

# EVOLUTION OF DIGITAL ISLAMIC BANKING AND FINANCE THROUGH IR 4.0



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## PREFACE

In line with the advancement of digital technology, which has permeated nearly every industry, especially the banking industry, Malaysia's fourth industrial revolution (IR 4.0) has advanced a number of industrial sectors. The development of this technology has made it simpler for customers to do business. However in the midst of the fourth industrial revolution, the development of digital technology might potentially pose a danger to traditional banking and more advantage to the current banking situation.

The Multidisciplinary Research on the Entrepreneurship and Business E-Colloquium 2022/2023 Colloquium was held in as virtual on 30 January 2023 at Campus Kota, Universiti Malaysia Kelantan. It was a delightful event with all the final year undergraduate student participants had many fruitful discussions and exchanges that contributed to the success of the colloquium. 11 papers for field of digital in banking and finance was 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.

All in all, the Multidisciplinary Research on the Entrepreneurship and Business E-Colloquium 2022/2023 Colloquium 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 Study On Factors Affecting Use Of Online Transaction Among University Malaysia Kelantan Students**

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### ***Abstract***

*Modern day business, economic, and consumer life are all being impacted by the quick development of online transactions. The existing array of methods of payment, particularly those for online transactions, offers quicker settlements and respectable security, but new payment methods can encounter opposition. Recent developments in online transactions have been pushed mostly by young, tech-savvy consumers at Malaysian universities, especially University Malaysia Kelantan. The current study examines the variables influencing students at University Malaysia Kelantan's use of online transactions by applying the theory of planned behaviour (TPB). A google form was used to collect data from 307 respondents who participated in an online survey from students at UMK Pengkalan Chepa. SPSS 25 was then used to analyse the data, and the results were statistically displayed in the form of tables, charts, and graphs utilizing frequencies and percentages. According to the results of the multiple regression analysis, awareness of usefulness, perceived trust, behavioural control, and subjective norms are key factors in determining the use of online transactions.*

**Keywords:** *Online transaction, awareness of usefulness, perceived trust, behaviour control, subjective norms, University Malaysia Kelantan*

## 1.0 Introduction

### 1.1 Background of the Study

In this study, we would like to find out the factors that affecting the online transaction. An online transaction is a cashless transaction in which funds or money are sent over the internet via electronic fund transfer. From Investing Answer by Paul Tracy online transactions often known as PIN-debit transactions, are password-protected payment options that permit the transfer of money via an electronic funds transfer (EFT). In the digital era, online transactions have grown more prevalent. Since the Covid-19 epidemic, the digitalization trend has intensified in many spheres, including business. Online transactions are becoming an alternative to address a wide range of demands, from fundamental needs like food, drinks, and other home necessities to tertiary needs like education and healthcare.

Online transactions are simple to use and only need a few steps. Based on Smithsonian Magazine by Marissa Fessenden the first thing sold on internet is CD of Sting's "ten Summoner's Tales" by Kohn to his friend in Philadelphia that have writes by Peter H. Lewis for The New York Times. Our group would like to make research about the factor that affecting the online transaction. Based on website The Star, 22 million digital natives (in Malaysia), who spend close to nine hours online daily, play a key role in driving the growth of Malaysia's e-commerce sector. According to J.P. Morgan's website, about 62 percent of people that use smartphone to conduct online shopping. Currently, 47 percent of all e-commerce transactions are made using mobile devices. By 2021, it is predicted that the amount of e-commerce transactions made using mobile devices will reach 5.6 billion, growing at a CAGR of 31.4%. From website Statista published by (Joschka Muller)<sup>1</sup>, statistics shows the number of online transactions in Malaysia in 2020, by payment method is E-money amounted around 1.8 billion, internet banking around 1.1 billion and mobile banking around 0.9 billion.

Our group wants to investigate the elements that impact online transactions. We conducted this research to learn more about the factors that influence online transactions. This study will focus on several factor that will affecting online transaction. The purpose of this study is to examine the relationship between awareness of usefulness, perceived trust, behaviour awareness and subjective norms.

### 1.2 Research Objective

The general objective of this study is to identify the factors that affecting the use of online transaction among University Malaysia Kelantan students and specifically to study at the following:

1. To study relationships between awareness of usefulness affecting use of online transactions among University Malaysia Kelantan students.
2. To investigate relationships between perceived trust affecting use of online transactions among University Malaysia Kelantan students.
3. To analyse relationships between behaviour awareness affecting use of online transactions among University Malaysia Kelantan students.

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<sup>1</sup> Southeast Asia: digital payment transaction value 2022. (n.d.). Statista.

<https://www.statista.com/forecasts/1349417/southeast-asia-digital-payments-transaction-value-by-country>

4. To identify relationships between subjective norms affecting use of online transactions among University Malaysia Kelantan students.

## 2.0 Literature Review

### Use of Online Transaction

The word "online transaction" describes a phenomenon in which a person uses the internet to buy goods and services since doing so is necessary while shopping online. Online retail transactions have increased as a consequence of the development of ecommerce and the popularity of the internet (Zhang, Zheng & Wang 2020)<sup>2</sup>. Additionally, in order to attract and retain customers in today's competitive market, firms must use innovative strategies (Aref & Okasha 2019)<sup>3</sup>. E-money, debit or credit cards, internet banking, and other payment systems are all examples of online transactions (Chaiyasoonthorn & Suksa-ngiam, 2019)<sup>4</sup>. Numerous further advantages come with using online transaction solutions. For instance, they facilitate faster financial transactions, doing away with the need for lengthy waits and queues for payments and cash receipts. People may send and receive money remotely using their mobile phones or another form of payment (Najdawi et al., 2021)<sup>5</sup>.

### Awareness of Usefulness

Awareness of usefulness refers to a person's belief in using online transactions. Awareness of the usefulness of online transactions can be ensured when consumers believe that using such a system can meet the desires of consumers and their lifestyles, in addition to increasing efficiency in the way they conduct various transactions. Based on (Turban, et al., 2018)<sup>6</sup> an individual can shop for daily essentials and clothes online, order his favourite food online, hail a ride, make travel plans online, make a banking transaction and complete tax returns online. Shopee is the e-commerce with the highest number of visitors in 2020. In e-commerce, consumers are buyers and visitors to find the desired product (Suleman et al., 2019)<sup>7</sup>. Lin & Shiqian (2018)<sup>8</sup> found that factors such as ease of use, perceived benefits, and mobile efficacy had a significant impact on merchants' intentions to use mobile wallet services.

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<sup>2</sup> Zhang, J., Zheng, W., & Wang, S. (2020). The study of the effect of online review on purchase behavior: Comparing the two research methods. *International Journal of Crowd Science*. <http://dx.doi.org/10.1108/IJCS-10-2019-0027>

<sup>3</sup> Aref, M. M., & Okasha, A. E. (2019). Evaluating the online shopping behavior among Egyptian college-educated community. *Review of Economics and Political Science*. <http://dx.doi.org/10.1108/REPS-10-2018-0013>

<sup>4</sup> Chaiyasoonthorn, W., & Suksa-Ngiam, W. (2019). The diffusion and adoption of electronic payment systems in Bangkok. *International Journal of E-Business Research (IJEBR)*, 15(2), 102-115. <http://dx.doi.org/10.4018/IJEBR.2019040106>

<sup>5</sup> Najdawi, Z. C., & Said, R. (2021). Factors impacting digital payment adoption: An empirical evidence from Smart City of Dubai. *Advances in Science, Technology and Engineering Systems Journal*, 6(1), 1208-1214. <http://dx.doi.org/10.25046/aj0601137>

<sup>6</sup> Turban, E., Outland, J., King, D., Lee, J. K., Liang, T. P., & Turban, D. C. (2018). *Electronic Commerce 2018*. *Springer Texts in Business and Economics*. <https://doi.org/10.1007/978-3-319-58715-8>

<sup>7</sup> Suleman, D., Zuniarti, I., & Sabil. (2019). Consumer Decisions toward Fashion Product Shopping in Indonesia: The effects of Attitude, Perception of Ease of Use, Usefulness, and Trust. *Management Dynamics in the Knowledge Economy*, 7(2), 133-146. <https://doi.org/10.25019/mdke/7.2.01>

<sup>8</sup> Lin, L., & Shiqian, W. (2018). Factors influencing the behavior intention of Ebanking transactions through mobile phones in China. *Journal of Internet Banking and Commerce*, 23(1), 1-11. <http://dx.doi.org/10.31014/aior.1992.01.02.13>

Their research also showed that before making payment technologies available to their customers, merchants must be knowledgeable and aware of their uses and capabilities.

### Perceived Trust

Perceived trust is one of the important factors affecting the use of online transaction, because it is a subjective expectation that a party would uphold its responsibilities in accordance with the expectations of the stakeholders, it poses a significant barrier to e-payment systems (Alarooj, 2020)<sup>9</sup>. Wong and Mo (2019)<sup>10</sup> summed up and described trust as the attachment that is represented in the confidence and feeling of security to another party and said that customers did not buy a product due to worries about online safety. The ability to reach predicted levels of customer pleasure has been attributed to the role of trust as a catalyst in a variety of interactions between sellers and buyers (Nababan et al, 2021)<sup>11</sup>. Business is built on the foundation of trust. When two or more parties trust each other, a business transaction will take place. Other parties or business partners cannot simply recognise this trust and it must be created and proven from the start (Sudirman et al., 2020)<sup>12</sup>.

### Behavioural Control

Behaviour control is one of the factors that influence the use of online transactions among UMK students. Behavioural control could be linked to the theory of planned behaviour which was developed from the theory of planned behaviour, which already explained that a person's intention towards a behaviour was more likely to act determined based on two factors namely subjective norms and a person's behaviour when their behavioural control felt was high. Behavioural control could also be defined as an individual's confidence in the ability to perform a behaviour, where directly in today's growing aspect of online transactions will indicate behaviours that are perceived to give consumers aware of the availability of resources, knowledge and opportunities required in making online payments (Nguyen et al., 2020)<sup>13</sup>. Based on the study, it has shown that a subjective norm in predicting the intentions and behaviour of an online transaction user in terms of payment when realizing that a person was important for them to make online payments than they also tend to act as such.

### Subjective Norms

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<sup>9</sup> Alarooj, N. (2020). Which factors influence consumers' choice of payment method when purchasing online? (Doctoral dissertation, Auckland University of Technology).

<sup>10</sup> Wong, W. H., & Mo, W. Y. (2019). A study of consumer intention of mobile payment in Hong Kong, based on perceived risk, perceived trust, perceived security and Technological Acceptance Model. *Journal of Advanced Management Science* Vol, 7(2), 33-38. <http://dx.doi.org/10.18178/joams.7.2.33-38>

<sup>11</sup> Nababan, T. S., Panjaitan, F., Panjaitan, R., Silaban, P., & Silaban, P. H. (2021). Analysis of Consumer Consideration Factors on Moderated Purchase Decisions in Online Shopping By Consumer Trust (Study on Students of Master of Management Study Program, Postgraduate at HKBP Nommensen University, Medan). *Strategic: Journal of Management Sciences*, 1(2), 80-93. <https://jurnal.stiesultanagung.ac.id/index.php/strategic/article/view/18>

<sup>12</sup> Sudirman, A., Efendi, E., Harini, S., Xvhu, R. Q., Ri, V., Edvgh, D. & Kdv, W. (2020). Kontribusi harga dan kepercayaan untuk membentuk kepuasan pengguna transportasi berbasis aplikasi. *Journal of Business and Banking*, 9(2), 323-335. <http://dx.doi.org/10.14414/jbb.v9i2.2078>

<sup>13</sup> Nguyen, T. P. L., & Nguyen, V. H. (2020). Factors Affecting Online Payment Method Decision Behavior of Consumers in Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(10), 231–240. <https://doi.org/10.13106/jafeb.2020.vol7.n10.231>



According to *Yulianita (2018)*<sup>14</sup>, a perception of an individual towards social pressure surrounding certain behaviour is what we called subjective norm. People will assess whether other persons or society will accept or reject their behaviour. In the same journal state that a “normative belief is a significant understanding about preferences about whether one should or should not engage in the behaviour.” Hence, the judgement of other people or the society will influence an individual’s motivation in conducting certain behaviour. It also being mentioned in the different research by *Cheng & Yee (2014)*<sup>15</sup>, subjective norm is the most significant predicting factors on online purchase intention among university students in Malaysia. When consumer are aware that people who are important to them make online payment, they tend to do so (*Nguyen et al., 2020*)<sup>13</sup>. It was being emphasized that the impact of important people such as relative or family, friends and colleagues to consumer who have positive subjective norms towards a behaviour will also tend to engage in a positive behaviour.

### **Hypotheses Statement**

A new framework in Figure 2.1 is formulated based on the factors affecting the use of online transaction among University Malaysia Kelantan students. There are four (4) hypotheses are shown below:

- H1: There is a significant relationship between awareness of usefulness and use of online transaction among University Malaysia Kelantan students.
- H2: There is a significant relationship between perceived trust and use of online transaction among University Malaysia Kelantan students.
- H3: There is a significant relationship between behaviour awareness and use of online transaction among University Malaysia Kelantan students.
- H4: There is a significant relationship between subjective norms and use of online transaction among University Malaysia Kelantan students.

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<sup>14</sup> Yulianita, Y. (2018). Comparison of Generation X and Y: Perceived Usefulness, Perceived Ease of Use, and Subjective Norms on Purchase Intention in E-Commerce. *Jurnal Komunikasi Indonesia*, 7(2). <https://doi.org/10.7454/jki.v7i2.9677>

<sup>15</sup> Cheng, B. L., & Yee, S. W. (2014). Factors influencing consumers’ online purchase intention: A study among university students in Malaysia. *International Journal of Liberal Arts and Social Science*, 2(8), 121-133.

## Research Framework

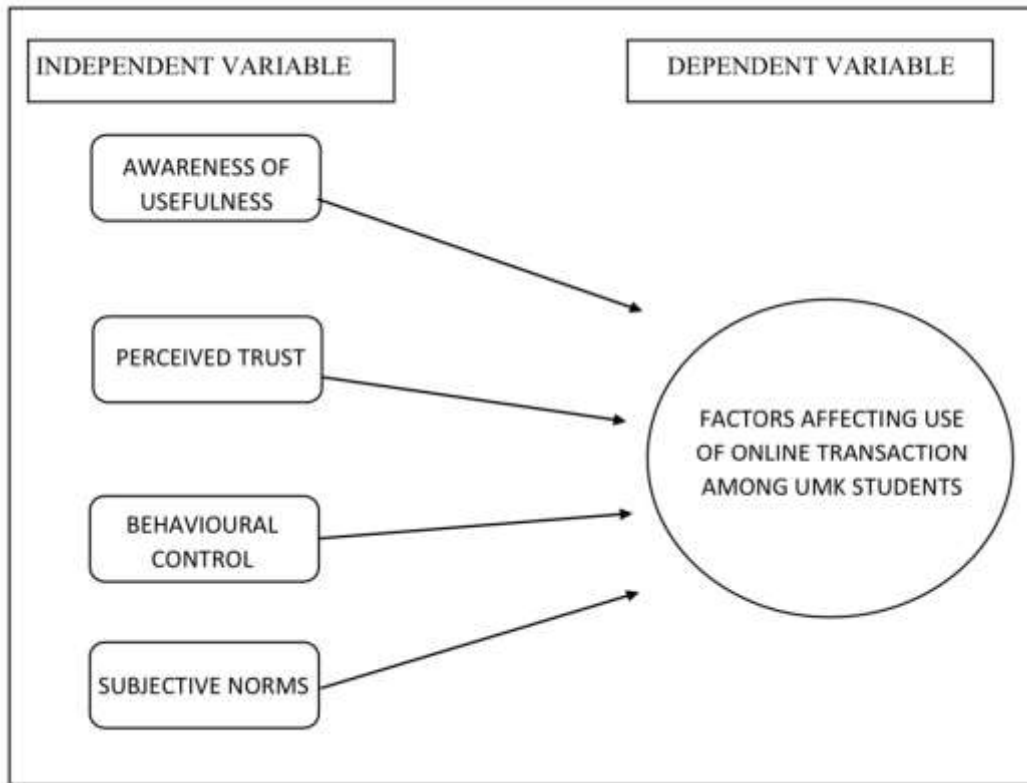


Figure 2.1: Research Framework for Factors Affecting Use of Online Transactions Among University Malaysia Kelantan

## 3.0 Methodology

In general, research design is a strategy for answering the research question using empirical data. Research design has also been divided into two, namely qualitative and quantitative data collection techniques. Qualitative analysis method is the collection of data that does not require any equations or even statistics for the data to be analysed. On the uncountable element also such as the uncountable emotions or feelings like what the researcher are feel or taste. On the other hand, quantitative analysis approach can also be defined as numbers that must be inferred using mathematics. In this research, we applied a quantitative research approach. A quantitative research field that examines awareness of usefulness, perceived trust, behavioural control, and subjective norms, offers data in more interpretable percentages. This quantitative research aims to construct approximately theories and hypotheses of factors affecting use of online transactions among University Malaysia Kelantan students.

Data collection method is a systematic process that need to be done for collecting and evaluating specific information in order to provide data with important questions and evaluate the result of the data collection process. The data that had been collected would have to test the hypothesis of this research in order to understand the situation.

There are two data sources that exist which is primary data and secondary data. Secondary data means that we are not gathering or creating our own empirical data. Instead it was the opposite of that method because we will use the data that already exist in other article,

research study and so on. On the other hand, primary data is the opposite of secondary data because we need to collect our own data. We can collect our own data using different method such as questionnaire, survey, interview and so on.

In this research we will use only primary data. The data would be collect through online questionnaire that we create from Google drive as we don't want to lose any data due to internet error or some mistake. The questionnaire would be given to 300 University Malaysia Kelantan's students which is the student are only whose study at Pengkalan Chepa. The link for questionnaire would be given through social media. The questionnaire will be collect after 2 week and will be analyse by our researcher.

## 4.0 Results and Discussion

### 4.1 Preliminary Analysis

In order to ensure that the questionnaires could be used for this research, a pilot test was conducted to test the validity as well as reliability of the questionnaires. The researcher conducted a pilot test on 35 respondents randomly.

Table 4.1: Results for Variable Reliability Statistic

Variable	Cronbach's Alpha	N of Items
Use of online transactions among UMK students	0.966	6
Awareness of usefulness	0.910	5
Perceived trust	0.972	5
Behavioural control	0.971	5
Subjective norms	0.953	5

According to the table 4.1, it shows that Cronbach's alpha of 0.70 or above is considered to be favourable. Meanwhile, a score of less than 0.6 is regarded as bad. Results of Cronbach's alpha for all variables are typically satisfactory. Additionally, the Cronbach's alpha values were 0.910, 0.971, and 0.953 for the independent variables awareness of usefulness, behavioural control, and subjective norms, respectively. Results for each independent variable were all larger than 0.6, suggesting that each variable was reliable and had a respectable level of internal consistency. The results for the dependent variables are 0.966, which is likewise regarded as excellent.

### 4.2 Demographic Profile of Respondents

In this section, the demographic information of the respondents including age, gender, race, years of study, total household income, use of online transactions, and frequency of using online transaction is explained.

Table 4.2: Respondents Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18 – 21 years old	74	24.1	24.1	24.1
22 – 25 years old	211	68.7	68.7	92.8
26 – 29 years old	19	6.2	6.2	99.0
30 years old and above	3	1.0	1.0	100.0
Total	307	100.0	100.0	

Table 4.3: Respondents Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	141	45.9	45.9	45.9
	Female	166	54.1	54.1	100.0
	Total	307	100.0	100.0	

Table 4.4: Respondents Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	204	66.4	66.4	66.4
	Chinese	42	13.7	13.7	80.1
	Indian	35	11.4	11.4	91.5
	Others	26	8.5	8.5	100.0
	Total	307	100.0	100.0	

Table 4.5: Respondents Years of study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	61	19.9	19.9	19.9
	2	48	15.6	15.6	35.5
	3	55	17.9	17.9	53.4
	4	131	42.7	42.7	96.1
	5	12	3.9	3.9	100.0
	Total	307	100.0	100.0	

Table 4.6: Respondents Total House Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RM 0 – RM 1,481	106	34.5	34.5	34.5
	RM 1,482 – RM 2,067	70	22.8	22.8	57.3
	RM 2,068 – RM 2,513	27	8.8	8.8	66.1
	RM 2,514 – RM 2,819	24	7.8	7.8	73.9
	RM 2,820 and above	80	26.1	26.1	100.0
	Total	307	100.0	100.0	

Table 4.7: Respondents Use of online transactions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	306	99.7	99.7	99.7
	No	1	.3	.3	100.0
	Total	307	100.0	100.0	

Table 4.8: Respondents Frequency of using online transactions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	At least once a week	253	82.4	82.4	82.4
	At least once a month	53	17.3	17.3	99.7
	Never	1	.3	.3	100.0
	Total	307	100.0	100.0	

### 4.3 Descriptive Analysis

This sections discussed in using a means to analyse for finding out which independent variable which includes awareness of usefulness, perceived trust, behavioural control and subjective norms that affect the use of online transaction among University Malaysia Kelantan students. Furthermore, the descriptive study involves a total of 307 respondents randomly from University Malaysia Kelantan students. Parametric statistics such as mean, standard deviation, and variance measurements will be used. Besides, the frequency analysis will be used in calculate the frequency or number of occurrences of each response chosen by the respondents.

Table 4.9: Awareness of Usefulness Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Ca1 I am aware that using online transaction improves my performance in shopping activities.	307	1	5	4.64	.611
Ca2 I am aware that online transaction saves more time than actual shopping purchase.	307	1	5	4.68	.617
Ca3 I find online transaction sites useful for my shopping activities.	307	1	5	4.68	.586
Ca4 Using online transaction allows me to manage my transactions more efficiently.	307	1	5	4.58	.687
Ca5 I believe online transaction is more useful than traditional ways of conduct transactions.	307	1	5	4.58	.683
Valid N (listwise)	307				

Table 4.10: Perceived Trust Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Cb1 I trust payments made through e-wallet platform will be processed securely.	307	1	5	4.53	.742
Cb2 I believe my personal information on an e-wallet will be kept confidential.	307	1	5	4.52	.777
Cb3 I believe that in case of any issue, the e-wallet service provider will provide me assistance.	307	1	5	4.53	.755
Cb4 I believe that the e-wallet service follow consumer laws.	307	1	5	4.57	.748
Cb5 I trust that a transaction conducted through an e-wallet is secure and private.	307	1	5	4.54	.759
Valid N (listwise)	307				

Table 4.11: Behaviour Awareness Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Cc1 I think I will use mobile payment to consume in the future.	307	1	5	4.67	.560
Cc2 In my daily life, I will continue to use mobile payment.	307	1	5	4.61	.630
Cc3 I am willing to bind my credit card or financial account to mobile payment.	307	1	5	4.54	.750
Cc4 After most of my friends use mobile payment, I will consider to use it.	307	1	5	4.63	.615
Cc5 I will use mobile payment more frequently in the future.	307	1	5	4.65	.594
Valid N (listwise)	307				

Table 4.12: Subjective Norms Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Cd1 People who are important to me would think that I should use e-payment system.	307	1	5	4.54	.687
Cd2 People who influence my behavior would think that I should use e-payment system.	307	1	5	4.55	.714
Cd3 People whose opinions are valued to me would prefer that I should use e-payment system.	307	1	5	4.55	.696
Cd4 It is expected that people like me should use e- payment system.	307	1	5	4.60	.636
Cd5 I think it is important that everyone in the society should use e-payment system.	307	1	5	4.61	.629
Valid N (listwise)	307				

#### 4.4 Validity and Reliability Test

In this sections, the researcher determined the reliability of surveys with several Likert scale questions, Cronbach's alpha tests were used. These inquiries gauge latent variables, or concealed or imperceptible characteristics, such as a person's conscientiousness, neurosis, or openness. In the actual world, they are incredibly difficult to quantify. You may determine how closely connected a bunch of test items are by looking at the Cronbach's alpha. In this study, Cronbach's alpha analysis was performed to assess reliability, with alpha values of 0.6 and above being acceptable.



