurial forms, computerized and communication technology namely via integration of information, computers, handheld, wire or wireless devices were explored (Ashrafi and Murtaza, 2008).

Reflecting to the emergence of technology, information technology and particularly the Internet, new ecosystem of entrepreneurship, Cyberpreneurs has been introduced in the twenty-first century (Tajvidi & Tajvidi, 2020). It has been practiced with numerous related terms namely online business, internet business as well as digital business (Lian & Yen, 2017; Badaruddin et al., 2015; Badaruddin, 2018). Likewise, in the entrepreneurship studies, the Cyber entrepreneurship is a modern and emerging concept (Tajvidi & Tajvidi, 2020). Above and beyond, the government announced Malaysian Ringgit million almost RM700 million in grants allocated for all entrepreneurship activities especially eligible small medium enterprises to adopt digitalization as well as RM 70 million in funds for Cyber entrepreneurship platform (M Star, 2021). Nonetheless, abundant facilities are available for encouragement of Cyber entrepreneurship, but still a number of small businesses reluctant to use technology for supporting their business activities especially social network and websites (Suhartanto & Leo, 2018). Thus, the objective of this paper to review the existing literature of cyber entrepreneurship and to explore the current issues on related terms of cyber entrepreneurship.

## LITERATURE REVIEW

### ***Small Medium Enterprises (SMEs)***

Small Medium Enterprises (SMEs) are the backbone to the economic growth (Saleh & Ndubisi, 2006; Elsmami, Rahim & Mohammed, 2017; Naradda Gamage et al., 2020) and contributing towards large employment by providing job opportunities (Ibrahim & Dawood, 2020). That is the reason it become a focal of interest among the researchers (Musa et al., 2016) in challenging era. SME in Malaysia comprises of manufacturing, services, and other sectors. The manufacturing, with an annual sales turnover not exceeding RM50 million or full-time employees not exceeding 200. Meanwhile, the services, and other sectors comprise of primary agriculture and ICT groups of companies with full-time employees not exceeding 75 or with annual sales turnover not exceeding RM20 million. The business will be deemed as SMEs whenever it meets the criteria highlighted. Nonetheless, the definition of SMEs has been reviewed in 2013 but new definition was endorsed at the 14<sup>th</sup> NSDC Meeting July 2013 SMEs as a vital contributor and significant tools for economic development, Gross Domestic Product (GDP) and employment (Abdullah, 2015; World Bank, 2011; and Harif, 2010) as summarized in the Table 1.

**Table 1: Summaries of SME definition by Size in Malaysia**

		<b>Micro – enterprise</b>	<b>Small enterprise</b>	<b>Medium enterprise</b>
Manufacturing		Sales turnover < RM300, 000  <b>OR</b> Employees: < 5	Sales turnover RM300, 000 to < RM15 million  <b>OR</b> Employees: 5 to < 75	Sales turnover RM15 million <RM50 million  <b>OR</b> Employees: 75 < 200
Services and other sectors		Sales turnover < RM300, 000  <b>OR</b> Employees: < 5	Sales turnover RM300, 000 < RM3 million  <b>OR</b> Employees: 5 to < 30	Sales turnover RM15 million <RM20 million  <b>OR</b> Employees: 30 < 75

**Source: (SME Corp Malaysia, 2020)**

### ***Cyber entrepreneurship***

Generally, Cyber entrepreneurship is a new term of online entrepreneurship (Mamat, Abdullah, Ismail, Muhammad & Samsudin, 2018) which first term “Cyber” has been used by William Gibson in his novel entitled “Neuromancer” indicated to a place where conducting a business via vast network of computer and telecommunication line. It is a new norm and innovative practices of entrepreneurship via the cyberspace (Tajvidi & Tajvidi, 2020), one of the nascent types of entrepreneurs in recent era and a new entrepreneurship ecosystem that shifting the traditional way of doing business (Chang, Shu, Wang, Chen, & Ho, 2019). As supported by Bret and Champeaux (2000), the Cyber entrepreneurship founded upon electronic commerce whose main activities are based on exploiting networks using Internet technologies, Intranets as well as Extranets. Further, Matlay (2004), Cyber entrepreneurship is a business practice by entrepreneurs in a way to attempt their company establishment via the internet-based and internet platforms. Kollmann (2008), Cyber entrepreneurship specified as a new online company that based on the innovative business ideas as well as IT within the digital economy.

Conferring to Illés, Dunay, & Jelonek (2015) discovered that new vast network information technologies preferably internet technologies is one of the source of new venture of entrepreneurship platform such as e-entrepreneurship (Jelonek 2013; Matlay & Westhead, 2005). Despite of that, Carrier & Raymond (2004) further defines Cyber entrepreneurship as new entrepreneurship ecosystem founded upon the vast electronic network that purely utilized the internet brochure in doing business (Badaruddin, Arokiasamy, Nordin, Yusof, and Zakaria, 2012). The individuals who are interested to innovate and exploit opportunities generated by the development of new information technologies are known as cyber entrepreneurs (Shane and Venkataraman, 2000). Moreover, the Cyber entrepreneurs also considered as an individual’s estimation of the likelihood that he or she will start and own a new e-commerce business (Wang et al., 2016). In simply definition it seems that the

electronic commerce that has advanced towards the internet and Web would open to the communication and transaction that is accessible in providing growth opportunities for entrepreneurial firms (Mullane et al., 2001; Raymond, 2001). In broader views, the Cyber entrepreneurship term is another way to promote or sell any particular product or services by means of the Internet technology or electronic brochure that well known as home page on the Internet and it is a new source of development and growth of the economy (Ismail, Jaffar, Khan & Leng, 2012; Rahmawati, 2017). In spite of that, cyber entrepreneurship also considering to as any start-up business or determination to exploit the information technology for the business purpose which in turn gaining profit in return (Badaruddin, Arokiasamy, Yusof, & Zakaria, 2012).

Prior study by Waddell, Singh & Musa (2006) defined there are four Cyber entrepreneurship broad categories namely traditional, serial, home-based and more recent is cyber entrepreneur. Badaruddin (2018) then further summarized that the Cyber entrepreneurship comprises of three dimensions and denoted the categories of CE as follows: auction, dropship, single page website, multiple page website, affiliate, social networking, email marketing as well as forum. Deceptively, there is limited research and literature discussing the term 'cyber entrepreneurs' due to the term itself is comparatively new among the researchers. Wide research in this area is still at the nascent phase, where only at the present time it started to capture the attention of many researchers (Badaruddin et al., 2015). The publication year of a common topic between the year 2011 to 2020, as seen between 2011 and 2020 (Table 2), three articles were published in 2020, seven articles were published in 2019, nine articles were published in 2018, three articles were published in 2017, 11 articles were published in 2016, six articles were published in 2015, eight articles were published in 2014, six articles were published in 2013, one article was published in 2012 and 4 articles were published in 2011, out of the total 58 articles.

### ***Benefit of Cyber entrepreneurship for SMEs***

Subsequently, Cyber entrepreneurship as compared to the traditional entrepreneurship brings along more innovations and advancement (Norhashim, Aziz, Jumaat, & Zainuddin, 2018) that focuses preferably to earn profit through the various virtual platform (Badaruddin, Mohamad, Awee, Mohsin & Kadir, 2015). Looking at the income generation from the adoption of Information and communication technology among the Malaysian businesses showed the increasing trend by 6.0 percent for the year 2017 (RM 447.8 billion) as compared to the year 2015 (RM 398.2b). This parallel towards the increasing number of internet user, as reported by Internet User Survey 2018 (MCMC, 2018), the percentage of online shoppers among Malaysian Internet users generally increased from the 48.8% in 2016 to 53.3% in the year 2018. Thus, adopting the Cyber entrepreneurship seems like good opportunity for SMEs entrepreneurs. It is significant for the SME entrepreneurs to participate in the Cyber entrepreneurship. This will not only benefit for collecting useful knowledge globally, penetrate new markets, change existing products but also announcing new business model for the sustainability of the business (Nasip et al., 2015). Furthermore, would also increase with the competitiveness of the SMEs (Apulu and Latham, 2011; Ongori and Migiro, 2010) due to the dynamic, efficient, and vast technology existence in the market as well as easily extending and connected to local and global contacts. Past study showed that most of the SME entrepreneur aware regarding the importance of information technology in the business and believe that the adoption would assist the company in managing daily operations as well boost the business performance that led to sustainability (Rozmi, Nordin & Bakar, 2018). Throughout all means and gadgets available the introduction of the World Wide Web makes their businesses even more interesting.

### ***SMEs, Issues of Cyber entrepreneurship adoption in Malaysia***

There are some researchers begin to examine new forms of entrepreneurship based upon technology, and more specifically e-commerce (Al-Tit, 2020; Dahbi & Benmoussa, 2020; Lim & Trakulmaykee, 2018; Aidah et al., 2017; Esmailpour, Hoseini, & Jafarpour, 2016; Saif-Ur-Rehman, 2016; Agwu & Murray, 2015; Ghobakhloo, 2013) and Information Technology (Raj et al., 2020; Jaganathan, Ahmad, Ishak, Nafi & Uthamaputhran, 2018; Suhartanto and Leo, 2018), digital entrepreneurship (Dutot & Van Horne, 2015; Omar, Rahim & Salman, 2015), e-entrepreneurship (Balachandran & Sakthivelan, 2013), e-commerce, s-commerce ( Adam & Razak, 2020), e-business (Taylor & Murphy, 2004), social medias (Nawi, Al Mamun, Nasir, Raston & Fazal, 2017), website (Thelwall, 2000) as well as m-retail cloud- based (Ghani, Khidzir, Guan & Ismail, 2018). Delawari (2019) identified lack of opportunity and infrastructure, security, low purchasing power, IT literacy and trust are some other challenges towards online business.

It is found limited research of CE adoption in the context of Small and Medium Enterprises (Jaganathan, Ahmad, Ishak, Nafi & Uthamaputhran, 2018; Eze et al., 2018). This is because the Cyber entrepreneurship (CE) is a new frontier in entrepreneurship development that still at the development phase and infancy stage which just commenced to capture the attention of many researchers recently (Carrier, Raymond, & Eltaief, 2004; Alam & Noor, 2009; Salwani et al., 2009; Badaruddin et al., 2015). Thus, this study will examine the issues of Cyber entrepreneurship by reviewing issues concerning numerous related terms namely online business, internet business as well as digital business (Lian & Yen, 2017; Badaruddin, 2018) and also new forms of entrepreneurship based upon technology.

According to the Internet User Survey 2020 by Malaysian Communications and Multimedia Commission (MCMC, 2020), the trend of Cyber-entrepreneurship seems increasingly popular in Malaysia but less than a quarter of businesses in Malaysia including SMEs adopting the Cyber entrepreneurship. According to Department of Statistic in Malaysia (2020), the embracement of digitalization among SMEs is only about 32 percent of total establishment with lower numbers of web presence, internet usage and ICT usage (Mamat, Abdullah, Ismail, Muhammad & Samsudin, 2018). Most of the entrepreneurs utilized the internet for social purposes like communicate by texting, voice/video call and many more instead of online business even though numerous facilities are available (Internet User Survey 2020). Several small businesses disinclined to utilise technology for supporting their business activities specifically social network and websites (Suhartanto & Leo, 2018). The issues behind it due to several highlighted barriers like financing, lack of technological skills and expertise, broadband issues, costly, culture and inadequate technology (Dahbi & Benmoussa, 2020; Turkes et al., 2019; Huawei Technology, 2018). In addition, Raj et al., (2020) found that due to lack of digital skills, lack of internal digital culture and training as well as resistance to change. Rahim et al., (2019) summarized that main obstacles faced by the SMEs online entrepreneur is lack of financial assistance. Reflecting to these matters both online entrepreneurs and related agencies should increase their initiative in disseminating it respectively to avoid mere problem of connecting the dots and not fully rely to spoon feed only.

**Table 2: Common Topics of Cyberpreneurship Research**

No.	Author	Year	Common Topics of CE Research:					
			CE	OE	EE	DE	SE	DT
1.	Tajvidi, R., & Tajvidi, M.	2020	/					
2.	Chang, S. H., Shu, Y., Wang, C. L., Chen, M. Y., & Ho, W. S.	2020	/					
4.	Hasbolah, H, Mamat, S.A, Abdullah, Z., & Sidek, S.	2020	/					
	Wibhawa, B.	2019					/	/
5.	Ilina, I., Zharova, E., Turginbayeva, A., Agamirova, E., Kamenskiy,	2019						/
6.	Martinez Dy, A.	2019				/		
7.	Boellstorff, T.	2019				/		
8.	Chang, S. H., Shu, Y., Wang, C. L., Chen, M. Y., & Ho, W. S.	2019	/					
9.	Song, A.K.	2019				/		
10.	Zaheer, H., Breyer, Y., Dumay, J., Enjeti, M.	2019						/
11.	Lehmann, J., Rosenkranz, C.	2018				/		
12.	Tumbas, S., Berente, N., Vom Brocke, J.	2018				/		
13.	Haarhaus, T., Geiger, J.-M., Liening, A.	2018				/		
14.	Tumbas, S., Berente, N., Vom Brocke, J.	2018						/
15.	Antonio Ghezzi, Angelo Cavallo,	2018				/		/
16.	Arvidsson, V., Mønsted, T.	2018				/		
17.	Boojihawon, D.K., Ngoasong, Z.M.	2018				/		
18.	Mamat, S. A., Abdullah, Z., Ismail, W. A. A. Z. W., Muhammad, S., & bin Samsudin, M. R.	2018	/					
19.	Satish Nambisan, Robert A. Baron,	2018				/		/
20.	Lian, J. W., & Yen, D. C.	2017		/				
21.	Nambisan, S.	2017				/		
22.	Rahmawati, M.	2017	/					
23.	Leong, C., Pan, S.L., Liu, J.	2016				/		
24.	Tufte, T.	2016						/
25.	Fleacă, E.	2016				/		
26.	Ans Kolk, François Lenfant,	2016						/
27.	Babry, A., & Mehmood, B.	2016	/	/				
28.	Bapat, J.	2016	/					
29.	Hodalska, M., Ghita, C., & Bapat, J.	2016		/				
30.	Hosu, I., Iancu, I.	2016				/		
31.	Shabbir, M. S., & Shariff, M. (2016). R., Faisal, M., & Shahzad, A.	2016	/					
32.	Wang, Y. S., Lin, S. J., Yeh, C. H., Li, C. R., & Li, H. T.	2016	/					
33.	Yu, T. K., & Chao, C. M.	2016	/					
34.	Batool, H., Rasheed, H., Malik, M. I., & Hussain, S.	2015		/	/			
35.	Chepureno, A.	2015						/
36.	Ghani, W. S. D. W. A., Khidzir, N. Z., Guan, T. T., & Daud, K. A. M. 2015,2018	2015	/					
37.	Ghoul, W.A.	2015		/				
38.	Soumaya Ben Letaifa,	2015						/

39.	Tumbas, S., Berente, N., Seidel, S., Vom Brocke, J.	2015				/		
40.	Gupta, A.	2014					/	/
41.	Kelestyn, B., Henfridsson, O.	2014				/		
42.	Ukpere, C.L., Slabbert, A.D., Ukpere, W.I.	2014				/		
43.	Alain Fayolle, Francisco Liñán,	2014	/					
44.	Masínová, V., & Svandová, Z. 2012,2014	2014	/		/			
45.	Mulyaningsih, H.D., Yudoko, G., Rudito, B.	2014						/
46.	Narang, Y., Narang, A., Nigam, S.	2014	/					
47.	Rauth Bhardwaj, B	2014			/			
48.	Muhamad, N.S., Adham, K.A.	2013					/	/
49.	Sun, W.-W., Cai, N.	2013					/	/
50.	Bhadviya, P., & Joshi, A.	2013	/		/			
51.	Bhardwaj, B. R., Wahi, S., & Deshmukh, A. R.	2013	/		/			
52.	Özdemir, O.G.	2013	/					
53.	Wahee, S. J., Bhardwaj, B., & Deshmukh, A. R. 2013,2014,2015	2013	/					
54.	Ismail, N., Jaffar, N., Khan, S., & Leng, T. S.	2012	/					
55.	Abdullah, A. H. (2011, November).	2011	/					
56.	Badaruddin, M. N. B. A., Arokiasamy, L., & Yusoff, H. 2011,2012,2015**	2011	/					
57.	Esmaeeli, Hadi.	2011						/
58.	Hafezieh, N., Akhavan, P., Eshraghian, F.	2011						/
	CE = Cyber Entrepreneurship							
	OE= Online Entrepreneurship							
	EE= E-Entrepreneurship							
	DE= Digital Entrepreneurship							
	SE= Social Entrepreneurship							
	PE= Perniagaan Digital	Results	19	8	5	17	3	16
	DT= Digital Technology							
	Keywords="Cyber entrepreneurship" OR "online entrepreneurship" OR "e entrepreneurship" OR "digital entrepreneurship" OR "social entrepreneurship"							



Table 3: Common issues of Cyber entrepreneurship

Issues	Sources
<ul style="list-style-type: none"> <li>• Lack of IT Knowledge</li> <li>• Culture of an organisation/tradition</li> <li>• Organisation Size</li> <li>• Lack of perceived ease of use</li> <li>• Lack of usefulness/value</li> <li>• Time constraint</li> <li>• Financial Constraint</li> <li>• Lack of technical support</li> <li>• Lack of encouragement</li> <li>• Lack of training</li> <li>• Reluctance of CEO to learn new technologies</li> <li>• Attitude</li> <li>• Demographic factor (age, gender, level of education)</li> <li>• Government regulation</li> <li>• Security and safety</li> <li>• Customer not being able to touch and feel</li> <li>• Product performance risk</li> <li>• Doubtful of technology usage</li> <li>• High Investment in Industry 4.0 Implementation</li> <li>• Lack of Clarity Regarding Economic Benefit</li> <li>• Risk of Security Breaches</li> <li>• Lack of Infrastructure</li> <li>• Lack of Digital Skills</li> <li>• Lack of Internal Digital Culture and Training</li> <li>• Resistance to Change</li> <li>• Resource's availability</li> <li>• Market and industry competitiveness</li> <li>• Social culture</li> <li>• Politic</li> <li>• Government legal and regulatory</li> <li>• Behavior of entrepreneur</li> <li>• Owner's characteristics</li> <li>• User's prior experiences</li> <li>• Owner's innovativeness</li> <li>• Computer literacy</li> <li>• Lack of trust</li> <li>• External pressure</li> <li>• Lack of awareness</li> <li>• Different product types</li> <li>• Lack of confidence</li> <li>• Mismatch with product type</li> <li>• Mismatch between the way's companies run their business</li> <li>• Low penetration of Internet in the country</li> <li>• the cost of Internet access</li> </ul>	<p>Kaur et al., 2020 Raj et al., 2020 Dahbi &amp; Benmoussa, 2020 Al-Tit, 2020 Rahim et al., 2019 Mamat, et al., 2018 Jaganathan et al., 2018 Badaruddin, 2018 Suhartanto and Leo, 2018 Andipakula, 2017 Nawi et al., 2017 Aidah, 2017 Oktavianus et al., 2017 Abu Bakar et al., 2017 Irma, Chong &amp; Ram, 2016 Juneja,2016 Saif-Ur-Rehman, Rizwan Alam, 2016 Laukkanen, 2016 Jambulingamis, Sumathi &amp; Rajagopal, 2016 Steyn, Steyn, &amp; De Villier, 2015 Agwu &amp; Murray, 2015 Dutot &amp; Van Horne, 2015 Omar, Rahim &amp; Salman, 2015 Balachandran &amp; Sakthivelan, 2013 Cohen et al., 2013 Ghobakhloo, 2013 Lian &amp; Liu, 2012 Mohd Nizam et al., 2012 Lawrence, 2011 Abid et al.,2011 Wamuyu and Maharaj, 2011 Zaied,2012 Ramani et al.,2012 Lawrence et al., 2010 Good &amp; Qureshi, 2009 Gatautis and Vitkauskaitė, 2009 AlAwadhi and Morris, 2008 Chibelushi, 2008 Fathian, Akhavan, &amp; Hoorali 2008 Wolcott et al., 2008 AlAwadhi and Morris, 2008 Kotelnikov, 2007 Matthews, 2007 Mutula &amp; Brakel, 2007 Kapurubandara and Lawson, 2007 Esselaar et al., 2006 Ndubisi and Kahraman,2005 Ram &amp; Sheth, 1989 Raghuprasad et al., 2013</p>

## RESEARCH METHOD

The methodology that has been chosen to retrieve articles related with the cyber entrepreneurship via the academic database resources and prior studies done by researchers. The process of papers review involved three stages principally: searching the databases, visualizing and analyses the data and content precisely. Keyword in the title of selected database resources is “cyber entrepreneur\*”, “digital entrepreneur\*”, “online entrepreneur\*”, “social entrepreneur\*”, “e- entrepreneur\*”, “barriers and adoption\*”, “issues and adoption\*” and “challenges and adoption\*” (see Table 2). Next, the undefined journal or insignificant proceeding paper to the related phrase were eliminated due to variability in the peer-review systematic process in certain extent it tolerates the strict searching of keywords or related terms to cyber entrepreneurship and technology adoption reviews. In addition, in term of visualizing examination, the titles, abstract and keyword of the papers were cautiously read and reaching out on technologies issues. Finally, the remaining papers were assessing and analysis in the analysis the data abstraction and content. The ulterior effort focuses on related and specific studies that respond only to the objective of the paper. The data were abstracted by reading through the abstract first before proceeding to in depth review to identify item related the cyber entrepreneurship and issues, challenges, or barriers adoption.

## DISCUSSION

From the highlighted issues among the prior studies related to the Cyber entrepreneurship, thus this paper summarized that the challenges that hindering the adoption classified under three categories namely, Functional Issues Individual Issues and Psychological Issues.

### ***Functional issues***

First and foremost, the issue highlighted in this study is functional issues which are issues related to the usefulness, value, and risk exposure from the technology itself due to the challenges of innovation that affect user’s status quo (Ram & Sheth, 1989), the value perceived by new innovations and products offered as against the expectation (Kushwah et al., 2019). Most of the former literature proposes that value barriers have a negative association with user intentions in various contexts of study, namely online shopping (Lian and Yen, 2017), mobile gaming (Oktavianus et al., 2017), mobile commerce (Moorthy et al., 2017), mobile services (Joachim et al., 2018), and mobile banking (Laukkanen, 2016). Lastly, in term of risk it usually related to the privacy risk and product performance. In fact, Al-Tit (2020) depicted that there are seven barriers out of eighteen barriers factors related to intention to use CE namely technology knowledge of employee, telecommunications, cost of connectivity, technical expertise, cost of technology, security of internet and legal barriers. Meanwhile, Van Huy et al. (2012) identified that innovation complexity and perceived risk are obstacles factors in the implementation of cyber entrepreneurship (CE) preferably among entrepreneurs of SMEs.

### ***Individual issue***

The individual issue is another ongoing issue highlighted due to lack of knowledge on particular technology among the entrepreneurs (Dahbi & Benmoussa, 2020). This will lead to some possible consequences that absolutely will affect the interest towards cyber

entrepreneurship activities in doing business. Additionally, conferring to (Hong and Zhu, 2006; Antonelli et al., 2000) many empirical studies deliberated that entrepreneur tend to reject the information technology due to their limited and lack of basic knowledge. In fact, it was found that this might be due to most of the SMEs entrepreneurs from aged less than 40 years old with low level of education and limited knowledge in running the business (Abu Bakar et al., 2017) which consequently unfamiliar to persist the certain technology accessibility. Additionally, as addressed by (Jaganathan, Ahmad, Ishak, Nafi, & Uthamaputhran, 2018; Antonelli et al., 2000; Raghuprasad et al., 2013), lack of IT knowledge among the SMEs entrepreneur being part of the challenges encountered that to an end lead to resistance of adoption. Other than that, the individual issues also related to the knowledge awareness in order to improve their skills of shifting the way of doing business towards on-line entrepreneurship. As revealed by MOHE 2019, it is approximately only 48% involvement for the year of 2019 in self-competencies training programmed among entrepreneurs. There was likely lack of consensus among them towards the importance of building up skill competencies. Nevertheless, the government and private sectors intervention and support system such as through the “*e-usahawan*”, “*e-rezeki*” and many more play the vital roles to support training and skill competencies program as well as increase entrepreneurs’ interest to participate. From that, they will expose to cyber entrepreneurship in conducting business activities to use internet of thing technologies parallel with the current support modes initiative adaptation practices in real-world entrepreneurship.

### ***Psychological issues***

Another issue related to the CE adoption is psychological issues. Ram and Sheth (1989) define the psychological barriers comprise of tradition and image barrier. The tradition issue is a regular pattern of perception and behavior adopted by an individual or people, referred to a new innovation that will change habit and lifestyle as compared to the existing practices or habit (Mani and Chouk, 2018). It is found to be an imperative factor that impeding the ICT usage behavior among SMEs entrepreneur (see Straub et al., 1997; Farhoornand et al., 2000; Leidner and Kayworth, 2006). Suhartanto & Leo (2018) revealed that culture will be valuable to consider towards ICT adoption among SMEs since behavior of an entrepreneur is influenced as well triggered by culture (Tambunan, 2011; Sanakulov, 2019). Mohd Taib Dora (2013) added that culture is something that influencing individual behavior towards which community wants and accepts. In Malaysia, it is found that each state has different unique culture and tradition for instance the business culture in Kelantan possesses its own uniqueness that rarely different by other states (Kelantan State Tourism Officer, 2019). This is due to business culture applied among the SMEs entrepreneur especially in Kelantan were bit different whereas traditional way of doing business became the priority in preserving their business from generation to generation (Ibrahim & Dawood, 2020). In a way doing business they prefer to face to face communication and transaction. In some circumstances, the adoption of information technology seems does not fit with their existing businesses culture (Saif & Rizwan, 2016). In other word simply changing towards innovation in entrepreneurship would not be preferable. As what have been discussed by Farhoornand et al (2000), cultural found that a factor that could lead to ICT adoption among SMEs entrepreneurs.