Table 4.13: Cronbach's Alpha

VARIABLES	NO OF ITEM	CRONBACH'S ALPHA	RELATIO NSHIP
Awareness of Usefulness (IV 1)	5	.877	Acceptable
Perceived Trust (IV 2)	5	.964	Acceptable
Behaviour Control (IV 3)	5	.923	Acceptable
Subjective Norms (IV 4)	5	.936	Acceptable
Use of Online Transactions Among UMK Students (DV)	6	.975	Acceptable

#### 4.5 Normality Test

The most popular techniques to check the normality of the data are the Shapiro-Wilk test and the Kolmogorov-Smirnov test, which are both well-known tests of normality. The statistical programme "SPSS" that we use allows us to do normality tests. Any variables that have p-value less than 0.05 is the data regarding abnormality. Based on the table below, it demonstrates that the test of normality of all variables in the study through Kolmogorov-Smirnova and Shapiro-Wilk tesr. The result to each test shows that all the significant value, p is 0.000 which is less than 0.05 thus making the data as abnormal because does not follow a normal distribution.

Table 4.14 Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Use of online transactions	.279	307	.000	.704	307	.000
Awareness of usefulness	.302	307	.000	.721	307	.000
Perceived trust	.290	307	.000	.695	307	.000
Behavioural control	.328	307	.000	.714	307	.000
Subjective norms	.304	307	.000	.739	307	.000

a. Lilliefors Significance Correction

## 4.6 Hypotheses testing

In this study, the Pearson correlation coefficient was used to determine the strength of the linear relationship between two variables. We will determine the relationship between the independent variables (IV) of awareness of usefulness, perceived trust, behavioural control, subjective norms and the dependent variable (DV) of factors affecting use of online transactions among University Malaysia Kelantan students. Thus, each of these variables is measured to see how closely the two variables are related to each other.

### 4.6.1 Hypotheses 1

H1: There is a significant relationship between awareness of usefulness and use of online transactions among University Malaysia Kelantan students.

Table 4.15: Correlation analysis between use of online transactions and awareness of usefulness

		Use of online transactions	Awareness of usefulness
Use of online transactions	Pearson Correlation	1	.780**
	Sig. (2-tailed)		.000
	N	307	307
Awareness of usefulness	Pearson Correlation	.780**	1
	Sig. (2-tailed)	.000	
	N	307	307

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 4.6.2 Hypotheses 2

H2: There is a significant relationship between perceived trust and use of online transactions among University Malaysia Kelantan students.

Table 4.16: Correlation analysis between Use of online transactions and perceived trust

		Use of online transactions	Perceived trust
Use of online transactions	Pearson Correlation	1	.592**
	Sig. (2-tailed)		.000
	N	307	307
Perceived trust	Pearson Correlation	.592**	1
	Sig. (2-tailed)	.000	
	N	307	307

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 4.6.3 Hypotheses 3

H3: There is a significant relationship between behaviour awareness and use of online transactions among University Malaysia Kelantan students.

Table 4.17: Correlation analysis between Use of online transactions and behaviour awareness

		Use of online transactions	Behavioural control
Use of online transactions	Pearson Correlation	1	.751**
	Sig. (2-tailed)		.000
	N	307	307
Behaviour awareness	Pearson Correlation	.751**	1
	Sig. (2-tailed)	.000	
	N	307	307

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 4.6.4 Hypotheses 4

H4: There is a significant relationship between subjective norms and use of online transactions among University Malaysia Kelantan students.

Table 4.18: Correlation analysis between Use of online transactions and subjective norms

		Use of online transactions	Subjective norms
Use of online transactions	Pearson Correlation	1	.761**
	Sig. (2-tailed)		.000
	N	307	307
Subjective norms	Pearson Correlation	.761**	1
	Sig. (2-tailed)	.000	
	N	307	307

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## 4.0 Discussion and Conclusion

### 5.1 Implication of the study

Since cashless transactions are cost effective and generate revenue for financial institutions, they may have more motivation to adopt cashless systems. As we know, financial institutions act as a market for assets and money so that it allows capital to manage risk for more productive use. Financial institutions also offer debit and credit cards as the most popular cashless payment options worldwide.

Financial institutions also provide banking card services to their customers such as secure payment options, bank and merchant rewards, satisfaction guarantees and so on. With this online or cashless transaction, the community and customers can save time by eliminating the need to carry cash and wait in line for ATM services. The number of users has grown in recent years as more individuals begin to utilise digital payment applications. As a result, several changes must be done in order for cashless transactions to be used in a secure and easy manner.

## **5.2 Limitation of the study**

To make additional research on this subject more precise and significant, there are a number of areas that might be improved. The researcher can obtain a deeper and larger sample spanning use of online transaction utilisation among the Malaysian population for the proposed future study. This is done in an effort to ensure that internet transactions are used in Malaysia in a larger and more encouraging way.

There were various lacks found during the investigation. The students at University Malaysia Kelantan seem initially less interested in responding to the questionnaire, and the researcher's time is insufficient for managing and finishing the investigations. Additionally, there are not enough respondents in the area of the institution for the researcher to create a questionnaire with Malaysian University Kelantan students as respondents. The fact that not all participants expressed commitment to or participation for the study results in a lack of reliable data from respondents for this study. The researcher had to find additional respondents to finish the survey because a few of respondents gave no answers at all. Additionally, several respondents provided false information on the survey, which made it more difficult for the researcher to finish the study.

## **5.3 Recommendation of the study**

In order to expand the sample size, the sample size in future studies may be raised to concentrate on the topic use of online transaction users to the state or the entirety of Malaysia. Second, broadening the variables that influence how people use online transactions, focusing on more than just awareness of online transaction, perceived trust, behavioural control, and subjective norms. As a result, more in-depth research on bigger aspects of the use of online transactions can be conducted utilising a combination of quantitative and qualitative research techniques. In the end, respondents did not create any open-ended questions for them to answer, they just responded to a scaled questionnaire online. When employing the interview approach, researchers can get a lot of responses, clear up any doubt, and follow up on partial responses right away. As an outcome, this approach can lessen misconceptions and enhance results.

## **5.4 Conclusion**

As a conclusion, the findings of this study have make a positive relationship between the factors that influencing which awareness of usefulness, perceived trust, behaviour awareness and subjective norms with the use of online transaction among University Malaysia Kelantan students. And among the three variables contribute the most to the use of transactions in is awareness of usefulness the second largest contribution subjective norms. Perceived trust is the least because it has the smallest coefficient. It can be concluded that all the independent variables in this study are awareness of usefulness, subjective norms and behaviour awareness have a strong relationship to be factors that influence the use of online transaction among University Malaysia Kelantan through the multiple linear regression method. As a result, the

researcher hopes that all the knowledge provided in this study can benefit the parties involved and policymakers to regularly upgrade their technical infrastructure to big data and analytics to better understand the factors that influence online transactions among University Malaysia Kelantan students provide the services they expect.

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## Ecommerce Trends During Covid-19 In Malaysia

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### ***Abstract:***

*The emergence of Covid-19 disease had caused the government to make the precautionary step to be followed by the community known as Standard Operating Procedure (SOP) to avoid infection which also affect and made changes to e-commerce trends in Malaysia. The main purpose of this study is to clarify the trends of e-commerce in Malaysia due to the existence of the Covid-19 pandemic. The qualitative research method was used to conduct this study by referring to journals, official websites (WHO, KKM, and OECD), and online news portals. Through this study, the discussion comprises three matters including knowledge of e-commerce trends response to the pandemic, customer behavior during Covid-19 in Malaysia, and the impact of Covid-19 on e-commerce trends in Malaysia. The findings of the research objective to examine consumer behavior during Covid-19 in Malaysia suggest that consumer purchasing behavior and the shopping experience are both influenced by consumer concerns about a shortage of goods available. The Covid-19 pandemic had drastically transformed traditional shopping, and it was likely to force people to adopt new norms and practices. The e-commerce industry has grown as a result of the Covid-19 pandemic in Malaysia. This can be stated that the effect of the Covid-19 pandemic caused the trend of e-commerce in Malaysia to increase.*

**Keywords:** Covid-19, e-commerce trends, customer behavior, media, purchasing behavior, pandemic.

## **1. Introduction**

E-commerce Trends During Covid-19 Pandemic In Malaysia are the main of the topic. E-commerce refers to the online purchase and sale of products and services, as well as the movement of funds and data to complete the transaction. Electronic or online commerce are other terms for it. A trend describes the overall direction in which something is changing, developing, or deviating. The SARS-CoV-2 virus causes coronary artery disease (COVID- 19).The majority of those infected with the virus will have mild to moderate respiratory symptoms and will recover without the need for specific treatment. Some, on the other hand, will get extremely unwell and require medical assistance. COVID-19 (coronavirus illness 2019) is a disease caused by the SARS-CoV-2 virus, which was found in Wuhan, China, in December 2019. It is very infectious and has spread rapidly over the world. COVID-19 is most commonly associated with respiratory symptoms that resemble a cold, flu, or pneumonia. COVID-19 has the potential to infect more than only your lungs and respiratory system. The condition may also affect other sections of your body. In other words, when the covid19 pandemic came, it will

impacted businesses and organizations that use ecommerce that are closely linked.

Ecommerce began more than 40 years ago, when early technologies such as Electronic Data Interchange (EDI) and teleshopping were introduced in the 1970s, paving the way for the modern-day ecommerce business as we currently know. The history of ecommerce is inextricably linked to that of the internet. When the internet was first made available to the general public in 1991, online purchasing became conceivable. Amazon was one of the first ecommerce sites to launch in the United States, and many of firms have since followed suit. Since the beginning of internet purchasing, the ease, security, and delightful user experience have all grown dramatically. We shall explore some of the important actors and ecommerce milestones in this post.

### **1.1 Problem Statement**

The world economy is altering cash flows in the sphere of e-business, which demonstrates the rising impact of the Internet on global economic processes. This change is taking place within the backdrop of global changes that are implicated in pandemics. As a result of being confined to their homes because to the worldwide lockdown, society is learning about new technology. The modern consumer is able to view the range of products that are being sold in real time, find the appropriate product in a short amount of time, learn about its characteristics, read the reviews that other customers have left, select a delivery method and time that are convenient for them, and make online payments using a mobile phone rather than a traditional desktop computer. The COVID-19 pandemic was also a factor in the development of innovative approaches to international trade, including as e-commerce and mobile commerce. In light of this fact, the need to develop scientific and methodological approaches to the study of the trajectory and features of e-commerce and m-commerce, an analysis of their impact on the online shopping and sales industry, a post-pandemic forecast in international trade trends, and the priorities of e-business must be addressed.

In the East Asian, Indonesia were founded as one of the country. The creative economy of Indonesia has enormous untapped potential, but it confronts a variety of obstacles. The expansion of Indonesia's creative sector is expected to reach new heights in 2018. This forecast is consistent with the country's e-commerce industry's strong growth over the previous five years. The creative economy is predicted to become a new economic force in the future. However, the majority of the industry is made up of small and medium-sized businesses that continue to promote their goods exclusively locally. Furthermore, just 50.87 percent of businesses and entrepreneurs use e-commerce in their operations. While the adoption rate varies per subsector, only two subsectors have more than a 75% e-commerce adoption rate. Poor Internet use and low E-Commerce adoption may imply that many firms continue to depend on offline transactions.

E-commerce, technology, business travel, and the economy are all affected by the coronavirus (Covid-19). It has already claimed the lives of numerous people and continues to do so. Furthermore, every country uses lockdown protocols as a preventative precaution, and Malaysia has followed suit. Malaysian e-commerce just recently began to take off and was expanding at a gradual but steady and robust rate. The development of technology was directly proportionate to how much e-

commerce is expanding. In the early 2000s, there was a rise in the availability of internet services and in the use of computers in homes and workplaces, which sped up Malaysia's e-commerce expansion. In addition, there was a significant inflow of new companies selling appealing items on internet platforms stated ecommerceDB (2020). New ecommerce infrastructure sets for different platforms appeared in the late 2000s. These innovations were well-received and quickly rose to prominence as the most widely used internet marketplaces. For the first time ever, global e-commerce (B2C) sales crossed US\$1 trillion at the end of 2014, with double-digit growth seen across every continent. According to Globaldata (2020). The COVID19 epidemic also ended up being a blessing in disguise for Malaysia's e-commerce industry in 2020, when it helped fuel up to 37 percent % growth. Is it true that Covid19 has affected the buying and selling trends?

## **2. Literature Review**

### **2.1 Coronavirus (COVID-19)**

Coronavirus is considered to be one of the infectious diseases that occurs mainly after contaminating humans with respiratory distress syndrome (Guo, Coa & Hong, 2020). The World Health Organization (WHO, 2020) declared the cause of this epidemic outbreak was a new virus discovered in 2019 and named the illness CoronaVirus (COVID19). Malaysia is no exception to this situation, where not only is the case rate of COVID-19 infection increasing daily but also affecting the national economy. According to Sarkodie & Owusu (2020), the impact of COVID-19 not only on global human lives and other related human social, but also in economic activities that are evident and enormous.

Research carried out by Rupani et al (2020) also shows that COVID-19 has impacted every aspect of human life and the global economy. Cheng (2020) argued that it is clear this epidemic will have intensively dangerous effects on the Malaysia macro economy and the welfare of the Malaysians. Due to the COVID-19 epidemic, businesses had to look for new options and it was found in e-commerce (The Star, 2020). As a result, the COVID-19 has given impact to the economy and also speed up the adoption and transition towards digital e-commerce in a veritably significant (OECD, 2020).

### **2.2 Customer Behavior**

According to Donthu & Gustafsson (2020), the pandemic has dramatically changed businesses and consumer behavior. Yuen et al (2020) stated that consumer behavior changed can be due to the panic buying and herd mentality behaviors. This can also be seen at the start of the MCO in March 2020, the community bought a huge number of foods and cleared some of the hypermarket to be used as stock. While Kyriakopoulou & Kitsios (2017), argued that advertisement and social media can be affect consumers' behavior decision making before purchase. Thus, the behavior of the customers in Malaysia generally can influence the e-commerce trends. The customer's purchase behavior would be affected due to the slowdown in the country since there would be a lack of products and services caused by COVID-19 (Ulpiano et al., 2021).

According to Duygun & Erdal (2020), using Maslow's hierarchy of needs theory, people prioritize physiological needs such as food, beverage, shelter, and clothing over non-essential needs in the current period. Security requirements were met concurrently by purchasing masks, sanitizers, and other protective equipment. As a result, more online purchases are made to protect families from COVID-19.

### **2.3 E-commerce trends**

According to Andrienko (2020), the effects of the Coronavirus very depending on the kind of product marketed, implying that the impact of COVID-19 ranges from extremely high on certain items to less significant on others. As a consequence of the virus, people are remaining inside, keeping their social distance, and purchasing and working online from home, which has resulted in an overall rise in e-commerce sales. For example, internet grocery buying at Walmart has climbed by 74%. According to Datuk Ahmad Maslan, Deputy Minister of International Trade and Industry (NSTP, 2018), the contribution of the e-commerce industry to the expansion of the nation's economy has seen significant rise in recent years. He went on to state that information obtained from the Department of Statistics indicated that the contribution of electronic commerce to the gross domestic product of Malaysia increased to 6.1 percent or RM74.6 billion in 2016, up from 5.9 percent or RM68.3 billion in the previous year. In the year 2020, the COVID19 epidemic turned out to be somewhat of a gift in disguise for the e-

commerce business in Malaysia, where it contributed up to 37 percent growth stated GlobalData (2020).

### **2.4 Marketing Information**

The information can be distributed to consumers through various channels such as social networking, viral marketing, media advertising, the internet and email marketing (Chaffey, 2015). According to Wahab et al (2015), e-commerce marketing is a new channel with minimal cost, interactive and has universal access where new or smaller companies have a chance to survive. While Kyriakopoulou & Kitsios (2017) stated that information from social media or online advertisements can influence consumer behavior, decision-making and purchase intention on e-commerce.

Yen (2014) explains that consumer behavior and purchasing intentions have changed due to the information and growth of the internet. In addition, Chew & Kim (2021) stated that internet websites are crucial for understanding consumer behavior and for providing as much information as possible via various marketing channels to assist consumers in making the best decision. This study uses the Technology Acceptance Model (TAM), which is an information systems theory that models how users come to accept and use a technology. Generally, customers can get any data and information easily through the internet (Wang et al., 2005).

### **2.5 E-commerce Services**

According to Filina-Dawidowicz (2015), logistics is primarily connected with shipping, however the aspects of logistics that are pertinent to e-commerce include not just the procedures pertaining to storage and supply but also document flow, payment processing, and resource planning. E-commerce is distinguished by being technology-driven, innovative in terms of business models, and rapidly expanding on a scale. It has a significant positive impact on the efficiency of operations and contributed to the rise of productivity stated by Yang et al (2017). Additionally, logistics is often highlighted as one of the most important sources of competitive advantage for the e-commerce business (Kozerska, 2014; Ambroziak and Tkaczyk, 2015). The rapid development of technology, the internet, and the services it provides have all contributed to the emergence of new markets stated D'silva (2010). Gajendra and Wang (2013) has said that the characteristics of a

website give a medium for functions that are able to communicate messages from text-based to multimedia formats, therefore delivering a depth of product information and responsiveness to the client.

## **2.6 Research Gap**

A research gap, according to Hamid (2021), is a knowledge gap or a lack of information that has not yet been investigated within the field of research. Another definition of a research gap is a subject or area where the availability of sufficient or acceptable data prevents reviewers from concluding on a particular question (Ashikul, 2020). A necessary first step in creating a research agenda is the clear identification of research gaps (Azeez,2022).

Based on the argument in the literature review above, it is found that the researchers discuss numerous themes. Firstly, it is about Coronavirus or Covid-19. The pandemic of Covid19 had caused the economy of Malaysia to fast the adoption of e-commerce as a significant option for economic growth. This is because it obviously effective and helpful in surviving the economic condition as there are obstacles for most Malaysian that exist due to the rise of the Covid-19 pandemic in Malaysia. Secondly, there is also the theme about customer behavior in the literature review. Customer behavior changes on making more preference for buying online or through the e-commerce than before the Covid-19 pandemic due to several reasons. Some of them are to obey the government regulation of MCO, avoid

outdoor social interaction as a precaution against Covid-19, and spend less time outside which is an unhealthy environment.

Thirdly, the literature review above also discusses about e-commerce trends. There are explained by highlighting the statistic of the contributions of e-commerce trends towards economic growth. Moreover, in the literature review also discussed about marketing information. Product or service marketing that distributed throughout online alternatives provide many advantages for both seller and buyer. For example, in terms of costs, survive chance for small company, provide 24/7 customer support, and easy. Lastly, it is about ecommerce service. E-commerce service involved dissimilar aspects in terms of business model with offline service.

2.7 Research Framework

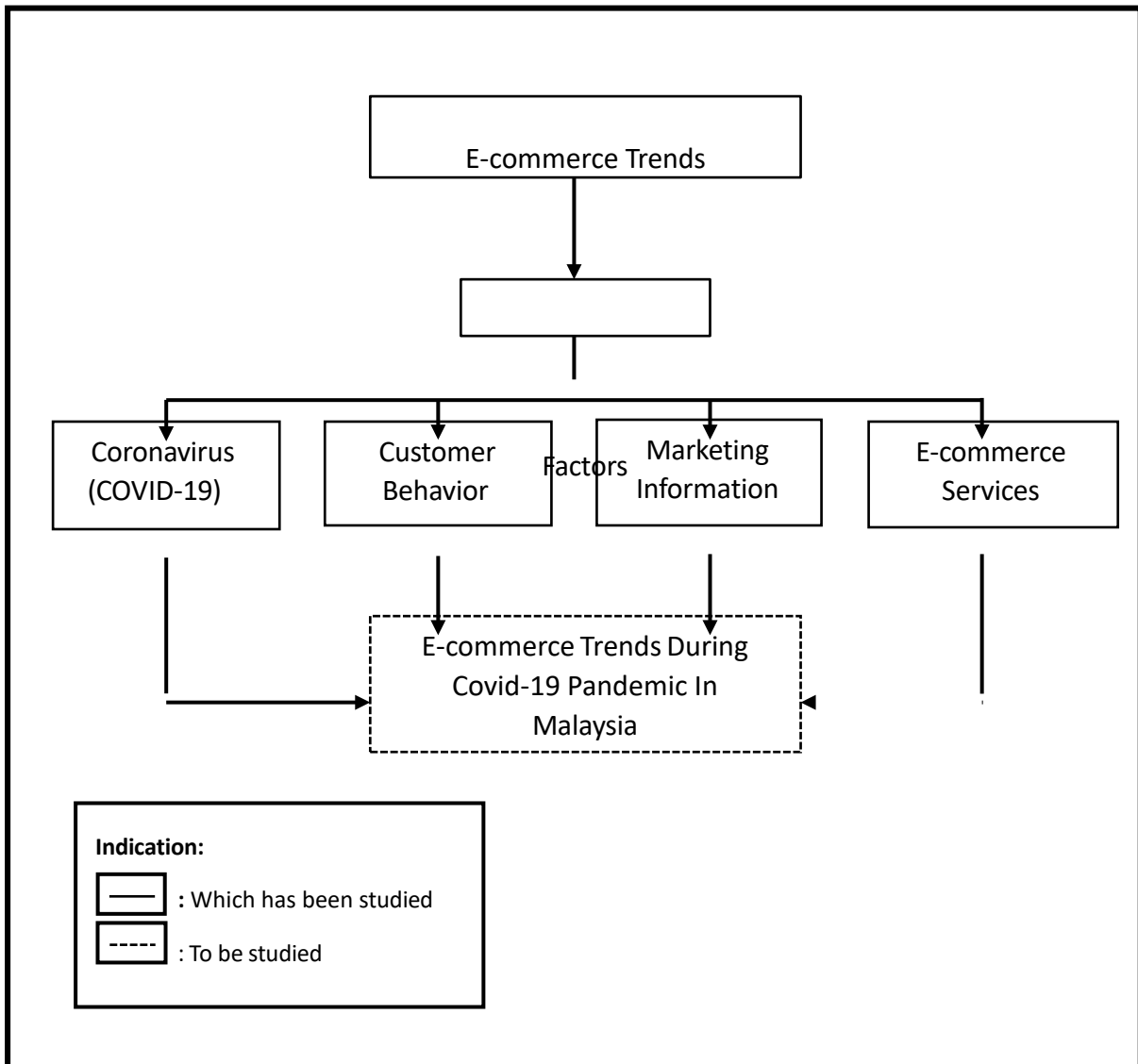


Figure 1: Research framework



Based on literature review, the research framework of the study were developed and shown above in figure 1. The purpose of this study is to analyze e-commerce trends during the Covid- 19 pandemic in Malaysia. This study is starting to look at e-commerce trends. The use of e- commerce has a very high potential. E-commerce platforms are increasingly in demand by customers nowadays even during the covid-19 pandemic. Most people use e-commerce platforms during the covid-19 pandemic because they have many options, saving time as well as convenience when making choices, purchases and comparison of goods.

### **3. Research Methodology**

#### **3.1 Research Design**

This study was conducted using a qualitative research method which according to Bhandari (2020), asserts that qualitative research entails gathering and studying non-numerical data. To collect "factual data," qualitative research techniques are particularly helpful. Descriptive research was the form of qualitative analysis used in this study. Other researchers often collect qualitative data using a variety of methods, including focus groups, observation, case studies, and exploratory research. It can be utilized to uncover intricate details about a situation or to spark fresh study concepts. Descriptive research used in this study aims to accurately and systematically describe a population, situation, or phenomenon. It can respond to inquiries about what, where, when, and how, but not why (McCombes, 2019). This method is suitable for finding the fact in the scope of e-commerce trends during Covid-19 in Malaysia. Since descriptive research entails thoroughly analyzing each variable before reaching conclusions, it can be an effective way to test the validity of existing conditions which will support the accuracy level of this research.

#### **3.2 Data Collection Method**

This study used a qualitative descriptive method to examine e-commerce trends, customer behavior, and the Covid-19 pandemic in Malaysia. According to Palinkas (2015), qualitative data has three types that researchers use which are observation, in-depth interviews, focus group discussions, and document analysis. In this study, the researcher used secondary data where the data is obtained through a literature review by referring to journals, official websites, and online news portals.

#### **3.3 Data Analysis Method**

To verify that the information investigated in this study is valid, the data will be assessed based on content analysis and assisted by the ATLAS.ti software program. The qualitative study where acquires non-numerical data and all data is based on texts such as books, articles, journals, etc. Because this study held a new nature of research, descriptive research is more suitable through content analysis for a better understanding of the study (Renz, Carrington & Badger, 2020). The methods used in the data analysis are as follows:

##### **3.3.1 Content Analysis**

Content analysis is one of the techniques used in a qualitative study intended to interpret the contents of the texts. This kind of analysis is used in acquiring objective content of the text to learn about the meanings, themes, and patterns that were used in the study. Qualitative content analysis usually begins at the beginning of data collection. This process is an initial level in analyzing data of information

and then will help the concept development and data collection towards sources that are more useful in solving the research question of research (Deterding & Waters, 2021). The results obtained from this study will help in supporting new theories on e-commerce trends during the Covid-19 pandemic in Malaysia and it can also validate existing theories.

### **3.3.2 Computer Support for Qualitative Content Analysis**

Qualitative content analysis is the process of sorting out, overseeing, and coding qualitative data in a more productive way. It can be carried out by a computer program utilizing a set of search dictionaries and algorithms or by human coding according to a predefined coding scheme. The fundamental capacities that are upheld by such programs incorporate content editing, note and notice taking, coding, content recovery, and category manipulation (Mayring, 2020).

### **3.3.3 Computer-Assisted Qualitative Data Analysis Software (CAQDAS)**

The advent of computer software that makes it easier to analyze qualitative data has been one of the most important advancements in qualitative research. The field of computer-assisted qualitative data analysis, or CAQDAS, has seen an expansion in terms of the number of individuals utilizing these programs. Concerns include growing determinism and rigidity in processes, prioritization of coding and retrieval techniques, increased pressure on researchers to concentrate on quantity and rather than depth and meaning. This program aids in the management, organization, and analysis of information (Olapane, 2021).

### **3.3.4 ATLAS.ti**

ATLAS.ti is used to code, analyze transcripts, or even draw diagrams that connect various emergent concepts. The primary goal of ATLAS.ti is to create tools that make coding processes easier and categorize data according to visual and network themes for interpretation. (Rozani & Pigola, 2020). It is a potent workbench for the qualitative analysis of significant amounts of textual, graphical, audio, and video material. Researchers will use it for coding and analyzing transcripts and field notes, constructing literature reviews, creating network diagrams, and data visualization based on e-commerce trends during the Covid-19 pandemic in Malaysia.

### **3.4 Reliability and Validity of Data**

In this qualitative study, the researchers make use of triangulation to ensure the validity and reliability of the data collected. Triangulation is a strategy used by qualitative researchers to examine and confirm the validity of their findings (Lisa, 2022). Then, according to Noble and Heale, (2019) also state that triangulation is a technique for improving the credibility and validity of study results. Researchers use a variety of techniques to acquire data from the same data source, which are websites, journals, and articles. Triangulation has also been seen as a qualitative research approach for testing validity via the convergence of information from several sources. Thus, this strategy can efficiently and thoroughly handle research challenges.

## 4. Findings and Discussion

### 4.1 Knowledge on E-Commerce Trends Respond to The Pandemic

E-commerce can give small and medium-sized businesses a competitive edge, as it allows them to connect with more customers and expand their operations (Purnamasari, 2020). Greater management awareness of e-commerce adoption can also enhance a firm's ability to dedicate resources to embracing e-commerce technology (Moldabekova, 2021), which in turn can boost the possibility for SMEs to maintain their businesses (Wicaksono, 2021). The Covid- 19 pandemic has caused customers to alter their shopping habits out of fear of being infected (Flores et al, 2021) and shift towards e-commerce platforms to curb the spread of the virus.

Innovation, entrepreneurship, and knowledge are key to economic growth and competitiveness, as supported by Pineiro et al. (2020) and Nafei (2016). Proactiveness, driven by collaboration and cooperation, can be enhanced by social capital from corporate social networks, as shown by Chen et al. (2016) and Tu (2020). This social capital also positively impacts organizational performance through the production of shared knowledge (Wang, 2016).

This study found that e-commerce users are needed to facilitate communication in cyberspace. During the Covid-19 pandemic happens, this can make it even easier to do business online. Merchants can continue to trade as usual when they use the e-commerce platform, and customers can buy goods as usual when they use the same platform. Therefore, using e- commerce can help businesses succeed because of many people use their cell phones despite the shutdown. Because they cannot be in between customers and sellers face-to-face.

### 4.2 Customer Behavior during Covid-19 in Malaysia

Kaur et al. (2020) reported that the Malaysian public panicked and engaged in frenzy buying after the Prime Minister announced Phase 1 of the Movement Control Order, despite reassurances from the government about food availability. This behavior was influenced by low trust in media organizations, as argued by Zychowicz et al. (2020), and by perception, fear of the unknown, coping behavior, and social psychology, as identified by Yuen (2020).

According to Kaur et al. (2020), fear of a lack of goods sold affects consumer purchasing behavior and the shopping experience during the first phase of the Movement Control Order (MCO) in Malaysia. Zychowicz et al. (2020) who found a correlation between perceived stresses, fear of limited access to food, and purchasing larger amounts of food. Mass and social media play a role in amplifying these fears and causing a domino effect on consumer behavior, as noted by Kaur et al. (2020).

According to Nair et al. (2022), the Covid-19 pandemic caused significant changes in consumer behavior, including the development of new buying and shopping habits, which is in line with research that found customers everywhere were developing new ways of looking for products and brands. For example, a Malaysian survey found that 85% of customers now wash their hands or use hand sanitizer more regularly than before. This behavior change is also associated with greater self-efficacy in practicing preventive behaviors, such as handwashing and wearing masks. This is supported by Sheth (2020) and Gu et al. (2021) who found that consumers' priorities have shifted from cheap goods and services to health and safety during the pandemic.

### **4.3 The Impact of Covid-19 on E-commerce Trends in Malaysia**

The Covid-19 pandemic has significantly impacted global e-commerce trends, with many consumers switching from traditional offline to online shopping (Nakhate & Jain, 2020; Whiteford, 2020). According to GlobalData (2020), the e-commerce market in Malaysia is expected to grow by 24.7% in 2020, and Export.gov (2019) reports that Malaysia's e-commerce sector has surged by 37% compared to pre-pandemic levels.

The Covid-19 pandemic has led to a significant increase in online grocery shopping in Malaysia, with popular apps like Tesco, Lazada, and Shopee experiencing a sharp rise in daily downloads at the end of February (Hasanat et al., 2020). A survey by Rakuten Insight (Statista, 2020) revealed that 34% of participants said the pandemic led them to make more online purchases. Research by Jaafar (2020) found that 73% of Malaysians reported that the pandemic outbreak had improved their attitudes towards online shopping.

The growth of e-commerce in Malaysia during the pandemic has been facilitated by improvements in technology and internet services (Marcom, 2020). Upgrades in internet technology have led to increased e-commerce and more cost-effective logistics operations due to decreased costs and delays (Luo et al., 2011). The rise in online shopping has also led to an increase in demand for courier services, as reported by the Department of Statistics Malaysia (2021). This high demand has put pressure on logistics companies, who struggle to meet demand and have few storage facilities, leading to delays in delivery (Mazlan, 2021; Liu et al., 2013).

### **4.4 Network View (Atlas.ti)**

The network view below uses numerous articles from google scholar as resources which related to the discussion above. Besides, the main codes in this Atlas.ti network view are comprised of knowledge, customer behavior, and the impact of Covid-19. There have straight lines which means a strong connection with each other. While the break lines mean they have a weak connection. Furthermore, the type of layout in this network view is random to ensure the diagram shows a systematic and clear structure of every connection. There are seven points obtained from four articles categorized under the code of knowledge. Besides, under the code of customer behavior, it is found that there are eight related points acquired from the two articles. Then, it can be identified there are six points categorized under the code of impact of Covid-19 which was obtained from three articles.

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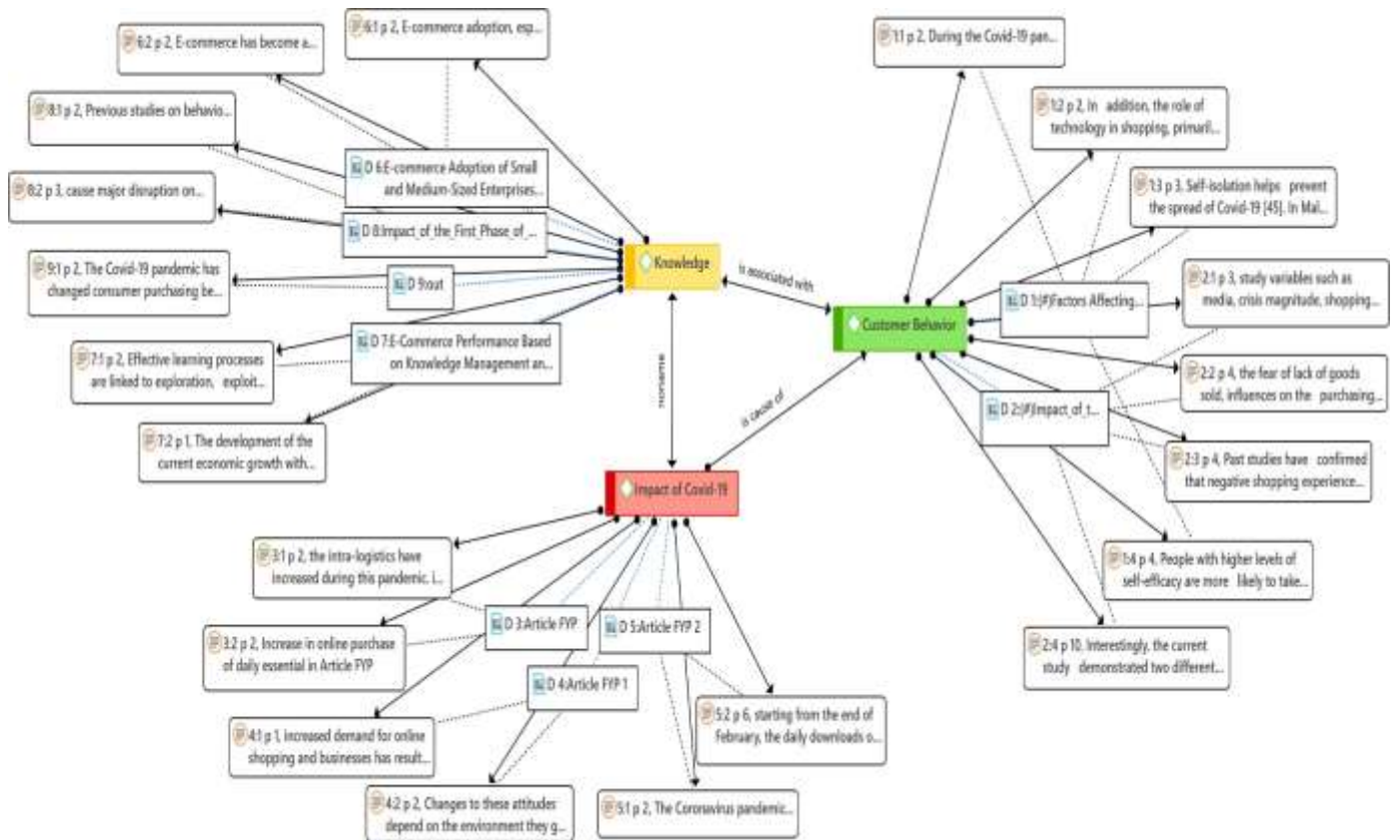


Figure 2: A Network View of E-Commerce Trends During Covid-19 Pandemic in Malaysia

## **5. Implications**

As a result of the findings of this study, there are several implications of this study, including the following:

### **5.1 Customers**

Customers have a wide range of options and the ability to compare prices, quality, and services. With that, clients can satisfy their needs and make the best decision. Online buying, or e-commerce, has a number of benefits over other types of enterprises. With services like this e-commerce, users or purchasers have more possibilities and can engage in overly excessive buy and sell activities.

### **5.2 Merchants**

E-commerce allows for the elimination or reduction of costs associated with renting warehouse space, insurance, leasing fees, quality control, and other forms of storage in the transfer of goods and services. Additionally, merchants can interact with clients directly rather than merely gathering information and responding immediately and online. In this manner, you may immediately address all of the flaws. This expedites the process of changing policies and plans. Lastly, the ability to advertise and market products or services across borders is made possible by e-commerce, which leverages the internet.

### **5.3 Manufacturer**

Producers and manufacturers easy to get the latest information with the use of technology. This allows companies to send marketing messages and product information to consumers via the internet. Even the accuracy of the information allows the manufacturer to make the right decision that will bring profit to the company.

### **5.4 Policy Makers**

The government needs to provide support related to legal aspects that are not burdensome, simple and consistent. Regulations should be transparent and protect rights, property and control fraud. Where this policy helps combat fake trading websites that cause users to not get the ordered item even though payment has been made. In addition, policy makers can amend and enact e-commerce laws from time to time to adapt to current conditions to develop e-commerce transactions more easily and efficiently.

### **5.5 Country**

A large market will be made available in Malaysia as the e-commerce trend grows. Whereby local business owners now have the chance to market their goods both domestically and internationally due to borderless transactions. Trade between countries has also been boosted by borderless transactions. Last but not least, cross-border transactions encourage the flow of cash into the country and the expansion of its economy.

## **6. Recommendations for future research**

The purpose of this research is to investigate the E-commerce Trends During Covid-19 Pandemic In Malaysia. In the future , it is advised that the researchers have the option of conducting their investigations within the scope of Southeast Asia, Asia, the Islamic world, or the whole globe.

In addition, the researcher used a qualitative methodology to identify

knowledge, Customer behaviour, and the impacts of Covid-19 on E-commerce Trends in Malaysia. The next step is to make the suggestion that potential study may be conducted via the use of a quantitative research strategy that is organised around the scientific method. 61 The formation of a hypothesis may then be accomplished via the use of a quantitative technique by having three hundred individuals fill out questionnaires.

The data analysis method that is the details explain the methodology used, and in this work, the researchers employ theme analysis and ATLAS.ti as the tools for coding and analysing transcripts. Additionally, the data analysis method that is the details explain the approach used. The Statistical Package for the Social Science, often known as SPSS, is a useful instrument for doing data analysis, and it may be used to carry out the research if it is followed. You are able to carry out a variety of analyses by using SPSS software. Some of these include non-parametric testing, descriptive statistics, reliability testing of scales, and others. Last but not least, SPSS makes it possible to deal with massive volumes of data, making use of bigger samples and including more factors.

## **7. Conclusion**

Based on the first findings, which is the Knowledge on E-commerce trends respond to the pandemic. The usage of information technology has increased in developing nations as well (Bozer& Jones, 2018). Consequently, as the usage of information technology is enhanced, it becomes easier for small and medium-sized firms to conduct commercial procedures. According to the second findings, Customer Behavior during Covid-19 in Malaysia. There are a number of customer behaviours during Covid-19 in Malaysia. This can be explained when the country is in a Covid-19 pandemic, people are instructed by the government to stay at home. In the third findings, The e-commerce industry has grown as a result of the Covid-19 pandemic in Malaysia. This can be stated that the effect of the Covid-19 pandemic caused the trend of e-commerce in Malaysia to increase.

As a result, it is abundantly obvious that the use of e-commerce during the pandemic may continue and even boost economic outcomes. The performance of businesses therefore improves as a result of a growth in the number of merchants that utilise e-commerce platforms as a location to market their items.

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**The Influencing Factors That Affect Online Banking Usage  
Among Students of University Malaysia Kelantan at  
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**ABSTRACT**

*The existence of online banking has given a new approach to banking firms to compete with other banking firms. However, the success of this new channel for the bank's products and services depends on the level of usage of its customers. This study aims to measure the level and identify the factors that influence the use of online banking usage among students of University Malaysia Kelantan (UMK) City Campus. In this study, technology adoption, service offered and customer privacy are used as independent variables related to the dependent variable, online banking usage. For the research design, the study utilized a quantitative method. The purpose of the quantitative method in this study because the data obtained from this technique is more appropriate for conducting hypothesis testing. The research used questionnaires as the method of data collection because it is a more effective and efficient approach to get information from the respondent. A set of questionnaires was distributed directly to 361 people of the target population through Google Forms. Data from the questionnaire was analyzed using SPSS. The results of the study are significant and support the hypothesis. In conclusion, this study can be a reference for anyone who can be referred for future studies.*

**Keywords:** Finance, Online banking, Technology adoption, Service offered, Customer privacy.

**1. INTRODUCTION**

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Online banking is known as a service provided by each bank to facilitate its users without having to go to the bank's counter. Most students already have their own online banking accounts. Technological change has had a major impact on global economic development including the banking industry. This situation has resulted in the bank being no longer able to meet all the current wants and needs of customers. Therefore, there are alternative channels of banking services through electronic banking such as Automated Teller Machines (ATM), phone-banking, PC-banking and online banking as a facilitator. Online banking services were created in line with the new millennium of the modern age that can only be accessed with the fingertips.

The purpose of this study is to investigate the factor that affects online banking usage among students of University Malaysia Kelantan. Over the past few decades, the

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advancement of financial technology in this era has played a huge role in various fields and almost all of its activities can be done online including banking. In addition, with the advent

of internet banking today, almost every banking institution has some form of online banking, both on the desktop version and through a mobile application.

Online financial services in 2020 showed a rapid shift towards digital adoption with online banking transactions increasing 49 per cent to 2.5 billion transactions compared to 1.7 billion transactions made in 2019. Bank Negara Malaysia (BNM) in its 2020 Annual Report released e-wallet transactions jumped by 131 percent to 600 million last year.

Internet banking facilities have various advantages to the customers of a bank. Initially, this facility was provided by the bank to facilitate customers and the bank to conduct banking transactions. The main advantage is that we do not have to leave the house to go to the bank or ATM to make a transaction, except to withdraw cash. By using the internet network, customers can perform various transactions. Therefore, customers benefit in terms of time and cost.

This study will help researchers to know more about the issues related to online banking based on the perception, understanding and appreciation of UMK City Campus's student regarding the factor that affect online banking usage to them. Furthermore, this research somewhat helps the student to know and understand more about online banking in improving their knowledge. This is due to the fact that online banking is very beneficial to humans where online banking makes their daily lives easier and more effective regardless of technology adoption, service offered and customer privacy.

## **2. LITERATURE REVIEW**

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### **2.1 USAGE**

The times are constantly advancing. Today's world is the age of technology. Everything has evolved to the Internet, and of course banks are no exception. What used to be a traditional bank has become an online bank in today's era. Some data show that the number of online banking users has been increasing wildly in recent years. Here we will share some of the factors of using online banking. It has been characterised as the customers' personal temperament, which is mostly attributable to the customers' value and belief system (Loukis and Kyriakou, 2015; Ratchford and Barnhart, 2012; Estrella-Ramon et al., 2016). According to Han et al. (2004), SQ is a technique used to create a competitive advantage in the firm. In the last 20 years, efforts have been made to improve service quality. Service quality is a crucial success element for businesses looking to grow and compete in the market (Angelova & Zekiri, 2011). The organisation has recognised that SQ provides a long-term and competitive advantage. Service quality has evolved into a metric for determining which services match the expectations of customers. According to (Hanudin, 2021), it is necessary to instill "confidence" in humans about the system by offering adequate knowledge and "utility" for their critical thinking before using the system, which ranges from "know-how" to security

### **2.2 TECHNOLOGY ADOPTION**

Technology adoption is defined as to measure the level of acceptance of technology as well as the approach that technology can use nowadays when it is considered

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as abeneficial perception and a user-friendly perception. Consumers also have a propensity to use technology nowadays especially once in the aspect of services such as online banking. This is due to their preference for self-service technologies (Magotra et al., 2015; Al-Smadi, 2012). For example, users can only access the bank's online services through the bank's website on a smartphone or other device.

### **2.3 SERVICE OFFERED**

Service Offered is commonly defined as a condition of serving by giving or providing support or assistance to another person through the use of a group of materials or immaterial means. Consumer services are defined as services that aim to protect consumers' interests or meet their needs. It involves activities aimed at meeting the needs of users or users of services or products offered by the company either in public or private terms. For example, online banking services such as requests for information, money transfers, check services, and payment instructions to 3rd parties. Various transactions that users can perform quickly and easily and save

### **2.4 CUSTOMER PRIVACY**

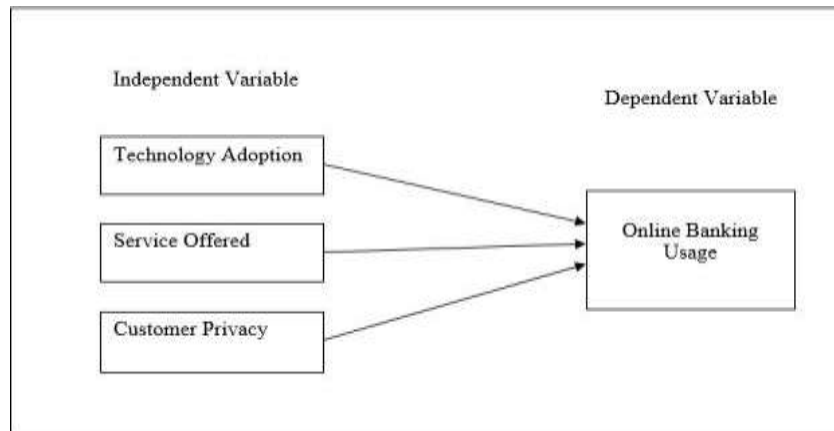
Customer privacy is defined as the ability of individuals or groups of customers to isolate themselves from public attention or information about themselves from the knowledge of strangers. Privacy is a complex term. It's not just about one's personal privacy when it comes to privacy. Furthermore, privacy obstructs the existence of others. When using online services like online banking, customers are usually concerned about their privacy (Sreejesh et al., 2016). Individuals differ in the level of concern that affects their privacy. Individuals treasure their privacy and are always concerned about what anyone else.

### **2.5 HYPOTHESES STATEMENT**

1. There is a relationship between technology adoption and online banking usage among students of University Malaysia Kelantan.
2. There is a relationship between service offered and online banking usage among students of University Malaysia Kelantan.
3. There is a relationship between customer privacy and online banking usage among students of University Malaysia Kelantan.



## 2.6 CONCEPTUAL FRAMEWORK



**Figure 1: Conceptual Framework**

Figure 1 shows the conceptual framework that will be discussed in this paper. This study is to determine the relationship between dependent variable which is online banking usage and independent variable. There are 3 independent variables which are technology adoption, services offered and customer privacy.

## 2.7 RESEARCH DESIGN

Research Design is a strategy that uses actual data to answer a research question. Research design can be defined as a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings (Burns and Grove, 2003:195). Research design can be categorized into two approaches which are: Qualitative and Quantitative Approach. The quantitative research because it is flexible and inductive at the same time, allowing us to adjust the research design based on what we discover during the research process. After data collection, qualitative research is a great way to disprove a hypothesis. The structure was created with the goal of bringing scientific findings together in a logical and consistent manner across all scientific disciplines. It can therefore be defined as a formal relationship of cause and effect between the issues and factors. Therefore, this research used a quantitative research approach to study the relationship between factors that affect online banking usage among students of University Malaysia Kelantan. Researchers chose the questionnaire as the data source over the primary data because it could be obtained effectively and quickly. It can also save cost while improving the quality of the data collected. This in turn will help the researcher identify issues and see whether questions based on observations have been answered. As was used where data was collected from the respondents at one point in time. That is the primary data collected throughout this research.

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## **2.8 DATA COLLECTION METHODS**

The data collection method which is questionnaires was the lowest cost incurred because there were no personal interviews and face to face section with respondent or travel costs for research location. We created a questionnaire in the form of a Google form as the data collecting mechanism for our survey because we are more focused on distant data collection. As a result, we will send a link to the Google form as a questionnaire to all University Malaysia Kelantan students who voluntarily respond to the survey. Our survey- related questionnaires have no limit for University Malaysia Kelantan's students as we provide an open opportunity to any student who wishes to be one of the respondents of our study. We expected a long time in anticipation, two weeks before we finished receiving respondents. While distributing this questionnaire, we hope that respondents will be able to answer the questions that we will discuss sincerely and relevantly in line with their knowledge of the factors that affect online banking usage.