## **CONCLUSIONS**

In a nutshell, this paper contributes to the future research since it discussed the imperative roles of cyber entrepreneurship adoption for SMEs entrepreneurs. Moreover, Apulu and Latham (2011) indicated that the competitiveness of the SMEs would also increase with the adoption of Cyber Entrepreneurship. In fact, these barriers discussed, and the proposed

solution put forward in this study should be seriously investigated and speedy action taken by policy makers as well as relevant agencies that responsible for overseeing and monitoring the SMEs' development and growth to acquire wealth, gain market exposure in various aspects of the world globally and locally.

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# Government Support Policies Enhancing the Entrepreneurial Orientation of SMEs and Performance in Ghana

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## ABSTRACT

This study aimed to examine how government support policies may enrich the entrepreneurial orientation and the performance of SMEs in Ghana. Governments' role in promoting entrepreneurship and the performance of SMEs/firms cannot be over emphasized. However, there is little studies on the relationship of government support policies on the entrepreneurial orientation and firm performance particularly in Ghana. This study examined the relationship of government support policies in enhancing entrepreneurial orientation and SMEs the performance in Ghana. Questionnaire were obtained from 369 SME-owners using random sampling method and data analysed via PLS-SEM. The study revealed that government support policies significantly influence SMEs innovativeness, risk-taking and on performance but not on the proactiveness of SMEs. Regarding the effect of entrepreneurial orientation on performance, the findings demonstrate that proactiveness influences performance with no significant relationship of innovativeness and risk-taking on SMEs/firm performance in Ghana. The study, therefore, filled the empirical gap as well as added to the building of theory on how other variables like government support policies enhances the entrepreneurial orientation and on SMEs performance. The study entreats SMEs to see government support policies and entrepreneurial orientation as their essential resources based on the RBV theory. The study ended with suggestions for policy makers, SME-owners and further research.

**Keywords:** Government support policies; Entrepreneurial orientation; SMEs performance; Ghana; Resource base-view theory.

## INTRODUCTION

SMEs have been and continue to serve the growing needs of people with entrepreneurial undertakings because of their enormous contributions to nations. This makes the growth and performance of SMEs in every nation paramount to governments with policy measures to support them due to their engagement in creating novel jobs as well as reducing the high level of unemployment and contribute to the GDP of the local economies especially in Ghana at the informal level. The performance of SMEs therefore, have become focal point for governments, non-governmental institutions and other actors like, researchers with the view of ensuring that SMEs always attain their performance targets.

Regardless of the vast contributions of SMEs in the world however, SMEs performance especially in Ghana and most developing countries are inhibited by a number of obstacles.

Some of the hindrances of SMEs are; inadequate access to finance; little market opportunities; weak institutional capacity, low level of technology usage, less ability to network, and limited demand for local products and services. Likewise, SMEs are not able to engage highly qualified personnel and have less motivated staffs; and especially low level of entrepreneurial orientation (EO) (Ezie, & Danjuma, 2016; Abdullahi, et al., 2016; Zaato, et al, 2021).

Universally, it has been reported that SMEs constitutes 99% of all businesses made of 60 to 70 per cent of informal jobs operating in several aspects of the economy (Hongyun, et al, 2019; OECD, 2017; Nasip, et al., 2017). And constitutes 92 percent in Ghana and 90 percent of all firms in Africa (Zaato, et al, 2021). SMEs have brought about an improved employment levels from 2003 to 2016 in 132 different countries where permanent workforce almost doubled from 79 million to 156 million. However, the employment levels are expected to reduce from 5.3 million to a maximum of 24.7 million due to the current Covid-19 pandemic (OECD, 2020).

Again, SMEs failure rate is high compared to large businesses where potential entrepreneurs are discouraged from starting a business every year in some developing countries (Hoque, Siddiqui, Awang, & Baharu, 2018). The challenges of SMEs particularly in Ghana make them to contribute less to GDP of Ghana and increased unemployment among the teeming youth and have 1-5 people as employees (Abor, & Quartey, 2010; Sekyi et al., 2014; Zaato, et al, 2020). The major reason been the inability of SMEs to grow and hire more hands which made many of them hesitant in employment creation with barely 47% of them which may employ one to five staffs in five or more years (GEM, 2013).

Meanwhile, government support policies (GSPs) to SMEs in other develop and developing countries such as India, South Korea, Taiwan, China, South Africa, and the United Arab Emirates economies have played a vital role in the EO of SMEs and performance (Kusi, Opata, & Narh, 2015; Onuoha, 2012) and is not the same in Ghana. The vibrant SMEs these countries have brought about reduction in the poverty levels, unemployment, and lifted the economic status of those countries (Eniola & Entebang, 2015). The failure of SMEs and other hindrances expressly in Ghana therefore, need GSPs to enhance their EO and performance.

With the issues confronting SMEs performance like low level of EO, high failure of SMEs especially in Ghana, it makes it imperative for governments' intervention with support policies to sharpen the entrepreneurial orientation or skills and performance. Yet, a dearth of literature exists in Africa and Ghana in particular on the role of GSPs in promoting the EO and performance of SMEs (Eniola & Entebang, 2015; Nakku, et al, 2020; Zaato, et al 2021).

Past studies have indicated that SMEs that have high level and use of EO are able to perform better in terms of job creation and execution of other entrepreneurial actions than their competitors and has significant influence on performance (Miller, 1983; Palmer et al., 2019; Semrau, et al., 2016; Wales, et al., 2013). With EO, SMEs are capable of enduring every economic shock (Fadda, 2018; Lumpkin & Dess, 2006), as it helps SMES to become more proactive, calculated risk-takers and support innovative ideas to meet their performance aim (Wiklund & Shepherd, 2003).

This study is based on the RBV theory which stress the need for SMEs to judiciously use their resources and unique competencies that are of value, rare, and cannot be imitated or replaced by their counterparts. With RBV, SMEs are encouraged to first make good use of resources at their firm level to beef up their performance (Barney, 1991; Zaato, et al, 2021). Once SMEs are able to judiciously use their internal resources, they will be able to access other resources externally like GSPs. In this study, EO and GSPs are regarded as internal and external resources respectively when used properly will augment SMEs performance.

To achieve this study objective of filling the empirical gap on studies relating to how GSPs enhances the EO and performance of SMEs, the study examined how GSPs enhances the



EO of SMEs and performance in Ghana. The study adapted measures of GSPs, three constructs of EO like proactiveness, innovativeness, and risk-taking as well as SMEs performance measures. In view of the study objective, the following hypothesis were tested.

Hypothesis 1: GSPs has positive relationship with Innovativeness of SMEs in Ghana.

Hypothesis 2: GSPs has positive relationship with Proactiveness of SMEs in Ghana.

Hypothesis 3: GSPs has positive relationship with Risk-Taking of SMEs in Ghana.

Hypothesis 4: GSPs has positive relationship on SMEs performance in Ghana.

Hypothesis 5: Innovativeness has positive relationship on SMEs performance in Ghana.

Hypothesis 6: Proactiveness has positive relationship on SMEs performance in Ghana.

Hypothesis 7: Risk-taking has positive relationship on SMEs performance in Ghana.

## RESEARCH METHOD

This study used quantitative research design to assess how government support policies relates with the EO and performance of SMEs in Ghana using survey questionnaire. The researchers obtained data from SME-owners in the services and manufacturing sector of Ghana. The respondents were randomly reached through the assistance of Ghana National Board for Small Scale Industries (NBSSI), a government institution that support SMEs in Ghana. Questionnaire were distributed to 500 SMEs across the three geographical zones of Ghana and out of that number, only 369 questionnaires were received and considered usable. Again, the data was treated using online Web Power and the multivariate Mardia tool to ascertain the normality of the data and it confirmed the basis for using PLS-SEM for data analysis as the data was not normal (Hair, et al, 2014). The questionnaire were adapted and adopted from related studies thus, GSPs (Shu, et al., 2019; Leste, 2014; Li & Atuahene-Gima, 2001; Cai, Jun, Yang, 2010), entrepreneurial orientation (i.e. Olabanji Oni et al., 2019; Shu, et al., 2019; Nasip et al., 2017), and SMEs performance (Dess, Lumpkin & Covin 1997; Covin & Wales, 2012). The study model and analysed results using the PLS-SEM software are presented below.

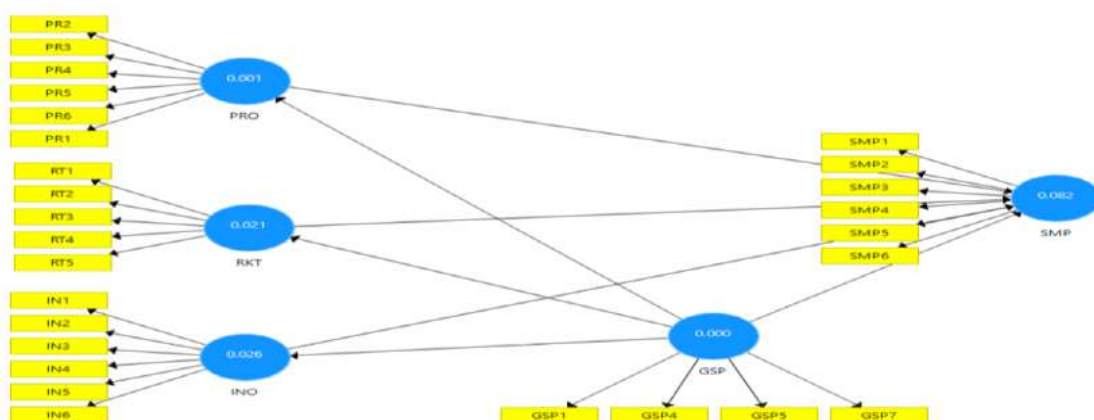


Figure 1: Research model

## RESULTS AND DISCUSSION

### Descriptive Statistics

The results on the personal and business information as in Table 1.1 indicated more males (55.3%) than females (44.7%), with their age group in years ranging from 29 or less (7.3%), 30 to 39 (42.3%), 40 to 49 (39.0%), and 50 or more (11.4%). On education, JHS or less recorded (25.5%), SHS or O/A level (32.5%), Diploma (13.3%), Undergraduate (23.0%), Masters (5.7%). Again, as noted in Table 1.1 on the firm age, majority of the SMEs were 6 to 10 years (36.6%), 11 to 15 years (26.6%), 16 years or more (21.4%), and 5 years or less made of (15.4%). In terms of number of employees, 71.0% employed 6 to 29 staffs while 29.0% had 30 to 99 employees. In relation to the management experience of SME-owners 5 years or less (21.1%), 6 to 10 years (37.4%), 11 to 15 years (22.5%), and 16 years or more (19.0%). The SME-owners with past work experience for those with 'Yes' response (65.9%) and 'No' of (34.1%) and on the reasons for quitting their former job, Closed down (22.2%), Operating (27.6%), 'To set up my own' (20.3%), Merger (4.3%), and Other reasons as (25.5%).

**Table 1.1 Demographic Profile**

<b>Variable</b>	<b>Frequency (N)</b>	<b>Percent (%)</b>
<b>Gender</b>		
Male	204	55.3
Female	165	44.7
<b>Total</b>	<b>369</b>	<b>100.0</b>
<b>Age Group in Years</b>		
29 or below	27	7.3
30 to 39	156	42.3
40 to 49	144	39.0
50 and above	42	11.4
<b>Total</b>	<b>369</b>	<b>100.0</b>
<b>Highest Level of Education</b>		
JHS or less	94	25.5
SHS or O/A level	120	32.5
Diploma	49	13.3
Undergraduate	85	23.0
Masters	21	5.7
<b>Total</b>	<b>369</b>	<b>100.0</b>
<b>Firm Age</b>		
5 years or less	57	15.4
6 to 10 years	135	36.6
11 to 15 years	98	26.6
16 years or more	79	21.4
<b>Total</b>	<b>369</b>	<b>100.0</b>
<b>Number of Employees</b>		
6 to 29 employees	262	71.0
30 to 99 employees	107	29.0
<b>Total</b>	<b>369</b>	<b>100.0</b>
<b>Management Experience</b>		

5 years or less	78	21.1
6 to 10 years	138	37.4
11 to 15 years	83	22.5
16 years or more	70	19.0
<b>Total</b>	<b>369</b>	<b>100.0</b>
<b>Prior Work Experience</b>		
Yes	243	65.9
No	126	34.1
<b>Total</b>	<b>369</b>	<b>100.0</b>
<b>Reasons for quitting First Work</b>		
Closed down	82	22.2
Operating	102	27.6
To set up my own	75	20.3
Merger	16	4.3
Others	94	25.5
<b>Total</b>	<b>369</b>	<b>100.0</b>

### Validity and Reliability

Table 1.2 presents the reliabilities of the study variables based on their acceptable values of Cronbach's Alpha ( $\alpha$ ) and Composite Reliability (CR) which exceeded 0.60, 0.50 respectively. The Average Variance Extracted (AVE) values also agreed with the extant literature (e.g. Hair, et al., 2012; Henseler, & Chin, 2010; Hair, et al., 2016). This suggest that the study constructs have all fulfilled the requirements for reliability and convergent validity and had no problem of multi-collinearity.

**Table 1.2 Reliabilities of Study Variables**

Variable	Item	Cross loading	$\alpha$	CR	AVE
Government support policies	GSP1	0.691	0.687	0.806	0.511
	GSP2	0.683			
	GSP3	0.801			
	GSP4	0.677			
Innovativeness	INO1	0.694	0.834	0.878	0.557
	INO2	0.786			
	INO3	0.830			
	INO4	0.869			
	INO5	0.830			
	INO6	0.664			
Proactiveness	PRO2	0.735	0.808	0.863	0.517

	PRO3	0.693			
	PRO4	0.798			
	PRO5	0.799			
	PRO6	0.719			
Risk-Taking	RKT1	0.702	0.811	0.864	0.560
	RKT2	0.725			
	RKT3	0.688			
	RKT4	0.763			
	RKT5	0.852			
SMEs Performance	SP1	0.873	0.911	0.931	0.693
	SP2	0.859			
	SP3	0.812			
	SP4	0.848			
	SP5	0.838			
	SP6	0.760			

Note: Cronbach's Alpha ( $\alpha$ ), Composite Reliability (CR), and Average Variance Extracted (AVE)

This study also examines discriminant validity of the variables as in Table 1.3. The discriminant validity values were regarded reasonable thus, by using the Heterotrait–Monotrait (HTMT) criterion. As illustrated by Table 1.3, the variables maximum values were lower than 0.90 with none of the variables also having HTMT value of 1 as per past studies hence, confirmed the presence of discriminant validity of the study variables (e.g., Kline, 2015; Hosen, et al., 2021).

**Table 1.3 Heterotrait–Monotrait (HTMT) Ratio**

Variables	GSP	INO	PRO	RKT	SP
GSP					
INO	0.278				
PRO	0.122	0.148			
RKT	0.255	0.206	0.169		
SP	0.132	0.066	0.390	0.102	

Note: Government support policies-GSP; Innovativeness-INO; Proactiveness-PRO; Risk-Taking-RKT; SMEs Performance-SP.

### Study Structural Model

Table 1.4 below demonstrates how GSP influences the entrepreneurial orientation and SMEs performance. As shown, GSPs influences Innovativeness ( $t=5.080$ ,  $p=0.000$ ), GSPs did not have significant effect on proactiveness ( $t=1.178$ ,  $p=0.119$ ), further GSP has significant effect

on risk-taking ( $t=4.165$ ,  $p=0.000$ ) and GSP has significant effect on SMEs performance ( $t=1.786$ ,  $p=0.037$ ). Likewise, on the effect of EO on performance, the results indicate a significant outcome of proactiveness and performance ( $t=7.362$ ,  $p=0.000$ ), but an insignificant relationship was realized with innovativeness on performance ( $t=0.643$ ,  $p=0.260$ ), and risk-taking on SMEs performance ( $t=0.487$ ,  $p=0.313$ ) though they had positive relationship.

**Table 1.4 Results of Relationships**

Hypothesis	Relationship	$\beta$	SD	T - Values	P- Values	Lower level (5.0%)	Upper Level (95.0%)	Decision
H1.	GSP -> INO	0.233	0.046	5.080	0.000	0.171	0.321	Support
H2.	GSP -> PRO	0.064	0.055	1.178	0.119	-0.023	0.160	No support
H3.	GSP -> RKT	0.212	0.051	4.165	0.000	0.142	0.305	Support
H4.	GSP -> SP	0.088	0.049	1.786	0.037	0.030	0.193	Support
H5.	INO -> SP	-0.035	0.054	0.643	0.260	-0.124	0.054	No support
H6.	PRO -> SP	0.335	0.045	7.362	0.000	0.266	0.415	Support
H7.	RKT -> SP	0.028	0.058	0.487	0.313	-0.069	0.121	No support

*Note.*  $\beta$  = Beta, and SD = Standard Deviation.

Additionally, the results affirmed the fact that SMEs continuously need GSPs in the form of financial and non-financial support services to thrive. As such, governments and the government of Ghana in particular, should not overlook the enormous contributions of SMEs by providing them with support services and entrepreneurial fostering environment for the progress of SMEs. This will enhance the EO of SMEs to create more jobs and reduce unemployment in the country. This will also lead to an increase contribution of the SMEs sector to the Gross Domestic Product of the country.

The significant result GSPs as stimulating the innovativeness of Ghanaian SMEs agrees with Jordan, Aulbach and Linowes (2013) and Nakku, Agbola, Miles, and Mahmood, (2020) that GSPs has a significant influence on SMEs innovativeness but disagrees with Idris, and Saad, (2019) and Ismail, and Zakaria, (2018) that GSPs may lead to a decline on SMEs innovativeness. As can be seen, GSPs reported to have insignificant impact on SMEs proactiveness and disagrees with Dai, and Si, (2018) study outcome where GSPs had statistical and significant effect on the proactiveness of SMEs. This suggest that government need to provide more support to SMEs in Ghana to increase their level of proactiveness.

More so, the result where GSP had significant link with risk-taking and SMEs performance is in consonance with some prior studies (e.g. Nakku, et al, 2020; Asgary, et al., 2020; Alhnity, Mohamad, & Ku Ishak, 2016). On the hand, the result on how proactiveness influence SMEs performance confirms other studies like Bature, et al, (2018), Lumpkin and Dess, (2001) and Adams, Quagrainie, and Klobodu, (2017). However, the finding on the influence of innovativeness and risk-taking on the performance of SMEs also varies from the results of Kosa, Mohammad, and Ajibie, (2018) and Lumpkin and Dess, (1996) which recorded significant relationship of innovativeness and risk-taking on the performance of SMEs.

## CONCLUSIONS

The study results proved that government support policies play an important role on SMEs EO and performance in Ghana. Therefore, SMEs need better and continuous GSPs that will make them more entrepreneurial oriented in discharging their duties for the citizens and for the collective development of the country as they render their services. The finding of this study supports the theoretical stand that studies of EO on performance relationship is an ongoing phenomenon and that other variables should be included for better understanding on how they influence EO on performance of firms. This study results signify that SMEs should concentrate more on how they can use GSPs to enhance their innovativeness, risk-taking and on their performance. Again, emphasis should be focus on their proactiveness so as to improve upon their innovativeness and risk-taking ability so that it will enhance their performance in Ghana. Further researchers may double the sample size, use another design with mediating or moderating variables so that the results can be generalized.

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# **A Conceptual Paper on Issues in Internal Auditors Behavioral in Local Governments in Riau Province: Implications for Audit Quality**

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## **ABSTRACT**

This paper aims to reveal the performance of government internal auditors which has implications for audit quality. Changes in the political, social, and economic systems pose a variety of problems for good governance. Audit quality is a reflection of the auditor's performance in doing audits. Audit quality can be interpreted as audit work related to good or bad audit work and compliance with existing standards. This study discusses the government internal auditor's roles in carrying out activities such as checking/supervising and consulting. The results of the work of the internal auditors will be reviewed by the government's external auditors. Opinions from external auditors represent the performance of internal auditors. The problem faced by the government's internal auditors is that they do two contradictory things: monitoring and providing consultation. With this condition, the government's internal auditors are an indication of the occurrence of role conflict, role ambiguity, role clarity, and knowledge-seeking behavior in carrying out tasks that will have an impact on audit quality. This study uses role theory to determine whether formalization, role conflict, role ambiguity, role clarity, and knowledge-seeking behavior affect job performance which will have implications for audit quality.

**Keywords:** formalization; role theory; role conflict; role ambiguity; role clarity; knowledge-seeking behavior; job performance; audit quality; internal auditor.

## **INTRODUCTION**

In the business world, an auditor's report or what is called an audit opinion is needed by interested parties such as directors, investors, creditors, and other parties. Stakeholders will consider investing or following up on policies that will be implemented within the company. The private sector market reveals that audit quality reflects the transparency and reliability of the company's financial statements to users, namely stakeholders (Suttipun, 2021). Although the key mechanisms of corporate governance in contemporary organizations are increasing, internal audit is still considered an under-researched topic in the accounting literature (Gendron and Bedard, 2006; Roussy, 2013; Minhret and Grand, 2017; Roussy et al, 2020; Khelil and Khlif, 2021). However, governance in the public sector has a different impact compared to the private (Cordery & Hay, 2021). Governance in the public sector through audit reports will have a major impact on society and the government itself. This is because internal auditors can effectively check for fraud, fraudulent activity, and improve government performance. Moreover, the quality of internal audit can now be linked to its impact on corporate governance by linking the types of internal audit findings to specific corporate

governance areas for improvement that should be made by senior management (Abullah et al, 2018).

In Indonesia, for example, the Government Internal Audit Standard defines a government internal auditor as someone who has a position that has the scope, duties, responsibilities, and authority to carry out internal control over government agencies. The role of government internal auditors is to provide quality audit results. In terms of providing quality results, the auditor is guided to carry out audit activities according to standards. It can be said that auditing in government is a broad, complex, and challenging field. Because government audits are more beneficial to the community. Judging from the condition of the State of Indonesia, from the many cases of fraud committed by unscrupulous government officials, the presence of an internal auditor is expected to reduce and eliminate acts of fraud and improve government performance.

Murdock (2019) Internal auditors can play a key role in keeping fraud at bay by helping management implement better programs to prevent, prevent, detect, and investigate fraud. Internal audit is more than just finding and listing problems. To be effective, internal auditors must also understand the contributing factors to the problems identified, and be creative enough to brainstorm possible solutions, screen the alternatives, and select the most feasible option based on available resources and priorities. A best practice is not always the best choice for every organization. One area of government that is in the spotlight of the public and legislators when a company failure occurs is the performance of the internal audit function (Abullah et al, 2018). Failure in the internal audit process is caused because the auditor is faced with a dilemma. Faountain (2017) says that auditors are always under internal auditors experiencing pressure from management to rewrite findings or omit observations.

**Table.1 Report on Examination Results (LHP) of Riau Province 2015-2019**

No	Province/ District/ City	2015	2016	2017	2018	2019
1	Riau Province	WTP	WTP	WTP	WTP	WTP
2	Bengkalis Regency	WTP	WTP	WTP	WTP	WTP
3	Indragiri Hilir Regency	WDP	WTP	WTP	WTP	WTP
4	Indragiri Hulu Regency	WDP	WTP	WTP	WTP	WTP
5	Kampar Regency	WDP	WTP	WTP	WTP	WTP
6	Meranti Regency	WTP	WTP	WTP	WTP	WTP
7	Kuantan Singingi Regency	WTP	WTP	WTP	WTP	WTP
8	Pelalawan Regency	WTP	WTP	WTP	WTP	WTP
9	Rokan Hilir Regency	WDP	WDP	WDP	WTP	WDP
10	Rokan Hulu Regency	WDP	WTP	WTP	WTP	WTP
11	Siak Regency	WTP	WTP	WTP	WTP	WTP
12	Dumai City	WDP	WDP	WTP	WTP	WTP
13	Pekanbaru City	WDP	WTP	WTP	WTP	WTP

Source: [www.bpk.go.id](http://www.bpk.go.id)

\*WTP: Unqualified Opinion

\*WDP: Qualified Opinion

From Table 1 it can be seen that the opinion of the Regional Government of Riau Province BPK in 2015-2019 has increased and received an unqualified opinion. This is in contrast to the results of the examination which were recorded quite well. At least 4 sections must be

improved according to recommendations such as Compliance with Government Accounting Standards, Adequacy of Internal Control System, Compliance with Laws and Regulations; and Adequacy of disclosure in the Notes to Financial Statements.

The findings of the Riau provincial government LKPD audit related to non-compliance with the legislation had a financial impact of 91.4. Billions of rupiah and the number of cases related to non-compliance with laws and regulations as many as 170 cases with 74 cases causing losses to the state, 32 cases potentially causing losses, 38 cases of lack of state/regional revenue, and 26 cases of administrative irregularities. As revealed in the Audit Results Report on the 2020 Central Government Financial Statements that for the Groundwater and Surface Water Tax, there is a claim for the Pekanbaru City Groundwater Tax that the Pekanbaru Mayor Regulation Number 78 of 2018 and Riau Governor Regulation Number 14 of 2018 concerning Water Acquisition Value Land cannot be the basis for the Regional Government in calculating the amount of the Ground Water Tax (PAT) (bpk.go.id/ikpp.2020). The Summary of Examination Results for Semester 1 of 2019 informs that the number of findings from 2005-2019 was 1,050 findings with a total rupiah value of 1,752,266,599,861.26 Rupiah, with a total recommendation of 2,747 with a rupiah value of 989,096,914,195.67 Rupiah, with follow-up monitoring status with the following; According to the Recommendation totaling 2,108 with a rupiah value of 636,680,012,245.77 rupiah, not yet following the recommendation; 544 with a rupiah value of 342,174,046,843.41 forms, Not followed up with a total of 32 with a rupiah value of 832,746,926.60, Cannot be followed up with a total of 63 with a nominal rupiah of 10,410,108,179.89 (bpk.go.id/ihps .2019).

The information above shows that the main role of the internal auditor has not been carried out following the Regulation of the Head of the Financial and Development Supervisory Agency of the Republic of Indonesia Number 1 of 2016 Articles 3 and 4 concerning the Duties and Functions of the Government's internal auditor. The duties and functions stipulated in articles 3 and 4 are as follows: Government internal auditors carry out internal supervision, carry out activities, carry out coaching, provide assistance in preparing reports, evaluate government implementation and accountability. Viewed from the main task and allows internal auditors to experience role conflict, role ambiguity, role clarity, and the search for knowledge in carrying out tasks that will have an impact on audit quality.

This regulation explains that the main activities of local government internal auditors regulated by the government are conducting audit activities, review activities, monitoring activities, evaluation activities, and supervisory activities such as consultations. Following the main duties and functions of the government's internal auditor, when the two roles faced are contradictory, this will indicate the occurrence of role conflict and role ambiguity in the government's internal auditor. Internal auditors will experience role conflict when there is a role for local government internal auditors in providing audit supervision roles to local government agencies while simultaneously providing a consulting role to the management of government agencies. Role ambiguity can occur in local government internal auditors when they do not have clear duties, authorities, responsibilities, and standards in carrying out audit tasks during the implementation of the audit supervisory role. The audit supervisory role and the consulting role are two roles of government internal auditors that have conflicting expectations. The role of the internal auditor is to work as a 'quality assessor' who assists the government in regulating the government to achieve efficiency and effectiveness and meet economic requirements. but from the information above it can be seen that the performance of the internal auditors is very good. However, it is still not optimal because efficiency and effectiveness have not been achieved.



Referring to the role of theory, when individuals face a mismatch of role expectations simultaneously with adherence to one role expectation it will be difficult to fulfill other role expectations, causing the individual to experience role conflict (Kahn et al. (1964) cited in (Agarwal, 1999). Role theory reveals that when a person carrying out an activity/role does not have sufficient information to produce an effective performance of a particular role, the individual will experience role ambiguity (Kahn et al., 1964 as cited in Senatra, 1980). According to Whitaker et al, (2007) "role" is defined as a set of expectations or norms that are applied to incumbents by others in the organization, and employees with high role clarity, therefore, have a clearer understanding of their needs. When individuals experience role ambiguity and role conflict, auditors can have role clarity. High role clarity will result in a good performance (Cohen, 1980). It can be concluded that role clarity is a factor in achieving better performance.

The audit supervisory role and the consulting role are two roles of government internal auditors that have conflicting expectations. The work of government internal auditors depends on the clarity of duties, authorities, responsibilities, and clear standards, and auditors understand their roles to avoid role ambiguity and role conflicts to achieve good performance and can be seen from the quality of the audit provided. In the research of (Novriansa and Riyanto, 2016) it was revealed that role conflict and role ambiguity affected job performance (Causholli et al., 2021) reveals that knowledge-seeking affects auditor performance.

## **Role Theory**

Schuler et al., (1977) defined that Role theory as a conceptual framework theory to explain the behavior of individuals in an organization. Rebele and Michaels (1990) reveal that role theory emphasizes the nature of a person as a social actor who studies behavior that is appropriate to his position in society. Rahim (2019) describes three uses of the term role. First, the role usually means a normative status that includes the behaviors, attitudes, and values that are attributed by society to people who occupy certain positions. Second, a role usually means an individual's conceptualization of his or her situation about their position and the position of others in society. Third, roles usually refer to the behavior of someone who occupies a social position.

Khelil and Khlif (2021) In organizational role theory, organizations are considered as social systems based on a core concept called "role sets". Hunter (2015) reveals that role theory begins with a set of normative expectations that are considered to define a certain position or status in the structure and the appropriate role or behavior in interactions with others. In short, normative behavior is goal-oriented. From the above understanding, it can be concluded that role theory is a conceptual framework of the theory that emphasizes the nature of a person who is in a social environment and is goal-oriented. Palomino and Frezatti (2016) say that the social environment is formed due to continuous interaction between an individual and other people. In the process of interaction, an individual assumes the need for a role, position, status, or responsibility in a certain context. Georgakakis et al., (2019) considers the role of people as members of a social position and having expectations for their behavior and that of others.

Problems arise when the role expectations are unclear, not easy to interpret, and not following the capture power of individuals who have a role so that the role expectations will be judged to be ambiguous and contain elements of conflict (Ahmad and Taylor, 2009). K Khelil and Khlif (2021) revealed that from the perspective of organizational role theory, internal auditors face role conflict problems because they interact with various types of stakeholders. Role ambiguity, role conflict, and role clarity are constructs of role theory, role ambiguity is which

individuals do not have enough information to perform a role or when tasks, authority, and responsibilities are unclear (Tubre and Collins, 2000); Amilin (2017). Role conflict is a conflict or confusion that occurs due to the simultaneous occurrence of two or more forms of pressure in the workplace, where fulfilling one role makes fulfilling another role more difficult (Pratiwi et al., 2019).

This can create a dilemma for internal auditors. In doing so, internal auditors play an important role in the company's business processes or reporting from public sector organizations. In the private sector, the auditor will provide the best assessment so that the company's financial statements are ready to be examined by external auditors. However, in the public sector, internal auditors are responsible for government performance reports. Because one of the duties of the internal auditor is to provide supervision and consultation. Indirectly, it can be said that the performance report that is made is the internal auditor. This raises an ethical dilemma in his role. According to Noviarni et al (2012) internal auditors experience a dilemma when receiving intervention from superiors, auditors experience feelings of reluctance when reporting peer errors, public perceptions, auditors feel disappointed, a limited number of auditors, audit time, and supporting infrastructure are factors hindering audits. Role conflict and role ambiguity have a potential impact, in other words, role conflict affects audit quality performance or behavior (Amiruddin, 2019). Gibson, et. al, (2012) stated that the factors that affect performance are individual, psychological, and organizational factors. Job performance is related to the performance evaluation carried out on a job and will affect the promotion of positions and incentives that will be given to local government internal auditors. According to Sanjiwani and Wisadha (2016) auditor performance is the work achieved by an auditor in carrying out his role following the responsibilities given to him. This role is one of the benchmarks used to determine whether a job will be good or bad.

Government Internal Auditors are expected to be agents of change who can create added value in government agency products or services. The government's internal auditor as the government's internal supervisor is one of the important elements of government management to realize good governance that leads to clean government/bureaucracy. It is concluded that when the job performance of the auditor is good, it can have a good effect on audit quality. Audit quality can be said to be a characteristic or description of audit practices and results based on applicable standards. Liu and Wang (1999), audit quality is the probability that the auditor will not report an audit report with an unqualified opinion for financial statements that contain material errors. According to DeAngelo, 1981) audit quality is the joint probability that an auditor will find and report violations in the client's accounting system.

### **Hypothesis development: Formalization, Role Conflict, Role Ambiguity, Role Clarity, Knowledge Seeking Behavior, Job Performance: Implications for Audit Quality**

Formalization is defined as the level of standardization of work and the number of permissible deviations of work from the standard (Hage, 1965; Aiken and Hage, 1966). Formalization can include statements of procedures, rules, roles, and operating procedures related to decision making, delivery of decisions and instructions, and delivery of information including feedback (Pugh et al., 2015). Chen and Rainey (2014) reveal that formalization has long been considered as one of the most distinctive characteristics of public sector organizations because it is considered to lead to administrative efficiency and organizational effectiveness. However, Do and Van Vu (2021) reveals that Formalization can affect employee benefits through regulatory oversight and company oversight by regulatory authorities, but when formalization does not improve performance, employee wages and benefits can be cut or delayed to compensate for poor productivity. This could be due to Neubert and Hunter (2016) that the rules and regulations provided by formal procedures replace the leader's task

orientation. Nathan Eva (2021) Having clear policies and procedures helps promote good performance (Hunter, 2015) Role theory asserts that the norms governing interactions are there to realize the defined goals of the interaction. Khelil and Khlif (2021) reveal three role concepts related to social positions and norms that are influenced by individuals, organizations, and informal groups, namely; role ambiguity, role conflict, and role overload.

Role conflict is defined as a condition when the role of someone who is sent does not match the focal person (Schuler et al., 1977). This role conflict occurs when there is a mismatch of role expectations with the role being carried out and two conflicting roles are carried out at the same time. Roussy (2013); Rahim (2001) revealed that there are four types of role conflicts, namely; Intrasender conflict, Intersender conflict, Interrole conflict, Intrarole (person-role) conflict. Unguren and Arslan (2021) role conflict can occur when there are role assignments from different superiors and different roles, but they must be done at the same time. Breugh and Colihan (1994) define that role ambiguity refers to the perception of a person/employee/employee regarding the uncertainty of various aspects of their work. Rahim (2001) revealed that role ambiguity is a lack of clarity in understanding role expectations and what requirements must exist to fulfill a given role. Kahn et al. (1964) cited by Shenkar and Zeira (1992) revealed that role ambiguity occurs under one of several conditions, such as lack of required information, lack of communication of the available information, or reception of conflicting messages from different role senders. Unguren and Arslan (2021) when an employee is unable to ascertain the job requirements or the way to succeed, he or she may experience task ambiguity. Factors for the occurrence of role ambiguity can come from organizations or individuals. Kahn et al., 1964 as cited in Hall (2008) said that role clarity is based on a person's or individual's perception of expectations and behaviors related to his role. Yulk (2002) defines that role clarity as a person's understanding of his job responsibilities or roles and knowledge of what to do. Suseno (2001) reveals that the unclear role in the organization is caused by three factors; rapid changes in the organization, increasing complexity in the organization, poor communication. According to role theory, an organization should have a clear set of responsibilities. Wang et al., (2016) reveal that lack of role clarity tends to cause individuals to believe that they are powerless and reduce their impact on work. Thus, Unguren and Arslan (2021) reveal that role clarity is an important indicator of performance.

Today's successful organizations understand why they must manage knowledge, develop plans on how to achieve this goal, and devote time and energy to this effort (Elbaz et al., (2017). Sharma and Bock (2005) revealed that Knowledge Seeking is classified as a cost and benefit for knowledge seekers. Causholli et al., (2021) revealed that the search for knowledge carried out by auditors costs money. Knowledge-seeking behavior can occur because individuals need incentives, economic rewards, interdependent tasks, and mandates. Knowledge Seeking Behavior is influenced by three factors, namely; knowledge Seeking attitude, knowledge-seeking intention, and perceived behavior control. Lai et al., (2014) revealed that the importance of beliefs, such as system quality, compatibility, trustworthiness, knowledge growth, and knowledge quality, in creating positive attitudes towards knowledge seeking. Causholli et al., (2021) Audits are conducted by a team of individuals with different levels of knowledge and expertise. This difference makes different results because in carrying out effective audit activities, auditors must know.

Causholli et al., (2021) suggested auditor knowledge from two dimensions: theoretical perspective (Human capital. Social capital) and specific knowledge (General knowledge and specific knowledge). One of the main assets that must be owned by an organization is human capital. Human capital can improve performance and increase organizational excellence based on the ability to transfer knowledge from source to recipient effort (Elbaz et al., (2017).

Andriessen and Gubbins (2009) Describe social capital such as ties, roads, and bridges. see social capital in terms of internal network relationships or external relationships. Definitions that focus on external relationships are referred to as 'bridging' (Adler and Kwon 2002) or 'communal' (Oh et al. 1999) forms of social capital and those that focus on internal relationships are referred to as 'bonding' (Adler and Kwon 2002) or 'linking' (Oh et al. 1999) forms of social capital. It can be said that social capital is a relationship. This is as expressed by (Gubbins and Dooley, 2021) that the search for knowledge is the behavior of deciding and initiating social interactions to retrieve the required knowledge. Mohammed and Kamalanabhan (2020) revealed that knowledge-seeking behavior can have a positive influence on performance. Empson et al., (2015) Express that this knowledge can make the provision of assistance in teams important for member work performance and project success. Causholli et al., (2021) knowledge-seeking networks are an important aspect for Job performance auditors.

Kalbers and Fogarty (1995) define job performance as an evaluation of the work done through direct superiors, coworkers, self, and direct subordinates. Poor job performance of auditors can create potential for errors, legal liability, and loss of credibility (Fisher, 2001). Caillier (2010) defines that job performance as a term that can be used to describe how well an employee performs tasks related to his work. Johari et al (2018) say that work performance is one of the important indicators and gets serious attention in the field of psychological organization and human resources. Accountants in carrying out their duties to protect the public interest must do their job well because reducing negative effects on their job performance is very important (Knight et al., 2021). Government internal auditors sometimes encounter obstacles in their implementation where there are considerations of kinship, togetherness, and a sense of humanity (Fa'niansah et al., 2020). This will have a negative impact on the job performance of the auditor.

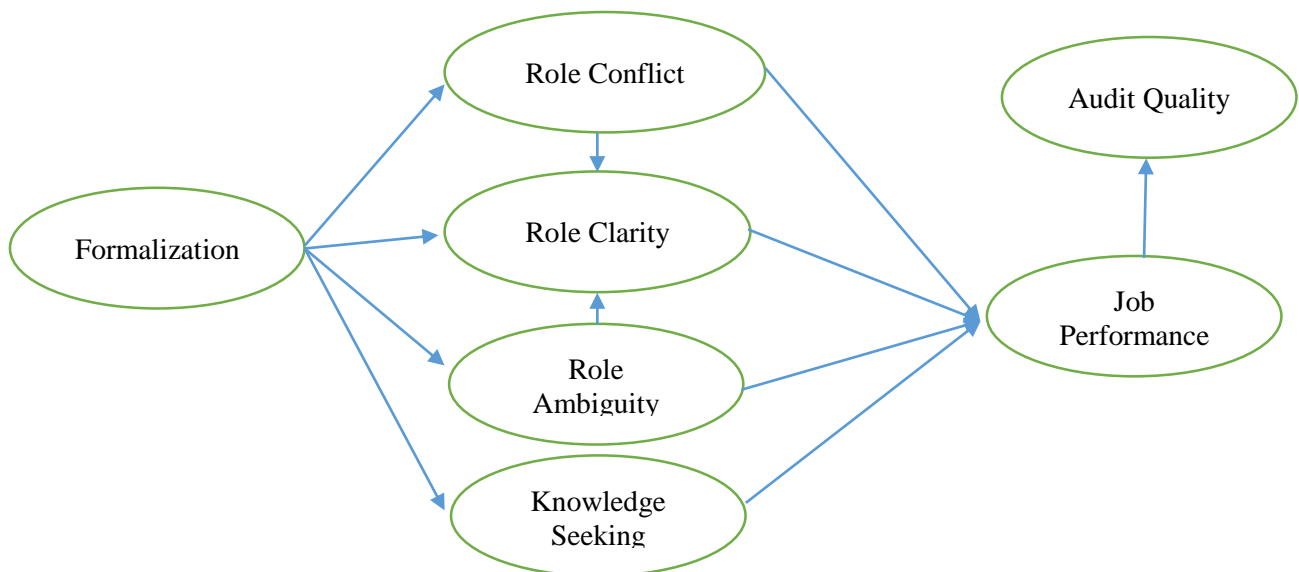
DeAngelo, (1981) defines audit quality as the probability that the auditor will find and report violations of the auditee's accounting system. The IASB defines audit quality as a complex subject and no analysis has achieved universal recognition. Quality audits include the key elements that create an environment that maximizes the likelihood of quality audits being conducted consistently. The International Auditing and Assurance Standards Board provide five key elements, namely input, process, output, interaction, and contextual factors. Sumartono et al., (2019) revealed that it is not easy to describe and measure audit quality objectively with several indicators. The adoption and development of internal auditors in public sector organizations build on previous literature on internal auditors in the private sector, it highlights the relevance of the interaction between actors' contemporary involvement in professional systems and the focus of social systems as a source of relevant practice variation (Arena and Jeppesen, 2016). This poses a dilemma for government internal audits. Because of these mutually exclusive dual roles, it is difficult for auditors to move around. This is supported by Gamar and Djamhuri (2015) where internal auditors act as "doctors" for fraud in local governments.

Indications of the occurrence of role conflict in local government internal auditors are due to the existence of two roles of local government internal auditors who have conflicting role expectations/requirements occurring simultaneously, namely the audit supervisory role and the consulting role. High organizational formalization means the organization makes an explicit regulation or standard that regulates job descriptions, implementation standards, authority, responsibilities, time, and various things that are allowed or not allowed to fulfill a role that must be carried out by local government internal auditors, which then the rules or standards are communicated properly. Rogers and Molnar (1976) stated that the existence of clarity about goals and procedures for achieving organizational goals makes administrative

heads report low ambiguity about their organizational roles and tasks. Indications of role ambiguity in local government internal auditors occur when they do not have clear duties, authorities, responsibilities, and standards to carry out their roles. Formalization helps provide clarity to the work of local government internal auditors through the establishment of explicit regulations or policies. Amiruddin (2019) says that audit quality is a guarantee because quality will be used to compare actual conditions with expected conditions.

Rizzo et al., (1970) showed that role ambiguity is associated with decreased performance in problem-solving. Role ambiguity makes local government internal auditors weak in understanding the audit tasks they must perform. Fisher (2001) developed a hypothesis of a negative relationship between role conflict and job performance following Jackson and Schuler (1985) According to a cognitive perspective, role conflict can lead to low job performance because role conflict conditions cause individuals to face situations where it is almost impossible to do everything that is expected of a role (Jackson and Schuler, 1985). Unguren and Arslan (2021) reveal that role conflict and role ambiguity have a direct negative influence on job performance and can reduce performance. Inappropriate tasks and lack of personal decision-making opportunities will create pressure on employees which will be detrimental to employee job performance (Johari et al., 2018). Based on the highlighted issues in the role of the internal auditors, the present study develops hypotheses as follow:

- H1: Formalization is negatively related to role conflict.
- H2: Formalization is negatively related to role ambiguity.
- H3: Formalization is positively related to role clarity
- H4: Formalization is positively related to knowledge-seeking behavior
- H6: Role conflict is negatively related to job performance.
- H7: Role ambiguity is negatively related to job performance
- H8: Role clarity is positively related to job performance
- H9: Knowledge seeking happiness is positively related to job performance
- H10: Job performance is positively related to audit quality
- H.11: Role clarity affects the relationship between role conflict and job performance
- H12: Role clarity affects the relationship between role ambiguity and job performance



**Figure1. Proposed conceptual framework**



## CONCLUSION

This conceptual paper explores the issues of role conflict, role ambiguity, role clarity, and knowledge-seeking behavior to improve auditor performance and the quality of government internal auditors. Its purpose is to provide a conceptual framework and discourse for stakeholders, researchers. There are still many studies that find inconsistent results, rules that are difficult to apply because they involve a person's behavior. The government has provided guidelines, indicators for assessing audit quality, but until now it is still difficult to provide good results for the government and the community. The good results received by the government through the results of this audit opinion are not directly proportional to the existing reality. The government only focuses on achieving the target in terms of providing opinions from external audits. But this favorable opinion still raises big questions.

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# Effect of Financial, Social, and Human Capital on Micro and Small Enterprises Performance

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## ABSTRACT

This study aimed to empirically investigate the effect of financial, social and human capital on informal micro and small enterprises performance, through the lens of social capital theory. Through the implication of cross-sectional design, data were randomly gathered from 356 micro and small entrepreneurs operating in the informal sector. The outcomes of the study revealed that access to financial capital, social capital and human capital exerted a positive and significant effect on small businesses performance. The finding of this study extends the scope of social capital theory and also improving our comprehension of the importance of access to financial, social and human capital resources toward enhancing the performance of informal MSEs in developing countries. Consequently, it is recommended that, since many have lost their jobs due to the Coronavirus Disease (COVID-19) pandemic, the policies makers of the Government of Senegal should place more emphasis on the importance of informal entrepreneurship, through training in entrepreneurship and particularly with access to financial capital resources through low interest credit facilities among microentrepreneurs. This could boot the economic growth of the country as informal entrepreneurs have the ability, via jobs creation and income generation activities to contribute to the economic recovery.

**Keywords:** Financial Capital; Social Capital; Human Capital; Enterprise Performance; Informal Sector

## INTRODUCTION

Micro and Small Enterprises (MSEs) are critical contributors to job creation, economic development, poverty alleviation, and distribution of wealth (Matsongoni, and Mutambara, 2018; Al Mamun, et al., 2018). They increase competition, explore niche markets, improve productivity and technological advancement, and boost economic performance (Khan, 2018; Omri, et al., 2015). The bulk of MSEs are operating in the informal sector. Indeed, the informal sector claimed to cover over 72% of the overall informal business segment in Sub-Saharan African nations (ILO, 2016), with 91% in Ghana (Turkson, et al., 2020) and 97% in Senegal (ANSD, 2017). In addition, throughout francophone Africa, the informal sector dominates, accounting for over half of GDP and more than 90% of employment (Mbaye and Gueye, 2018). Moreover, in low-income countries, SMEs and informal companies represent for more than 60% of GDP and 70% of total employment, while in middle-income countries, they contribute



for more than 95% of total employment and approximately 70% of GDP (Zafar and Mustafa, 2017). The majority of microentrepreneurs use the informal market's opportunities to handle their socioeconomic difficulties (Musara and Nieuwenhuizen, 2020). Indeed, the informal sector is regarded as a source of entrepreneurial creativity, characterized by perseverance, adaptation, job creation, and economic growth (Khan and Quaddus, 2020). In Senegal, the preponderance of these MSEs operate in the informal sector which generated the majority of jobs (Simen, 2018). The national agency for statistics and demographics (NASD) stated that the informal sector employs 97% of the country's workforce (ANSD & RGE, 2017) and accounts for 48.8% of overall employment (ANSD & ENSIS, 2011). Additionally, informal sector companies contributed 39.8% of total output, 41.6% of value-added, and 57.7% of non-agricultural value-added to national production (ANSD & ENSIS, 2011). Between 2002 and 2010, tax contributions increased from 1.9 to 4.2 % (DPS, 2002; ENSIS, 2011), however they are still low when compared to the formal sector's 10.4%. According to Senegal's Direction of Prevision and Economic Studies (DPES), informal sector companies contributed 55% of GDP on average between 1980 and 2014, with value-added averaging 57% between 1984 and 1991 and 54% between 1995 and 2002 (DPEE, 2018). However, the informal sector produced 16.7% of total turnover, compared to 87.3% for the formal sector, indicating a low performance of informal enterprise (ANSD, 2017). As a result, due to their considerable contribution to the national economy in terms of GDP and employment generation, it is essential to evaluate the performance of these informal firms. Furthermore, there are various explanations and interpretations of informal business definition that could be affiliated with illegality but are economically and socially legitimate (Webb, et al., 2014), regulation and registration (William and Krasniqi, 2018), business size and access to bank credit (Benjamin and Mbaye, 2012), and flexibility and participation in social security (Gërkhani, 2004). In the context of this study, informal enterprise refers to MSE that is not registered in the National Identification Number of Companies and Association (NINCA) and does not maintain an accounting system that meets the requirements of West African Accounting System (DPEE, 2018; ANSD, 2017). However, these businesses are registered with the local chamber of commerce or municipal government and use an informal accounting system (Notebook). Despite the reality that informal enterprises contribute considerably to employment generation in most developing nations, including Senegal (ENSIS, 2011; DPEE, 2018), the vast majority of micro-entrepreneurs suffer a variety of difficulties. According to the DPES in Senegal, 60.4% of informal businesses lacked customers, 40.0% faced intense market competition, 27.3% struggled with financial constraints, 19.2% lacked an appropriate location, 19.1% were entangled in stringent legislation, and 15.4% were subjected to excessive taxes. Indeed, due to a lack of expertise, restricted access to financial, human, and intangible resources, and other issues, micro and small firms in Africa are predicted to 85% of business mortality (Fatoki, 2014). The key determinants of early micro and small enterprise mortality can be explained by a lack of entrepreneurial competencies along with limited resources in terms of access to financial, social, and human capital (ILO, 2018; Yadav, et al., 2018; Khan, et al., 2020). Based on current literature, several scholars have emphasized some serious issues facing micro and small businesses in developing countries, and the majority of these issues are associated to developing entrepreneurial competencies skills (Turyakira, et al., 2019), as well as insufficient access to financial, social, and qualified human resources (Tundui and Tundui, 2020; Khan, et al., 2020; Fowowe, 2017; Nguyen and Canh, 2020; Ozigi, 2018). Small businesses are principally unable to receive funds from banking institutions for the following reasons: inability to provide collateral (Boohene, 2018), higher transaction costs (Quartey, et al., 2017), insufficient financial expertise (Adomako, et al., 2016), lack of accounting records (Arinaitwe and Mwesigwa, 2015), high interest rate (Fowowe, 2017), as well as perceived risks associated with their informal status (Turkson, et al., 2020). Furthermore, commercial banks chose to work with registered businesses (firms that operate in the formal sector), whereas the bulk of micro and small businesses operate in the informal sector (ANSD, 2018). In



addition, micro-entrepreneurs are less likely to be able to generate, invest, and build social capital's abundant resources (Akintimehin, et al., 2019). Despite the fact that studies have demonstrated that an entrepreneur's social capital is critical to their business's success (Analia, et al., 2020; Yadav, et al., 2018), it has not been well addressed in Senegalese literature. Moreover, human capital, which is also an important driver of micro-enterprise success, provides a quality worker who allows the organization to operate efficiently (Assaker, et al., 2018). Education, training, and experience have all been cited as important components in aiding informal micro and small businesses to expand and move to formality (Benzamin et al., 2012). Senegal has a high level of human capital resources in comparison to its regional competitors (GEM, 2015). However, the majority of Senegalese entrepreneurs acknowledge that finding well-qualified personnel and focused owners/managers with a relevant set of business skills is a significant challenge (Mbaye, et al., 2018; Lukas and Cathelijne, 2017). The combining of these three types of capital, such as financial, human, and social, is critical for micro and small businesses to attain long-term viability and performance (Yadav, et al., 2018; Atmadja and Sharma, 2016; Fatoki, 2012).