## **2.9 SAMPLING TECHNIQUES**

In this research, non-probability sampling techniques were used to collect data. A purposive sampling method was used to represent the participants in these studies. According to Dudovski, J. (2018), purposive sampling is a sampling approach in which we choose a sample of the population to participate in the study based on our own judgement. The deliberate sampling strategy may be effective when only a small number of persons can serve as primary data sources due to the nature of the study design and aims and objectives. The reason we choose the purposive sampling approach in our research study is that it is one of the most cost-effective and time-effective sampling strategies accessible. There are a restricted number of primary data sources available to contribute to our research project. Purposive sampling may be the only viable approach if the number of primary data sources accessible to contribute to the study is restricted. This sampling strategy might be effective in anthropological contexts where an intuitive approach to meaning discovery is advantageous.

## **DATA ANALYSIS**

Data analysis can be defined as the activity of drawing conclusions by changing data from research to new information that can be in the study. In this chapter, a report on what was done in the study based on test results and feedback received from respondents on the questionnaire that was conducted. This questionnaire that will be constructed or framed in this study is based on the online banking usage according to technology adoption, services offered, and customer privacy. This study was analysed using the Statistical Package for Social Science (SPSS) system.

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**3. FINDINGS**

**3.1 RESULTS OF FREQUENCY ANALYSIS**

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentages (%)</b>
<b>Age</b>		
20 years old and below	78	21.6
21 years old	25	6.9
22 years old	75	20.8
23 years old	140	38.8
24 years old and above	43	11.9
<b>Gender</b>		
Male	70	19.4
Female	291	80.6
<b>Race</b>		
Malay	345	95.6
Chinese	6	1.7
Indian	6	1.7
Others	4	1.2
<b>Do you have experience using online banking?</b>		
Yes	351	97.2
No	10	2.8
<b>Internet Banking Usage Frequency</b>		
Once a week	100	27.7
2 - 5 times a week	194	53.7
6 - 9 times a week	40	11.1
10 - 12 times a week	27	7.5

**Table 1: Frequency Table**

Table 1 showed the respondents by age. This chart showed the total numbers of respondents in this survey is 361. Most of the respondents are 23 years old with a percentage of 38.5% and total of respondents is 139 followed by the percentage for respondents 20 years old is 21.9% and the total respondent is 79 responses. Next, the respondent 22 years old with the percentage is 20.8% and the total respondent is 75. Furthermore, the percentage for respondents 24 years old is 11.9% with total respondents is 43. Meanwhile, the lowest percentage of 21-year-old is 6.9% with the total respondent is 25. For gender, the respondents are female with a percentage of 80.6% while the percentage of the male respondents is 19.4%. From a total number of 361 respondents, 291 of them are female while 70 of them are male. Next, for race with is Malay with a percentage of 95.3%, while the percentage of the Indian respondents is 1.9% and Chinese is 1.7%. Next, the percentage of other races which are Murut Paluan, Somalia, Bugis and Siamese each category is 0.3%. From a total number of 361 respondents, 344 of them are Malay, while 7 of them are Indian, Chinese is 6 respondent and other races which are Murut Paluan, Somalia, Bugis and Siamese are 1 respondent each of category. Most of our respondents are having experience using online banking with a percentage of 97% with the total respondent is 350 while the 3% are not having any experience for using the online banking and total respondent is 11 people. Most of our respondents are having internet banking usage frequency 2-5 times with percentage of 54% with the total respondent is

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195. While 27.7% are having internet banking usage frequency once a week and total respondents are 100 people. Next, the percentage 10.8% are having internet banking usage frequency 6 – 9 times with the total 39 respondents. Meanwhile, the lowest percentage is 7.5% having internet banking usage frequency 10 – 12 times and a total of 27 respondents.

### 3.2 Results of Descriptive Analysis

Variable	Item	Mean Score	Standard Deviation
<b>Technology Adoption</b>	I have enough experience with new technologies to use online banking.	4.08	.862
	I use online banking without any help.	2.70	1.302
	I find online banking is hard to use because I am not an expert in computer skills.	4.07	.950
	Using online banking improves my performance in modern technologies.	4.31	.777
	I own a “smartphone” with internet access.	4.69	.626
<b>Service Offered</b>	I usually pay my household utilities such as electric or water bills with online banking payment.	3.70	1.280
	I used online banking to check my current balance in my savings account.	4.57	.724
	I always use online banking to purchase the products.	4.35	.827
	I find online transfer is very quick and easy to use.	4.55	.721
	I used online banking for my business to lower my overhead fees as I didn't have to pay the cost for branches	4.12	.890
<b>Customer Privacy</b>	I am very careful in giving information about myself.	4.67	.613
	I am worried if my personal information is misused without my knowledge online.	4.15	.977
	I am concerned that if information is provided voluntarily but cannot be used for identification by me it will be used by the bank.	4.52	.749
	I am concerned about voluntarily provided information that can be used to identify me used by the bank.	3.93	1.024
	I expect the bank to be responsible if my personal information is misused.	4.00	.969
<b>Online Banking Usage</b>	I use internet banking often	4.08	.862
	I find that using online banking can give benefit through its application.	4.07	.950

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I prefer to visiting the branch to instead of using online banking services for doing my transaction	2.70	1.302
I use internet banking more frequently than classic banking services.	4.31	.777
I use internet banking as main way of using banking services	4.69	.626

Table 2: Descriptive Analysis

The table 2 was represented the mean and standard deviation analysis for independent variable which is Technology Adoption. The score mean for IV1 is between 2.70 to 4.69. This clearly shows that most of the respondent disagree with the question IV1Q2 and find that online banking is easy to use as they are expert in computer skills. Meanwhile, the highest mean is IV1Q5 which means most of respondent strongly agreed that they have been using smartphone with internet access in their daily life. Moreover, for the range of SD is came out from 0.626 to 1.302. Based on the table above, it can be said that the highest of SD is IV1Q2 as most of student disagree that online banking is hard to use and the lowest score will be IV1Q4. The next IV which is IV2 the service offered. The range of the mean for IV2 is from 3.70 to 4.55. The highest score for mean will be IV2Q4 as most of the respondent strongly agree that using online banking is very quick. Meanwhile, the lowest score is 3.70 for question IV2Q1 whereby some of the respondent may prefer to pay their utilities using online and some of them may not. Moreover, for SD, its range is from 0.721 to 1.280. Therefore, it can be said that 0.721 (IV2Q4) will be the lowest and 1.280 (IV2Q1) will be the highest. The last IV which is the customer privacy (IV3). The range of mean score is between 3.93 to 4.67 which means the highest score will be 4.67 for question IV3Q1 and the lowest will be 3.93 which is question IV3Q4. Meanwhile, the highest SD for this IV is 1.024 which is IV3Q4 and the minimum SD is 0.613 which is IV3Q1. Overall, it shows that most of the respondent agreed to the all question as well as concerned about their privacy information when using online banking services. the descriptive statistic for dependent variable (DV) which is the online banking usage among students of University Malaysia Kelantan. Based on the table above, the range of mean for DV is between 2.70 to 4.69. It can be said that 4.69 will be the highest score of mean which is reflect to DVQ5 and the lowest score will be 2.70 which is reflect to DVQ3 as most of the respondent disagree to make online banking by going to a bank branch. Meanwhile, the range of SD is between 0.629 to 1.302. Therefore, it clearly shows that 0.629 is the lowest score for SD that refer to question DVQ4 and the highest score for SD will be 1.302 that reflect to question DVQ3. Overall, most of respondent agreed to using online banking in their daily life.

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**3.3 RESULT OF RELIABILITY ANALYSIS**

The Table 3 shows the result of reliability analysis

<b>Variable</b>	<b>Number of items</b>	<b>Cronbach Alpha</b>
Online banking usage	5	0.774
Technology adoption	5	0.775
Services offered	5	0.775
Customers privacy	5	0.716

The values for both the dependent and independent variables in this research were shown in table 4.5.2 of the SPSS results. according to the table, every variable exceeded the threshold of 0.700. The survey has been approved. Five questions were utilized to assess the factors affects online banking usage among students of University Malaysia Kelantan at campus city, the dependent variable in this research. The Cronbach's alpha score of 0.774 is considered to be good. As a result, the coefficient found for the question the factors affect online banking usage among students of University Malaysia Kelantan at campus city was accurate. Following that, five questions were used in order to measure the independent variable, which was technology adoption affects online banking usage among students of University Malaysia Kelantan at campus city. The result of the Cronbach's Alpha test was 0.775, which is considered to be good. Therefore, the coefficient that was calculated for this query may be relied upon. The second independent variable, the impact of the service offered affects online banking use among University of Malaysia Kelantan students in campus city, was quantified with the use of a set of five questions. The score of 0.737 for Cronbach's Alpha is satisfactory. As a result, the coefficients derived for this research question service offered affects online banking use among University of Malaysia Kelantan students in campus city were robust. Finally, five questions were utilized to assess how customer privacy affects online banking use among University of Malaysia Kelantan students in campus city. Cronbach's Alpha was 0.716, which is good. Therefore, the coefficients derived for the research question customer privacy affects online banking use among University of Malaysia Kelantan students in campus city were accurate.

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**3.4 RESULT OF PEARSON CORRELATION**

The Table 4 shows the Pearson Correlation Analysis

HYPOTHESIS	P-VALUE	RESULT
There is a significant relationship between technology adoption and online banking usage among students of UMK City Campus.	1.0	Accepted.
There is a significant relationship between service offered and online banking usage among students of UMK City Campus.	0.611	Accepted.
There is a significant relationship between customer privacy and online banking usage among students of UMK City Campus.	0.424	Rejected.

Table 4.6.1 shows that technology adoption has a fairly significant relationship with online banking usage among students at University of Kelantan, Malaysia. The value that obtained is  $r = 1.0$  and the result shows that it was significant under the significant level  $p < 0.05$ , which was  $p = 0.000$ . This means that the relationship between the two variables is strong and low in significant. s that service offered has a moderate significant relationship with online banking usage among students at University of Kelantan, Malaysia. The value that obtained is  $r = 0.611$  and the result shows that it was significant under the significant level  $p < 0.05$ , which was  $p = 0.000$ . So, it can be concluded that there is a relationship between service offered and online banking usage among students of University Malaysia Kelantan. Hence, hypothesis 2 (H2) is accepted. the customer privacy has little if any correlation with the online banking usage among students at University of Kelantan, Malaysia. The value that obtained is  $r = 0.424$  and the result shows that it was significant under the significant level  $p < 0.05$ , which was  $p = 0.000$ . This means that the relationship between the two variables is strong and low in significant. So, it can be concluded that thereis no relationship between service offered and online banking usage among students of University Malaysia Kelantan. Hence, hypothesis 3 (H3) is rejected.

**4. DISCUSSION AND RECOMMENDATION**

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Students are believed to be somewhat influenced by their use of internet banking. These effects make them no longer use internet banking or use it less. However, students of university Malaysia Kelantan at campus city has confirmed this finding. College students do not have enough time to use offline banks for various reasons, but they still do not use online banks because of other factors. Simple and convenient online banking options are of course what all college students yearn for. However, our research cannot be sure that all students agree, but at least most of them. Many factors also limited this research, the most important being time constraints and cost issues, so a web-based questionnaire was used. Future research also considers expanding the scope of the study to include civil servants, private workers, housewives, and single adolescents, rather than focusing only on college students. This research will know the results that affect the usage rate of online banking, so reliable answers must be obtained to solve the problem. In the future, online banking will be very important in the world and will become an

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indispensable life product. This study breaks new ground by highlighting recommendations for potential research advancements. This proposal can provide multiple benefits for new research on the influence of online banking usage on users, especially university students. The first suggestion is to change the existing data collection method and use qualitative. Qualitative research generates data in a different way that quantitative research does not seem to do. Interviews, observations, and document analysis are examples of qualitative data. The main supporter in validating the field work carried out in a qualitative study is the field notes and the researcher's diary.

Future researchers are recommended to use qualitative methods such as telephone surveys and face-to-face interviews in their research. Specifically, for face-to-face or telephone interviews, the questions asked can reveal the respondent's attitude. As a result, it delivers more accurate, consistent and useful data for the study of factors that affect online banking usage among students. Future researchers can update, improve and reproduce the journal in the future. Researchers compared data from western countries using standard journals in this investigation. As a result, cultural differences between western and eastern students. People in different countries, such as western countries, may have different perspectives and make different recommendations, resulting in a biased situation. Future researchers can find journals in public libraries such as university libraries and refer to things relating for online banking usage and its advantages to help increase reading resources. In addition, future researchers can search for journals on Google Scholar and my Athens about the perception of online banking users to find more information.

## 5. CONCLUSION

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In conclusion, all the relationships between variables, the study found that all three hypotheses in this research were accepted. All independent variables show different correlation coefficients with dependent values, namely 1.0 for technology adoption, 0.611 for service offered and 0.424 for customer privacy inspired by UMK City Campus Student. The results show a very high positive correlation for technology adoption, a moderated positive correlation for service offered and low positive correlation for customer privacy among the dependent variables. It also answers the research question whether there is any relationship between the independent variable and the dependent variable. Therefore, to conclude, there is a significant relationship between technology adoption, service offered and customer privacy towards online banking usage.



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## Factor Affecting the Intention To Use Digital Banking Service Among University Malaysia Kelantan

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### ***Abstract:***

*This study identifies factor affecting the intention to use digital banking service among University Malaysia Kelantan, Risk perception, attitude, and trust. Theory of Planned Behavior (TPB), is used to see the extent of factor affecting the intention to use digital banking service among University Malaysia Kelantan. The quantitative research method is used as a research instrument to collect data with prepare survey questions. This study uses non-probability sampling. Respondents will be selected using a convenience sample approach in this analysis, which will use non-probability sampling. The data collected was analysed using software (SPSS Version 29) to analyse descriptive statistics, reliability analysis, and Pearson correlation analysis. Based on the results of the study, the intention to use digital banking among University Malaysia Kelantan students is known where the majority of respondents scale Likert 4. For the attitude students towards digital banking, the highest mean is 4.5134 which is students prefer using digital banking services to classic banking. It has proven that students do not have time to deal with classic banking. For the risk perception by students toward digital banking, the highest mean is 4.2151, indicating that students occasionally do not get acknowledgment or receipt of transactions owing to network congestion or failure. It has been demonstrated that students are quite particular about the website or programmes that must be good when utilising digital banking. Next, the trust of University Malaysia Kelantan students when using digital banking from the result shown the highest mean is 4.8360 which means students have used digital banking services such as TNG e-Wallet, Boost and Big Pay applications. Regarding the results, attitude, risk perception, attitude in this research has a relationship with the factor affecting the intention to use digital banking service among University Malaysia Kelantan.*

**Keywords:** *Attitude, risk perception, trust, Understanding of Digital Banking Service and Theory of Planned Behaviour (TPB).*

## **1.0 Introduction**

Digital banking is the best thing to happen to humanity. In actuality, technology has not only made banking more convenient, but it is a system that does not require any tools such as paper or pen to implement it. With that, the digital implementation of bank service users makes it easier to deal with transactions, check account balances, and is also more effective if it is used for good, such as in the interweaving of welfare. Banking has always been an information-intensive activity that relies significantly on information technology (IT) to obtain and provide information to all relevant users. IT is not only important in information processing; it also allows banks to differentiate their products and services in the market. As a result, banks have discovered that they must constantly develop and update their information technology in order to retain their clients demanding and knowledgeable. This is to ensure they can provide a convenient, dependable, and beneficial service. Financial in cyberspace is quickly becoming an alternate channel for providing banking services and goods, thanks to the increasing spread of the internet. The internet is now regarded as a strategic weapon, revolutionizing how banks operate, deliver, and compete with one another, particularly as the competitive advantages of old branch networks erode rapidly. A few decades ago, online shopping was essentially non-existent.

The emergence of digital services has had a significant impact on business operations. Furthermore, the use of the digital banking system is expected to generate profits ranging from 43% to 48%. (State Bank, 2019). In recent years, Malaysia's banking industry has experienced rapid growth and intense competition among banks. As a result, digital banking is now required for Malaysian banks. Today, digital banking has enabled current business brands such as Amazon, Snapdeal, and eBay to become enormous market grossers. They grew into profitable ventures, inspiring other start-ups and sectors to follow in their footsteps.

## **1.1 Research Question**

RQ1: Is there a link between students' attitudes regarding perceived usefulness and their intention to use digital banking service at University Malaysia Kelantan?

RQ2: Will the risks felt by University Malaysia Kelantan students have a negative impact on attitudes towards digital banking services?

RQ3: How to get the trust of University Malaysia Kelantan students when using the service without having to care about risks or other issues?

## **1.2 Research Objectives**

RO1: To see the relationship between students' attitudes regarding perceived usefulness and their intention to use digital banking service at University Malaysia Kelantan.

RO2: To see the negative impact on digital banking services when there is a risk felt by students of University Malaysia Kelantan.

RO3: To find out the extent of trust of University Malaysia Kelantan students when using digital banking services without having to worry about risks or other issues.

## **2.0 Literature Review**

This study briefly explains some terms about the study that will be conducted. The term described becomes the key word that will be discussed in the next chapter. The purpose of this keyword is explained in chapter one to make it easier and understandable for the reader in addition to providing an overview to the reader about the study which is then discussed in the next chapter.

### **2.1.1 Attitude**

The attitude of giving a role in making an action because it is a percentage in making decisions should be helped by a more open attitude. An investigation was done by Mishra, Sankar and Datta in 2014 which focused more on disposal characteristics as an important component for people to tolerate digital banking.

### **2.1.2 Risk Perception**

Perceived risk is commonly defined as a feeling of uncertainty about the potential negative consequences of using a product or service. We defined risk as the amount that would be lost if the consequences of an act were unfavourable, as well as the individual's subjective belief that the consequences will be unfavourable. Risk is defined as variation in the distribution of possible outcomes, their likelihoods, and subjective values. Perceived risk is an assessment of the level of danger or expected uncertainty in using a system or making a purchasing decision (Wang et al., 2006). Many other studies have found that the perceived risk of digital banking influences the intention of customer to use digital banking service.

### **2.1.3 Trust**

Trust is essential in situations characterised by risk, uncertainty, and interdependence, and the online environment is no exception. Because customers increasingly rely on the internet for information and purchases, customer trust is especially important in the online context (Shankar et al., 2002). Online trust is defined as a belief or expectation about the web site, the web vendor, and (less frequently) the internet as the trusted party or object of trust, as well as a behavioural intention or willingness to rely on the trusted. The majority of information systems research has concentrated on the importance of trust and trust building as a prerequisite for e-commerce transactions and business relationship development. If online trust can be understood and enhanced by reputable online merchants, then the number of people who engage in e-commerce should increase substantially.

### **2.1.4 Understanding of Digital Banking Service**

Digital banking software simplifies the access, understanding, and management of all traditional services. This method enables banks to test lower-risk before transitioning parts of their legacy business to the new system. Modern banking solutions enable a fully digital

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customer journey by generating real-time data streams and speeding up key analytics. Mobile banking is another term that is frequently used interchangeably with online and digital banking. It is a service provided by an existing bank to its customers that allows them to conduct transactions using their mobile devices rather than visiting a bank branch. In the last 20 years, efforts have been made to improve the quality of services. Service quality is an important element of success for businesses that want to grow and compete in the market (Angelova & Zekiri, 2011). Organizations have recognized that SQ provides a long-term competitive advantage.

**2.1.5 Theoretical of planned Behaviour (TPB)**

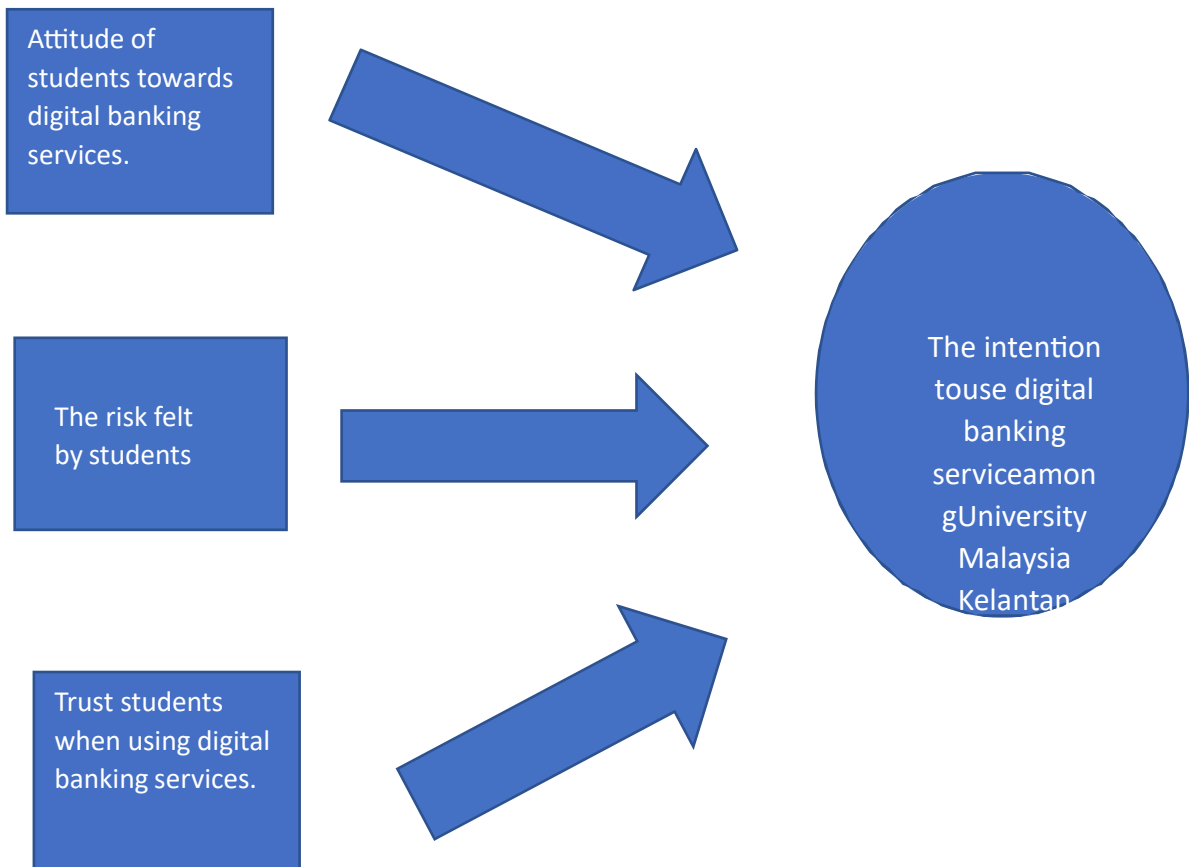
Variables that prompt a response to users while the views taken in the hypothesis indirectly have an impact and expectations to implement it. A person's attitude, subjective norms, perceived behavioural control, intentions, and actions are the basic components of theory of planned behaviour (TPB) (Ajzen, 1988). According to the theory of planned behaviour, student conduct is determined by behavioural intentions, and behavioural intentions are a result of a digital banking adopter's attitude toward the activity.

The individual's favourable or negative sentiments about executing the activity are characterised as their attitude toward the behaviour.

## 2.2 Conceptual Framework

Independent Variables

Dependent Variable



## 3.0 Methodology

### 3.1 Research design

There are two types of research designs: quantitative research (the process of collecting and analyzing numerical data) and qualitative research (a method used for market research which aims at obtaining data through open-ended questions and conversations with the intended consumers). Quantitative research was used in this study because it is more objective and explores and understands the relationship between the independent variable (attitude, the risk felt, the trust of University Malaysia Kelantan students when using digital banking services) and the dependent variable (the intention to use digital banking service among University Malaysia Kelantan students). There are two data that we collected namely primary data and secondary data needed to make this study clearer and simpler.