Most of the few studies that have focused on the issue of the informal enterprise's activities in Senegal have been conducted by the National Agency of Statistic and Demographics (DSP, 2003; ENSIS, 2011; RGE, 2017) and the Direction of Prevision and Economic Studies (DPEE, 2018). In addition, a review of the literature revealed that, despite their significant contribution in terms of employment creation and income generating activities in the national economy, informal businesses receive far less attention. In addition, there have been restricted and few studies on how informal MSEs can ameliorate their access to financial, social, and human capital resources in order to enhance their business performance (ANSD, 2018). Furthermore, there appears to be little research on the informal business performance when access to financial, social, and human capital are combined. Moreover, since the success and failure of small business performance is largely determined by lack of access to finance, humane capital resources and social network, there is a need to investigate the effect of financial, social and human capital on small business performance in informal entrepreneurship as the majority of businesses are operating in this sector in developing countries. This deficiency in the literature must be addressed in order to improve informal business performance, because access to financial, social and human capital resources are important factors for enterprise success. Thus, the objective of this paper is to examine the effect of financial, social, and human capital on informal business performance.

## **THEORETICAL FOUNDATION**

Social capital theory is a significant resource for informal entrepreneurship in Africa (Kebede, 2018) and provides a valuable theoretical perspective (Akintimehin, et al., 2019). The goal of social capital theory is to comprehend and explain social bonds, social interaction, trust, and reciprocity (Pratono, 2018). The relationship between social capital and informal entrepreneurship is based on the fact that institutional structures appear to be relatively weak in developing nations, while social capital is seen as an informal institution (Escandon-Barbosa, et al., 2019). In comparison to the formal economy, social capital is critical for the informal economy because it replaces ineffective institutional structures in accessing and managing resources such as physical, financial, and human capital, as well as intangible resources (Nordman, 2016; Escandon-Barbosa, et al., 2019). Furthermore, informal entrepreneurs are interconnected to communities of varied socio-demographic groupings through creating effective mechanism to capitalize from social capital diversity (Kebede, 2018). Moreover, informal businesses rely heavily on ethnic and religious networks to build

mutual-assistance ties (Kebede, 2018), communication and collaboration (Al Mamun, et al., 2018) with surrounding entrepreneurs in the establishment, and market sharing or customer exchange partnerships (Akintimehin, et al., 2019; Berrou and Combarous, 2011). For the acquisition of commodities, equipment, and materials, they continue to rely on their community and religious and ethnic relationships (Kebede, 2018). In fact, since African culture is collaborative in nature, informal workers have a high level of establishing social capital and informal ties (Benjamin, et al., 2014), which allow them to reduce their risk and uncertainty. Burt (1992) proposed that entrepreneurs require three types of capital: financial, human, and social, with social capital resources being a critical component in the formation of small firms. Informal microentrepreneurs' techniques for obtaining formal or informal financing are often built on social capital networks that assist small enterprises with advice, information, and funds (Mungiru, et al., 2015). Access to information and formal funding is facilitated by the relationship between microentrepreneurs and business partners, including Chamber of Commerce, local and political authority and financial institution (Arinaitwe, et al., 2015). Entrepreneurs benefit from social capital in the form of social networks since it provides them with accurate and exclusive information that can improve their capabilities by facilitating access to financial and human capital resources (Al Mamun, et al., 2018). Indeed, Allen, et al. (2018) claimed that successful company performance is correlated with positive informal funding, including trade credits and family borrowing, based on connection and information advantage. Therefore, under the premises of social capital theory, this study explains the association between financial capital, social capital, human capital and informal enterprise performance.

## RESEARCH METHODOLOGY

This study used a cross-sectional research design and gathered quantitative data from informal MSEs in Senegal through structured interview. The research population for this study was MSEs operating in the informal sector in three regional capitals of Senegalese namely Dakar, Thies and Diourbel. These three regions count almost 60 % of micro and small enterprises in the country operating in the informal sector (ANSD, RGE, 2017). These microenterprises are unregistered in the National Identification Number of Companies and Association (NINCA) and are not maintained an accounting system complying with the standards West African Accounting System (WAAS) (National Agency for Statistics and Demography, 2011; 2017).

The sampling procedure for this study was cluster sampling technique. The required sample size of this study was estimated 172 adopted from G-Power 3.1 with the power of 0.95, effect size of 0.15 and 10 predictors of the model (Faul, et al., 2007). Also, to use structural equation modelling via partial least squares, 50 to 200 samples size is suitable (Hair, et al., 2017) or a minimum threshold of 100 samples is required (Reinartz, et al., 2009). Moreover, Kline (2005) recommended that a sample size over 200 is considered large for non-complex model. Therefore, this study collected data from 356 informal entrepreneurs across three regions in Senegal via structured interview to avoid any possible complication due to small sample size. A list of each regional chamber of commerce reflects the sampling frame of the study. The stratified random sampling techniques were applied to gather data from informal entrepreneurs.

## RELIABILITY AND VALIDITY

The reliability of this study was estimated with Cronbach's Alpha, Composite Reliability (CR), DG rho – Dillon-Goldstein's rho (DG Rho) and Average Variance Extracted (AVE). The Cronbach's Alpha, as indicated in Table 1, for all indicators was more than 0.80 (Hair et al. 2019); therefore, the Cronbach's Alpha is considered reliable. Similarly, for composite reliability and DG rho, the values for all indicators are more than 0.80, indicating that all items are reliable. The AVE value for all items was higher than 0.5, thus showing a good and sufficient convergent validity (Hair et al. 2019). In addition, as indicating in Table 1, the variance inflation factor (VIF) for each construct, and all of the values were less than 3, demonstrating that there was no problem with multi-collinearity among the study constructs (Hair et al., 2019). Therefore, this study constructs had satisfied both reliability and convergent validity requirement.

Table 2 which represent discriminant validity of Cross Loading indicate that all Cross-loading values of the constructs meet the minimum threshold value of 0.708 (Hair, et al., 2019). Therefore, the results show that discriminant validity is satisfied for the constructs of the study. In addition, Table 3 represent the Foronell-Larcker criterion and the Hetrotrait and Mono-trait ratio. To establish discriminant validity for each construct, the Fronell-Larcker criterion results must be less than 0.70 (Hair et al. 2019). As shown in table 3, all constructs had satisfactory discriminant validity. Furthermore, the HTMT ratio was less than 0.90, indicating that the research constructs had discriminant validity (Henseler et al. 2015). Thus, all of the values met the Heterotrait–Monotrait (HTMT) criterion since they fell below the 0.90 threshold.

**Table 1: Reliability analysis**

	CA	DG Rho	CR	AVE	VIF
<b>FCP</b>	0.927	0.932	0.945	0.774	1.185
<b>HCP</b>	0.871	0.877	0.906	0.660	1.271
<b>SCP</b>	0.902	0.905	0.927	0.718	1.105
<b>EPR</b>	0.823	0.825	0.883	0.654	

Note: CA: Cronbach's Alpha; DG rho - Dillon-Goldstein's rho; CR - Composite Reliability; AVE Average Variance Extracted; VIF - Variance Inflation Factors.

(Source: Author's data analysis)

**Table 2: Cross Loadings**

Construct	FCP	HCP	SCP	EPR
<b>FIN1</b>	0.866	0.328	0.112	0.374
<b>FIN2</b>	0.890	0.327	0.090	0.394
<b>FIN3</b>	0.869	0.385	0.203	0.474
<b>FIN4</b>	0.871	0.353	0.195	0.461
<b>FIN5</b>	0.901	0.326	0.106	0.451
<b>HUM1</b>	0.407	0.824	0.262	0.371
<b>HUM2</b>	0.273	0.846	0.211	0.326
<b>HUM3</b>	0.250	0.790	0.276	0.269
<b>HUM4</b>	0.332	0.759	0.216	0.347
<b>HUM5</b>	0.309	0.840	0.274	0.376
<b>SOC1</b>	0.327	0.312	0.821	0.341

<b>SOC2</b>	-0.035	0.194	0.896	0.286
<b>SOC3</b>	0.321	0.303	0.792	0.316
<b>SOC4</b>	0.001	0.227	0.853	0.255
<b>SOC5</b>	0.006	0.231	0.871	0.279
<b>EPR1</b>	0.422	0.328	0.283	0.834
<b>EPR3</b>	0.381	0.414	0.313	0.821
<b>EPR4</b>	0.385	0.334	0.304	0.783
<b>EPR5</b>	0.411	0.279	0.239	0.796

Note: FIN: Financial Capital; SOC: Social Capital; HUM: Human Capital; EPR: Enterprise Performance.

**Table 3: Fornell-Lacker Criterion**

	<b>FCP</b>	<b>HCP</b>	<b>SCP</b>	<b>EPR</b>
<b>FCP</b>	0.880			
<b>HCP</b>	0.392	0.812		
<b>SCP</b>	0.164	0.305	0.847	
<b>EPR</b>	0.494	0.421	0.353	0.809

**Table 5. Heterotrait-Monotrait Ratio**

<b>FCP</b>				
<b>HCP</b>	0.428			
<b>SCP</b>	0.212	0.338		
<b>EPR</b>	0.561	0.489	0.403	

## PATH ANALYSIS

Table 4 represents the path analysis coefficients of financial capital, social capital and human capital on performance of Micro and Small Enterprises. The path coefficient value for financial capital ( $\beta = 0.376$  and  $p\text{-value} = 0.000$ ) exert a positive and significant effect on enterprise performance. Beside this, the  $f^2$  value of 18.5% indicates a medium effect of financial capital on microenterprise performance. Similarly, the path coefficient value for social capital ( $\beta = 0.229$  and  $p\text{-value} = 0.000$ ) exert also a positive and significant influence on performance of micro and small enterprises. The  $f^2$  value of 7.3% shows a small effect of social capital on enterprise performance. By the same token, the path coefficient value for human capital ( $\beta = 0.204$  and  $p\text{-value} = 0.000$ ) exert a positive and significant effect on enterprise performance, with the  $f^2$  value of 5% that indicate a small effect.

The  $r^2$  value for enterprise performance is 0.358, meaning that 35.8% of the variation in informal microenterprise performance can be explained by access to financial capital, social capital and human capital of MSEs. In addition, the  $Q^2$  values larger than 0 suggest that the model has predictive relevance for a certain endogenous construct. As indicated in table 4, the  $Q^2$  of 0.157 is more than zero, indicating that financial capital, social capital and human capital provide a clear support for the model predictive relevance.

**Table 4: Path Coefficients**

	Variables	Beta	Mean	SD	t-value	p-value	r <sup>2</sup>	f <sup>2</sup>	Q <sup>2</sup>	Decision
H1	FCP -> EPR	0.376	0.380	0.044	8.568	0.000	0.35	0.185	0.157	Accept
H2	HCP -> EPR	0.204	0.199	0.059	3.432	0.000	8	0.050	7	Accept
H3	SCP -> EPR	0.229	0.229	0.041	5.546	0.000		0.074		Accept

Note: FIN: Financial Capital; SOC: Social Capital; HUM: Human Capital; EPR: Enterprise Performance. Source: Author's data analysis.

## DISCUSSION AND IMPLICATION

This study empirically examined the three main factors of social, financial and human capital on informal small business performance. The finding of the study revealed that financial, social and human capital positively and significantly influence informal MSEs performance. The result of the study is consistent with that reported by Fatoki (2012), Yadav et al. (2012) and Omri et al. (2015) whose asserted that access to financial, social and human capital played a significant and positive role in enterprise performance. In this study, the results show that access to financial capital has the greatest impact on microbusiness performance, followed by social capital and human capital. The practical implications for informal microentrepreneurs are to focus more on access to financial capital resources due to its high significance effect on small business performance. This study suggests a more practical strategy for policymakers to improve access to financial and working capital with low interest rate for informal entrepreneurs.

The performance of informal enterprise could be improved by implementing the following strategies: increasing access to social capital benefit and entrepreneurial training. As financial, social and human capital significantly and positively impact small business performance, the study contributes to social capital theory. Thus, the Senegalese authorities should focus on developing specific industry platforms for informal small businesses at the communal, regional, and national levels. Microentrepreneurs will be more interested in sharing their opinions, expertise, and experiences on such platforms in order to improve their expertise, knowledge, and competences, which would eventually lead to improved business performance. Productive industry-specific training for informal microentrepreneurs provides a supportive business environment for the creation of social capital, which can help small businesses to gain a competitive advantage and maintain their performance for the purpose of the country's socio-economic growth. Moreover, given the number of people who have lost their jobs due to COVID-19 (OIT, 2020), Senegal's government should address issues that face informal entrepreneurs, such as providing entrepreneurial training and human management resources, as well as financial management, because informal entrepreneurship has the potential to boost the country's economic growth. As a result, this study recommends that the government and non-governmental organisations to support informal entrepreneurs in taking advantage of current opportunities in order to achieve economic recovery.

## CONCLUSIONS

The objective of this study is to empirically examine the effect of financial, social and human capital on informal micro and small enterprises performance. Via structural equation modelling, access to financial, social and human capital was tested based on the sample size of 356 MSEs operating in the non-formal sector. The outcomes of the study displayed that access to financial capital, social capital and human capital exerted a positive and significant effect on small businesses performance. The findings of this research lead to expansion of social capital theory while also improving our comprehension of the importance of access to financial, social and human capital in enhancing the performance of informal MSEs in developing countries. Thus, informal entrepreneurs need to focus on access to financial and social capital resources in order to improve and maintain their business performance.

Finally, this study has some limitations. Firstly, the study used the definition of informal enterprises in the context of Senegal. Thus, future studies could use International Labor Organization definition of informal enterprises. Secondly, the study method is constrained by its cross-sectional approach which is related to common method bias. Therefore, future studies should also extend this research to larges enterprises and implement multi-method and longitudinal approaches for data collection to improve both the outcome and reliability.



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## Antecedents and Consequences of Brand Loyalty

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### ABSTRACT

A company's success largely depends on the capability of a firm to attract its brands. The concept of brand loyalty is an important strategy for a company to obtain a sustainable competitive. In study viewed brand loyalty as a complex construct. The conceptualization of brand loyalty consists of behavioral and attitudinal loyalty. Both dimensions are correlated, and an increase in the attitudinal will increase behavioral brand loyalty. This literature review identified three antecedents and consequences of brand loyalty. This article refers accordingly to Dick and Basu (1994) study on the conceptual framework of customer loyalty. The antecedents such as consumer driver, brand driver and social driver are insufficient to determine brand loyalty. Hence, there are many predictors, for example, brand trust, brand satisfaction, and brand personality. Each type of loyalty is determined by the antecedents, either single or combination. The literature contributes for the marketing manager to plan their marketing strategy to attract consumers based on the consequences of brand loyalty.

**Keywords:** Brand Loyalty; Behavioral Loyalty; Attitudinal Loyalty.

### INTRODUCTION

Brands have proven they can attract highly engaged customers where consumptions are attached to identity and socialization (Belk and Tumbat 2005; Schouten and McAlexander, 1995). The different types of the brand, for example, product brands, service brands, investor brands, place, and B2B brands, display the varying level of engagement, cultural brand, in particular, integrating it into many aspects of their lives (O'Reilly, 2005; Schroeder, 2009). Many studies suggest that brands must provide unique, valuable experiences to gain a competitive advantage (Iglesias *et al.*, 2019). Loyalty is a concept used in various disciplines to mean similar but slightly different things, but marketers have settled on a very particular set of understanding. Brand loyalty plays a vital role in strategic management, and organizations have emphasized great significance to build and manage loyalty for their brand (Jamshidi and Roustae, 2020). Past research in the marketing has made significant contribution in the identification and study of factors that drive customer towards brand loyalty (Kaur and Soch, 2018). Many studies on antecedents of loyalty include customer satisfaction (Picon *et al.*, 2014), trust (Phan and Ghantous, 2013) commitment (Wu *et al.*, 2012) and service quality (Gonzalez *et al.*, 2007). Unfortunately, there is still a lack of knowledge in study antecedents of brand loyalty. The concept of brand loyalty is an essential strategy for the company to obtain a competitive advantage. Brand loyalty is an important strategy for a company to be sustain in competitive advantage. This due to several reasons of it. Firstly, retaining existing customers is five times more valuable than attracting new customers (Kim and Gupata, 2009). Secondly, brand loyal consumers reduce the marketing costs of the firms

(Mellens, 1996). The cost of retaining a customer is substantially lower than attracting a new one, warranting the importance of having a loyal customer base (Khan *et al.*, 2020). Thirdly, brand loyalty shows it is associated with higher return rates if return of investment (Gounaris and Stathakopoulos, 2004; Buzzell and Gale, 1987; Reicheld and Sasser, 1990). Fourthly, brand loyal consumer engages in an information search among alternatives, and probability will reduce switching brands (Uncle and Dowling, 2003). Lastly, brand loyalty is the determinant for brand equity (Dekimpe *et al.*, 1997).

A brand can be considered a valuable asset for any company and has widely acknowledged as an important reason for customers' choices, besides serving as an element to distinguish between companies and their offers (product or services) and their singularities. Moreover, brands can impact customer trust in the companies and their recommendations and the established trust itself. It can facilitate the decision-making process, help to reduce problems associated with the lack or low customer experience in related products or services, and reducing perceived risks (Huang and Sarigollu, 2011; Emari *et al.*, 2012; Chung *et al.*, 2013). Brand loyalty is unique and operationalized in the marketing literature (Gounaris and Stathakopoulos, 2004). Jacoby and Chestnut (1978), defined brand loyalty as the biased behavioral response, expressed over time by some decision-making unit with respect to one or more alternative brands out of a set of such brands, and is a function of psychological (decision-making, evaluation process. The definition viewed brand loyalty as repeat purchases and mostly a sequence of purchases. Most of the study on loyalty has criticized that it primarily focuses on measurement issues (Dick and Basu, 1994) and correlates with consumer characteristics in a segmentation context. Brand loyalty research used a variety of behavioral measurements include a proportion of purchase (e.g., Cunningham, 1996), purchase sequence (e.g., Kahn *et al.*, 1986), and probability of purchase (e.g., Massey *et al.*, 1970). The behavioral measure lacking a conceptual basis and only capture a static outcome of a dynamic process (Jacoby and Chestnut, 1978). The diverse definition of loyalty is a very complex construct (Fournier and Yao, 1997). Sheth and Park (1974), in their study, viewed brand loyalty as a multidimensional construct. Day (1969) who the first proposed brand loyalty consists of attitudinal and behavioral measures. Brand loyalty as consisting of repeat purchases prompted by solid internal dispositions. Purchases that follow by weak attitude but only influence by situational labeled as "spurious loyalty."

## **DIMENSIONS OF LOYALTY**

### *Behavioral Loyalty*

Behavioral loyalty is a consumer's intent and action of repurchasing the same product or service over time (Shristi *et al.*, 2017). The behavioral dimension addressed quantitative measurement by a customer's percentage of purchase in a specific brand category. Marketers are more interested in learning behavioral loyalty than directly translated into higher sales revenue (Dawes *et al.*, 2015). Behavioral loyalty is also called the stochastic approach (Odin *et al.*, 2001; Tucker 1964). The measurement is typically used in observing "the sequence of purchases or the proportion of purchases, if the customer is satisfied with the brand purchase and repeats it in a relatively short period (Maity and Gupta, 2016). Numerous remain critics of the behavioral dimension for several reason (Dick and Basu, 1994; Fournier and Yao, 1997; Jacoby and Kyner, 1973). Loyalty should not act as mere purchase behavior (Dick and Basu, 1994a). It should be open to many variables that can be considered the consequences of evaluative constructs in studying brand loyalty. According to Mellens *et al.*, (1996), behavioral measures in terms of the actual purchases observed over a certain period focused on behavioral responses and expressed over time. The explanation given is based on the



conceptual definition by Jacoby and Chestnut (1978). There are some advantages of behavioral measurement (Mellens et al., 1996). Firstly, they are based on the actual purchases directly related to the performance and existence of the firm. Secondly, they are not likely to be incidental as they are usually based on behavior over a period. Behavioral measurement is sensitive to short-run fluctuations. For example, a customer's preferred brand is temporarily out of stock.

### *Attitudinal Loyalty*

According to Casidy & Wymer (2015); Casidy & Wymer (2016); Haryanto et al.,(2016), attitudinal viewed as the consumers' devotion and attachment towards, and closeness with a brand) Attitudinal loyalty captures the emotional and cognitive components of brand loyalty (Appiah et al., 2019). It focuses on the psychological expression of individuals, including the intention to remain and attitude toward a brand human (Naude, 2014; Mosavi et al., 2018; Baker and Legendre, 2020). Customer tendency also involves a psychological process such intention to spend or recommend without repeat purchase (Baker and Legendre, 2021). Consumer displays an internal dispositional commitment (Chaudhuri and Holbrook 2001), and it allows brands to form enduring relationships with them based on deep motivation-based understanding (Ramaswami and Arunachalam 2016). Attitudinal perspective in the conceptualize loyalty seen consists of strong dispositions towards a brand leading to repeated purchases. It conceives brand loyalty on preferences, commitment, or purchase intention (Gounaris and Stathakopoulos, 2004). Once attitudinal and behavioral loyalty correlates, it will have a positive relationship even though not perfectly. An increase in attitudinal loyalty will lead to an increase in behavioral loyalty. Table 1, is the advantages and disadvantages of the two approach measurements.

**Table 1: Advantages and disadvantages of behavioral and attitudinal**

	Advantages	Disadvantages
Behavioral measures	<ol style="list-style-type: none"> <li>1) Based on actual behavior</li> <li>2) Non-incidental</li> <li>3) Easy to collect</li> </ol>	<ol style="list-style-type: none"> <li>1) Repeat buying not distinguished from brand loyalty</li> <li>2) More sensitive to short-run fluctuations</li> <li>3) Challenging to pick the right decision unit.</li> </ol>
Attitudinal measures	<ol style="list-style-type: none"> <li>1) Repeat buying separated from brand loyalty</li> <li>2) Less sensitive to short-run fluctuations</li> <li>3) Easier to pick the right decision unit</li> </ol>	<ol style="list-style-type: none"> <li>1) Valid representation of reality not guaranteed</li> <li>2) Incidental</li> <li>3) Harder to collect</li> </ol>

**(Source: Mellens, M., Dekimpe, M. and Steenkamp, J.B.E.M., 1996)**

*Types of Loyalty*

The study review of past literature suggests that brand loyalty has been viewed from different conditions as shown in figure 1, Dick and Basu (1994) table comprises four types of loyalty. Consumers can exhibit different types of commitment to other brands. The same brand can have a different segment of brand-loyal consumers (M.Dapena-Baron et al., 2019). Social influence mainly influence the loyalty level (Gounaris and Stathakopoulos,2004; M.Dapena-Baron et al.,2019; Kamboj and Rahim,2016). Dick and Basu (1994) dominant 2x2, low/high behavioral and high/low attitudinal classification loyalty has provided a rich foundation for research on loyalty (Dapena-Baron et al.,2020). This article review past literature on perspective of reasoned action. Consumer's behavior maybe influenced by social pressures, hence explain how a consumer's brand attitude may be unfavorable, while the consumer repeat the particular brand. Gounaris and Stathakopoulos, (2004) suggest theory of reasoned action to explain brand loyalty. Martin Fishbein and Icek Ajzen (1980) developed the theory of reasoned action which is very popular in marketing study. The theory proposed that behavior comprise the attitudinal, normative and conative component (Ishak and Ghani, 2010). According to Lyong ha, (1998) in his study on brand loyalty applying theory of reasoned action, many studies on topic brand loyalty have been measured by the behavioral aspect without considering cognitive aspect of brand loyalty. According to TRA model, brand loyalty is conceived as notion that is dependent on normative influences such as from social peers (Gounaris and Stathakopoulos, 2004; Lyong ha, 1998). It impacts reflected in the behavioral consequences of loyalty. One may hold a favourable attitude towards a brand but still not purchase because of not being able to afford it or other reason. Figure 1 below show the typology of loyalty (Dick and Basu, 1994)

		Repeat Patronage	
		High	Low
Relative Attitude	High	Loyalty	Latent Loyalty
	Low	Spurious Loyalty	No Loyalty

**Figure 1: Types of Loyalty  
 (Source: Dick and Basu, 1994)**

*No Loyalty*

Low relative combined with low repeat purchase signifies an absence of loyalty. It may happen under a variety of market scenarios (Dick and Basu, 1994). Low relative attitude might be indicative of a recent introduction or inability to communicate distinct advantages. Second, low relative attitude may be due to the dynamic of a specific marketplace where most competing brands are seen as similar. According to Gounaris and Stathakopoulos (2004), no loyalty shows no purchases had been made and a complete lack of attachment towards the brands.

### *Spurious Loyalty*

A low relative attitude is accompanied by high repeat patronage characterized by nonattitudinal influences on behavior. Consumers perceive little differentiation among brands in a low involvement category and undertake repeat purchases based on situational cues such as familiarity or deal. Social influences also may lead to spurious loyalty. Gounaris and Stathakopoulos (2004) called this loyalty as inertia loyalty. Based on their study, this type of loyalty is an individual does not exhibit habit or convenience even though they purchase the brand. Inertia loyalty displays a large extent, unemotional and convenience-driven. The consumer may buy the brand but with little emotional involvement, little personal investment, and no brand commitment.

### *Latent Loyalty*

A high relative attitude comes with low repeat patronage. This type of loyalty is a serious concern for marketers. This situation happens due to a marketplace environment where nonattitudinal influences such as subjective norms and situational effects are at least equally influential than attitudes in determining patronage behavior (Dick and Basu, 1994).

### *Loyalty*

The most preferred types it significant to a good correspondence between relative and patronage behavior. Loyalty may attain both low and high levels of attitude strength, which provides target customers to perceive substantial differences among competing brands. Other researchers call this type premium loyalty. The individual exhibits a high degree of relative attachment to the brands and high repeat purchases. Oliver (1999) describes it as "action loyalty," which imposes commitment to the action of buying.

### *Antecedents of loyalty*

#### *Consumer drivers*

Several characteristics of consumers may have an impact on the decision to purchase a specific brand. Consumer drivers relate to an individual consumer's behavior, attitude, or situation. It includes such as nostalgia, emotions, brand commitment, and consumer attitudes. Individuals used different cues to direct their brand loyalty (Gupta *et al.*, 2017). The consumer might form a positive connection to a brand if they are being valued and respected when dealing with them. Diversity-seeking or variety-seeking is one of the consumer drivers in a determinant of brand loyalty. Customers are frequently searching for a wide range of alternatives when it comes to a product or service (Javed *et al.*, 2021). Many marketing scholar has placed experience at the heart of the brand building process (example, Payne *et al.*, 2009). From this perspective, brand management concern not only to brand-related activities but also on consumer experience to support the brand building. Thus, the higher the customer experience towards brand the higher the customer's brand loyalty to the brand.

#### *Brand drivers*

An Individual's intention to purchase a product reflects a search for value out of the transaction and the const if he decides to acquire the products. It is essential to determine the value

individuals derive from the brands for a firm to understand what loyalty is (Gournaris and Stathakopoulos, 2004). These antecedents help customers to differentiate between competing brands and drives satisfaction. Examples of the antecedent include brand communication, brand image, brand trust (Taşkın *et al.*, 2016), brand personality, brand association, brand identification, and perceived quality (Gupta *et al.*, 2017). Brand trust refer to customer's perceptions whether a brand is reliable or responsible for their welfares hence has a cognitive element (Huang, 2017). Thus, brand trust is significant to brand loyalty on both behavioral and attitudinal loyalty (Iglesias *et al.*, 2019).

### *Social drivers*

The social driver may influence consumer behavior patterns, and in the previous research, social media communication influences consumers' loyalty towards the brand. Social media marketing communication is related to brand driver antecedents and affects brand loyalty (Orzan *et al.*, 2016; and Taşkın *et al.*, 2016). The consumer with a robust attitude will be more likely to overcome countervailing social norms or situational factors.

### *Consequences of loyalty*

#### *Word-of mouth communication*

Word-of-mouth behavior is believed to follow from consumption satisfaction or dissatisfaction (Oliver, 1998). Consumers are likely to engage in word-of-mouth when they experience remarkable emotional experiences (Dick and Basu, 1994). In the study by Taşkın *et al.* (2016), word-of-mouth positively correlates to brand loyalty (Nikhashemi *et al.*, 2015). Word-of-mouth is one of the consequences of attitudinal loyalty (Gupta *et al.*, 2017). It concerns affective condition, and consumers perceive a brand to have a higher when compared to the competitor brands (Palacios-Marque *et al.*, 2016; Gupta *et al.*, 2017). Managers can emphasize giving the value experience and psychological benefit of product to consumers to catalyze positive word-of-mouth (M. Dapena-Baron *et al.*, 2019)

#### *Motivation to search*

Searching information for consumers perceived and costs of search activity. The benefit of searching probably will be reduced when consumers have a high relative attitude and when they engaged with repeat patronage (Dick and Basu, 1994). Experience, learning, satisfaction, and repeat purchase increase, search for information about alternative brand decreases. Increased positive experience resulted in less search. Search for information about alternative products appears related to brand loyalty. Conative antecedents play an important role in determining the motivation beyond their consumer's loyalty status. Managers can cater to the conative antecedent by providing the appropriate information (M. Dapena-Baron *et al.*, 2019) to the consumers and enhance the performance of products or services.

#### *Resistance to counter persuasion*

Enhanced resistance to counter persuasion comes from the Belch (1981) study showing that repetition of comparative television advertisement for a new brand enhanced attitude towards the established brand preferred by customers. Attitude approachability was related to attitude change in response to a persuasive message. The greater the object evaluation association,

the more resistance the attitude led to the better the stability (Dick and Basu, 1994). Consumers resist persuasion by another brand and prefer a higher liking (Gupta et al., 2017).

## **CONCLUSIONS**

An approach to understanding all-loyalty building and sustaining activities is inherently helpful to brand managers who follow loyalty types. The antecedent and consequences in this literature review refer to the study of Dick and Basu (1994) based on their conceptual framework of consumer loyalty. It identified three categories of antecedents to brand loyalty. It indicates that any single the antecedent is insufficient to incite brand loyalty. Each type of loyalty varies according to the combination of the antecedents. Most of the previous research agrees that brand loyalty consists of behavioral and attitudinal approaches, as proposed by Dick and Basu (1994). The practical contribution from the review on the consequences of brand loyalty gives the manager how to manage their marketing strategy. A marketing manager should provide the appropriate information about their to the consumer when the consumer has greater attitude-repeat patronage. A negative result can make a consumer have spurious loyalty or no loyalty towards the brands. From the viewed of theoretical contribution, loyalty have treated an attitudinal and behavioral. It is sugges that social influences should be considered when examnining the loyalty development since the behavioral consequence on loyalty not necessarily involve with actual purchase of the product. The building process of brand loyalty should be considered on the factor of purchasing behavior, consumer's emotional attachment and normative (social) influence. Thus, the type of loyalty can be distinguished based on the three factors.

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# Developing Insaniah Model of the at-Risk Youth into Agripreneur in Selected Vocational Colleges in Malaysia: A Systematic Literature Review

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## ABSTRACT

At-risk youths in this paper are students selected from troubled family backgrounds with low-income, and who may also often youth of abusive parents, and drug addicts. They appear to have low literacy as studies had cited an increase of involvement in gangs, which resulted in poor grades, absenteeism and drug abuse. At such, building a value of Islamic lifestyle system is to position youth's a role in the society is critical in addressing problems among this at-risk youth. This paper aims to offer a new set of an insaniah of Islam as a model for inclusivity for the at-risk youth who are currently studying at selected agriculture vocational colleges (TVET) in Malaysia by developing them with new skillsets in sustainable agriculture. In preparing at-risk youth in this category, the model may challenge the assumptions of how the contemporary education brings about a change to embrace Islam values with new opportunity in life and equipped them with agripreneurship education. The systematic literature review is employed in this paper among selected publications; Emerald Insights, Proquest Dissertation, Spingerlink, Research Gate, Google Scholar, Sage Pub, Science and Direct Pro Quest which have produced 1,499 results from 2000 until 2019. Most of the empirical studies are based on quantitative research methods. The outcome offers a systematic analysis from research evidence on aspirational agriculture and the learning-by-doing in entrepreneurship education. Results indicated that there is lack of research focusing on insaniah value and learning-by-doing associating at-risk youth venture into agriculture as a career pathways.

**Keywords:** Entrepreneur; Agriculture Entrepreneur; Agriculture Aspiration; At-Risk Youth; Insaniah Model; Systematic Literature Review.

## INTRODUCTION

There is a potential gap in bridging the theory of change (Siti Hajar, Noralini, Abd Hadi, & Haris, 2012; Noraini, & Hasan, 2008) in the perspectives of delivering an insaniah value model into the agriculture entrepreneurship education while at the same time preparing future agripreneur for the vulnerable communities such as at-risk youth. At-risk youths in this paper are students selected from troubled family backgrounds with low-income, and who may also often youth of abusive parents, and drug addicts (Azlina, 2010; Koh, 2009; Salman, Samsudin, & Yusuf, 2017; Chong, Choon, Ibrahim, Samsudin, 2017). They appear to have low literacy as studies had cited an increase of involvement in gangs, poor grades, absenteeism and drug abuse (Balan, Samsudin, Soon Singh, & Juliana, 2017). Education is particularly important here as it can help youth break the cycle that created their circumstances in the first place. In the human domain, insaniah model as defined in this study comprises of positive personal qualities for millennials with those emotional intelligence, mental resilience, and a sense of purpose needed going forward (Salman, Samsudin, & Yusuf, 2017; Nor Hafizah, Zaihairul &

Geshina, 2012). At-risk youth has been termed a one of the vulnerable groups and demands support in order to prepare their career in future agriculture.

### Insaniah Value Model and Agriculture Entrepreneurship Education

As sixty percent of jobs hired in the next generation do not exist today; future agriculture is identified as one of the areas that new jobs will emerge (Salman, Samsudin, & Yusuf, 2017). Thus, instilling a sense of purpose for a lifelong journey requires quality insaniah values into agriculture entrepreneurship education. This effort is largely meant to help structure at-risk youths' goals and define the steps toward it. Education is particularly important here as it can help youth break the cycle that created their circumstances in the first place. One of the examples of crime made by youth is their participation in illegal activities. These unhealthy activities form part of the issues among the at-risk youth (Salman, Samsudin, & Yusuf, 2017). At such, building a value of Islamic lifestyle system in through insaniah value model will make them associate with positivity. For example, insaniah value model teaches them understanding and making Allah as the Greatest love, to be loved and to be feared. Activities related to insaniah value model will lead at-risk youth to believe in religious values; and making God (Allah s.w.t) as the driving force in serving and providing the utmost benefit to mankind. Ultimately, this connection will make at risk youth feel being attended, meaningful and have a role in the society.

Designing innovative insaniah value model as solutions to cater the demand for the high value human potentials to deal with management of the agriculture products; requires a new model in research and resulting economic effects of the new agripeneur (Raja Suzana, Zulazli, & Zainudin, 2017). As such, the study aims to offer a new set of an insaniah of Islam as a model for inclusivity of the at-risk youth that are currently studying at selected agriculture vocational colleges (TVET) in Malaysia by developing them with new skillsets in sustainable agriculture.

Numerous past research derived from the western viewing the agripeneur development and future (Samsudin, & Hasan, 2017; Koh, 2009; Salman, et al., 2017; Chong, et al., 2017). Lack of research focusing on developing an insaniah value among learners of agripeneur (Raja Suzana, Zulazli, & Zainudin, 2017; Chong, et al., 2017). Furthermore, youths appear to be more interested working in white-collar jobs. Career in agriculture was not a priority due to the 3D mentality (dirty, difficult and dangerous), lack of sustainability, low in profitability and in social status. Examining sample of at-risk youth in agriculture vocational colleges (AVC), it was found agriculture entrepreneurship was being taught directly or indirectly among these colleges. This paper also aims to explore the extent of learning-by-doing in this agenda of building agripeneurs. In the next section, it is beneficial to search articles on learning-by-doing in entrepreneurship education and associating it with agriculture and insaniah value.

### Learning-by-doing

Learning-by-doing in entrepreneurship education and its intervention will be explored in the following aspects; firstly, the phases of building agripeneur in operational plan. Secondly, on the agriproduct description, and, thirdly on go-to- market analysis to co-develop funding and financing opportunities for agripeneur startup growth. According to Tranfield, Denyer, & Smart, (2003), systematic reviews are based on systematic methods and aim to collect, evaluate and synthesize all studies on the topic. This paper also identifies gaps in the literature to help further accumulate scientific knowledge.

Although it is complex and time consuming (Mills, Montori, Ross, Shea, Wilson, & Guyatt, 2005), systematic reviews play an important role in contributing to the academy of literature as well as methodological advances for the field of study.

### Research Objectives and Research Questions

Based on the issues and research problems identified in the systematic literature review concerning the presence insaniah values standard possess among the at-risk youth in Malaysia, the following three (3) research questions are established:

1. To determine the existing learning-by-doing in Entrepreneurship Education among selected agriculture vocational colleges in Malaysia;
2. To examine levels of insaniah value education being learnt among youth-at risk studying at selected agriculture vocational colleges in Malaysia; and
3. To develop an insaniah value model into the Agrobased TVETpreneurship Education Framework.

Thus, the following research questions are formulated:

1. What elements of learning-by-doing activities exist in the Entrepreneurship Education among selected Agriculture vocational colleges in Malaysia?
2. What levels of insaniah value education being learnt among youth-at risk studying at selected Agriculture vocational colleges in Malaysia?
3. What nature of insaniah value model can be developed into the Agrobased TVETpreneurship Education Framework?

This paper aims to construct a framework that synthesizes the sophistication of an easily accessible shared literature. It provides a basis for the study of the scaling mechanisms of initiatives starting from the bottom up by presenting the latest knowledge on the topic (what is known and where the gaps are) and by providing the conceptual understanding desired for the study of this topic.

## RESEARCH METHOD

### Systematic literature review

Systematic literature review (SLR) is adopted as the research method for this study. SLR was grounded in Medical Science (Cook, Mulrow, & Haynes, 1997) and adopted in the field of management and entrepreneurship (Tranfield et al., 2003) and in environmental studies (Hossain, 2016). This method was used to provide a framework for identifying the gaps in the literature relevant to scaling social and sustainable initiatives and for synthesizing the existing findings. Systematic reviews improve the quality of the review process and outcome by employing a transparent, reproducible procedure (Danang, Margo, Bambang & Erna, 2019). There are five phases to facilitate the literature review process namely planning, search, screening, extraction, and synthesis as well as reporting based on the methodology from Tranfield et al., (2003).

Planning: Researcher undertakes planning in the study to identify the research questions. For this study, the research questions were “What elements of learning-by-doing activities exist in the Entrepreneurship Education among selected Agriculture Vocational Colleges in Malaysia?”, “What levels of *insaniah* value education being learnt among youth-at risk studying

at selected Agriculture vocational colleges in Malaysia?” and “What nature of *insaniah* value model can be developed into the Agro-based TVETpreneurship Education Framework?”

**Search:** The search process for articles related to the research questions was conducted using a search database; Emerald Insights, Proquest Dissertation, Spingerlink, Research Gate, Google Scholar, Sage Pub, Science and Direct Pro Quest. The selection of the articles was based on articles that showed good and appropriate presentations on Social Enterprise, Social Funding Model, Entrepreneurial Intention and related empirical studies. The key words used in this study are “Entrepreneur; Agriculture Entrepreneur; Agriculture Aspiration; At-Risk Youth; Insaniah Model; Systematic Literature Review”. With these key words, researchers can find answers to research questions from general to specific.

**Screening:** Search results from search online databases; Emerald Insights, Proquest Dissertation, Spingerlink, Research Gate, Google Scholar, Sage Pub, Science and Direct Pro Quest have produced 1499 articles listed along with abstracts. After that, the researcher re-evaluated the results of the study based on the research questions. Then, the researcher implemented specific acceptance and exclusion techniques to facilitate review of the articles. The acceptance criteria are:

- Only select articles in English and Bahasa Malaysia;
- Sources of articles in research papers, books, pamphlets, webinar videos, thesis reports and articles from websites;
- No duplicate copies;
- Read Abstracts and Keywords that contain explanations of research questions;
- Articles containing empirical and theoretical research methods;
- From various countries.

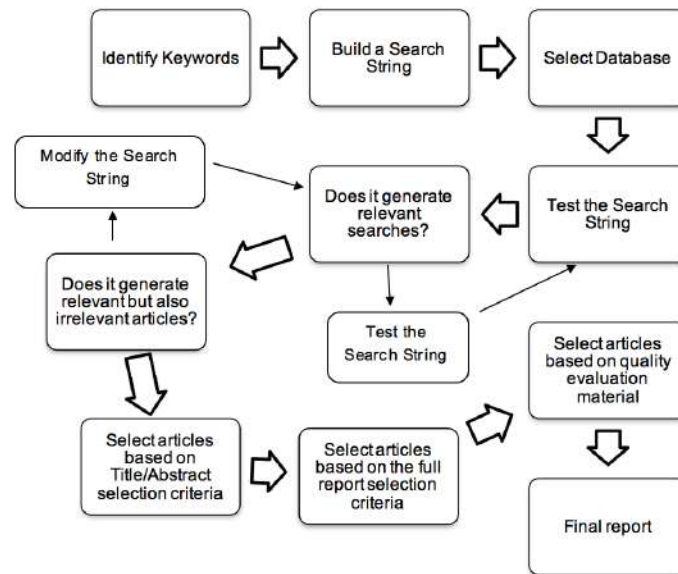
The exclusion criteria are:

- Articles other than English;
- Articles that do not match the research questions;
- There are duplicate copies.

**Extraction:** As a result of the screening criteria, the researchers have obtained a total of 22 articles from the results of the reception to search for "Aspiration Agriculture" and "Youth & Argiculture" as search techniques in general. Then, the researchers made re-acceptance according to the research questions that had themes for agriculture entrepreneurship, aspiration agriculture and at-risk youth. However, none of the *insaniah* value term associating with areas in developing agripreneur are found and neither are studied in depth. The purpose of selecting these the keywords is generally to look at all the methods as well as the theoretical basis used in the study in general.

From these results, the researchers conducted an in-depth review of the study as outlined in Microsoft Excel and developed the results of the search as a literature review matrix. With the database on literature review matrix created in the Microsoft Excel, it appears to have been very useful for researchers. The literature review matrix assists the research to explore, analyze and develop potential gaps from articles in a structured manner and make research reviews in the form of columns in Excel (Tranfield et al., 2003), The literature review matrix also identifies important trend and search processes where the researchers are able to collect and classify information aspects of articles by title, author, distributor and year of publication, variables of interest, theoretical development, key findings, methods used, results and future research recommended by the articles. The literature search process is illustrated in Figure 1 below. The main focus of this study was to find the literature gap in the study results from previous studies on agriculture entrepreneurship, aspiration agriculture and at-risk youth.

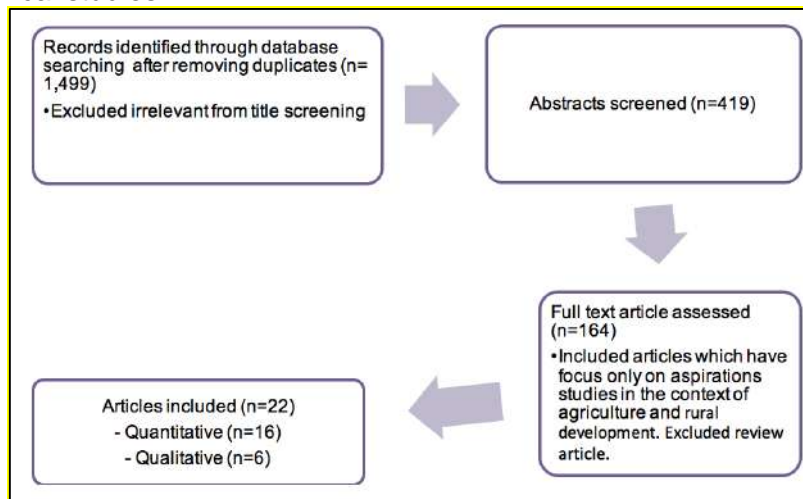




**Figure 1: Literature Search Process**  
(Source: Danang, et al., 2019)

## RESULTS AND DISCUSSION

In this section, the researchers analyse selected publications from 2000 until 2019. Only two articles were published before 2012, and another 20 articles were published in 2012 until 2019. The highest publication was found in 2018 with six articles. Based on a systematic review of agriculture aspiration by Ravi and Swamikannu (2021), Figure 2 illustrates the flow diagram of the systematic screening process. It was found about 73% of the reference materials were based on empirical studies.



**Figure 2: Flow diagram of the systematic screening process**  
(Source: Ravi & Swamikannu, 2021)

There are about six studies that use qualitative and theoretical methods. Although qualitative data does not provide reference to the variables in the scaling process of interest, but it assisted the researcher a useful information for the means and reasons for the use of the scaling process. Most of the empirical studies are based on quantitative research methods which resulted 16 studies. No case studies were identified. Some 41% of the studies are scored as high-quality articles.

## CONCLUSION

A review was made based on publications from selected online databases. Areas such as aspirational agriculture and the learning-by-doing in entrepreneurship education were found and studied by number of past research. However, there appear to be limited studies focused on associating aspirational agriculture and the learning-by-doing in entrepreneurship education to insaniah value. It was further concluded that numerous past researches derived from the western perspectives such as issues and challenges in developing agripreneur and future workforce in sustainable agriculture. There are significant gaps on research in developing an insaniah value model among learners of agripreneur. This paper aims to explore the extent of learning-by-doing in this agenda of building agripreneurs.

The researchers suggest further exploration of frameworks in specific branches or topics, such as insaniah value model and learning-by-doing in agriculture entrepreneurship. Exploration in different dimension and relationships in this nature of setting and framework may offer new concept. Comparing results across various branches and topics can potentially yield results that are able to explain the relationships between insaniah value model and learning-by-doing in agriculture entrepreneurship. It is also important for future study to explore the sustainability of agriculture entrepreneurs associating funding, management, and the pillar support.

## ACKNOWLEDGMENT

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# **A Systematic Review: Adoption of Social Media in Different Industries and its Factors**

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## **ABSTRACT**

In this digital age, all organizational environments are forcing companies to adopt social networks because these technologies have a great impact on such businesses. However, the productivity and the competitiveness of a business vary depending on its functions and purpose. Social media has been one of the important tools to communicate between stakeholders and also as one of the learning tools. Based on a systematic literature review, 2632 has been retrieved at the early stage and 11 studies has been finalized according to the criteria. The findings have identified that, education industry as one of the industries that commonly use social media as one of the tools. The most common factors why social media is adopted, mainly are; social media use, perceived usefulness and perceived ease of use. Therefore, further study related to social media adoption can be done for other industries in Malaysia.

**Keywords:** Social media adoption; Adoption factors.

## **INTRODUCTION**

Internet and its advancements of technologies have changed and users manage to search for information related to products or services, the company's background as well as responses from other consumers via social media. Firms and people all over the world has been using social media actively for different purpose. Most Internet users are frequent visitors to social media sites such as Facebook, Instagram, Twitter, LinkedIn, and YouTube (Arshad & Akram, 2018). The strength of social media cannot be underestimated and is expected to revolutionize the communication and interaction of people and organization around the world (Ngai et al., 2015).

Social media is a virtual space that gives high engagement with their users. It also has become a tool for businesses to manage customer relationships. The social media sites are very popular, low cost and able to reach better coverage are some of the factors that encourage marketers to utilize social media as one of the tools (Jain et al., 2018). The online platform offers the marketers many benefits in which they can virtually share marketing information, sell products and services, provide customer support services and maintain ongoing customer relationships (Sahak et al., n.d.). According to Carlson et al., (2018), customers able to have quality interaction and able to gain useful information via social media. In addition, Zhang & Vos (2014) stated that, through social media networking sites there are a growing number of activities for consumers to interact with the brand. This will build better brand relationship with consumers.

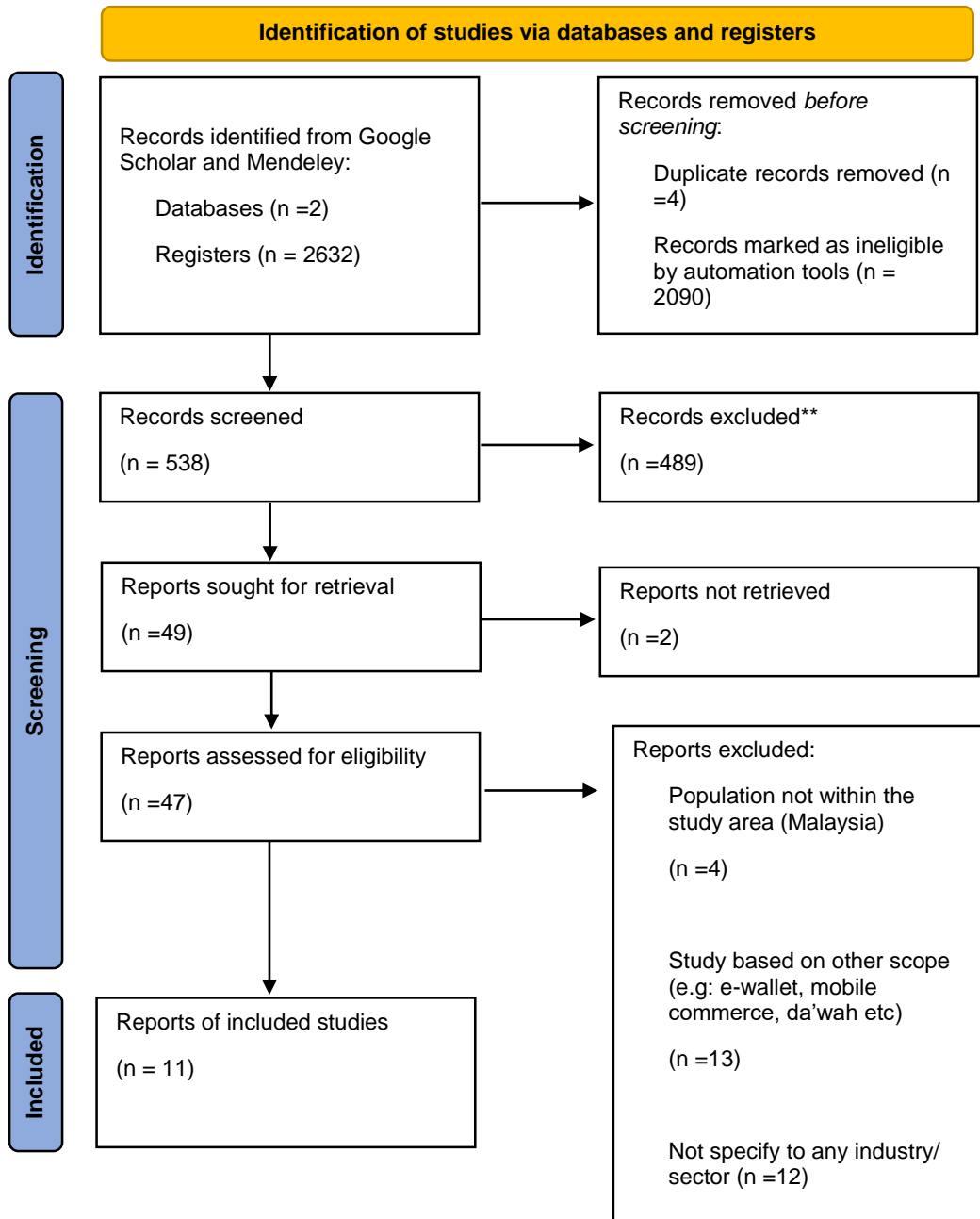
Social media helps to form a brand image and brand awareness, boost sales and captivate new customers, and secure present customers (Mohd Nawi et al., 2020). Furthermore, companies also seeks to promote attention to the brand and its value in social media and will create interest to among users and linked products or services (Zhang & Vos, 2014). According to Heller Baird & Parasnis, (2011), 60% agreed that passion for a business or brand is a prerequisite for social media engagement and need to find creative ways to extract the trusted social community.