These secondary data were gathered from existing sources of information relating to this study, such as journal articles, newspapers, and websites, and will help to reinforce the data gained from the main data. This is because these two data

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are extremely significant to us as researchers since they allow us to compare the data, we obtained with previously collected data. This is how the primary and secondary data for this study was gathered.

#### **3.2 Data Collection**

The data collection method is a step to get the results of the study where the researcher will prepare a questionnaire related to the study being conducted. Questionnaires are a method with the lowest cost because respondents only need to answer the questions provided and will save time. Furthermore, the method does not involve personal and face-to-face interviews with respondents or travel costs to the research location. The way we prepare this questionnaire is by easily creating a questionnaire in the form of a Google form as a data collection mechanism to collect the data we need because we are more focused on remote data collection. The researcher will send a link to the Google form to be distributed by several chains to ensure that this questionnaire reaches the respondents and answers well and is not burdensome. The questionnaire does not have any coercion or pressure because the questionnaire aims to achieve the goals of this study and it has no limits for University Malaysia Kelantan students. This study does not affect the respondents because we provide an open opportunity to any student who wants to be one of the respondents of your study. We only focus on a few faculties in University Malaysia Kelantan which are within our target.

#### **3.3 Sampling design**

##### **3.3.1 Population**

Based on University Malaysia Kelantan The student population of University Malaysia Kelantan is estimated to be 6013 student

##### **3.3.2 Sample size**

The student population of University Malaysia Kelantan is estimated to be 6013 students, which is a number that has been used as the size of the population that the researcher wants to make a questionnaire obtained from the University of Malaysia Kelantan database. The size of the study sample was determined based on Krejcie & Morgan's table (Appendix 1) which uses a fixed formula for population estimation. A total of 372 respondents among university students.

##### **3.3.3 Sampling technique**

For the purpose of obtaining a sample of respondents, this study uses a purposive sampling procedure (purposive sampling) which involves online distribution to UMK students at City Campus. These basic features are very important to ensure the respondents involved have knowledge and understanding of the practice of digital banking services. Respondents involved in this study answered a voluntarily distributed questionnaire without any coercion. Recently, the number of respondents has been proposed based on two faculties located in the City Campus, namely the Faculty of Entrepreneurship and Business (FKP) and the Faculty of Hospitality, Tourism and

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Wellness (FHPK) which is a total of six (6) programs from FKP and four (4) programs from FHPK.

**3.4 Research instrument**

It is important for the researcher to create the research instrument before the researcher collects any other data. A research instrument is a tool or method used to obtain, measure, and analyses data from subjects around a research topic. Among the instruments to be used based on the type of study being conducted are quantitative, qualitative or mixed methods. For example, for quantitative studies that can decide to use a questionnaire, and for qualitative studies where can choose to use a scale.

**4.0 Data Analysis and Findings**

This section describes in detail the data obtained for the study as well as the technique utilized to analyses the data. It also addressed the study's findings. This section describes in detail the data obtained for the study as well as the technique utilized to analyze the data. It also addressed the study's findings. The questionnaire was issued to all University Malaysia Kelantan (UMK) students who are aware of this research, the intention to use digital banking services among UMK students. This survey received 372 responses from students. The outcomes of the data analysis were described using five different forms of analysis: pilot test, demographic test, reliability analysis, descriptive analysis, and Pearson correlation analysis. This information was gathered using a Google form.

**4.1 Descriptive Analysis for Demographic**

Descriptive statistics include frequency analysis. The frequency of an occurrence is defined in statistics as the number of times it occurs. Frequency analysis is a branch of statistics concerned with the number of events and analysis metrics such as central tendency, dispersion, percentiles, and others. In this study, there were a total of three questions ask such as gender, course and frequency of use digital banking.

Table 4.1: Respondents' Gender (n = 372)

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	Male	115	30.9	30.9	30.9
	Female	257	69.1	69.1	100.0
	Total	372	100.0	100.0	



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The table above represent the frequency and percentage of the respondents' gender. A total of 115 respondents were male and the overall percentage of it is 30.9%. The total number of respondents who were female 257 which carries the percentage of 69.1%.

Table 4.2: Respondents' Course (n = 372)

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	SAB	127	34.1	34.1	34.1
	SAE	51	13.7	13.7	47.8
	SAL	43	11.6	11.6	59.4
	SAK	56	15.1	15.1	74.5
	SAR	59	15.9	15.9	90.3
	SAW	36	9.7	9.7	100.0
	Total	372	100.0	100.0	

The table 4.2 shows the courses of the respondents in this study. The courses have been divided into six groups. The largest frequency is 127 (34.1%) of the 372 respondents are under course of SAB. The second largest course group, those coursed SAR, accounts for approximately 59 (15.9%) of the total. The third biggest class is from SAK course and get total of respondents are 56 with 15.1%. The fourth would be SAE course that produced 51 for frequency and 13.7%. Next group is SAL represent 43 respondents and get 11.6%. For the last course, which is from SAW, there is a total of 36 (9.7%) respondents.

Table 4.3: Frequency of use of Digital Banking n= (372)

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	< 2 hours	97	26.1	26.1	26.1
	2-5 hours	180	48.4	48.4	74.5
	> 5 hours	95	25.5	25.5	100.0
	Total	372	100.0	100.0	

The table 4.3 shows the frequency of using digital banking. Frequency of using digital banking which is 2-5 hours in a day with the highest number of respondents which is 180 (48.4%). Meanwhile, the > 5 hours in a day represent the lowest frequency of using digital banking, 95 (25.5%). The second higher percentage is < 2 hours in a day which consist of 97 (26.1%).

**4.2 Pilot Test**

A pilot test is essentially a preliminary collection of information used to detect structural and instrumentation flaws, as well as to give intermediary data for the selection of a probability sample. Pre-testing refinement is carried out before to the final test. The table below contains a brief case study:

Table 4.4: Reliability Test (Pilot Test)

<b>Variables</b>	<b>Number of Items</b>	<b>Cronbach's Alpha</b>
Attitudes	5	0.710
Risk perception	5	0.738
Trust	5	0.761
The intention to use digital banking	5	0.701

Table 4.4 displays the results of each variable's reliability test in this study. We can see from the table of Cronbach's Coefficient of Alpha that the range of Cronbach's Alpha after the reliability test is 0.743 to 0.844, which suggests that each variable is counted as acceptable by following the Cronbach's alpha coefficient thumb rule. This obviously implies that the target respondents understand all of the questionnaires and that they may be used for data collection in this research.

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**4.3 Dependent Variable and Independent Variable**

Table 4.5: Pearson Correlation Between Dependent Variable and Independent Variable

Attitude			Risk Perceived	Trust	The Intention
Attitude	Pearson Correlation	1	.297**	.222**	.522
	Sig. (2-tailed)		.000	.000	.000
	N	372	372	372	372
Risk Perception	Pearson Correlation	.297**	1	.221**	-.558
	Sig. (2-tailed)	.000		.000	.000
	N	372	372	372	372
Trust	Pearson Correlation	.222**	.221**	1	-.556
	Sig. (2-tailed)	.000	.000		.000
	N	372	372	372	372
The Intention	Pearson Correlation	.522	-.558	-.556	1
	Sig. (2-tailed)	.677	.877	.277	
	N	372	372	372	372

The relationship between attitude and intention to use digital banking services among Universiti Malaysia Kelantan students. The value of the correlation coefficient is 0.522 indicating that there is a moderate to the strong relationship between both of them. Based on the result of the significant value ( $P < 0.05$ ); this shows that there is a relationship between factors attitude's students and intention to use digital banking among Universiti Malaysia Kelantan students. The significant level shows that both variables are highly significant.

The relationship between risk perception and intention to use digital banking services among University Malaysia Kelantan students. The value of the correlation coefficient is 0.-558 indicating that there is a moderate to the strong relationship between both of them. Based on the result of the significant value ( $P < 0.05$ ); this shows that there is a relationship between factors risk perceived and intention to use digital banking among students. The significant level shows that both variables are highly significant.

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The relationship between trust and intention to use digital banking services among students. The value of the correlation coefficient is 0.556 indicating that there is a moderate to the strong relationship between both of them. Based on the result of the significant value ( $P < 0.05$ ); this shows that there is a relationship between factors the trust and intention to use digital banking among students. The significant level shows that both variables are highly significant.

**4.4 Hypothesis Test**

	Hypothesis	Pearson's Correlation Result
H1	There is a link between student attitudes and intent to use digital banking among University Malaysia Kelantan students.	$r = 0.522$ (Supported)
H2	The relationship between risk perception and intention to use digital banking among University Malaysia Kelantan students are positive.	$r = -0.558$ (Supported)
H3	There is a relationship between the trust and intention to use digital banking among University Malaysia Kelantan students.	$r = -0.556$ (Supported)

**5.0 Discussion and Conclusion**

In this section, the examination's findings, which were established in Chapter 4 were discussed. The issues introduced in Chapter 2 served as the framework for the conclusion. In order to examine the association between community awareness and behaviour toward digital banking services, researchers also suggested various conclusions to justify the findings and outcomes. This study discovered that the variables (attitudes, perceived of risk, the trust of students and the intention to use digital banking services among students) to obtain and outcomes. variable in the study have a relationship.

## **5.1 Discussion and Findings**

### **5.1.1 Practical Implications**

This research can contribute benefits to researchers in the future to study what other factors affect the intention to use digital banking service. This study can also help researchers to measure the level of trust in the use of digital banking in everyday life by knowing the risk perceived and attitude of a user. In addition, this study also benefits other researchers who want to expand and know more about the use of digital banking in Malaysia. Companies and investors who want to use and develop digital banking can refer to findings or research results that allow them to make changes and strengthen their business models, which can retain existing users and attract new users to use digital banking. The results of this study provide important information about the relationship between the intention to use digital banking service and attitude, risk perceive, and trust, which has a p value of 0.000. These results show that the relationship between the independent variable and the dependent variable is a moderate to a strong positive relationship where it is proven the findings of previous studies for the intention to use digital banking service. From the data collected, we found that respondents may face problems in using digital banking when they have doubts or lack of trust in digital banking.

### **5.1.2 Methodological Contribution**

The quantitative approach was used to obtain data from respondents in this study. It was more convenient and took less time to collect data. Because it is simple for the researcher to gather a big number of respondents at one time, the questionnaire can be distributed to the intended respondents in a location. The intended respondent is a University Malaysia Kelantan (UMK) student who can assist with the questionnaire's completion. The quantitative method enables the researcher to test the hypothesis, determine the cause and impact of the variable, and collect a bigger or random sample of respondents.

This study used the casual research approach, which allows the researcher to find and analyse the cause and impact of variables on one another, resulting in high-quality research results for the end user to use as references. The study's research purpose should be used to determine the target respondents. The future researcher is advised to identify their target respondents in order to make data gathering easier. For example, in this study, the target respondents are (UMK) students, and the majority of them use digital banking in their daily lives.

## **5.2 Recommendation**

Qualitative research appears to generate data in a manner that quantitative research does not. Examples of qualitative data include interviews, observations, and document analysis. The field notes and the researcher's diary are the key supporters in authenticating the field work performed in a qualitative study. Future researchers are encouraged to conduct their research using qualitative approaches such as telephone surveys and face-to-face interviews. In particular, questions answered during face-to-face or telephone interviews might show the respondent's perspective. As a result, it

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provides more precise, consistent, and valuable data for the research of factors influencing student online banking usage.

Although this research will take a long time to complete, it is necessary to have a better grasp of digital banking in the future. It can serve as a guideline for new researchers conducting fresh studies on digital banking. The following research will have a greater impact on them if they truly comprehend the issues that students have with this digital banking service. As a result, future researchers who wish to conduct research should learn more about the services provided by digital banking in order to determine which factors should be improved in the future.

#### **5.3 Conclusion**

Finally, this study discovered that all three hypotheses in this research were accepted. When tested on UMK students, all of the independent variables show a positive correlation coefficient with the dependent variable. Students can use this study as a reference while using digital banking services in the future, taking into mind the safety of their money. According to the data collected, the majority of students will utilise this digital banking service if they believe that their personal information will not be disclosed to the public and that the digital banking system itself is secure to use. In addition, the use of digital banking nowadays might have a positive impact on them because it can save students' time and energy. As a result, researchers can demonstrate that the characteristics that can offer students the motivation to use this digital banking service include attitude, knowledge of the danger they would face, and faith in the service.

## 6.0 Acknowledgements

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Dr. Zulkifli, our study's examiner, also provided us with feedback on how to improve the study. To determine how many students here utilise digital banking services, a study on the factors that drive Universiti Malaysia Kelantan students to use the service was undertaken.

We'd also like to thank the students of University Malaysia Kelantan for taking the time to respond to some online questions. This study would be incomplete without them, which we greatly appreciate.

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## The Study on The Acceptance of Online Banking Transaction Among Universiti Malaysia Kelantan Students

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### *Abstract*

*Online Banking is one of the trend that has been used as one of transaction medium in daily works. There are variety of use of online banking. This study aims to examine the factors that influence the acceptance in using of online banking among undergraduates of University Malaysia Kelantan. This study also will discuss on the function of online banking platform other than making online payment. There are variety range of online banking user which have different determinents on the acceptance of using online banking. Thus study also will explain briefly on the risks that must to be known by the users when using online banking platform. This research will be focussing on the undergraduates of University Malaysia Kelantan, Campus City in Pengkalan Chepa, Kelantan. This research will provide knowledge to researcher on the determinants for undergraduates in accepting of using online banking platform. This research chose University Malaysia Kelantan, City Campus whihc have the most number of undergraduuates. It location which located near at urban area shown that it is located at developing area of Internet. This also will help the researcher to identify and collect the data and information to complete this research.*

**Keywords** : *Acceptance of using online banking, convinience, security, social influence*

### **1.0 Introduction**

#### **1.1 Background of Study**

According to the study by Saeed & Agha (2015), online banking provides many platforms and opportunities to their client and customers which all the opportunities are backed by the use of internet which can provide many business transactions to the client and customer online payment, money transfer, withdrawal, deposit, history transaction and many more which it helps to ease the customers daily activities. Online banking is available to both banking systems. According to the study by Mohamed Ariff (1988), Islamic banking did not

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charge the interest rate to its client or customers and will share the profits with their depositors. According to the study by Bankewitz & Teuchert (2016) based on the research by Brown & Marsden (2013), digitalization era is referred to the concept which contains many elements including the availability of large amount of data, algorithm driven analytic, processing capabilities, and crowd sensor approach. Many aspects will change in digitalization era where all the behaviours of customers can be measured and analyzed to predict the future event.

#### **1.1.1 Online Business Transaction**

According to Abadi, Huda, Hehsan, Basir & Ikhwan (2018), E-commerce provides a new platform to customers that shift traditional business to electronic businesses by innovating the information and communication technology. Online business has provided a new way to run the industry in the whole world. The idea of entering a building to make a purchase has been substituted with other alternatives. The world also is developing many new technologies such as "Metaverse" which aim to bring the experience of physical shopping but in the online platform. Thus, this shows many innovations that have changed the business structure over the world.

#### **1.1.2 Online Banking**

Online banking is one of the trends that has been used regularly nowadays. One of the effective ways to make online payment are through online banking. According to Agha & Saeed (2015), based on the research by Chowdury & Ahmamd (2011), many people think that online banking is secured, flexible and can be done at anywhere. Majority of the people are using online banking as their method to make online payment. Only a minority group of people did not use online banking for other reasons. Online banking is available to both banking systems including conventional and Islamic banking. The mode of online payment via online banking also can be made through interbank. These facilities will give a huge advantage to the customers. There are a lot of benefits by using online banking. Online banking also has been fit with multi-type of security.

### **1.2 Research Objective**

The general point of the objectives of the study attempted to:

- i) To analyse the relationship between security and the acceptance of online banking transaction among student at UMK City Campus.
- ii) To investigate the relationship between convenience and the acceptance of online banking transaction among student at UMK City Campus.
- iii) To examine the relationship between social influence and the acceptance of online banking transaction among student at UMK City Campus.

### **2.0 Literature Review**

### **Acceptance of Online Banking Transaction**

According to Abdullah, Aqilah, Salehudin & Falah (2020), more students will have a lot more financial knowledge if it has been developed from high school level. This study is

focusing on the acceptance of online banking transaction platforms among undergraduates of University Malaysia Kelantan. Undergraduates are using online banking platforms in order to help them in their business transaction, daily transaction, investment and many others. Daily transactions of undergraduates have diversified which it has expanded to a wide range of transactions. The use of internet helps customer to perform transaction at anywhere rather than walk-over into banking branches. However, the amount of customer accepting the use of online banking depending on various factor. According to the study by Anouze & Alamro (2019), bank need to understand customer decision to provide better strategies that will influence the acceptance of online banking among customers.

### **Security**

Security concerns, which are becoming increasingly significant, are hindering the popularity of internet banking. Information regarding the locations, activities, and demographics of internet banking customers is of utmost importance to online businesses. Aside from generic worries regarding the transmission of personal information, persons may have issues about being increasingly recognized as the amount of personal information necessary grows, according to Kumar, M., & Gupta, (2020).

According to Hammouri et al., (2021), security is regarded as the primary operational risk of internet banking; yet, certain concerns straddle risk categories, such as breach of security allowing unauthorized access to client information. Such security concerns might put the bank to regulatory and reputation consequences. This is why banks make significant investments in security procedures to safeguard the data of their clients and guarantee the safety of their online banking platforms. This entails taking precautions like multi-factor authentication, encryption, and routine security audits to find and fix any possible weaknesses.

### **Convenience**

According to Shankar (2021), in his study entitled How does convenience drive consumers' webrooming intention? The study aimed to evaluate the impact of convenience on the web room of intentional banking users. The study found that users' web room intentions had a significant impact on ease of access, ease of search, ease of benefits and convenience after benefits. Convenience in the web room mediates the dimensional effect on the hedonic value and the perceived utilitarian value. Consumer-perceived security concerns affecting the mediation effect vary between high and low levels.

Next, according to Wu & Jonathan (2022) Investigate about the influences of technological characteristics and user beliefs on customers' perceptions of live chat usage in mobile banking. The purpose of the study was to identify the factors that potentially influence bank customers' intentions and attitudes towards using mobile chat from a functional perspective and expected advantages. In the findings of this study stated that performance expectations are influenced by convenience and accessibility while all technological features are influenced by effort expectations. In addition, attitude can determine the intentions of the customer. Expectations of effort and circumstances facilitate while the three constructs of consumer trust are determined by their attitudes.

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Besides that, according to Jain et al (2019) make a study of the evaluating service quality in automobile maintenance and repair industry. This study aims to investigate the quality of services in industrial car maintenance and repair. The focus of this study was to look at service fairness and convenience on customer service satisfaction. In addition, this study also focuses on the effects of service satisfaction and brand trust on word of mouth (WOM). The mediating effect of customer service satisfaction on the relationship between service quality and WOM was also evaluated in this study. The results of this study found that service quality, fairness and perceived service convenience have a positive relationship with customer service satisfaction. WOM is positively influenced by service satisfaction and trust.

#### **Social Influence**

A few previous studies have found the social influence variable are influence on the intention of the use an online banking system, indicating that social influence is a factor in the desire to use an online banking transaction. The majority of the studies concluded that there is a direct relationship and influence. Wan Rung Lin (2020) state that social influence has significant positive influence on behavioral intention to use mobile payment. The variables consist of performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value and habit in Taiwan. The research concluded that all of the variables does have a significant influence toward the adoption in cashless transaction. From the research we can relate because of the cashless transaction have a relationship with online banking system. All the finding from the research can be use in our research.

There is another previous study that has been discussed about social influence such as according to Matsuo (2018), the study finding that the social influence has both effect either direct and indirect on innovation resistance, that all these effects are partially mediated by the usage and the performance risk barriers, and also that experience moderates these relationships. This study discovered that social influence directly reduces the innovation resistance of inexperienced consumers while directly increasing the innovation resistance of experienced consumers. However, their discovery that social influence increases experienced consumers' resistance to innovation is unexpected. This is because experienced consumers may resent individuals who try to persuade them to continue using new services.

Moreover, according to Mohamad Azwan Md Isa (2018) in research about factors affecting consumers' acceptance towards electronic payment system: case of government land and district office also state that social influence has positive relationship with acceptance to use mobile payment. There are a few more variable such as consumers' acceptance, performance expectancy, effort expectancy, and facilitating condition. All of them have a significant influence.

#### **Hypotheses Statement**

A new framework in Figure 2.1 is formulated to study the relationship between the dependent variable, acceptance in the use of online banking transaction among UMK City Campus student and the other three independent variables which are security, convenience and social influence. There are three (3) hypotheses are shown below:

H1: There is a significant relationship between security and acceptance of online banking

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transaction among UMK City Campus undergraduates.

H2: There is a significant relationship between convenience and acceptance of online banking transaction among UMK City Campus undergraduates.

H3: There is a significant relationship between social influence and acceptance of online banking transaction among UMK City Campus undergraduates.

**Theoretical Framework**

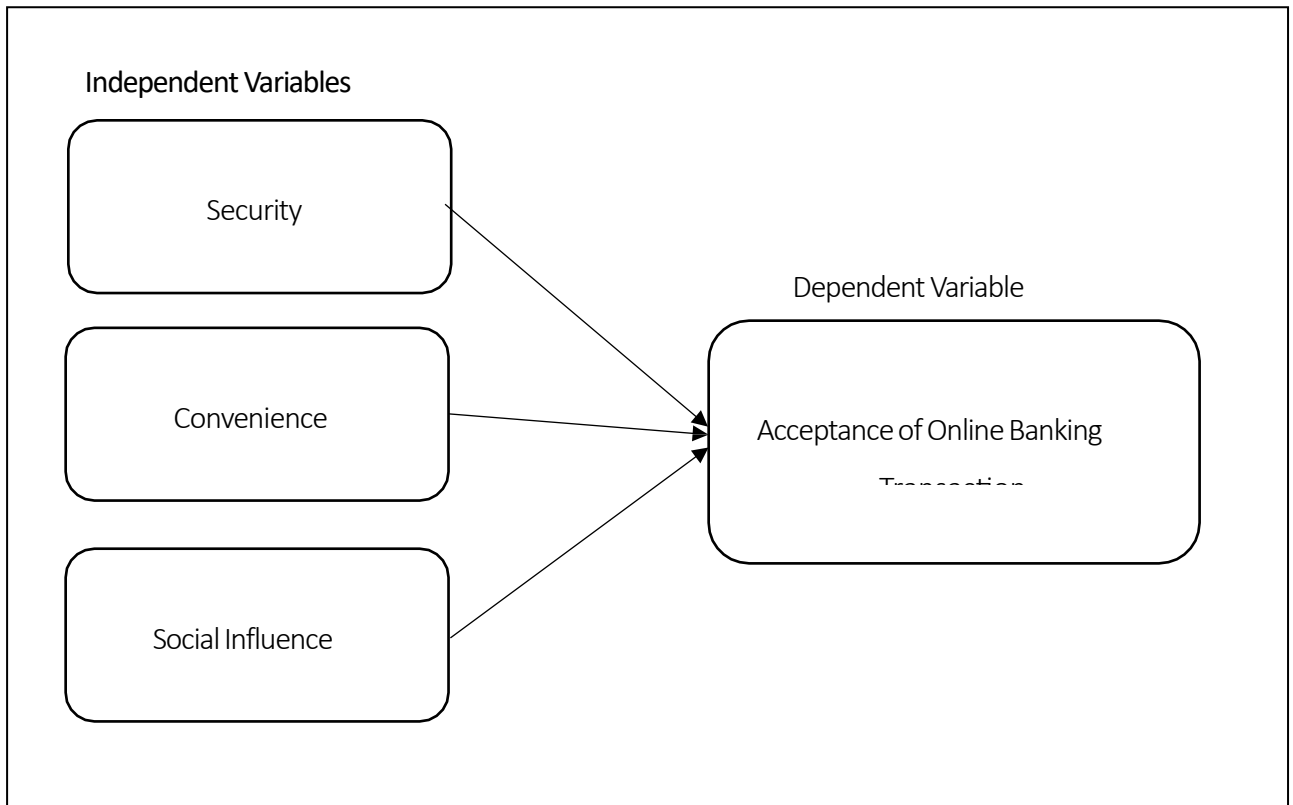


Figure 2.1: Theoretical Framework for the factor acceptance of online banking transaction among UMK City Campus undergraduates.