Social media users create, share, exchange information and ideas in virtual communities and able to connect with other parties who share similar interest (Khalid et al., 2020). Social networking media provide new room for sharing, creating and interacting between learners and educators (Elkaseh et al., 2016). Arshad & Akram (2018), added that the social media platforms have completely revolutionized the way people communicate by providing collaborative and shared learning experiences. As for education industry, students choose to engage in social media, specifically Facebook, for knowledge sharing within a specific learning context, and therefore present considerations for educators to enhance their respective practices (Moghavvemi et al., 2017).

The variety usages of social media have allowed different industries to adopt it as one of the tools into the business. Social media use could facilitate SMEs in managing and resolving issues related (Samsudeen et al., 2021). The purpose of this research is mainly to determine the industry that adopting social media into the business. By using the systematic review, it also helps to identify the adoption factors among these industries.

## **RESEARCH METHOD**

The systematic review was conducted in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Electronic databases were used to conduct literature searches with a variety of keywords to identify articles. Any ineligible and duplication of articles were removed. Next, 538 articles were screened and there are few articles were unable to retrieve. This study is limited the search articles published between 2019 and 2021. A full-text review was conducted for eligible studies based on certain selected criteria.





## RESULTS AND DISCUSSION

Two thousand six hundred and thirty-two articles were identified as a part of the systematic review, with the final set of eleven studies for qualitative synthesis. The features of selected studies were based on the industry and adoption factors of social media in Malaysia. Other than that, only quantitative studies were selected for this review. Table 1 shows the findings of this study.

**Table 1: Studies on Social Media Adoption and its Factor**

No	Year	Title	Author	Industry	Adoption Factors
1	2020	Social Media Use in Higher Education: Exploring Activities for Learning	Nur Shamsiah Abdul Rahman, Waleed Al-Rahmi, Muhaini Othman	Education	a) Social media use; b) Learning activities; c) Communicate for learning, d) Discussion for learning; e) Content generation; f) Teaching and learning
2	2019	Celebrity-Fan Engagement on Instagram and Its Influence on The Perception of Hijab Culture Among Muslim Women in Malaysia	Tengku Siti Aisha Tengku Mohd Azzman Shariffadeen, Aini Maznina A. Manaf, et al.	Fashion	a) Instagram use; b) Parasocial interaction; c) Attitude homophily; d) Formal religious educational background, e) Behaviour and attitude towards hijab; f) Perceptions towards hijab culture
3	2019	Assessing Factors Associated to Social Media Adoption Among Salespeople of Environmental Services Company in Malaysia	Siti Zaleha Sahak, Nazdrah Hashim and Razmuna Mohd Zaki	Services	a) Social Media Use; b) Intention; c) Social Media Norms; d) Customer Oriented Selling
4	2020	Determinants on the Utilisation of Social Media among Sales Advisor in Automotive Industry	Yulita Hanum P Iskandar	Automotive	a) Individual Competence b) Individual Commitment; c) Organisational Competence; d) Organisational Commitment; e) Customer Engagement
5	2020	Task-Technology Fit and Technology Acceptance Model Application to Structure and Evaluate the Adoption of Social Media in Academia	Qusay Al-Maatouk, Mohd Shahizan Othman, Ahmed Aldraiweesh, et al.	Education	a) Technology Characteristics; b) Task characteristics; c) Social characteristics; d) Perceived Usefulness; e) Perceived Ease of Use; f) Perceive Enjoyment
6	2020	Adoption of Social Media Marketing among Agropreneurs in Peninsular Malaysia	Nolila Mohd Nawi, Najihah Baharudin, Nurul Nadia Ramli	Agriculture	a) Perceived usefulness; b) Social influence; c) Perceived ease of use; d) Facilitating conditions

7	2020	English Vocabulary Development Among Undergraduates: Social Media	Nalini Arumugam, Nurainatul Farhanahburhanudin, Puspalata C Suppiah, et al.	Education	a) Perceived Ease of Use; b) Perceived Usefulness
8	2021	Critical Factors Affecting Higher Education Institution In Shah Alam Students' Engagement In Social Media	Masrul 'Aine Khalid, N. S. Zainuddin, R. A. Ramli, et al.	Education	a) Peer influence; b) Entertainment Informativeness; c) Addiction
9	2020	Shared Values of E-Recruitment Portal: Determinant Factors of Job-Seekers' Intention to use Job Portals	Munjarin Rahman & Aradhana Patra	Recruitment	a) Usability; b) User Experience; c) Performance Expectancy; d) Subjective Norm; e) Trustworthiness
10	2020	Impact of Social Media in Adoption of New Trends of Visual Arts: A Case Study of Established Visual Artists in Twins Cities	Muhammad Ayub Wali, Salman Amin, Muhammad Rehman	Arts	a) Adoption of new trends; b) Impact on artistic skills
11	2020	The Usage of Social Media on Spreading the Awareness of Lean Construction Concept in the Malaysian Construction Industry: Perspective of the Public	Amirul Muqmin Mahadzir, Mohd Arif Marhani	Constructions	a) Level of Knowledge; b) Connectivity/Access Restriction; c) Reliability of social media

Based on the findings, most studies were done based on education industry and the study was done in 2020. Al-Rahmi & Zeki (2017) explained that social media has always been used as a platform to exchange knowledge and information and it is a way to encourage knowledge sharing and social interaction in colleges. Other industry that has been identified for this study are agriculture, arts, constructions, fashion, services, tourism and automotive.

From these 11 studies, the most common adoption factors are social media use, perceived usefulness and perceived ease of use. Abdul Rahman et al., (2020) mentioned in studies, social media use is effective both learning activities and teaching and learning. As for perceived usefulness and perceived ease of use are two prominent factors suggested by many researches towards the adoption of a technology (Dwi & Aljoza, 2015). Perceived usefulness is the most significant influencing factor in adoption for agriculture industry (Mohd Nawi et al., 2020). The final common adoption factor is perceived ease of use for education industry. study Al-Maatouk et al., (2020) mentioned in his study, perceived ease of use as student perceptions of the amount of effort required to use media technologies for learning activities. Other identified adoption factors are based on the nature for each industry, such as impact on artistic skills, the level of knowledge and facilitating conditions.

This review has several limitations. First, only two databases were used for this study and searching method for both databases were different. Second, this review was limited only to the published articles between 2019 to 2021 and only Malaysia. Other related articles from different databases able to enhance the outcome of this study. Therefore, for future research,

researchers can use other databases, such as Scopus or Web of Science. Besides, researchers can widen the scope of study, such as within Asia.

## **CONCLUSIONS**

This systematic review has highlighted adoption of social media in Malaysia. Within the Malaysian context, education industry is the most highlighted industry in adoption of social media. Other industry that has adopted social media into their business are agriculture, arts, constructions, fashion, services, tourism and automotive. Finally, the adoption factors of social media that have been identified from this study are adoption factors are social media use, perceived usefulness and perceived ease of use. The review suggests several recommendations for future studies. First, the usage of other databases and to consider other type of publication such as book chapter, conference proceedings and non-peer reviewed articles and only limited to resources from related journals. Through this, researchers able to retrieve more related and relevant studies in their research.

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# The Determinants of Digital Workplace Adoption: A Conceptual Framework

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## ABSTRACT

The digital transformation has changed offices, collaboration tools, workplaces and eventually the way people work. In Malaysia, the transformation has a great impact on small and medium enterprises (SMEs) development. The digital workplace (DWP) is widely acknowledged as an important organizational asset for optimizing knowledge worker productivity. DWP offers communication, collaboration, mobility, information searching, removing barriers between people, information, and processes. SMEs provide a potential source of economic growth, job creation, innovation and social integration. This study will apply Performance Expectancy (PE), Effort Expectancy (EE) and Habit (H) from Unified Theory of Technology Acceptance and Use (UTAUT2). The models propose the influence factors on DWP adoption among Malaysian SMEs. Meanwhile, Personal Knowledge Management (PKM) will be a moderator to measure the ability of an employee to use DWP tools. The result will contribute to the understanding of the determinants of DWP adoption.

**Keywords:** Digital workplace adoption; Unified Theory of Technology Acceptance and Use 2; Personal Knowledge Management; Small and Medium Enterprises.

## INTRODUCTION

Nowadays, digital transformation changes the way people live and work. The digital transformation is commonly referred to a disruptive process that is fundamentally changing the way companies compete, create value, and engage with their business partners and customers (Hoberg et al. 2015). Schwab (2016) described digitalization as technologies that blend the digital, physical and biological worlds and permeate across industries and economies. Digitalization is the most important element in Industry 4.0 as it connects man and technology (Varghese and Tandur, 2014). The digital transformation has changed offices, collaboration tools, workplaces and eventually the way people work. Digital workplaces (DWP) arise when employees perform their work in digital, rather than physical workspaces.

The digital transformation has a great impact on small and medium enterprises (SMEs) development in Malaysia. SMEs firms which adopt newer or latest technologies or technology-oriented SMEs, will have a better performance as compared to SMEs that do not embrace or adopt these technologies for effective and efficient business performance enhancement (Singh and Hanafi, 2019). SMEs provide a potential source of economic growth, job creation, innovation and social integration. In 2018, SMEs significantly contributed to the GDP which grew by 38.3% to RM521.7mil from RM491.2mil a year before. In nominal terms, SMEs GDP recorded RM551.7 billion in 2018 (2017: RM519.1 billion) (DOSM, 2018). However, the



contribution to the overall GDP is still proportionately low compared to the most ASEAN countries (Kimura & Ueki, 2017). Digital Malaysia was established to realize the country's potential as a significant player in the global digital economy. The program was launched in 2012 to advance the country to become a developed digital economy by 2020. Based on Household Income and Basic Amenities Survey Report 2019 (DOSM, 2020), the income group adopted in Malaysia are classified into three. The highest income group of 20% (T20) refers to households with average monthly income of RM10,960.00 and above. The 40% middle-income household group (M40) refers to households with average monthly income ranging from RM4,850.00 to RM10,959.00. Meanwhile, the lowest 40% household income group (B40) refers to households with average monthly income below RM4,849.00. In particular, Digital Malaysia aims to tap global demand for digital products and services; increase citizen's income and unlock entrepreneurship potential for the B40 group; empower the next generation workforce with digital skill sets and the productive use of digital tools; and drive technology adoption amongst Malaysian SMEs to enhance productivity (SME Corp, 2016). In 2017, Malaysia has initiated 'Transformasi Nasional 2050' as an initiative of economic development, citizen well-being and innovation. In the plan, artificial intelligence and internet of things are identified as an enabler to bring Malaysia into the digital future. A National Policy on Industry 4.0 known as Industry4WRD was introduced in 2018 to enable the manufacturing sector to move into Industry 4.0 and along the way contribute to fulfilling Malaysia's commitment to the United Nation's Sustainable Development Goals (SDGs) (MITI, 2018). During the COVID-19 pandemic, the Government of Malaysia under the leadership of the Prime Minister introduced Pelan Jana Semula Ekonomi Negara (PENJANA) or the National Economic Recovery Plan. Eligible Micro, Small and Medium-Sized Enterprises (MSMEs) will be on-boarded onto e-commerce to shift towards business digitalisation. This will be done through a co-funded programme by the Government with MDEC and e-commerce platforms. Participating e-commerce platforms will support Malaysian SMEs in on-board training, seller subsidy and sales support.

DWP offers communication, collaboration, mobility, problem solving, information searching, creating connections and removing barriers between people, information, and processes (Igloo, 2017; Turkle, 2015). The digital workplace is widely acknowledged as an important organizational asset for optimizing knowledge worker productivity. The adoption of digital workplace brings countless benefits to the organization, employer and employees. According to Mathur and Dhulla (2014), technology adoption is a process that includes knowledge, awareness and usage of the technology. However, other researcher found that installing the technology is not a success guarantee for that technology (Schallenmueller, 2016). Hidayanto and Ekawati (2010) asserted that the success of implementation would depend on user acceptance and use of the technology in the organization. Limited adoption of advanced digital technology by businesses, potentially limiting the economic impact of the digital economy in the country. Moreover, local SMEs would have to compete with larger firms offering cheaper and better products and services to Malaysian and global market. Hence, SMEs need to upskilling their employees to ensure their survival and profitability as to keep up with well-established global players.

## **PROBLEM STATEMENT**

The impact of the pandemic on SMEs show severe disruptions among small businesses. More than half of SMEs face severe losses in revenues. The global effect including over-stretched credit and looming bankruptcies. The International Trade Centre (ITC) in their COVID-19 Business Impact Survey involving 4,467 companies in 132 countries reported that 55% of the respondents are strongly affected by the pandemic. In 2020, more than two-thirds of Malaysian

SMEs suffered business losses of up to RM100,000 during Movement Control Order (MCO). A Business Impact Survey by Ernst and Young covering 670 respondents including large, listed companies as well as SMEs evaluated the key challenges across five aspects namely financial, supply chain, customers, technology and people. About the technology aspect, one-third of SMEs pointed out that work-from-home connectivity is the key issue. On the people aspect, 31% of SMEs faced delay in completing tasks and projects, while 30% experienced downtime in operations (SME Corp, 2020).

Some researchers have claimed that there are factors contributing to the deceleration of productivity such as insufficient technology (Asada, Nixon and Koen, 2017), lack of sufficient internal resources for instance lack of training or expertise, lack of time to implement new initiatives and difficulty of managing costs and security concerns (RightScale, 2017) and lack of financial and skilled human resources in order to adopt the technology (MPC, 2016). Those failures influence the contribution of SME towards Malaysian economy, job employment, productivity, retrenchment and bankruptcy of businesses, and inflation. All these problems may result in social illness and discontent.

Investigating the adoption and user acceptance of IT is fundamental for ensuring the successful adoption and implementation process. Various models have been utilized to study DWP such as Technology Acceptance Model (TAM), Technology-Organization-Environment (TOE), Unified Theory of Acceptance and Use of Technology (UTAUT), and UTAUT2. UTAUT2 has been applied to the studies related to DWP adoption (Felea, Albăstroi & Georgescu, 2019; Silva et al., 2019; Nikolopoulos & Likothanassis, 2017; Alalwan, Dwivedi, & Rana, 2017; Amponsah, Panford, & Acquah, 2016). Other researchers had included other variables to the framework such as age and gender (Huang, 2018), trust (Alalwan et al., 2017, El-Masri and Tarhini, 2017), privacy concerns (Herrero and San Martin, 2017), cultural effect (Khan, Hamid and Khan, 2017), learning value (Ain, Kaur and Waheed 2016), pervasiveness (Salina Segura and Thiesse, 2015).

Most of the existing theories and models of IT adoption such as Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TPB) and Technology Acceptance Model (TAM) describe either the decision to adopt or the individual behaviour to accept and use the technology. However, the intentions do not guarantee the actual behaviour (Shropshire, Warkentin & Sharma, 2015). This shortage is known as Behaviour-Intention gap. The intention-behaviour gap exists when people develop explicit decisions to change their behaviour but do not take action. The intention-behaviour gap can be defined as the degree of inconsistency between users' intention regarding a specific behaviour and their actual behavior (Bhattacharjee & Sanford, 2009). Sun and Zhang (2006) identified ten moderating factors and categorized into three factors: Technology (Individual/Group, Purpose and Complexity), Individual (Gender, Age, Experience, Cultural background and Intellectual Capability) and Organisational (Voluntariness and Task/Profession). Bhattacharjee & Sanford (2009) studied the role of attitude strength to moderate the intention and action. Intention-based models, such as the Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TPB), Technology Acceptance Model (TAM), the Motivational Model (MM) and the Unified Theory of Acceptance and Usage of Technology (UTAUT) have been widely used in information technology (IT) acceptance and usage researches. Researchers are interested in studying intention because of its predictive value to commit with future behaviours.

From Islamic perspective, Ibn Taymiyyah asserted that the action must occur with the decisive intention. If the intention is met with the ultimate completed ability, the existence of the action must take place; because it was free of objections (Majed, Hussin and Abdullah, 2018). Ibn Taymiyyah emphasized the vitality of ability in moderating the intention and action. A verse in Quran has clearly prohibited people to say or do or witness something without knowledge (Surat al-Israa:36). Consistent with the study, Avery et al. (2001) highlighted the importance of personal knowledge management (PKM) skills for both problems solving and appropriate use of technologies. Pauleen & Gorman (2011) also asserted PKM as an evolving set of understanding, skills and abilities that allows an individual to survive and prosper in a complex and changing organizational and social environment. Therefore, this study attempts to bridge the gap and to add to the existing literature in DWP adoption by investigating factors contribute to the adoption of the digital workplace from employee perspectives such as Performance Expectancy, Effort Expectancy and Habit as independent variables and PKM as a moderator between intention to use and actual use of DWP.

## RESEARCH OBJECTIVES

The main objective of this study is to examine the internal factors influencing behavioral intention to use digital workplace in SMEs from employees' perspective which in turn affects their actual use of digital workplace. To achieve the research objective, this study will investigate the following objectives:

- To examine the relationship between performance expectancy, effort expectancy, habit and behavioral intention to use DWP.
- To examine the relationships between behavioral intention to use and actual use of DWP.
- To examine the relationships between behavioral intention to use and actual use of DWP.
- To examine the moderating effect of PKM towards the relationship between DWP intention to use and DWP.

## LITERATURE REVIEW

### Small and Medium Enterprises in Malaysia (SMEs)

Small Medium Enterprises (SMEs) are the backbone of Malaysia economy and plays an essential role for Malaysia economic development with high contribution to the gross domestic product (GDP). SMEs are considered as a significant source of national, regional and local economic development in many countries. In 2016, 98.5% or 907,065 business establishments in Malaysia are SMEs (DOSM, 2016). Malaysia's SMEs GDP for the year 2018 grew at 6.2 per cent as compared to 7.1 per cent in 2017. The sector's contribution to the GDP in that year grew by 38.3% to RM521.7mil from RM491.2mil a year before. In nominal terms, SMEs GDP recorded RM551.7 billion in 2018 (2017: RM519.1 billion) (DOSM, 2018). SME Corp also remarked in 2018 that value-added of SMEs in the services sector grew by 8.1%, which is the highest growth pace since 2014. The growth was driven predominantly by the wholesale and retail trade, food and beverages and the accommodation sub-sectors. In the manufacturing sector, the SME value-added expanded by 5.5%, led by non-metallic mineral products, basic metal and fabricated metal products as well as petroleum, chemical, rubber and plastic products. On exports, SMEs recorded a 3.4% growth, supported particularly by manufactured goods and chemical products. In terms of value, SME exports increased to RM171.9bil in 2018 from RM166.2bil in 2017, while its share of overall exports remained at

17.3%. The achievement reaffirmed that SMEs is a vital contributor to support economic growth in Malaysia. The achievement of SMEs will empower Malaysian to develop from a middle-income nation to a high-income nation. However, SMEs are incompetence to compete and sustain long enough in the marketplace (Sallem, et al., 2017).

The adoption of ICT by SMEs in developed countries was around 50 per cent. Whereas, in Malaysia the adoption of ICT by SMEs have been reportedly at just around 10 per cent (MPC, 2016). Furthermore, among 600,000 SMEs in Malaysia, the percentage of SMEs owners who believe in ICT is relatively small (MPC, 2016). The government has set up RM3bil Industry Digitalization Transformation Fund to encourage industries to utilize artificial intelligence. Such incentives would contribute to a wider adoption of technologies such as the Internet of Things, digital and automation services and accelerate Malaysia's growth into a digital nation. The governments also committed to upskilling the workforce and driving Malaysia's digital journey as the lack of talent and skill shortage is one of the main barriers to digital transformation (The Star, 2018). Among the national strategies is upskilling existing & producing future talent. Two strategies has been outlined: Strategy S1: Enhance capabilities of existing workforce through national development programs specially designed for specific manufacturing sectors and support reskilling and upskilling and Strategy S2: Ensure the availability of future talent by equipping students with the necessary skillsets to work in the Industry 4.0 environment (MITI, 2018)

### **Definition and Conceptualizations of Digital Workplace**

In the last 30 years, the workplace has changed and continuing reshaped by digital technologies (Cascio and Montealegre, 2016). Schallenmueller (2016) proclaimed the impact of such technologies has had on the workplace. Digital workplace enables employees to accomplish work activities beyond the office wall and at different locations. The transformation of work activities in any organization require employees to accept and support the necessary changes. Therefore, digital transformation strategies are crucial to embrace in organizations.

Schmidt, Praeg & Günther (2018) defined DWP as part of the IT infrastructure that is visible or experienceable for the user embedded in an organizational and processual structure, with the help of which he or she can perform his or her work activities being characterized by information, communication and collaboration. Dahlan, Abdullah & Suhaimi (2018) contended a digital workplace concept consists of social technology tools, contextual intelligence tools, communication infrastructure and mobility. Dery, Sebastian and Meulen (2017) asserted that digital workplaces encompass physical, cultural and digital arrangements that simplify working life in complex, dynamic and often unstructured working environments. According to Byström et. al., (2017), workplaces are commonly conceptualized as spaces where people are physically situated to engage in work activities.

## UTAUT2 Model

The UTAUT2 model is widely used by researchers for better understanding about consumer acceptance toward new technology or system. Four key constructs in UTAUT such as Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI) and Facilitating Conditions (FC) are verified as direct determinants of usage intention and behaviour (Venkatesh, 2003). Meanwhile, four other variables such as gender, age, experience and voluntariness of use are considered as moderators in the model. They also examined three other constructs consisting of self-efficacy, anxiety, and attitude toward using technology in the UTAUT model. However, these three constructs have no strong impact on others. Thus, three constructs are removed from the UTAUT model.

This research is grounded on UTAUT2 to study factors that are associated with DWP adoption. The justification of selecting UTAUT2 is due to its comprehensiveness in technology acceptance process and the model has a better explanation power than other models (Cataluña, Gaitan & Correa, 2015). Furthermore, this new model is focused on individual perspectives in technology adoptions and has been adopted to study various technology acceptance studies such as mobile technology, cloud computing, big data, business applications, etc. PE and EE are considered as Information system/technology attributes whereas the remaining two constructs FC and SI are viewed as contextual or organizational factors that influence individuals' behavior (Dwivedi et. al., 2017). Due to its significance to the technology adoption (Nikolopoulos & Likothanassis, 2017), only Performance Expectancy, Effort Expectancy and Habit will be studied in this research as SI, FC and PV does not influence the behavioural intention to adopt mobile applications (Kuan et. al., 2014) that. PV does not affect the behavior intention and use behavior (Harsono and Suryana, 2014). Meanwhile, Handoko, Soepriyanto and Lindawati (2019) asserted that SI does not have a significant effect on behavioral intention and FC has no significant effect on use behavior.

Performance expectancy (PE) is the degree to which an individual believes that using a system will help them attain gains in job performance (Venkatesh et al. 2003). PE significantly influenced behavioural intention on behavioral intention (Farah, Hasni & Abbas, 2018; Hsu, Lin, Chen, Chang & Hsieh, 2017). PE is similar to other constructs in five other models and theories such as perceived usefulness in TAM, extrinsic motivation in MM, job-fit in MPCU, relative advantage in the DOI and outcome expectancy in SCT. Effort expectancy (EE) is the degree of ease associated with the use of the system (Venkatesh et al., 2003). EE is related to the perceived ease of use construct in the TAM model, which argues that an application that is perceived to be easier to use is more likely to encourage a perception of usefulness, and thus affecting the intention to use it. The effort expectancy construct consists of three criteria namely Perceived ease of use, Ease of use and complexity. Meanwhile, Venkatesh et al. (2012) defined habit as the degree to which consumers tend to perform the usage of technologies or the usage of technology products behaviors automatically because of learning.

Associations between intentions and behavior have been found in a variety of studies. However, there is limited attention has been focused on actual behavioral studies. Furthermore, there is empirical evidence proof that intention may not always influence behaviours as expected (Venkatesh et al., 2003). Rhodes & de Bruijn (2013) proclaimed that intentions only 36% of the variance in behaviour. Hence, changing behavioral intentions does not promise behavior change and create an intention-behaviour gap. Table 1 summaries the selected of previous study on DWP adoption by using UTAUT and UTAUT2 constructs.



**Table 1: Selected previous studies on DWP**

No.	Author	Constructs	Major findings
1.	Nikolopoulos & Likothanassis (2017)	Performance expectancy, effort expectancy, social influence, habit, price value, facilitating conditions, hedonic motivation.	Behavioral intention to use cloud computing is primarily influenced by Performance expectancy, Facilitating conditions, Social influence and Hedonic motivation. Effort Expectancy and Habit rate last in the factors that determine cloud adoption
2.	Alalwan et. at., (2017)	Performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, trust.	Behavioral intention is significantly and positively influenced by performance expectancy, effort expectancy, hedonic motivation, price value and trust.
3.	Khan et.al., (2017)	Performance expectancy, facilitating conditions, habit, perceived security, price value, cultural, collectivism, uncertainty avoidance and behavioral intention.	Performance expectancy, facilitating conditions, habit, perceived security, and price value as important antecedents of behavioral intentions. The cultural dimensions, collectivism, and uncertainty avoidance were found to be significant moderators in explaining behavioral intention and usage behavior for online banking.
4.	Dhiman & Arora (2018)	Performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, habit and Behavioral intention.	An intention to use job search apps was significantly affected by efforts expectancy, social influence, price value and habit. However, performance expectancy, facilitating conditions, and hedonic motivation did not influence the behavioral intentions to accept & use of the job search apps.
5.	Verkijika (2018)	Performance expectancy, effort expectancy, facilitating conditions, hedonic motivation, price value, social influence, perceived risk, perceived trust.	Social influence, facilitating conditions, hedonic motivations, perceived risk and perceived trust were significant predictors of the behavioral intention to adopt m-commerce applications in Africa.



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| 6.  | Silva, Hassani & Madsen, (2019)          | Performance expectancy, effort expectancy, social influence, facilitating conditions, resistance to use                              | Intention to Use of Big Data on the part of SMEs is determined by Performance Expectancy, Social Influence and Facilitating Conditions. Resistance to use new technologies negatively affect the intention to use. The influence of Effort Expectancy is very low, with little significance over the intention to use.             |
| 7.  | Dasgupta & Gupta (2019)                  | Performance expectancy, effort expectancy, social influence, facilitating conditions, espoused organizational culture                | Espoused organization culture influences performance expectancy, effort expectancy, social influence, facilitating conditions in a government agency in an emerging economy, India. Effort expectancy has no significant effect on behavioral intention and behavioral intention has no significant effect on usage of the system. |
| 8.  | Kwateng, Atiemo & Appiah (2019)          | Effort expectancy, facilitating conditions, habit, hedonic motivation, performance expectancy, price value, social influence, trust. | Habit, Price Value and Trust are the main factors influencing adoption and use of m-banking in Ghana. Individual differences of gender, age, educational level and user experience responded differently as they moderate the relationship between UTAUT2 constructs and use behavior.   |
| 9.  | Cabrera-Sanchez & Villarejo-Ramos (2019) | Performance expectancy, effort expectancy, social influence, facilitating conditions, perceived risk, resistance to use              | Performance expectancy, social influence, facilitating conditions, effort expectancy and resistance to use significantly influence behavioral intention to use BDA in companies. Perceived risk has no significant relationship with the intention.  |
| 10. | Wiafe et.al. (2019)                      | Performance expectancy, effort expectancy, social influence, facilitating conditions, self-efficacy, anxiety, attitudes toward use   | There are significant influences of performance expectancy, facilitating conditions, anxiety and attitude towards use on users' intention to use INTTRA. In contrast, social influence, effort expectancy and self-efficacy did not significantly influence intention to use.  |
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### **The Relationship between Performance Expectancy and Digital Workplace Adoption**

Performance Expectancy (PE) is described as the degree to which an individual believes that using the system will help a person to attain gains in job performance. Other models such as TPB, TAM/TAM2 revealed that PE is a strong predictor of behavioural intention to adopt and use of information technology. The significance of PE in influencing a user's behavioural intention has been recommended in many studies by Raza, Umer & Shah (2017) and Maruping, Bala, Venkatesh & Brown (2017), All the studies concluded that PE significantly influenced user's behavioral intention. PE is a more influential variable for the adoption of cloud computing amongst the professionals (Venkatesh et al., 2003).

H1: Performance expectancy (PE) is positively associated with behavioural intention (BI) to adopt digital workplace.

### **The Relationship between Effort Expectancy and Digital Workplace Adoption**

Effort expectancy is the degree of ease associated with the use of the system. EE has been validated in various UTAUT2 studies as a significant variable of user's behaviour intention (Alalwan, Dwivedi & Rana, 2017). Moghavvemi, Salleh, Zhao, & Mattila (2012) confirmed that there is a significant relationship between EE on behavioral intention to Information Technology Innovation (ITI) adoption in Malaysia.

H2: Effort expectancy (EE) is positively associated with behavioural intention (BI) to adopt digital workplace.

### **The Relationship between Habit and Digital Workplace Intention**

Habit refers to the experience of using technology. If a user uses technology frequently, a habit will be developed. Multiple studies of the user's behavioural intention using habit as one of the determining factors. Venkatesh et al. (2012) asserted that habit has direct and indirect effect through behavioral intention. Researches on habitual intentions and habitual usage behaviors by Yen & Wu (2016) and Tarhini, Masri, Ali & Serano (2016) have demonstrated that the habit is a strong predictor of technology usages.

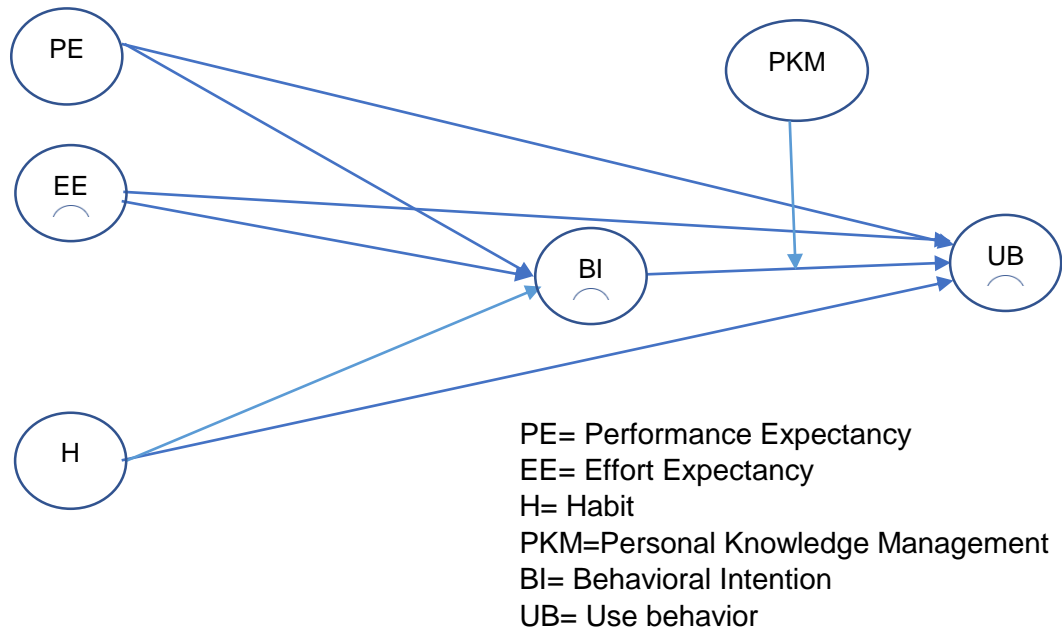
H3: Habit (H) is positively associated with behavioural intention (BI) to adopt a digital workplace.

### **The Moderating Role of Personal Knowledge Management in the Relationship between DWP Behavioural Intention and Actual Use of Digital Workplace**

The existing literature clearly points to PKM as a means of increasing individual effectiveness in the work environment and in the knowledge society (Pauleen, 2011). Through PKM, one can develop good study habits, enhance information literacy, improve professional knowledge and competitiveness and, finally, establish a solid foundation for knowledge development (Pauleen and Gorman, 2011). Cope with big data, people's knowledge management becomes personally useful as well (Daas et al., 2013). Pauleen (2009) claimed that individuals who occupy PKM can process various types of information, and all available information can be transformed into more valuable knowledge that can ultimately be connected to their work and life. Individuals can handle significant large amounts of information in a short period of time, as well as quickly and efficiently obtain the required knowledge to accurately utilize that

knowledge and to improve work efficiency and their capability (Razmerita et al., 2009). PKM can also help individuals to assess the quality of information and determine the extent of the information associated with the problems they encounter (Liu, Wang & Lin, 2017).

H4: PKM is positively moderate DWP behavioural intention with DWP adoption (ADO).



**Figure 1: Conceptual Framework**

### CONCLUSION

Digital workplace is necessary for SMEs to achieve macro-economic gains for a competitive company in the global economic world. Past studies on IT adoption describe either the decision to adopt or the individual behaviour to accept and use the technology. However, the intentions do not guarantee the actual behaviour. The intention–behaviour gap exists when people develop explicit decisions to change their behaviour but do not take action. Hence, this study proposed a conceptual framework based on UTAUT2 model and integrating PKM as a moderator between intention to use and actual use of the digital workplace. The transforming of a traditional to a digital workplace requires incorporation of organizational and personal knowledge management for a great value and effective use of digital technologies.

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# Customer Mobile Financial Service (MFS) Using Intention: In Digital Bangladesh Perspective

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## Abstract

Mobile, one of the most widely used modern telecommunication device, has become a part and parcel of mass people's life in Bangladesh. The growth of subscriber is reaching over 130 millions proving that it is one of the vital tools to reach mass people easily and conveniently. Bangladesh being a rising economy needed technological tools to establish the concept of digital Bangladesh, that's open up the opportunity to serve and empower mass population by setting up the mobile financial services with financial inclusion incorporated with mobile technologies, internet and integration of banks in the system. The study shows that mobile financial service is an important means to empower all sectors people with the help of mobile network providers and banks but it has challenges to face, despite this challenges, Bangladesh government and other stakeholders must take necessary steps to monitor and to accelerate the grab of this opportunity to conceptualize the digital Bangladesh concept and thereby boost up our national socio-economic development.

**Keywords:** Mobile financial services; digital Bangladesh; mobile money

## INTRODUCTION

Digital Bangladesh encapsulates the current idea of effective and efficient use of technology in terms of delivering on promises in terms of job placement, education, health, poverty reduction, and empowering both rural and urban populations. The "Digital Bangladesh" ideology entails guaranteeing people's democracy and accountability, as well as establishing justice, human rights, transparency, and assuring the delivery of government services to Bangladesh's population, all with the goal of improving the general public's living standards. This involves involvement by people of all socioeconomic groups, without prejudice or other technological risks. The current administration has also placed emphasis on the four aspects of the "Digital Bangladesh Vision," which include human resource development, citizen participation, public services, and the use of information technology in industry, trade, and commerce (Lee, Morduch, Ravindran, Shonchoy, and Zaman, 2021).

It has been observed that in order to establish the concept "Digital Bangladesh" financial transaction and financial empowerment to the mass people is one of the key issues. Researchers Singh, Nayyar, Le, and Das, (2019) pointed mobile phone is one of the much-distributed technological innovations which is widely accepted and used by the both rural and urban people which are one of the major financial service providers. According to Rehman, Omar, Zabri, and Lohana, (2019) banks are more efficient when utilizing the mobile financial services in modern digitized world. Therefore, banks of Bangladesh are playing vital role in providing mobile financial services for gearing up digital Bangladesh concept.

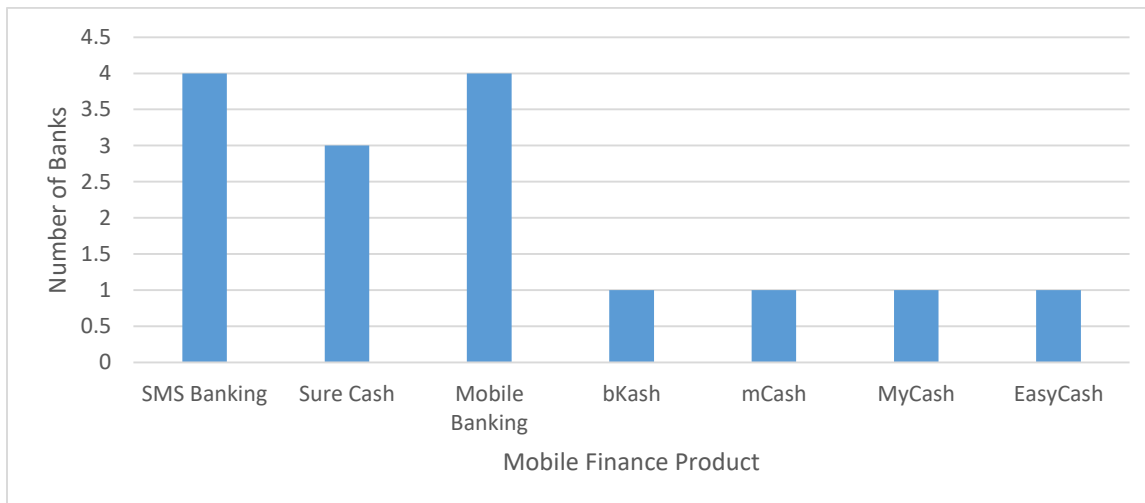
## METHODOLOGY

This research is based on descriptive approach. The fundamental discussion on a descriptive method is to show the wide use and opportunities of financial services through mobile phone by banks and thus an effective tool for digital Bangladesh theme. For this, the researcher did qualitative analysis only.

Data were collected from different secondary sources including sixteen major mobile financial service-providing banks of Bangladesh. For further analysis, data often shared, represented and discussed from different web sites relating to mobile financial service, books and journals to understand and interprets the significance of MFS and digitalization. Information also represented form Bangladesh bank guideline regarding the mobile financial services.

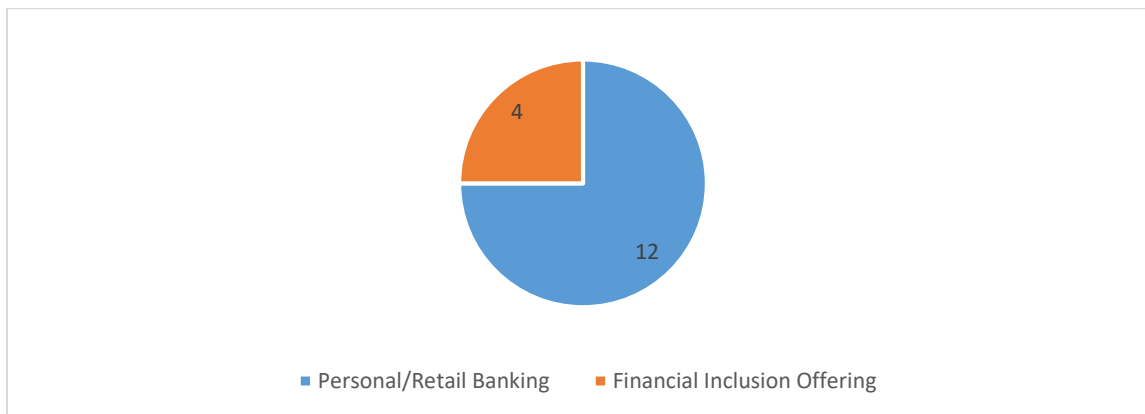
## RESULTS AND DISCUSSIONS

Digital Bangladesh is a phase of change and shaping a new dimension into a modern country. Any change needs positive persuasion and participants by the stakeholders (Lee, et al., 2021). The digital or electronic revolution has the potential to reduce the gap in citizen service quality between developed and developing nations, while also ensuring better government accountability, transparency, and efficiency in the future. Kabir, Huda, and Faruq, (2020) stated that in recent years, Bangladesh has taken significant steps to advance in the field of eGovernment, beginning with a few scattered projects for internal automation and gradually moving toward e-services delivery and connected governance across the country. Nonetheless, like poor countries, the government has encountered certain common and common difficulties, many of which continue to be hurdles to e-Government adoption in such settings. Every imaginable activity, from tax collection to bank administration, complicated scientific and technological challenges, may benefit from the use of IT and MFS (Salim, 2020). From the data collected, all the 16 banks had at least implemented one mobile finance product. The figure below illustrates some of the mobile finance products that have been implemented



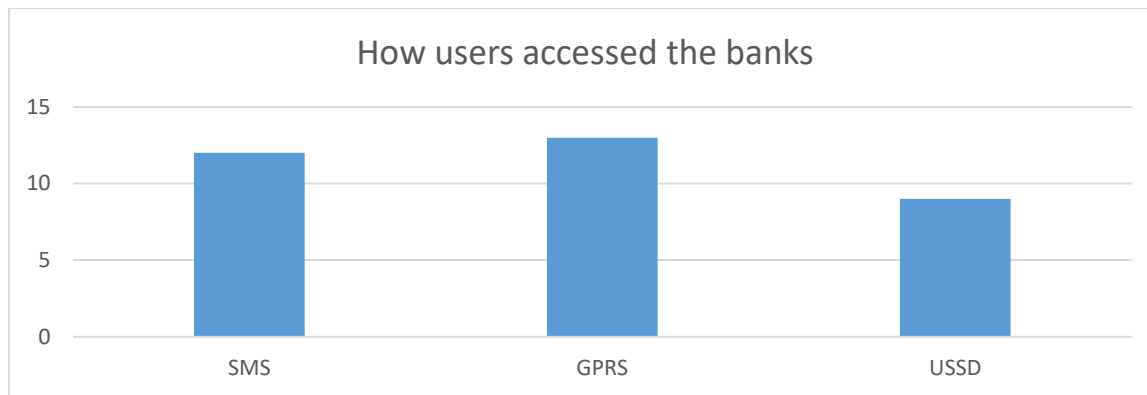
The overarching primary pledge in the election platform of the Awami League (Bangladesh Awami League) headed by Grand Alliance, which currently comprises the greatest part of this government's commitment, was the notion of "Digital Bangladesh." ICT must play a critical role in Digital Bangladesh in order to alleviate the nation's battle for economic, cultural, and social independence and empowerment. This approach has the potential to be extremely beneficial to the poor, who make up the vast bulk of the population. 'Digital Bangladesh' is, in many ways, a resurrection of the 'Sonar Bangla' ideal of a golden Bangladesh. From that perspective, it's better to retain it as a broad goal rather than a specific aim. As a result, ICTs and new technologies must be utilized in all sectors of national growth in order to attain that goal.

The use of a mobile phone to settle financial transactions is known as mobile banking. It allows person-to-person transfers with instant cash availability for the beneficiary; mobile payments leverage the card infrastructure for payment instructions movement as well as secure SMS messaging for beneficiary receipt confirmation. Mobile banking is designed for small-value transactions when speed of completion is critical. Given Bangladesh's minimal infrastructure needs and fast rising mobile phone adoption, mobile payment has a lot of promise. Account inquiry, money transfer, phone recharge, password changes, and bill payment are among the services covered by this product, which are only provided by a few institutions (Zalloum, Alghadeer, and Nusairat, 2019). The figure below shows the two distinct products offered by banks in the field of mobile banking.



In its most basic form, mobile banking refers to the use of a mobile phone to provide banking services. In the field of mobile banking, banks have developed two distinct products. One is a personal/retail banking product, while the other is a financial inclusion offering. It is a personal banking product that is available to all savings/current account holders and allows them to bank whenever and wherever they choose (Carranza, Díaz, Sánchez-Camacho, and Martín-Consuegra, 2021). Foreign and commercial banks were the first to introduce mobile banking, followed by public sector banks.

The study also sought to find out how users accessed the banks. The findings are in the figure below.



According to Shi (2009), mobile banking services have been widely implemented and are widely used. SMS (Short Message Service), GPRS (General Packet Radio Service), and USSD (Unstructured Supplementary Service Data) are the most common ways to access mobile banking services.

According to Chawla, and Joshi, (2019), the transition from traditional branch banking to electronic banking, as well as the newly developed wireless delivery channel, is inextricably linked to the spread and use of mobile banking services. The rationale for utilizing mobile banking to achieve financial inclusion is that the majority of Bangladeshis do not have access to banking services even 45 years after independence. The expansion of Bangladesh's economy must result in increased income and empowerment for the whole people, regardless of region or sector. (Kabir, et al., 2020). According to Islam, (2020), achieving the Digital Bangladesh Vision through e-Government requires the poor and vulnerable groups to have access to money, which is important for poverty reduction and social cohesion. Providing low-income and disadvantaged groups of society with access to money is a kind of empowerment. Credit, savings, insurance, payments, and remittance services are among the numerous financial services available.

The substantial rise in mobile users demonstrates the promise of mobile banking and the future of financial services delivered via the internet and mobile networks. The majority of low-income groups are hesitant to open bank accounts, partly due to the lack of a nearby bank branch (Islam, 2020), which means spending money on transportation (especially in rural areas) and losing a day's wages, and partly due to bank branch formalities or approaches intimidating them. Because of illiteracy, gender, age, low and irregular income, and regulatory variables such as identification documents, non-availability of bank branches, the poor are unable to obtain banking services (Zalloum, et al., 2019). The expense of providing these services is also highlighted as a key obstacle to expanding adequate financial services to the poor. Using a traditional retail banking method to serve the poor with low-value services is not feasible.

The central bank of Bangladesh published instructions on "Mobile Financial Services for Banks," plainly emphasizing that the market should be dominated by banks. The central bank, on the other hand, has pushed for cell carriers and microfinance institutions to be active participants (Aziz, and Naima, 2021). It has given banks ten licenses to deliver a full range of mobile banking services.



The market has moved as a result of the legislative changes, and by late 2020 and early 2021, two early leaders with the largest client bases and agent networks had emerged.

- a. BRAC Bank, in collaboration with its subsidiary bKash, provides the bKash service.
- b. The Dutch Bangla Bank has launched a new service called Dutch Bangla Mobile.

These two companies contributed the most to the almost 500,000 new mobile accounts and over 9,000 new agents.

- a. The Bangladesh Bank may authorize (in broad categories) the following Mobile Financial Services:
  - b. Incoming foreign remittances are disbursed.
  - c. Agents/Bank branches/ ATMs/Mobile Operator's outlets are all places where you may cash in or out using your mobile account.
  - d. Payments from individuals to businesses, such as utility bill payments and merchant payments
  - e. Payments between businesses and individuals, e.g. Payroll, dividend and return warrant payments, vendor payments, and so on.
  - f. Payments by the government to individuals, such as elderly allowances. Allowances, subsidies, and other benefits for freedom fighters
  - g. Payments made by a person to the government, such as taxes and levy payments.
  - h. Payments from one person to another (One registered mobile Account to another registered mobile account)
  - i. Other payments, such as microfinance, overdraft, insurance premiums, DPS, and so on.

**Table 1: Banks Providing Financial Service Through Mobile Banking System**

<b>Bank Name</b>	<b>Product Name</b>
AB Bank	SMS Banking
Bangladesh Commerce Bank	SureCash
Bank Asia Limited.	Mobile Banking
BRAC Bank Limited.	bKash
Dhaka Bank	SMS Banking
Duch-Bangla Bank Limited.	Mobile-Banking
First Security Islami Bank	SureCash
IFIC Bank Limited	IFIC Mobile Banking
Islami Bank Bangladesh Limited.	mCash
Mercantile Bank	MYCash
National Credit and Commerce Bank Limited	SureCash
Prime Bank Limited.	EasyCash
South East Bank	SMS Banking
Trust Bank	Mobile Money
United Commerce Bank	SMS Banking

(Source: Different Websites Of Respective Bank And Their Annual Report, 2020)

## **CONCLUSION**

Digital Bangladesh is a broad theme and its implementation will greatly influence through the establishment of mobile financial services. Kumar, Dhingra, Batra, and Purohit, (2020) analysed that the develop countries like Japan, Germany and New Zealand included banking services through mobile financial services for better effective and efficient service delivery. The more the inclusion of electronic and mobile banking gain success the more it will be easier to reach the dream of Digital Bangladesh. The days are ahead it is our expectation, when Bangladesh will be fully digitalized with the proper implementation of mobile services in financial and non-financial sectors throughout the country. Some of banks in Bangladesh who have received permission from Bangladesh Bank for MFS provider are still undecided about when and which strategies they will launch their service due to the cost factor. To establish the Digital Bangladesh concept country wide with affordable cost, the possible solution for banks who are attracted to come into the MFS space is to form an association and have one specific bank providing fully managed service to ease the investment cost by the partner banks. This would allow other banks to focus on only business aspects and operational innovations.

Recent significant growth in mobile and internet usage as well as banks involvement in customized mobile services towards its clients' shows a promising start towards the glory , yet to reach global recognition and competitiveness and building a digital Bangladesh, our banks, government and other regulatory authorities must invest in research and developments of different mobile financial services.

## **ACKNOWLEDGEMENT**

Primarily I would thank my Almighty for being able to complete this paper. Then I would like to thank my main supervisor Dr.Mohd Nazri Bin Muhayiddin and co-supervisor Dr.Ahmed Shahrudin Abdul Latif, whose valuable guidance, suggestion and their instructions are the major contribution for continue all my work properly. I also want to thank my parents, husband, families and friends. Last but not least I have to thank to my university sole mates who always support me from their busy schedule.

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# Research on the Optimization of Salary System in Human Resource Management

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## ABSTRACT

With the continuous development of the social economy, the competition among enterprises is becoming more and more intense. Talent is the core content of enterprise development in enterprise management, but how to give full play to talent in the fierce market competition is the important content of enterprise human resource management. Compensation management is one of the core contents of human resource management. In enterprise management has been an important position and significance. Establishing the salary incentive mechanism in the human resource management system can stimulate the staff's initiative and creativity and make the staff better play their ability. However, there are still many problems in human resource management in many enterprises, and the salary incentive system is not perfect. Therefore, The goal, principle, and design of the optimization of salary strategy in human resource management, which can be used as a reference for the optimization of enterprise salary system, are studied in this paper using ZG University as an example to analyze the problems that exist in ZG University's compensation incentive.

**Keywords:** Human resource management; Salary incentive; Optimization mode.

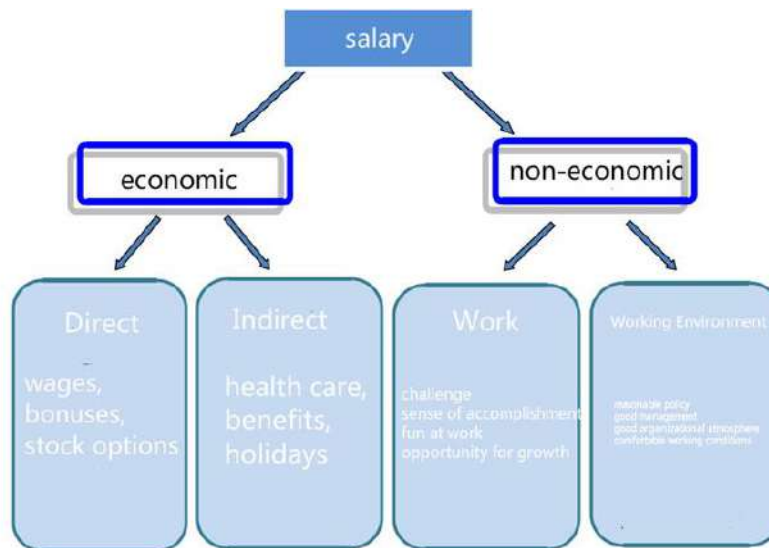
## INTRODUCTION

HR is a product of the human relations movement of the early 20th century when researchers began documenting ways of creating business value through the strategic management of the workforce (Obedgiu 2017). HRM is primarily concerned with managing people within organizations, focusing on policies and systems (Collings, Wood, and Szamosi 2018). Human is the source of enterprise creativity and the important value creator of the enterprise. The stable operation and development of an enterprise can not be separated from human initiative input. The organizational researchers generally acknowledge that Human Resources are the critical assets of an organization, whereas the organizational goals are successfully achieved by proper utilization of Human Resources (Khan et al. 2014). With the gradual development and improvement of management theory, the importance of human resources is self-evident. The level of core competence is essentially the level of human resources management. As an economic man, while contributing intelligence and physical strength to the enterprise, the employee must require the enterprise to pay the equivalent return and take the satisfaction of the return as the basis of decision-making whether to keep working hard or not. Therefore, how to do a good job of employee protection and encourage employees to work hard has become a common concern of the theoretical and practical fields. A fundamental requirement of creating a working incentive

system for individuals and the organization is understanding human behavior and motivators of human behavior (Schneider 1987).