**3.0 Methodology**

The researcher chooses to use the quantitative method in this study because the empirical evaluation is made up of numerical measurements and analyses. Online questionnaires were used to collect primary data. Data is classified into two types which is the primary data and the secondary data. For this research, for the primary data it will be collected via online survey, also known as online questionnaire. For the all the questionnaires that has been prepared by the researcher will be handed to random student at University Malaysia Kelantan Campus Kota.

The student of University Malaysia Kelantan Campus City going to be as the population of this study. UMK city has three faculty and this study will to all faculty. As a result, the study's total population is 5,410 students at the University Malaysia Kelantan City Campus. The target population is also defined as a specific group of people who are of

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interest to researchers. This study will be conducted at random among 357 students from all the faculty FKP, FHPK, and FPV at the University Malaysia Kelantan City Campus. They were chosen from a variety of courses, years, genders, ages, races, and religions.

In this study, the researchers used primary data from the results of consumer online questionnaires through Google Form as data was in the form of an ordinal scale. It is split into five parts which are Section A, Section B, Section C, Section D and Section E. Respondents' demographic profiles are in Section A, Section B involves the dependent variables aspects

which is acceptance of online banking transaction. Section C, Section D and Section E contains independent variables which are convenience, security and social influence. These sections use the five Likert scales in the questionnaire structure.

In this study, it is estimated that there will need to find around 357 respondents. Thus, the minimum size of sample size is 36 respondents. The pilot study that been started has found a total of 39 respondents. This pilot study will test the reliability of the questionnaire that will be spread in the next chapter. After the respondents has been found, the data will be analysed using SPSS to check the reliability of the questionnaire and data collected. The analysis will be using Cronbach's Alpha. A good value of Cronbach's Alpha are starting from 0.7 and higher. This will determine the reliability of the questionnaire and the data collected.

There are two types of variables have been used in this research: nominal data and ordinal data. This method was chosen to assist in finding more accurate information to complete the research. The nominal scale is for qualitative variables where the numbers used are only as categories and have no meaning or cannot be used for mathematical calculations. In this study, an ordinal variable is a type of measurement variable that accepts values in a particular order or rank used in quantitative variables. This ordinal variable is the second level of measurement and is a subset of the nominal variable. This scale arranges the objects in descending order of satisfaction that is from least to most satisfied.

The data in this study will be analysed and interpreted with the help of the statistical software package SPSS. Analysing, personalizing, and establishing recognizable patterns between various data factors are all accomplished with this approach. The data for this study were gathered using descriptive analysis, Spearman correlation analysis, frequency analysis, reliability and validity checks, and multiple linear regression.

## **4.0 Result and Discussion**

### **4.1 Pilot Test**

Pilot study is a study or research that be made before a real sampling be done. In this study, it is estimated that there will need to find around 357 respondents. Thus, the minimum size of sample size is 36 respondents. The pilot study that been started has found a total of 39 respondents. This pilot study will test the reliability of the questionnaire that will be spread in the next chapter.

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Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.969	.968	55

Table 3.7.3: The Reliability Test of Acceptance of Online Banking Transaction, Convenience, Security and Social Influence

Table 3.7.3 shows the reliability analysis for acceptance of online banking transaction, convenience, security and social influence. Cronbach's alpha coefficient presents a value of 0.969. Hence, the questionnaire is reliable and can be used for the research.

#### 4.2 Demographic Profile of Respondents

In this research, there are total of 373 respondent that has been gathered to answered the questionnaire that has been prepared. The respondents that has been gathered consists of widerange of demographic profile such as gender, age, year of study and course of study level. Table

4.1 show the response rate of questionnaire. The data that has been gathered from 373 respondents has been analyze using Statistical Package for Social Science (SPSS) version 26.

##### Gender

Frequency		Perce nt	Valid Percent	Cumulative Percent
Valid	Female	191	51.2	51.2
	Male	182	48.8	100.0
	Total	373	100.0	100.0

Table 4.2.1: Demographic Respondent Profile Based on Gender

Frequency		Age			
		Perce nt	Valid Percent	Cumulative Percent	
Valid	18 - 20 years old	81	21.7	21.7	
	21- 23 years old	188	50.4	72.1	
	24 - 26 years old	95	25.5	97.6	
	27 - 30 years old	9	2.4	100.0	
	Total	373	100.0	100.0	

Table 4.2.2: Demographic Respondent Profile Based on Age

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**Year of Study**

Frequency		Percent	Valid Percent	Cumulative Percent
Valid	Year 1	72	19.3	19.3
	Year 2	82	22.0	41.3
	Year 3	83	22.3	63.5
	Year 4	113	30.3	93.8
	Year 5	23	6.2	100.0
	Total	373	100.0	100.0

Table 4.2.3: Demographic Respondent Profile Based on Year of Study

**Course of Study**

Frequency	Percent	Valid Percent	Cumulative Percent
	2	.5	.5
SAB	88	23.6	24.1
SAE	59	15.8	39.9
SAH	27	7.2	47.2
SAK	37	9.9	57.1
SAL	28	7.5	64.6
SAP	41	11.0	75.6
SAR	60	16.1	91.7
SAW	31	8.3	100.0
Total	373	100.0	100.0

Table 4.2.4: Demographic Respondent Profile Based on Course of Study

**4.3 Reliability Test**

The dependability coefficient is the ratio of actual inconsistency to the variability achieved through experimentation. In order to assess the data and ensure its internal and external dependability, Cronbach's Alpha analysis was carried out. On a conventional 0–1 scale, Cronbach's alpha calculates the degree of agreement. A value of 0.4 or less is considered undesirable, whereas a value of 0.9 or above is considered to be a highly dependable result (George & Mallery, 2016).

Table 4.4.2: Reliability Coefficient for each Section of Questionnaire.

<b>Dependent Variables</b>	<b>Cronbach's Alpha</b>	<b>N of Items</b>
Acceptance of Online Banking	.716	10
<b>Independent Variables</b>		
Convenience	.664	10
Security	.803	10
Social Influence	.737	10
<b>All variables</b>	<b>.897</b>	<b>40</b>

*No of respondents (N) = 373*



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The reliability test of the pilot test has already been conducted, and the reliability test of the questionnaire is currently underway. Cronbach's alpha of independent variables namely convenience, security and social influence show good values of 0.664, 0.803 and 0.737 respectively. As a result, the study can employ this questionnaire because it is trustworthy.

**4.5 Normality Test**

Table 4.5: Test of Normality

Variable	Kolmogorov-Smirnov <sup>a</sup>		Shapiro-Wilk	
	Statistic	Sig.	Statistic	Sig.
Acceptance of Online Banking	.084	.000	.960	.000
Convenience	.109	.000	.975	.000
Security	.134	.000	.866	.000
Social Influence	.086	.000	.955	.000

The normality test is famous for two tests namely the Kolmogorov–Smirnov test and the Shapiro–Wilk test and is the most widely used method to test the normality of data. The Kolmogorov-Smirnov test uses a more general method, while the Shapiro-Wilk test is a specific test for normality. If ( $p > 0.05$ ), Kolmogorov-Smirnov is regarded as a normal result, whereas the Shapiro-Wilk test is regarded as abnormal. For a significant result, the Kolmogorov-Smirnov p-value for each independent and dependent variable should be ( $p = 0.000$ ). While all significant values for the Shapiro-Wilk test are ( $p = 0.000$ ), which is less than 0.05. Based on the test in this study, all dependent variables (Acceptance of Online Banking) and independent variables (Convenience, Security and Social Influence) and are not normal for correlation analysis.

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**4.4 Hypothesis Testing (Pearson Correlation Method)**

Table 4.5.2: The Pearson Correlation					
		Acceptance of online banking transaction	Convenience	Security	Social Influence
Acceptance of online banking transaction	Pearson Correlation	1	.616**	.370**	.596**
	Sig. (2-tailed)		2.0692E-40	1.4741E-13	3.1153E-37
	N	373	373	373	373
Convenience	Pearson Correlation	.616**	1	.563**	.678**
	Sig. (2-tailed)	2.0692E-40		.000	.000
	N	373	373	373	373

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Security	Pearson Correlation	.370**	.563**	1	.577**
	Sig. (2-tailed)	1.4741E-13	.000		.000
	N	373	373	373	373
Social Influence	Pearson Correlation	.596**	.678**	.577**	1
	Sig. (2-tailed)	3.1153E-37	.000	.000	
	N	373	373	373	373

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\*\* . Correlation is significant at the 0.01 level (2-tailed).

The researchers employed Pearson Correlation Coefficients to determine the significance of the association between the Acceptance of online banking transaction as a dependent variable and the convenience, security, and also social influence as a independent variable. From the table 4.5.1, it displayed the Pearson Correlation value's magnitude relationship, while for the table 4.5.2, it displayed the outcome of the Pearson's Correlation Coefficient utilized to determine the hypotheses for this study.

#### 4.4.1 Security

H0: There is no relationship between security and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus.

H1: There is a relationship between security and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus.

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		Acceptance of Online Banking Transaction	Security
Acceptance of Online Banking Transaction	Pearson Correlation	1	0.370
	Sig. (2-tailed)		1.4741E-13
	N	373	373
Security	Pearson Correlation	0.370	1
	Sig. (2-tailed)	1.4741E-13	
	N	373	373

According to table 4.5.2, there is a significant relationship between security and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus because the value of p is 1.4741E-13, which is lower than  $\alpha=0.05$ , and the value of the Pearson Correlation Coefficient is 0.616, which explains the substantial relationship between security and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus. The result, the H1 is accepted.

#### 4.4.2 Convenience

H0: There is no relationship between convenience and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus.

H2: There is a relationship between convenience and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus.

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		Acceptance of Online Banking Transaction	Convenience
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Acceptance of Online Banking Transaction	Pearson Correlation	1	0.616
	Sig. (2-tailed)		2.06926E-40
	N	373	373
Convenience	Pearson Correlation	0.616	1
	Sig. (2-tailed)	2.06926E-40	
	N	373	373

According to table 4.5.2, there is a significant relationship between convenience and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus, as the value of p is 2.0692E-40, which is lower than  $\alpha=0.05$ . While the value of the Pearson Correlation Coefficient is 0.616, it explains the moderate relationship between convenience and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus. For the result, we found out that the H2 is can be accepted.

#### 4.4.3 Social Influence

H0: There is no relationship between social influence and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus.

H3: There is a relationship between social influence and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus.

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		Acceptance of Online Banking Transaction	Convenience
Acceptance of Online Banking Transaction	Pearson Correlation	1	0.596

	Sig. (2-tailed)		3.1153E-37
	N	373	373
Convenience	Pearson Correlation	0.596	1
	Sig. (2-tailed)	3.1153E-37	
	N	373	373

According to table 4.5.2, there is a significant relationship between social influence and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus because the value of p is 3.1153E-37, which is lower than =0.05, and the value of the Pearson Correlation Coefficient is 0.596, which explains the substantial relationship between social influence and the factor of the acceptance of online banking transaction among student at University Malaysia Kelantan (UMK) City Campus. The result, the H3 is can be accepted.

#### 4.5 Multiple Linear Regression

Table 4.7.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.664 <sup>a</sup>	.441	.437	.28864

a. Predictors: (Constant), convenience, security, social influence

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According to the coefficient of determination, R Square, 44.1 percent of the change of acceptance of online banking transaction can be explained by the changes in the independent variable, which is changes in convenience, security, and also social influence. The remaining 55.9% indicate that there is no link between acceptance of online banking transaction and security, social influence and convenience.

## **5.0 DISCUSSION AND CONCLUSION**

### **5.1 Implication of Study**

As we are looking to the overall finding from this research, there are a few important implications should be taken by all the financial institution, banking institution and other funding institution in order to understand more about the factors that are influence the use of online banking transaction. Hence, this study will provide some implication toward the industry and improve academic or theory aspects in educational institutions.

This research will give an impact in financial situation Security has been see as one of the aspects that give a huge impact in the selection of online payment method. Thus, an improvement of level of security must be done to gain the trust of the customers. Financial institutions also may affect to improve their marketing and advertising strategy by this research where it already shown that social influence give a huge impact in the acceptance of online banking among customers.

Other than that, there are implication to the academic institution. The academic institution will have more understanding to the online banking system. This research will also give the understanding to the academic institutions to find the alternative that will helps to increase the acceptance of online banking systems among customers. Thus, an online banking system which more customer-friendly system can be created.

### **5.2 Limitation of The Study**

Discovering a limitation can be an important opportunity to identify new literature gaps and describe the need for further research. One of the limitations that has been discovered is there are a lack of solid data in making this research because of the expanding of financial innovations. The researchers also did not have the opportunity to meet the respondents physically due to many reasons such as physical distancing, online learning and many more.

Other than that, this research limitation is not enough time to explore more factors that are relate to social aspect. This research believe that they are others more crucial factors that affect the acceptance of online banking among students. This research believe they are others option that being offered to the students in the future.

Next limitation is limited sample size and population to represent all the University Malaysia Kelantan student. Due to open and distance learning and also resource constraints, it is difficult to make sure all the university Malaysia Kelantan student contribute to this research. Thus, this small sample size has caused the result to be limited, and it might fail to represent the high and mighty accuracy of gratifying results needed for this research.

### **5.3 Recommendation For Future Studies**

These are a few of the study's limitations that were identified. First, this study is only concentrates on the students at University Malaysia Kelantan City Campus. The researchers rush to gather the data from responders because they don't have enough to conduct interviews with respondent. Furthermore, researcher used Google forms to collect data via online questionnaires. Since not all respondents were devoted to and encouraged this study, the data collected from the respondents were inaccurate. The researcher had to gather additional respondents to finish the questionnaire because some respondents gave no response at all.

Additionally, the convenience, security, and social influence were the only three independent variables that were the subject of this study. The research's capacity to look into additional study aspects was constrained. Additionally, it happens when the sample size for this study is determined via convenience sampling. The sample's representations could not be eliminated by the researchers. This lack of control could lead to biased research samples and findings, which would restrict the study's capacity to be applied more broadly. In light of these considerations, the future researcher may think about employing a mixed technique approach to lessen the potential limitations of the study.

According to the findings of this study, as the researchers of this study, we have made the following recommendations for the future researcher to do more research related to this topic. To begin, the sample size in future research could be increased to emphasize the topic of the acceptance of online banking transaction. It is because of the respondents that has been use in this study were only from the UMK City Campus. For the suggestion, future researchers should broaden the sample size by conducting future studies on all three campuses of University Malaysia Kelantan, such as the Bachok Campus and the Jeli Campus.

In addition, the researcher offers various recommendations to enhance the study's findings even more. In order to gather data at a particular site, researchers must plan ahead and allow enough time. To assign a task and gather every sample respondent within a set timeframe, time management was important. The suitable respondent should then be chosen to complete the entire distributed questionnaire, it is the another advises from the researcher. this is because, suitable respondent may answer the question honestly and has enough time to read the passage correctly, which will provide researchers solid results. The respondent may be given a period of time by the researchers so that they can collect their questionnaire responses outside of working hours. The focus of their responses will improve as a result.

To describe the inquiries in a questionnaire, future researchers should concentrate on techniques like the direct approach, which is the researcher have to go direct to the respondent and do a face-to-face procedure during data collecting. Respondents provided honest answers when the data was gathered in this technique. To enhance the study's findings, future researchers may need to take the suggestion into consideration to improve the result of the research.

### **5.4 Conclusion**

In order to draw a conclusion from this study, it can be said that the results showed a relationship between the independent variable which is convenience, security, and social



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influence and the dependent variable which is the acceptance of online banking transactions. Hence, we can see that the convenience had the highest value among the standardized coefficients B, and among the other independent variables, it had the most influence on people's willingness to accept online banking transactions, with social influence coming in second. Because security has the smallest coefficient, it contributes the least. It is clear that the convenience, security, and social influence independent variables in this study all have a strong correlation on the factor of the acceptance of the online banking transaction. As a result, the researchers hope that all of the data presented in this study will be useful for banks and policy experts as they update their information systems to big data and analytics in order to better comprehend customer wants and deliver customers with the services they expect. We also hope that the general public will benefit from knowing more about the online banking services.

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## **The Study Factors Influencing User Acceptance Towards Cashless Society Among Universiti Malaysia Kelantan (UMK) City Campus Students**

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### ***Abstract:***

*Many parties have implemented cashless transaction services in this era of globalization. The main objective of this research is to examine the relationship between social influence, perceived usefulness, perceived ease of use, and performance expectancy and University Malaysia Kelantan (UMK) City Campus students' acceptance of a cashless society. 361 questionnaires were gathered in total. Data were analyzed using SPSS methods such as the Reliability and Validity Test, Descriptive Analysis, and Pearson Correlation Analysis. The result shows a significant correlation between social influence, perceived usefulness, perceived ease of use, and performance expectancy with user acceptance towards cashless society. In conclusion, the findings of this research showed that social influence, perceived usefulness, perceived ease of use, and performance expectancy are a factor influencing the dependent variable which is user acceptance towards cashless society among UMK City Campus students. Consumers, businesses, financial institutions, and the government have all been affected by this research. This is because cashless transactions can save time and do not bother us like having to carry money everywhere, hence people do not need to waste their time waiting in long queues to make their transactions.*

*Keywords: user acceptance of cashless society, social influence, perceived usefulness, perceived ease of use, performance expectancy.*

## **1.0 INTRODUCTION**

A cashless society is an eco-monetary framework in which real currency is replaced by virtual cash. ATMs, e-money, internet banking, debit, and mobile payments are examples of electronic systems which are now being used to make payments for products or services that have been developed online via the internet. A user can conduct financial transactions through the Internet using an Internet banking application such as bank Islam biz, maybank2u, and i-muamalat. The use of cash in financial transactions is becoming less common with the advancement of financial technology into a digital and electronic payment. Electronic payment or cashless systems have improved living quality by allowing for online payment and making businesses more efficient and organized.

Some argue that using digital payment can safeguard consumers from being stolen or losing money as a result of carrying cash and a wallet. Cash is the easiest way for the Covid-19 virus to spread through contact. The public is concerned about this global health issue while purchasing goods and services using cash. Canada has the highest cashless implementation rate in the world because everyone in Canada has more than two credit cards. Cashless spending has an impact on Gross Domestic Product (GDP), which is a determinant of a country's growth.

Each 1% reduction in cash in economic circulation is equal to a 40-basis point (0.4%) increase in GDP (Ishak, 2020). This suggests that cashless consumption contributes to the country's economic prosperity. However, the impact of cashless spending on GDP in Malaysia is low, at 2.6%, which will influence this country because its economic growth is low.

This concerns the government since low economic growth encourages investors to refuse to invest in the country and instead prefer to invest in other countries, which will be causing the national currency's value to drop. If Malaysians continue to reject cashless transactions, the country will be unable to compete with other countries with the highest GDP. This clearly illustrates every country's need for cashless payments to be established in the country and used by customers.

The purpose of this study is to identify the factors influencing user acceptance towards a cashless society in Malaysia. This research focuses on University Malaysia Kelantan (UMK) City Campus students.

## **2.0 LITERATURE REVIEW**

### **2.1 User Acceptance of Cashless Society**

Cashless payments were financial transactions in which consumers use cards or electronic technologies to make purchases in the absence of actual cash (Rahman et al, 2020). The amount of non-cash transactions climbed globally between 2018 and 2019, amounting to 708.5 billion transactions, growing at the quickest rate in 10 years. With non-cash transactions totaling 243.6 billion, Asia-Pacific has eclipsed Europe and North America to take the top rank in 2019. Smartphone proliferation, rising e-commerce, cashless acceptance, and mobile/QR-code payment technologies all contributed to the growth (World Payments Report, 2020). According to Kar Hoong Chan, (2020), the digital

transaction infrastructure was developed, and more individuals were beginning to accept cashless purchases, bringing the cashless economy closer to reality. Even though monetary terms are still readily available over the world, they are claimed to be more like electronic or digital forms than earlier perceptions.

Transactions on electronic payment instruments, in the opinion of Rahadi et al. (2020), are the central idea of a society without money. However, emphasises that the absence of currency in a community does not always imply a lack of cash transactions; rather, it merely indicates a reduction in the volume of money-based transactions. The use of physical cash as a means of payment is still highly widespread even though there are many alternatives to cash, including credit cards, debit cards, electronic wallets, electronic money, and mobile payments. Cash is a straightforward form of payment, but it also raises prices and lessens tax transparency. This situation led to the nation's various governments looking into ways to lower the expenses of utilising cash by lowering the reliance of their payment systems on cash and promoting more usage of noncash payment instruments by the general public. Mastercard has created a framework for predicting non-cash foreign travel based on its own research. This technique provides a methodology that emphasises the importance of a country's consumer payment value.

Because there is no need to carry a lot of cash, cashless transactions are quicker, simpler, and safer. Additionally, it may be claimed that adopting 15 cashless is simpler because all transactions are immediately logged by the system and are uncomplicated to follow. Every nation's economy depends on payment systems. The stability of an economy will suffer if the payment system is convoluted and inefficient. The method of payment used by the payment system is a type of transaction that can be either cash or cashless. Before the invention of the Internet, people used cash payment methods that involved actual money in the form of coins and banknotes. Then, as technology develops, people start to replace cash with non-monetary payment methods like carrying a card or a mobile phone. To facilitate transactions, technological developments also drive money transformation (Subawa et al, 2021). Since Covid-19 hit the country, many people are taking advantage of cashless usage in every purchase transaction. Therefore, society's acceptance of cashless transactions increased.

## **2.2 Social Influence**

The concept of "social influence" refers to how important others see a situation and how it affects a person's decision to behave (Rahadi et al, 2022).

The opinions of influential figures in a person's life, such as family, friends, and reference groups, have an impact on their intentions to behave in a particular way. As one of the tenets of the theory of reasoned action (TRA), this declaration, results in subjective norms, which correspond to the social influence concept in the current study. Customers may be unsure about a new technology product and the consequences of using it when they come across it. This ambiguity can be lessened by seeking the advice of people that one respects. This impact on mobile payment systems can be measured by how people's social environment perceives them (Aydin, 2016).

According to Xena and Rahadi (2019), social influence is the personal interpretation that most people who matter to him or her believe he or she should or should not do something. Social considerations have influenced consumer motivation to use mobile commerce. Additionally, other people's good opinions toward mobile shopping will inspire customers to shop on their phones. The perceived impact of people who influence customers in mobile transactions is referred to as social influence. Family, friends, coworkers, and neighbors might have an impact on mobile wallet users. Perceptions of adoption enforcers are related to societal influence (Prabhakaran & Vasantha, 2020).

According to Teng Tenk (2020), It is also recognized as one of the important elements that influence how well new technology is received. Because mobile phones are so commonly used in the present world, people heavily rely on online social communication. People might simply keep an eye on their behavior and solicit comments from others. As a result, people are more likely to be persuaded to utilize new technologies, such as mobile payment systems, by their friends or family. The results demonstrate that social influence has an immediate effect on usage. Furthermore, earlier research by Tusyanah, (2021) has shown that social impact affects how consumers behave while adopting new information systems, such as smartphones. Covid-19 that hit caused the community to sit at home. This will cause them to buy online without cash. Therefore, it will attract other people, especially family members to buy cashless also in their purchase transactions.

### **2.3 Perceived Usefulness**

Lack of observable benefits or a clear understanding of these benefits is one of the key barriers to the broad adoption of mobile payment systems. When a user finds a system useful, they adopt a positive attitude toward it and, if practical, use it to achieve the desired outcomes (Aydin, 2016).

According to the Technology Acceptance Model (TAM), a person's perception of a program's utility depends on how much he or she thinks using it would enhance his or her performance (Balakrishnan & Shuib, 2021). In other words, users are more likely to use an app again and prefer it to other payment choices when they see its perceived utility as being high (Mei & Boon Aun, 2019).