A salary is a type of payment made by an employer to an employee, usually stipulated in the employment contract. Salary system is a system for determining how much an employee should be paid as a payor pay, depending on one or more characteristics such as the employee's level, position, or position within the employer's organization, the amount of time the person has worked, and the complexity of the specific task completed. Pay has been considered an important reward to motivate the behavior of employees (Taylor and Vest 1992). All other behavioral aspects are significant for boosting the job happiness of employees, but happiness from compensation is needed. According to the substance of incentive, to fulfill employees' economic demands or spiritual requirements, the incentive may be separated into financial incentives and non-financial rewards. Salary incentive is an essential component of material incentive; it plays a critical role in generating employee work enthusiasm; a fair and ideal salary incentive may help employees accomplish their jobs properly. It can be claimed that establishing a salary incentive system is highly beneficial to an organization's human resource management, hence boosting long-term growth.

After paying individual work and different types of remuneration, the salary is the remuneration that the employee should get. Salary, in general, may be divided into two categories: economic and non-economic. Figure 1 depicts the classification of the salary system. Incentive plays a critical role in human resource management, as it helps build an effective salary system, encourages employee work enthusiasm, strengthens the enterprise's cohesive force, and supports the company's positive growth.



**Figure 1: Classification of the salary system**

### **(1) Motivation of employees**

The term "salary incentive" refers to a payment made by management based on an employee's working hours and contribution rate to the company. The installation of a wage incentive has a

significant positive impact on developing a rational and ideal human resource management system. Establishing a reasonable salary incentive can fully embody the connotation of "more work, more pay," assist employees in developing a positive working attitude, better stimulate employees' initiative and enthusiasm in the workplace, and, at the same time, better inspire employees to the enterprise's identity and sense of belonging. Using a financial incentive model may offer employees more tremendous respect, allow them to believe in their abilities, maximize their worth, and guarantee that staff and company development are aligned. Attract the majority of workers to stimulate their potential through a compensation incentive, and then increase the efficiency and profitability of the company. Salary incentives are frequently successful and may be employed for an extended period, and employees easily recognize them.

## **(2) Improvement of corporate cohesion**

A good wage incentive scheme may considerably improve enterprise cohesiveness. In today's fierce competition for talent, businesses that want to grow must increase employee remuneration and a sense of belonging to the company to retain top personnel and deliver more considerable economic advantages to the company, through a strong welfare policy to multi-angle, omni-directional attention staff demand, which can considerably improve the spiritual happiness of the employees. It also provides them a sense of belonging to the company and strengthens its cohesive force. The gifted individual continuously steers the firm forward and, in the end, boosts the firm's fundamental competitive power.

## **(3) Promotion healthy development of enterprises**

Compensation Incentive policies can help businesses grow in a virtuous loop. Human resource management and compensation incentives are linked and complement each other. On the one hand, the pay incentive must be achieved via Enterprise Human Resources Management; on the other hand, the pay incentive may help the enterprise's human resources grow. In addition, monetary incentives can help human resource managers gain more outstanding expertise in the field. A solid wage incentive system may deliver more economic and social advantages to the organization and push the firm in the correct and social growth path, in addition to human resource management experience. Incorporate human resources management, a suitable wage incentive may help optimize and update human resources management to fulfill the company's demands in an ever-changing economic market.

This paper studies the optimization of the salary system, aiming to improve the quality of employees and the core competitiveness of enterprises. The significance is mainly reflected in the following aspects: Firstly, it improves staff and staff development quality to create suitable conditions. Establishing a scientific and systematic salary incentive system can broaden the channels for employees to be promoted and paid, which improves employees' satisfaction and stabilizes the human resources team. It further mobilizes employees' subjective initiative and enthusiasm and stimulates employees' endogenous motivation, enhancing employees' sense of belonging and achievement. Secondly, it can improve their compensation management level at the present stage and enhance their market core. The competitiveness level has become the primary strategic priority. This paper provides referential measures and methods for Human Resource Management of enterprises, which helps enterprises formulate more scientific compensation incentive strategies. It also strengthens the market core competitiveness of enterprises.



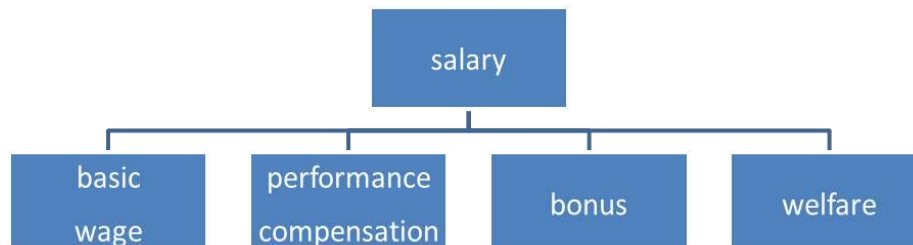
## RESEARCH METHOD

The author sorts out the research results of domestic and foreign scholars on salary system, salary incentive, etc., based on many references to existing academic works and research literature. It is found the right research direction and highlighted the research focus clear research ideas, which improves the educational value of this study. This study uses the ZG university in the HX group's educational sub-group to analyze the enterprise's existing salary system and identify some typical flaws in the salary system. It is constructed an effective compensation system and optimized the enterprise's compensation system. When doing a case study, interviews are one of the most significant sources of information. In order to understand the salary situation of ZG University, we interviewed the relevant personnel in charge of the university. During interviews, the focus was not on getting a clear yes or no response but instead capturing individuals' experiences and exploring their descriptions and explanations. It was done through semi-structured interviews, and each was lasting about 45 minutes. We understand the university's salary system through the interview and make the corresponding questionnaire according to the interview. The questionnaires were delivered to workers in the functional area with the most employees in the ZG university.

## RESULTS AND DISCUSSION

### 1. The present situation analysis of ZG university of HX group salary system

In 2015, ZG University implemented the current wage system, which is primarily based on the job compensation system and professional skills pay system, with the performance salary system as a supplement. Basic wage, performance compensation, bonus, and welfare are the four components.



**Figure 2. Salary chart of ZG university**

This research uses two methods to understand better how employees feel about the current compensation system: a questionnaire and an in-depth interview. Examining the salary satisfaction questionnaire findings considers both the workers' inner sentiments during the interview and their actual job performance. It can accurately reflect the subjective and objective status of workers' satisfaction with the compensation system and increase the survey findings' correctness. According to the survey, the results are summarized in Table 1.

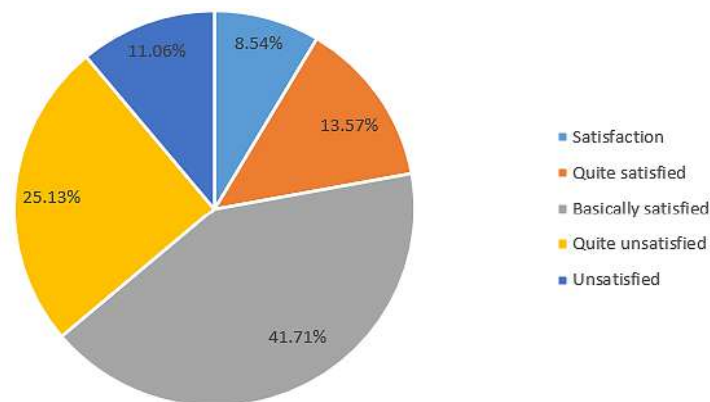
**Table 1: Summary of salary satisfaction questionnaire**

	Satisfaction	Quite satisfied	Satisfied	Quite unsatisfied	Unsatisfied
Satisfaction with the minimum wage	9	25	72	50	43
Satisfaction with performance pay	12	31	70	46	40
Satisfaction with bonuses	25	20	92	38	24
Satisfaction with benefits	26	33	91	27	22
Satisfaction with salary system	17	27	83	50	22

Following our examination into the present state of ZG University's compensation system and employee satisfaction, we discovered that the existing wage system of ZG University has some flaws, namely in the following areas:

**(1) The satisfaction of salary system is low**

The questionnaire is divided into five primary alternatives, as illustrated in Figure 2: satisfaction, quite satisfied, basically satisfied, quite unsatisfied, and unsatisfied. Each alternative had an 8.5 percentage, 13.6 percentage, 41.7 percentage, 25.1 percentage, and 11 percentage share of the vote. According to data research, employees have a negative attitude about the company's existing compensation standard and believe that the number of generally pleased individuals is the greatest. On a macro level, it is critical to increasing employee compensation satisfaction to produce a perfect incentive effect.



**Figure 2: Summary of data from the pay satisfaction questionnaire**

## **(2) The evaluation system of the salary system is not perfect**

The implementation of incentive measures should be based on performance appraisal, and the construction of a flawless and effective evaluation system is the foundation of incentive system implementation, which may further boost the evaluation passion and initiative. There are numerous flaws in ZG university management's performance assessment system right now, such as a mismatch between performance assessment and assessment system. The mental work of university employees is challenging to measure easily because of its uniqueness, complexity, creativity, etc. Moreover, with more excellent subjective color, more work items are primarily qualitative assessments, which affects the accuracy of the assessment findings to a great extent. Meanwhile, a performance assessment that does not reflect the current circumstances may have negative consequences, such as placing a premium on the number of articles written while overlooking the quality of those articles. It may be squandered as a result of this assessment methodology, which will have a detrimental influence on the assessors' creativity and the development and execution of educational materials.

## **(3) The salary system is too simplistic**

After interviewing employees, we discovered that the existing corporate wage structure focuses primarily on material rewards and ignores the value demands of employees above and beyond material rewards. Excessive use of material rewards is detrimental to the long-term success of businesses. In general, businesses rarely provide meaningful spiritual support to their employees, resulting in a lack of internal cohesiveness. Employee loyalty and centripetal force to the company are weak, resulting in a low level of work excitement.

## **(4) The salary system does not match with the enterprise development strategy**

The current university salary system is incompatible with business development strategies. It fails to establish the salary system with long-term development in mind and properly examine the talent pool. Moreover, it is considered compensation management one of the tools for controlling business costs. Employees will not entirely concentrate on their duties if their wage structure is incompatible with the enterprise's strategic growth plans. Employees will have no long-term career planning due to the salary-based compensation system, and the company will confront a shortage of talent reserves.

## **2.The principle of salary incentive system optimization**

Redesign the University's compensation system, moderately alter performance assessment, compensation model, pay grade, and other relevant components. Based on a complete consideration of the current circumstances and development strategy of ZG University to strengthen the effect of the salary incentive system. It is considered increasing the market core competitiveness of firms and ensuring their long-term, steady, and quick growth. The optimization of the salary incentive system should follow the following principles:

### **(1) Principle of fairness**

The notion of fairness is the first consideration in creating a salary system since it is the most basic premise in social science. The fairness concept encompasses two characteristics of fairness. Internal compensation level fairness is referred to as internal fairness. The notion of external fairness states that employees in various positions in an organization should be paid the same as employees in similar occupations in the same industry. If enterprises want to reflect fairness, they should adopt a more scientific and reasonable analysis mode. Employees' salaries in various positions reflect their contributions, and each employee perceives little difference between his or her salary and personal psychological expectations.

### **(2) Principle of incentive**

The function of incentive in an organization's human resources management department is critical. Many workers can make the employees' potential to play, contribute to the enterprise, and establish an effective incentive compensation mechanism, which can help enterprises attract high-quality talents and retain high-quality employees under the effective incentive compensation mechanism.

### **(3) Principle of competitive**

This approach applies to businesses optimizing their wage mechanisms, comparing them horizontally to other pay mechanisms in the same sector to guarantee that the businesses have specific competitive advantages and attractiveness. Only through having a significant external competitive edge will an organization recruit more high-quality personnel to join and service it, hence increasing the company's worth. Although the optimization of the compensation mechanism will benefit human resources in terms of recruiting, it will also increase labor expenses, which will influence firm efficiency.

### **(4) Principle of economic**

The economic principle states that businesses should consider their own economic strength and development position while optimizing the compensation system. As a result, throughout the optimization process, businesses should thoroughly evaluate their strategic objectives and actual advantages to drive staff growth better and secure the long-term success of their businesses.

## **3 Optimization design of salary incentive system**

### **3.1 Improvement of the performance appraisal system**

The performance heavily influences employees' remuneration. Consequently, a scientific and acceptable performance salary system is established, which increases performance appraisal results and strengthens the incentive impact of performance pay. It also stimulated employee enthusiasm and promotes the achievement of company objectives are all important and encourages the establishment of high-quality businesses.

### **3.2 Creation of a multifaceted incentive system**

There is a mix of the material and spiritual drive. The provision of an effective pecuniary incentive is a prerequisite for providing spiritual encouragement to employees in the organizational culture, which is set to increase their work passion. The use of a mixture of short-term and long-term incentives is beneficial. Optimizing the incentive cycle for various sorts of workers enhances employee stability and reduces the danger of firms seeking short-term gains.

### **3.3 Expectations of employees'salary**

It is known that creating a reward scheme that blends employee happiness with financial goals. An enterprise's financial goal is to make the most profit with the least amount of investment, which means lowering employee remuneration as much as feasible from a financial standpoint. Unreasonable pay will lower employee satisfaction and perhaps cause them to leave. As a result, we should examine the average societal income of the job when determining the compensation structure and then provide suitable advancement and year-end awards and bonuses. It also thoroughly evaluates its features while designing welfare and completely engages the firm's varied resources. The compensation design is not ideal if we are unable to utilize the company's resources fully.

## **CONCLUSIONS**

Talent is a significant indicator of an enterprise's core competitiveness and an essential guarantee for achieving its development plan and management objectives in the growth of modern businesses. As a result, businesses must place a high value on human resource management and give academic assistance and talent assurance to achieve high-quality growth. As a critical aspect of human resource management, salary management is directly tied to the stability of the talent team and the achievement of company objectives. For companies to achieve healthy and sustainable development and increase their core competitiveness, it is critical to boost enterprise salary management research, construct and improve the compensation system, and boost the compensation incentive function.

This study uses ZG as a case study to investigate and analyze the present state of ZG University's compensation system and employee compensation satisfaction to determine the difficulties that exist in the company's compensation system. For the reasons stated above, the author believes that ZG university's existing compensation system is no longer suited for the development demands of businesses at this time. The author proposes the optimization technique of compensation system, which gives some reference for optimizing the enterprise compensation system, based on a thorough study of the existing state of firms and the industry.

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# The Factors Influence of Distributors' Satisfaction Towards LPG Cooking Gas Principals in Malaysia

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## ABSTRACT

Many businesses are under pressure to become more responsive to their customers in today's markets. Suppliers must look for alternative methods to create value for their customers in today's competitive markets. This study examined the factors influence the satisfaction of distributors towards LPG principals in Malaysia. The literature shows that number of factors influence distributors' satisfaction such as support, perceived quality of training programs, perception of product/services and relationship benefits. The findings of this research will help businesses discover channel management strategies to improve distributor satisfaction and retention in the Malaysian LPG cooking gas market.

**Keywords:** LPG; distributors' satisfaction; supplier; Malaysia.

## INTRODUCTION

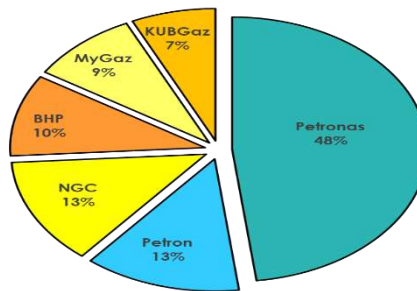
Liquefied petroleum gas (LPG) is a flammable hydrocarbon gas mixture used as a fuel in heating appliances, cars, aerosol propellant, refrigerant, and culinary equipment, etc (Sangeetha A, 2020). LPG outperforms conventional fuels like coal and wood in terms of cost and environmental benefits. In reality, natural gas is being touted as a revolution fuel in a number of industries, including manufacturing, residential, chemical, automobile, and refinery. This is why LPG has a substantial market share in the residential and auto fuel sector, and the demand for LPG is expected to rise in the forecast period as well. According to Acumen Research and Consulting company (2020), the market for gas cylinders is growing at 8.7 percent per year from 2020 to 2027, and is projected to increase. The demand grows yearly and therefore is a great market to step into.

Distributors is an entrepreneur engaged in sharing the responsibilities of sales and distribution of products or services of a company (ies) as an intermediate in the channels of distribution and has invested some money for an industry standard return on investment (Sahoo, 2002). Distributors are also known as direct sellers or small business owners that work as the frontline sales force (Lee, Lau & Loi, 2016) in LPG industry. Satisfaction is a process of the difference between the perceived performance and actual expectations (Kariappa & Akv, 2016). Anderson & Narus (1990) definite satisfaction is defined as an affective state coming from the evaluation of all aspects of a firm's working connection with another firm (Chang, Lee & Lai, 2012).

The government regulates the price of LPG in the cooking gas industry, resulting in limited pricing discrepancies or indifference between suppliers (Thanabordeekij & Syers, 2020). For household use, LPG is largely supplied in 10,12 and 14kg cylinders and is sold at both domestic (subsidised)

and commercial (non-subsidised) rates (Handique & Bhowal, 2017). In Malaysia, the major players dominating the LPG market are Petronas which is 48%, followed by Petron and KUB Gas 13% each, BHP 10%, MyGaz 9% and Mira Gas 7% (KPDNHEP, 2019). Each player is principals to their distributors and most of them already have been distributorship for a long time and are inherited business (Petronas, 2018; Harian Metro, 2020). However, in a competitive environment today's the principals must look for alternative methods to create value for their customers. Understanding the principal-distributor relationship aids in long-term customer loyalty and retention (Gandhi, Sachdeva & Gupta, 2018). Therefore, the distributor will remain a distributor for a single primary brand, rather than selling many brands to beat the competition.

LPG RETAIL MARKET SHARE IN MALAYSIA FOR THE YEAR 2019 (%)



**Figure 1: LPG Retail Market share in Malaysia for the year 2019 (%)**  
(Source: Kementerian Perdagangan Dalam Negeri Dan Hal Ehwal Pengguna, 2019)

This research is concentrated on the factors of distributors' satisfaction among LPG cooking gas distributors towards their principals in Malaysia. Many factors influence distributors, including social, psychological, economical, geographic, environmental, etc. The study considers that the four factors have the significant influence on satisfaction of distributors. The factors of distributors' satisfaction which involved principal support, perceived quality of training programs, perceptions on product/services (Lee, Lau & Loi, 2016) and relationship benefits (Patrik & Mosad, 2003; Mazilah, 2017) may have a significant effect that related to distributors' satisfaction. The objective of this study is to examine the factors influence satisfaction of distributors towards LPG principals in Malaysia.

### Distributor's satisfaction

In studies on the operations of complex distribution channels, the study of channel member satisfaction has been key (Gassenheimer & Calantone, 1995; Gauzente, 2003; Ruekert & Churchill, 1984). Anderson and Narus (1990) define distributors' satisfaction as the channel members' overall assessment of the partnership (Anisimova & Mavondo, 2014). Distributor's satisfaction is a condition that occurs when an experience is fulfilled or exceeds the needs or desires of a customer (Gallan, 2013; Putra, Tarigan & Siagian, 2020). Mayer and Dornach, 1998 have stated that customer satisfaction can influence the customer retention (as cited in Stephan, 2000).

## **Support**

From the perspective of distributors of LPG cooking gas industry, principals will appoint the distributor according to the specific zone or districts and the distributor will appoint the sub-dealers. In articles on 'Rethinking Distribution' by A. Narus & C. Anderson in 1996 have found that flexible and responsive distribution system can meet customers' most extraordinary needs by sharing resources and capabilities. The relationship between principal and their distributors are very important. Principals should consistently provide guideline and support in order to achieve the sales target (Spark & Schenk, 2006; Lee, Lau & Loi, 2016). Supply chain members' commitment and trust in ongoing interactions helps to promote efficiency and effectiveness (Johnston, McCutcheon, Stuart, & Kerwood, 2004); Vijayasathy, 2010; Salsabil, Alam, Ahmed & Afzal, 2020). Furthermore, principals must provide emotional support, knowledge sharing, social interaction initiative, and practical aid to their distributors on a constant basis. Hence, it is envisaged that principals support will contribute to LPG cooking gas distributors' satisfaction.

*H1: The better support from LPG cooking gas principal company; the better the distributor's satisfaction be.*

## **Perceived quality of training programs**

Research by Divergent Insight Esomar Cooperate in 2019 mention distribution training programs are scrupulously designed around the essential building blocks of routine operations like financial controls, sales planning, management of external environment, cost-service optimization, cost management, vehicles, warehouse planning and storage practices. It will assist them in being persuasive and skilled while selling or promoting a business opportunity or product/service (Delgado, 2000; Lee, Lau & Loi, 2016). Vinayagamoorthy et al (2007) stated that service marketers have really understood that competition can be well succeed by differentiating through quality (Amutha, 2018).

*H2: The better the perceived quality of training program offered by LPG cooking gas principal company; the better the distributor's satisfaction be.*

## **Perceptions on product/services**

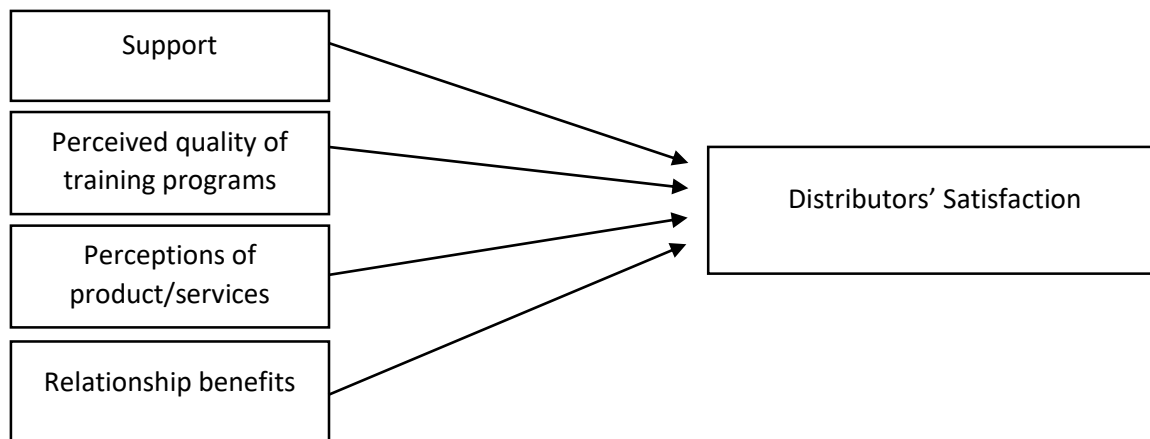
A company's products and services represent the company's identity and reputation. (Hernandez, Jaraba, Blanes & Carrasco, 2020). LPG cooking gas distributors are ambassador to customer in marketing view. Distributors also add value by performing tasks like customer relationship management (CRM), order processing, lead time reduction in production and operation management and knowledge management such as technical product and service expertise, market knowledge, etc (Rajkumar, 2013; Gandhi, Sachdeva & Gupta, 2018). Perception effects on perceived product quality, a lower level of risk and ambiguity in the consumer purchasing decision, and the transferral of good assessments to new product categories are all examples of perception effects (Cretu & Brodie, 2007; Ohnemus, 2009; Low & Blois, 2002; Anisimova & Mavondo, 2014). Therefore, products that are alleged to be appealing appear to be able to satisfy and retain both distributors and consumers.

*H3: The better the perception of products and services offered by LPG cooking gas principal company; the better the distributor's satisfaction be.*

## Relationship benefits

For a distributor, this relationship is one of the most important considerations. The way a principal treats its distributors matters a lot. Concern and care include a lot of aspects like responsiveness by logistics, finance and sales teams for resolving issues, access to the authorities of companies, easiness in registering any type of complaint etc (Divergent Insight Esomar Cooperate, 2019). Understanding the principal-distributor relationship can help develop long-term customer loyalty and retention (Ma et al, 2004; Gandhi, Sachdeva & Gupta, 2018). Distributors are awarded and rewarded for their business accomplishments in meeting set goals (C.V, Hermanth, Routroy & Mishra, 2020). Martin et al. (1998) (cites in C.V, Hermanth, Routroy & Mishra, 2020) mentioned that the incentives given to distributors show the principal's appreciation for their efforts. Hence, it can encourage better relationship and good will for principals.

*H4: The better the relationship benefits offered by LPG cooking gas principal company, the better the distributor's satisfaction be.*



**Research framework developed for the study**

## RESEARCH METHOD

This study is made with the quantitative approach using design. According to Saunders, Lewis & Thornhill (1997), the survey technique can be used to generate models of specific relationships between variables and to identify probable reasons for these relationships. According to them as to how quantitative method gets the data is through study instrument for example observation and questionnaire forms. The information collection process works well with this method. The researcher may be aware of the necessary data and how to quantify the variable. The study mainly uses comprehensive review on distributors' satisfaction and its influences towards LPG cooking gas principals in Malaysia from academician writing, online news portal and also online platforms.

## **CONCLUSIONS**

Overall, this paper highlighted some factors that influence the distributors' satisfaction. This paper urges LPG cooking gas principals to view distributors as critical to the company's success and to help them in all of their activities, including marketing initiatives, continuous information transmission, and support structure.

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