The degree to which a person believes using technology might improve his performance is known as perceived usefulness (Padmawidjaja, 2020). The 17 phrase "interest" is a personality term that refers to the existence of the will, or the urge (force) that arises from within an individual to choose other like objects. Faster, more accurate, growing efficacy, rising performance, productivity, and usefulness are all markers of perceived usefulness (Chaveesuk & Sudiyani, 2019). Based on the study of Tan Jia Enn, (2020), people would prefer to utilize cash if the perceived utility of an e-wallet is low and expensive, she said. People, on the other hand, are more likely to utilize an e-wallet instead of cash if it helps them increase their productivity and efficiency at work. Furthermore, as users' choice to use an e-payment service is influenced by the system's usability, perceived usefulness and e-wallet adoption are strongly correlated.

Cahyadi, (2019) also found that even if potential users think the programme is valuable, they could also think it's too complicated to use and that utilising it will only result in performance gains that are worth the effort. If the user-friendliness of the information system is excellent, it will have a favorable impact on users and generate a positive environment. Customer satisfaction and attitude toward the use of mobile payments Individuals who believe in Relevant technologies will need minimum effort, if not none at all. Users rarely accept mobile payment systems for several reasons, including a lack of tangible advantages and a lack of clarity regarding the performance they offer. (Mei & Atan, 2021). Cashless purchases will attract more people to use them. This is because it saves users more time without having to wait longer when the cashier returns the remaining money. Therefore, society will use cashless transactions in their daily lives.

#### **2.4 Perceived Ease of Use**

In their hypothesis Zheng (2019) mention the perceived simplicity of mobile payment, asserting that there is a favorable correlation between simplicity and beliefs about adopting mobile payment, as well as the perceived usefulness of mobile payment. The data acquired backed up the theory, confirming the existence of a positive association. Furthermore, the same hypothesis, believes that mobile payment should be simple to learn and use. 18 Consumers will see the cashless payment system as being easier to use than users who use cash payment methods (Mei & Atan, 2021).

TAM, which is widely acknowledged, is one of the most well-known ideas for explaining how people adopt new technologies. Since its inception, the strategy has been effectively applied in several studies on the adoption of new technologies, such as cloud computing, telemedicine, and e-learning. A person's openness to or resistance to new technology can be assessed using the TAM paradigm, which is widely acknowledged as being fundamental. In the vast majority of studies on cashless payments or e-payments, a few other constructs were also included for good measure, including security, cost, trust, mobility, expressiveness, convenience, speed of transaction, social reference groups, the allure of alternatives, privacy, system quality, and technology anxiety. Researchers, for instance, combined TAM with personal innovation, social influence, perceived danger, and perceived financial cost to evaluate the uptake of mobile credit cards (MCC) among 153 Malaysians. According to their model, which had a 44.9% predictive power, only perceived usefulness and simplicity of use were significantly related to adopting MCC (Balakrishnan & Shuib, 2021).

Perceived ease of use, according to Setiawan and Setyawati, (2020), is the belief that a piece of technology is easy to grasp, and a study indicated that perceived ease of use is one of the elements that strongly influences attitude toward using backs up this claim. Users will adopt new technology more quickly if they believe it to be easy to use and time and energy efficient. Perceived ease of use has a favorable impact on the user's attitude toward utilizing fintech because when fintech services are easy to use, the user's attitude is also positive. One of the reasons for the good attitude toward using is the perceived ease of usage. The

greater the satisfaction with technology's perceived ease of use, the more likely the individual would have a positive attitude toward its use. The use of cashless transactions for the community makes it easier for them. This is because, with more advanced technology, it will be easier to make cashless payments. They can make payments through their mobile phones only.

## **2.5 Performance Expectancy**

Performance expectations have received a lot of attention from writers throughout the spectrum of human endeavors (Venkatesh et al, 2003). According to Rogers (2003), several of these researchers sought to discover and apply the concept to explain information system adoption and usage. Performance expectation (PE) is the extent to which a person believes that putting a system into place would help them perform better at work (Venkatesh et al, 2003). Moreover, users are more inclined to adopt current technologies if they feel it gives benefits to them and are more efficient in their daily lives. Performance expectation is the degree to which a person expects that using a system would help them improve their work performance (Venkatesh et al., 2003). It may even be described as the extent to which, as an example, postgraduate students believe that utilising smartphones would help them achieve better academic success.

Furthermore, the term of "perceived usefulness" is comparable with "performance expectation" in behaviour models such as the Technology Adoption Model (TAM). According to other studies, "performance expectation" refers to people's conviction that utilising a system will improve their output and standard of work (Jambulingam, 2013). Consumers are more likely to accept evolving technologies if they feel the new technology will enhance and benefit them, according to reviewed studies (Alalwan et al., 2017). Researchers have repeatedly discovered that perceived usability is a major factor of customers' intentions to stay using mobile commerce in Taiwan (Lin & Shih, 2008). Individual perceptions of how useful mobile commerce applications may be when executing business operations are referred to as perceived performance.

The adoption and use of information systems have been said to be influenced by performance expectations. Cheok and Wong (2015) examined factors that influence e-learning satisfaction in Malaysian secondary school instruction and learning. As possible predictors of teacher satisfaction, user-related features, organizational-related characteristics, and e-learning system characteristics were considered. With the use of renowned databases such as Cambridge University Press, Emerald, Science Direct, Springer, and Sage, this study used a Webster and Watson structured strategy to discover and understand 20 items that are relevant to the study. Their findings demonstrate that the teacher's attitude, anxiety, and self-efficacy will all play a role in whether the method is properly implemented. Cashless transactions will make it easier for users. This is because the use of cashless transactions will save time and increase their use of cashless transactions.



## 2.6 Hypotheses Statement

A new framework in Figure 2.1 is formulated based on the factors influencing user acceptance towards cashless society among UMK City Campus students. There are four (4) hypotheses are shown below:

H1: There is a positive relationship between social influence and user acceptance of a cashless society among UMK City Campus students.

H2: There is a positive relationship between perceived usefulness and user acceptance of a cashless society among UMK City Campus students.

H3: There is a positive relationship between perceived ease of use and user acceptance of a cashless society among UMK City Campus students.

H4: There is a positive relationship between performance expectancy and user acceptance of a cashless society among UMK City Campus students.

## 2.7 Research Framework

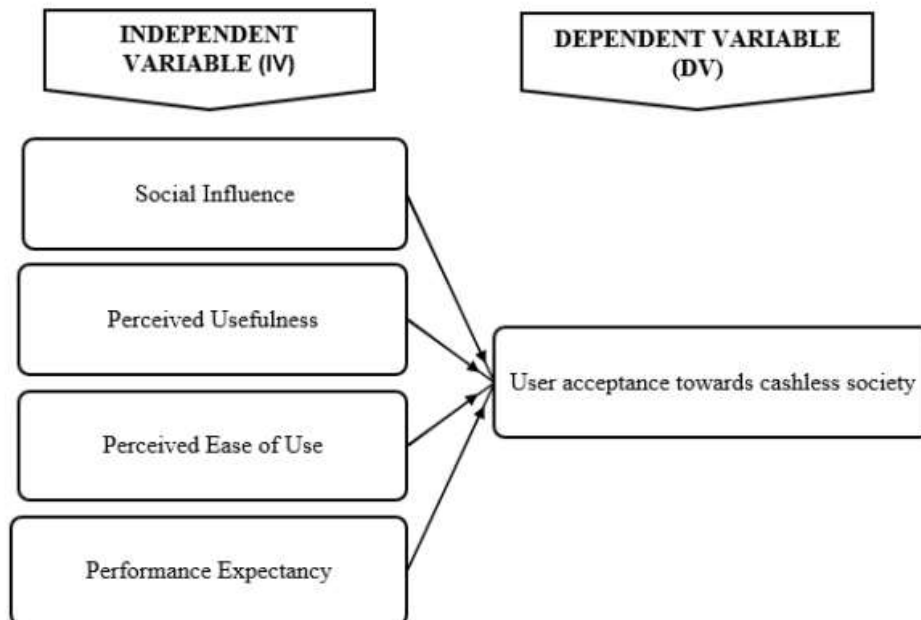


Figure 1: Research Framework for the factor that influences user acceptance of a cashless society among UMK City Campus students.

## 3.0 RESEARCH METHODOLOGY

For this research, primary data has been used, and the data collected through an online survey which is a questionnaire survey online created from Google Form that connects to the study's objective. The questionnaire has been distributed to share surveys on social media randomly such as Instagram, Facebook, WhatsApp etc to the respondents that are students at the UMK City Campus. Moreover, a quantitative research method was adopted in this study.

This study's target population is collected consist of all undergraduate students at the UMK City Campus. UMK has students from various religions, races, and cultures, and there are also students from internationally. There are three faculties available at UMK City Campus, there the Faculty of Entrepreneurship and Business (FKP), the Faculty of Hospitality, Tourism, and Wellness (FHPK), and the last is Faculty of Veterinary Medicine (FPV). In these three faculties, there are different programmes offered. From the differences will be seen the differences of opinion of each student on the factors that influence users to accept a cashless society.

There are 3,495 students from FKP, 2,518 from FHPK, and 224 from FPV among the 6,237 students in the three faculties. For the population of 6,237 students are required 361 respondents as a minimum sample size for our study based on table 3.1 Krejcie & Morgan, 1970, to match our population size. To avoid data error, this research will pick 364 respondents randomly. The researchers choose 3 respondents extra because they think, people are likely giving a very different answers to this survey.

To conduct this research, there were three sections for students at the UMK City Campus to answer this questionnaire. In the first section (A) the answer was about the student demographic information which is the details of the students. Section B mentions the dependent variable which was the user acceptance of cashless in society among UMK City Campus students while the questions from section C include the independent variables which consist of social influence, perceived usefulness, perceived ease of use and performance expectancy. This study also used questions from questionnaire survey from previous study are to be related independent variables and dependent variables. This study used five-point Likert scales in the questionnaire.

Moreover, two scale of measurement that will be used in this research, nominal and ordinal (Likert scale). The nominal scale is employed in the questionnaire for section A, which is related to the respondents' demographic profile, with gender, age, faculty, programmes, and year study, all being measured for the analysis of target respondents. While ordinal scale is a measurement scale used in research to distinguish data and contains aspects of ranking, degree, or level through a specific study. The evaluation can include elements of objectivity, subjectivity, or a combination of both. In the section B and section C for questionnaire in this research are use five-point Likert scale [strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5)] this is to help measure the level of strength of either agree or disagree about the statement for the variables studied.

The most recent version of the Statistical Package for Social Science (SPSS) will be utilised in this study's analysis and interpretation of the data. This method is used to analyse, personalise, and produce recognisable patterns between different data factors. The validity test, reliability analysis, descriptive analysis, and Person's correlation were the four types of analysis employed in this study.

## 4.0 RESULT AND DISCUSSION

Table 1: The Pearson Correlation Result

		USER ACCEPTANCE OF CASHLESS SOCIETY	SOCIAL INFLUENCE	PERCEIVED USEFULNESS	PERCEIVED EASE OF USE	PERFORMANCE EXPECTANCY
USER ACCEPTANCE OF CASHLESS SOCIETY	Pearson Correlation	1	.356**	.631**	.627**	.643**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	361	361	361	361	361
SOCIAL INFLUENCE	Pearson Correlation	.356**	1	.442**	.436**	.482**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	361	361	361	361	361
PERCEIVED USEFULNESS	Pearson Correlation	.631**	.442**	1	.777**	.789**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	361	361	361	361	361
PERCEIVED EASE OF USE	Pearson Correlation	.627**	.436**	.777**	1	.846**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	361	361	361	361	361
PERFORMANCE EXPECTANCY	Pearson Correlation	.643**	.482**	.789**	.846**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	361	361	361	361	361

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 4.1 Relationship Between Social Influence and User Acceptance of Cashless Society

H0: There is no relationship between social influence and user acceptance of cashless society among UMK City Campus students.

H1: There is a relationship between social influence and user acceptance of cashless society among UMK City Campus students.

In the Table above, it is demonstrated that there is a significant relationship between social influence and user acceptance of a cashless society among students at the UMK City Campus. This relationship is explained by the p-value of 0.000, which is less than 0.05, and the Pearson Correlation Coefficient value of 0.356. The H1 is accepted.

## **4.2 Relationship Between Perceived Usefulness and User Acceptance of Cashless Society**

H0: There is no relationship between perceived usefulness and user acceptance of cashless society among UMK City Campus students.

H2: There is a relationship between perceived usefulness and user acceptance of cashless society among UMK City Campus students.

According to the Table above, there is a significant correlation between social perceived usefulness and user acceptance of a cashless society among students at the UMK City Campus. This is because the p-value is 0.000, which is less than 0.05, and the Pearson Correlation Coefficient value is 0.631, which explains the relationship. The H2 is accepted.

## **4.3 Relationship Between Perceived Ease of Use and User Acceptance of Cashless Society**

H0: There is no relationship between perceived ease of use and user acceptance of cashless society among UMK City Campus students.

H3: There is a relationship between perceived ease of use and user acceptance of cashless society among UMK City Campus students.

In the Table above, it is demonstrated that there is a significant relationship between perceived ease of use and user acceptance of a cashless society among students at the UMK City Campus. This relationship is explained by the p-value of 0.000, which is less than 0.05, and the Pearson Correlation Coefficient value of 0.627. The H3 is accepted.

## **4.4 Relationship Between Performance Expectancy and User Acceptance of Cashless Society**

H0: There is no relationship between performance expectancy and user acceptance of cashless society among UMK City Campus students.

H4: There is a relationship between performance expectancy and user acceptance of cashless society among UMK City Campus students.

In the Table above, it is demonstrated that there is a significant correlation between performance expectations and user acceptance of a cashless society among students at the UMK City Campus. This correlation is explained by the p-value of 0.000, which is less than 0.05, and the Pearson Correlation Coefficient value of 0.643. The H4 is accepted.

## **5.0 DISCUSSION AND CONCLUSION**

### **5.1**

#### **Implications of the Study**

Businesses in sectors like online retail can save time and a significant amount of money on capital expenses like renting space for a store or building, purchasing computers, hiring interior designers, and so on. As a result, they particularly benefit from cashless transactions for their businesses. The government is also affected by this study. When preparing for a cashless society,

the government must also take the appropriate actions and think through certain policy options. As an illustration, the government can stimulate economic growth through the money flow that occurs between the seller and the buyer in cashless financial transactions.

Also, since cashless transactions are both cost-effective and revenue-generating for financial institutions, they may have more motive to adopt a cashless system. Financial institutions serve as a marketplace for money and assets, enabling capital to be managed risk to the most productive uses. Financial institutions additionally provide their customers with a range of banking card services, such as secure payment options, bank and merchant rewards, satisfaction guarantees, and much more. With cashless transactions, society and the consumer can save time by doing away with the need to carry cash and stand in line for ATM services.

## **5.2 Limitations of the Study**

The ability of the researcher to provide clearer explanations and the techniques by which the researcher chooses to conduct the research are both constrained by research limits. The first limitation of this study is sampling. Where this study only focuses on UMK City Campus students, while many uses cashless transactions. A survey of workers and villagers may produce different responses because each person has a different view on cashless transactions. When only focused on students in one area only, then the answers obtained are quite the same. The last limitation of this research is the lack of knowledge. Researchers lack knowledge about the variables that influence consumer acceptance of a cashless society. There are many more variables that affect the acceptance of a cashless society

## **5.3 Recommendations**

Based on this study, the researcher makes recommendations in the two sections which were to improve personal financial among students and future studies. The first step to improve the personal financial is figuring out where the money is going. Try to track income and spending for at least a month or two. Divide them into categories such as 'housing', 'traveling' or 'entertainment'.

The researcher then suggests a variety of modifications to the study's findings to further enhance them. Time management skills are required by researchers in order to manage data collection at a selected location. To assign a job and gather every sample response within a certain timeframe, time management was crucial. The suitable responder should then be chosen to complete the whole disseminated questionnaire, the experts further advise.

Finally, future researchers should concentrate on methods like a face-to-face approach with a direct approach during data collecting to explain about the topic in questionnaire. Respondents provided honest answers when the data was gathered in this manner.

## **5.4 Conclusion**

In this study, the researcher established four study objectives. There are connections between user acceptance of a cashless society with social influence, perceived usefulness, perceived ease of use, and performance expectancy. According to the evaluation, there is a connection between social influence and

user acceptance of a cashless society. Additionally, the findings of the correlation analysis demonstrate a favorable association between the dependent variable and the independent variables. It could be said that students at UMK City Campus benefit from using cashless systems generally.

## 6.0 ACKNOWLEDGE

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## **Factors Influencing the Adoption of E-Payment Among Youth in Kelantan**

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### ***Abstract:***

*Digitalization payment has been applied in all industries to improve and smooth activities and transactions. Thus, it has been extensively utilized, particularly during the Covid-19 pandemic, which restricts people's movement, which is Movement Control Order (MCO). It includes e-payment, which is another method of paying for goods or services. It is quite simple to use, and it just requires an electronic device such as a computer, smartphone, or tablet to make any payment through online transactions. Therefore, this study examines the factors influencing the adoption of e-payment among youth in Kelantan. This study used a quantitative method to analyze the data. Besides, the primary data that was collected via an online structured questionnaire from a sample of 384 respondents among youth in Kelantan are used in this study. SPSS software was used to run the correlation analysis. The results indicate that there are significant correlations between ease of use, usefulness, security, and trust with the adoption of e-payment among the youth in Kelantan. Last but not least, the findings of this study may provide the next researchers further insight into their next step of incorporating technology that will enable consumers to use e-payment services conveniently, and it is recommended that e-payment technology be constantly improved to ensure the safety and comfort of users.*

**Keywords:** *E-payment, Ease of Use, Usefulness, Security, Trust.*

## **1 Introduction**

An electronic payment system, or e-payment, is a set of components and procedures allowing two or more parties to carry out financial transactions exclusively online. According to Dennis (2004), the Electronic Payments System, known as EPS, is a form of financial commitment that surrounds business partners such as sellers and buyers as the electronic system facilitates it. Any monetary exchange resulting from electronic



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commerce transaction is referred to as an e-payment system (Kaur & Pathak, 2015). In addition, the existence of a pandemic throughout the country including Malaysia has led to the implementation of MCO or known as the Movement Control Order, which refers to preventive measures implemented by the federal government of Malaysia in response to the coronavirus outbreak (Covid-19). The spread of this virus has had a huge impact on society. It is because people are starting to change their purchasing behavior from making payments in cash to electronic or digital payments. This way can reduce or avoid interacting with other human being face to face. According to Bernama, authored by Baharuddin and Abu (2020), Malaysia's robust financial technology ecosystem supports the smooth deployment of cashless transactions, whether e-payment or e-wallet, particularly when the Movement Control Order (MCO) is implemented to prevent pandemic Covid-19. Monthly contactless transactions quadrupled over the past three years and are expected to continue to grow after Covid-19 and remain the preferred payment method soon. Various e-payments have been used, including Touch n Go, GrabPay, Boost, Online Banking, Credit Cards, and others.

In today's global financial operations, the Electronic Payment System (EPS) has been established because of the growth of e-commerce. It is now the most generally accepted payment option. It is due to its effectiveness, usefulness, and timeliness. Electronic payments (e-payments) have swiftly supplanted previous payment methods that required suppliers and consumers to provide personal information. According to Karim et al. (2020), the development of financial technology has led to a significant increase in the number of cashless transactions in recent years. As a result of the emergence of fintech solutions such as e-wallets, more and more people are moving away from conducting their financial transactions using cash to cashless. The annual Internet Users Survey (IUS) by Malaysian Communications and Multimedia Commission revealed an increasing trend from 76.9% in 2016 to 87.4% in 2018. E-payment is becoming increasingly popular in Malaysia, particularly in Kelantan. Furthermore, after the outbreak of the Covid-19 epidemic, which affected the entire world, including Malaysia, in 2019, the government issued a Movement Control Order (MCO) where all government or private sectors are ordered to close to prevent activities face-to-face, which can cause the transmission of Covid-19. As a result, many individuals are beginning to get used to buying necessities online through platforms such as Shopee and Lazada. On the other hand, youth in Kelantan, particularly, are still hesitant to utilize e-payment due to barriers such as a lack of Internet comprehension, which leads to a lack of trust in the e-payment system (Goh, 2017). This study examines the Kelantan youth's willingness to use e-payment as a payment method in a transaction involving the exchange of goods or services. This study aims to identify the factors that may influence Kelantan consumers' adoption of e-payments as an alternative payment method for transactions involving the exchange of goods and services.

## 2 Literature Review

### 2.1 Underpinning Theory

#### 2.1.1 Technology Acceptance Model (TAM)

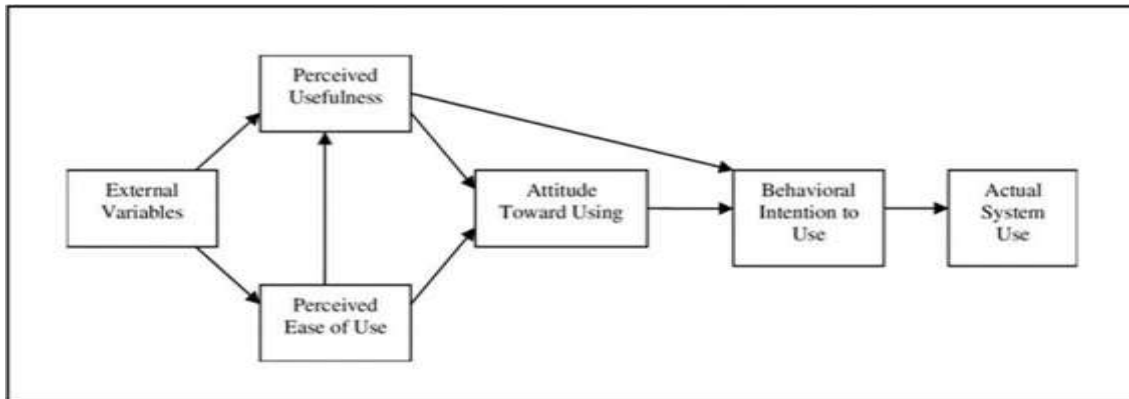


Figure 1: Process in the use of the Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a theory of information systems that describes how users acquire and employ technology. According to Barry and Jan (2018), TAM is an exceptionally well-researched intention model that has been demonstrated to predict technology acceptance behavior accurately. There are several variables in advanced TAM theory, such as Perception of Usefulness (PU), Perception of Ease of Use (PEU), Behavioral Intent (BI), and Actual System Use (ASU). This theory aims to identify and predict the variables influencing a system before its implementation. Most researchers chose TAM as one of the most influential technology acceptance models to develop the framework for investigating the factors influencing e-payment adoption. Two major TAM factors are affected by external variables, which are ease of use and usefulness. Some researchers also considered perceived risk, security, and trust in e-payments as additional variables. People interact with technology through the existing system and utilize it for various purposes. Their behavioral intention is one of these purposes. It is influenced by an individual's attitude toward technology, which is the individual's general view of technology.

### 2.1.2 Unified Theory of Acceptance and Use of Technology (UTAUT)

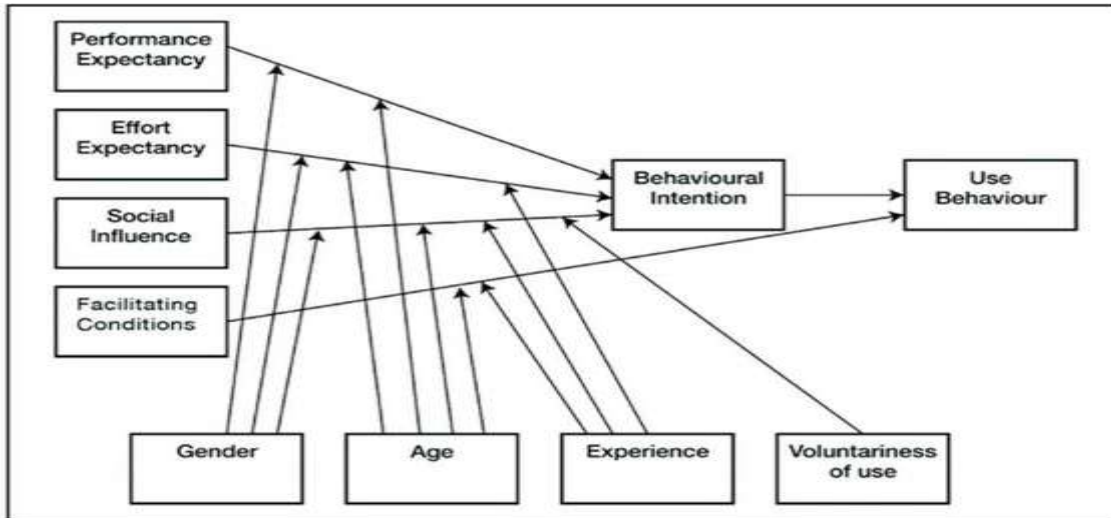


Figure 2: Process in the use of Unified Theory of Acceptance and Use of Technology (UTAUT)

Venkatesh (2003) developed the Unified Theory of Acceptance and Use of Technology (UTAUT) as a technology acceptance model, which other researchers later adopted. To understand how users intend to use an information system and how they behave due to their intentions, the UTAUT must first explain those intentions. The researcher developed a model in a prior study, and two external variables were added to the UTAUT model, such as culture and security. Culture and security variables are critical components of these systems and were included in the research on electronic payment systems (Junaidi & Sfenrianto, 2015). This theory is used in Alsabaawi et al. (2021) study on technology acceptance. However, in identifying customer intention to embrace and use e-technology, TAM theory is widely applied by the vast majority of researchers. UTAUT seeks to identify user intentions regarding technology acceptance in compliance situations, whereas UTAUT2 seeks to identify beneficiary intentions regarding technology acceptance and use in the consumer context (Putri et al., 2017). In the context of influencing e-payment adoption, Nguyen and Huynh (2018) assert that the UTAUT2 model requires variables such as trust. In contrast, Al-Sabaawi et al. (2021) assert that the UTAUT2 model requires variables such as security.

## 2.2 Previous Study

### 2.2.1 The Adoption of E-Payment Among Youth in Kelantan

Electronic payment is defined as a payment process that involves the transfer of funds using an electronic platform (Azman, 2020). The e-payment system is an important mechanism nowadays used by individuals or organizations. This system facilitates the community to make any payment transaction through the Internet. Using this system can lead to technological advances in the financial world (Slozko & Pello, 2015).

According to Restianto et al. (2018), a new payment method is called electronic payment, in which businesses collect payment information for their products and services and enter it into electronic templates to produce electronic files that can be processed through a network. According to Teoh et al. (2013), electronic payment is a

value transfer from the payer to the recipient that takes place electronically. These transactions are carried out through a predetermined route, enabling clients to effortlessly access and use their bank accounts online without having to visit an ATM to transfer money or withdraw cash physically.

### *2.2.2 Ease of Use*

The main factor which causes an increase in the use of e-payment among the Malaysian community is the ease of use of the system, which makes the community interested in trying e-payment. According to Afandi (2018), consumers in Malaysia prefer electronic payment methods such as internet transfers, ATM withdrawals, cash, credit cards, and debit cards by 70 percent.

Ease of use indicates the extent to which a website can assist learning, understanding, or operating (Lin, 2007). It can affect an individual's evaluation of the efforts that are being made in the technological process. Some empirical studies state that the perception of ease of use will affect the use of electronic payment. According to a survey by Thiab and Yusoh (2019), the adoption of e-payment is positively correlated with ease of use. Meanwhile, Perkins & Annan (2013) and Roy & Sinha (2017) showed a strong correlation between e-payment intention and convenience of usage. Besides that, according to the hypothesis proposed by Karim et al. (2020), the perceived ease of use and the behavioral intention to use an information system are significantly correlated.

According to Szajna (1996), based on the TAM model, perceived ease of use can influence user intentions. The ease of use requires usage issues that allow it to be easy to understand and navigate. Ease of use is also an opinion or view of users about the information technology used. It indicates that technology systems with friendly features can further improve user data compared to other systems. Moreover, according to Taherdoost (2018), a method for measuring user effort in utilizing a system is called ease of use. It can help users improve their learning about the job and, at the same time, add more knowledge about the latest systems (Al-Gahtani, 2016). The system's efficiency and the convenience of information technology will be beneficial to users in many ways (Vinitha & Vasantha, 2017).

H<sub>1</sub>: There is a positive relationship between ease of use and the adoption of e-payment among youth in Kelantan.

### *2.2.3 Usefulness*

One factor that influences the use of e-payment systems is their usefulness. According to Goh (2017), perceived usefulness is the most important factor influencing user attitude, and other researchers corroborated his findings. Using technology or a system would be more enjoyable for users if they could access information and services at will. It can be seen through the degree to which customers believe that e-payment services will benefit them. The level of productivity is also closely related to self-perceived usefulness. (Cheng et al., 2018). A study conducted by Barry and Jan (2018) shows a positive and substantial effect of usefulness on the adoption of e-payments as well as the perceived usefulness on the behavioral intention to use a certain system. The

perceived usefulness and behavioral intention to use are positively and significantly correlated, as found in a study by Karim et al. (2020).

According to TAM theory, the perceived usefulness hypothesis predicts a direct relationship between behavioral intention to use technology and technology use (Karim et al., 2020). The same underlying theory has revealed that the perceived usefulness and ease of use positively influence consumers' intention to use mobile credit cards. (Dawi, 2019). The perceived usefulness describes how strongly a person thinks utilizing a particular system will enhance their ability to perform at work. The perceived usefulness of a product is one of the most crucial factors in TAM theory because it has a significant impact on behavioral intentions. (Karim et al., 2020). As Cheng et al. (2018) demonstrated, the perceived usefulness of e-wallet services has a significant impact on user loyalty.

H<sub>2</sub>: There is a positive relationship between usefulness and the adoption of e-payment among youth in Kelantan.

#### *2.2.4 Security*

Security is another important factor related to the use of e-payment among youth in Kelantan. Security refers to an individual's belief that a specific procedure is safe. Technology use intentions are influenced by this factor (Voronenko, 2018). When it comes to supporting digital cash transactions using e-wallets, security concerns are one of the most important considerations.

According to Rahi and Ghani (2018), this security factor uses the UTAUT theory. There is a paucity of empirical research that captures both technology and risk factors to understand behavioral intentions in the use of Internet banking. It contributes to the research twofold. First and foremost, the UTAUT model should be expanded to include the Dissemination of Innovation (DOI) and perceived technological safety. According to Kumar (2018), security is a crucial factor in the adoption of mobile wallet payment methods, which is corroborated by Anaraki-Ardakani et al. (2014) findings that consumers' behavioral intentions toward e-banking positively relate to perceived security.

According to Ding et al. (2020), customers prefer to use an e-payment system if it has high-security standards. It is because security should be considered in the form of an e-payment system with a high level of protection to reassure customers in e-payment transactions. However, security positively impacts the adoption of e-payment systems, indicating that high levels of security can increase the adoption of e-payment systems. Goh (2017) claims that by improving and developing better and more secure systems, customers can quickly begin switching to e-payment systems.

H<sub>3</sub>: There is a positive relationship between security and the adoption of e-payment among youth in Kelantan.

#### *2.2.5 Trust*

Trust is an essential factor in determining whether or not to use an e-payment system (Thiab & Yusof, 2019). Security and trust are fundamental to increasing

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consumer perceptions to attract and retain consumers using e-payments. The process will be considered confidential when all phases of the e-payment process meet participants' needs and security expectations. All participants must have complete faith in the system they are involved in as a fundamental precondition for participation (Kabiret et al., 2017).

In addition, Ding et al., (2020) determined that there is a positive relationship between trust and e-payment system usage. For instance, consumers have a high level of trust in e-payment systems, so they will be more willing to assume the risk associated with e-payment system transactions. This indicates that consumers will be more likely to use e-payments because they have a reduced perception of the risk associated with using the technology (Goh, 2017). Most researchers have used TAM theory to develop a framework to investigate the factors that influence the use of e-payments, such as perceived ease of use and perceived usefulness. However, trust and security are additional factors (Najdawi et al., 2021). According to Liebana-Cabanillas et al. (2018), trust has had a significant impact on customer attitudes and perceived ease of use when using mobile payment services. Thus, customers' intention to use e-payment services will be influenced by their own level of trust.

According to Kongprapunt and Pupat (2018), it is important for users to have trust and confidence in the capabilities of the e-payment system. It keeps users' personal information and money safe from misuse and theft. Conversely, low trust is caused by concerns about user data privacy and Internet security that can affect the use of e-payment systems (Tasin, 2017). However, some researchers state that trust alone is not enough to make consumers use e-payment systems. For example, if a reputable organization provides e-payment services, consumers are happy to use them. However, consumers will also be cautious and wary of using e-payment services provided by unreliable organizations (Najdawi et al., 2021).

H<sub>4</sub>: There is a positive relationship between trust and the adoption of e-payment among youth in Kelantan.

Figure 3 below presents this research framework consisting of the research's dependent and independent variables. Based on the Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT), the figure above studies the relationship between dependent and independent variables for the conceptual framework. The dependent variable (DV) is the adoption of e-payment among youth in Kelantan. This study's independent variables (IV) are ease of use, usefulness, security, and trust.

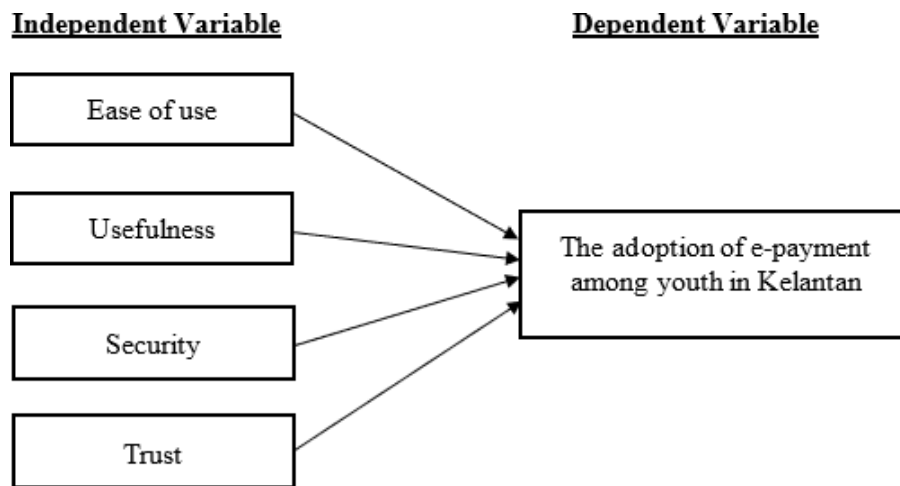


Figure 3: Conceptual Framework Model

### 3 Methodology

The analysis design for this study uses quantitative methods. By examining the factors that influence the use of e-payment among youth in Kelantan, it is designed in the form of a cross-sectional descriptive used in this study. This research used a quantitative approach and a cross-sectional questionnaire. According to Apuke and Oberiri (2017), quantitative research methods involve explaining problems or phenomena by collecting information in the form of numbers and analyzing them with the help of various mathematical techniques, especially statistics. This study uses a questionnaire as a data collection method and involves youth using e-payment in Kelantan. A practice convenience sampling procedure was used to understand some of the criteria highlighted from a random population sample. In this research, the study population analysis consisted of Kelantan youths between the ages of 19 to 39 years old. It is estimated that more than 796 thousand youths in Kelantan were recorded in 2021, according to the official portal of the Kelantan state government. Then, after referring to the total population based on the table of Krejcie and Morgan (1970), there are 384 respondents among youth in Kelantan that need to answer the survey. The respondents will be selected from the population to determine the ease of use, usefulness, security, and trust in the adoption of e-payment among Kelantan's youths.

In this study, online questionnaires were employed as the research tool and as the method for gathering data. There are several sections that have been divided into the questionnaire, including section A, section B, and section C. Section A has several questions related to the demographic profile of respondents in terms of gender, age, race, marital status, employment status, education level, and frequency of using e-payment. Next, in section B, there are questions related to the dependent variable, which is the adoption of e-payment among youth in Kelantan, while in section C, there are questions about the independent variable associated with the factors that influence respondents in the adoption of e-payment. The questionnaire tools that are used to collect data for the study will be based on a five-point Likert Scale with numerical

values of 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree), respectively. The results of the questionnaire-based survey were included in the project analysis, which was then analyzed using the Statistical Package for the Social Sciences (SPSS) method.

## **4 Findings and Discussions**

### **4.1 Demographic Profile of Respondents**

Table 1: Demographic profile of respondents

<b>Characteristic</b>	<b>Frequency (Respondent)</b>	<b>Percentage (%)</b>
<b>Gender:</b>		
a Male	164	42.7
b Female	220	57.3
<b>Age:</b>		
a 19-24 years old	173	45.1
b 25-29 years old	92	24.0
c 30-35 years old	63	16.4
d 36-39 years old	56	14.6
<b>Race:</b>		
a Malay	287	74.7
b Chinese	51	13.3
c Indian	35	9.1
d Others	11	2.9
<b>Marital Status:</b>		
a Single	226	58.9
b Married	158	41.1
<b>Employment Status:</b>		
a Non-Employed	169	44.0
b Self-Employed	74	19.3
c Employed	141	36.7
<b>Education Level:</b>		
a SPM	55	14.3
b STPM	40	10.4
c Matriculation	16	4.2
d Diploma	77	20.1
e Degree	159	41.4
f Master	27	7.0
g PhD	10	2.6
<b>Frequency of Using E-</b>		



<b>payment:</b>		
a	Constantly	258
b	Rarely	119
c	Never	7

#### 4.2 Reliability Analysis

Table 2: Reliability analysis

Hypothesis	Cronbach's Alpha Coefficient	Number of Items	Strength of Association
The Adoption of E-Payment among Youth in Kelantan	0.886	4	Very Good
Ease of Use	0.926	4	Excellent
Usefulness	0.922	4	Excellent
Security	0.621	4	Moderate
Trust	0.892	4	Very Good

Based on table 4.1 above, it describes the result value of Cronbach's Alpha Coefficient that showed the reliability of the instrument. The table shows the adoption of E payment among Youth in Kelantan = 0.886, Ease of Use = 0.926, Usefulness = 0.922, security = 0.621 and trust = 0.892. According to Hair et al. (1998), assert that reliability measures ranging from 0.60 to 0.70 are deemed the lower limit of acceptability. It is recommended >0.70 as the acceptability level. So, it means that, the three of independent variable which are ease of use, usefulness and trust are highly reliable and for security is moderate. This shows that some of outcomes of the instrument results are appropriate for a higher level of analysis.

#### 4.3 Hypothesis Testing and Correlation Analysis

Hypothesis testing can be conducted using the results that have been prepared. Feedback from individuals who have been given the opportunity to participate in this assessment can be used to gain insight into its findings. The method used in this study is Pearson Correlation analysis. Pearson's correlation coefficient measures the strength of the linear relationship between two variables. Coefficients are measured on a unitless scale and can take values from -1 to 0 to +1 (Djordjevic et al., 2021). The stronger the relationship between the two variables, the closer the scatter plot is to a straight line.

Table 3: Pearson Correlation analysis

<b>Ease of Use</b>	Pearson Correlation	.729**
	Sig. (2-tailed)	.000
	N	384
<b>Usefulness</b>	Pearson Correlation	.471**
	Sig. (2-tailed)	.000
	N	384
<b>Security</b>	Pearson Correlation	.418**
	Sig. (2-tailed)	.000
	N	384
<b>Trust</b>	Pearson Correlation	.661**
	Sig. (2-tailed)	.000
	N	384

Based on the table above, there is a positive relationship between the adoption of e-payment among youth in Kelantan and ease of use. Because the value of the correlation coefficient is 0.729 and the p-value 0.000 (p-value <0.01). So, H<sub>1</sub> is accepted. Thus, the value of the correlation coefficient for usefulness, security and trust is 0.471, 0.418 and 0.661 indicating that there is a moderate relationship between the adoption of e-payment among Youth in Kelantan. Based on the result, the relationship between the adoption of e-payment among youth in Kelantan and usefulness, security and trust are positive and significant because the p-value 0.000 (p-value <0.01). So, H<sub>2</sub>, H<sub>3</sub> and H<sub>4</sub> are accepted.

#### **4.4 Discussion**

This study discusses the relationship between the factors that influence the adoption of e-payment among youth in Kelantan. In this study, this hypothesis was tested that there is a positive relationship between ease of use, usefulness, security, and trust with the adoption of e-payment among youth in Kelantan. The correlation value for each variable and the adoption of e-payment among youth in Kelantan are 0.729, 0.471, 0.418 and 0.661.

The results were supported by a previous study where for ease of use, Najdawi et al. (2021), stated that they measure the extent to which an individual does not use any effort when using an e-payment system. The user's desire to use the system increased significantly. This is because they believe that the system is easy to understand and does not cause any complications for them (Siew et al., 2020). For usefulness, Karim et al.,

(2020), stated usefulness is defined as the extent to which individuals believe that using a certain information system will further extend the productive time and can improve a person's career performance. In addition, From Siew et al. (2020), many studies have shown that using online payment methods, such as e-payment, e-banking, or e-wallet, has a significant and positive effect on consumer behavioral intentions regarding the use of the method. As for security, Hajazi et al. (2021) state that security is a group of processes and programs that verify information sources. However, security has a positive effect on the use of e-payment systems, indicating that a high level of security can increase the use of e-payment systems. Lastly, this study is also supported by the TAM model, where Liebana-Cabanillas et al. (2018) found that the perception of trust significantly affects customer attitudes and the perception of ease of use when using e-payment services. It is because users have high confidence in the e-payment system. Therefore, they are more willing to bear the risk of doing transactions through the e-payment system. As a result, trust in the security of online payment systems positively affects consumers' propensity to use them.

## **5 Limitations and Suggestions**

One of the limitations of this study is the data collection technique chosen, where we utilised a quantitative approach to distribute the questionnaires through Google Forms. The downside of this method is that we cannot identify the validation of the information given by the respondents since most of the respondents are anonymous. Besides, some of them may have trouble understanding the question and have difficulty responding honestly. Furthermore, due to the certain attitude among the respondents, we need to spend extra time to obtain and collect their responses to the questionnaires. The attitude includes their reluctance to open the Google Forms link, being uncooperative in answering the provided questionnaires and even ignoring the Google Forms link we provided. The next challenge is in the target respondents involved. We have difficulty finding the desired respondents as the target respondents' scope is big. We need to reach out and approach youth all around Kelantan to distribute the questionnaires to collect data.

There are some suggestions to enhance the inadequacies in this research for the next researchers who will conduct research relevant to this subject. They can use quantitative and qualitative research methods altogether. Combining these two methodologies can aid researchers in acquiring a more complete picture than a standalone quantitative or qualitative study, as it integrates the benefits of both techniques. Apart from that, future researchers can focus on the target respondent involved in the study with a smaller scope. For instance, if the next researchers are Universiti Malaysia Kelantan (UMK) students, their target respondents can be among the 3<sup>rd</sup> and 4<sup>th</sup>-year students from Islamic Banking and Finance (SAB) program. So, it will be easier for them to reach out and approach their desired respondents.

## **6 Conclusion**

To sum up, this study has proven that ease of use, usefulness, security, and trust are important in enhancing customers' adoption of e-payment, especially among youth in Kelantan. In the fast-paced world, the transformation of e-payment from a traditional to an online system has made the customer prefer a quick and efficient transaction, which makes life easier but holds back if it is not user-friendly and poses security threats. Hence, there is a need for financial service providers to ensure their banking applications are easy to understand and manage by the most non-tech-savvy consumers and safe. This study questionnaire was posed only to Kelantan youth respondents, so the result might be limited to such a culture. Therefore, for future research, a greater study population should be able to give better and more generalized results than this study for example by extending it to all Malaysian youth.

## **7 Acknowledgements**

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## **The Factor Affecting Internet Banking Usage Among Sab Final Year Students In Semester 7 At Umk City Campus, Pengkalan Chepa**

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### **Abstract:**

*Internet banking is a service provided by banks that allows customers to access and transact on a specified account via a computer and a website. This includes transactions made via the mobile banking service as well as the smartphone app. This study focuses on factors that can affect the Internet banking usage of SAB final year students in Semester 7 at the UMK City Campus, Pengkalan Chepa. There are four factors: trust, service quality, reputation, and security. This study was conducted utilising quantitative approaches and convenience sampling to verify that the data was analysed using a reliable SPSS version 26 software package. The information was obtained from a Google Form and distributed via email contact. In this study, the researchers applied the Theory of Planned Behaviour (TPB), which has a variety of key characteristics that make it beneficial for explaining and predicting student intentions to utilise internet banking. The data collected from SAB final year students in semester 7 is from 135 respondents. The result is all variables have a significant relationship and the highest value by service quality which is  $r = 0.604$ . With contribution in providing improvement quality in the internet banking sector, organisations that are in the industry can examine every factor that will influence individuals to feel safe using internet banking and ensure that the internet banking industry is more familiar among students.*

**Keywords:** *Internet Banking, Trust, Service quality, Reputation, Security*

## **1 Introduction**

Information Technology (IT) development has been promising over the world, particularly in Malaysia, over the last few decades. The development of technology day by day has given many advantages or benefits to many people. In Malaysia, the use of internet technology has developed to the point where almost all sectors will use it. Malaysia's financial and banking sectors are included. Traditional banking



branches have several drawbacks that online banking addresses. Internet banking is more than just a convenient way to access and use existing financial services and products (Safari et al., 2020). According to Gautam L et al. (2014), internet banking is defined as a system that allows customers to access and conduct financial transactions on their bank accounts at any time by connecting web-enabled computers to banks' websites. According to Bob Batchelor (2017), the financial institutions began to introduce e-banking services in the mid-1990s, many consumers were wary of conducting financial transactions via the internet which was pioneered by businesses like eBay, Amazon.com and also America Online. At Malaysia, the development of internet banking was started at 1st June 2000 with the approval from Bank Negara Malaysia (BNM). A study from Hamid et al. (2007), stated that local domestic banks were permitted to offer a full range of products and services via the Internet at the beginning of 1st June. The practice of internet banking was quickly being adopted by Hong Leong Bank and others financial institutions after Maybank been the first bank that offer Internet banking services to the customers. Meanwhile, only after January 1st, 2002, foreign-owned banks with a local presence been allowed to offer internet banking services.

A data from Bank Negara Malaysia (2022), there are 30 banks all around Malaysia that offers internet banking services to the customers and it shows that the banking industry is willing to take new challenges to their operation method in order to give more value to the customers. Based on the data from The Department of Statistics Malaysia (DOSM) (2021), the percent of Malaysian whose using internet banking in 2020 reportedly increased compared to 2019 with 61.9 percent from 50.5 percent with around

11.4 increase rate. According to Bank Negara Malaysia (2020) data, In the first seven months of 2020, there were 136.3 million internet banking transactions, a 25% increase from the previous year. Furthermore, it increased 34% year over year (yoy) from 101.4 million in July 2019. Comparing July 2020 to July 2019, the value of transactions increased by 17% year over year, reaching RM810.1 billion.

From the data, it clearly shows that there are positive results as each year the number of internet banking users increase year by year that also effect the volume of transaction in a year. With an expectation of Covid-19, it led to a further decline in cash usage and increase the consumption of online transaction among Malaysian. Because Malaysia has so many banking organizations, customers have a lot of options when it comes to choosing a bank and at the same time, each banking institution should try to entice customers to use their services. As a result, the usage of internet banking is extremely beneficial as a tool for attracting customers' attention.

## **2 Problem Statement**

Malaysia is likewise becoming a digital nation, with the government encouraging citizens to use internet technology to help the country's transformation to the Fourth Industrial Revolution (IR4.0). A study by Al-Fahim (2012) stated that cost reductions, accessing new sectors of the population, increased efficiency, and improved customer service satisfaction are the key advantages for banks in using internet banking. On the other hand, other benefits of internet banking include improving the bank's credibility, and cost savings, and making the bank more appealing to new consumers.

Despite all of the advantages of internet banking, there are still concerns that will discourage other clients from using internet banking services. The topic of security is one of the most commonly raised by customers. Despite the fact that financial systems are meant to be almost impenetrable, cyberattacks and fraudulent conduct continue to be a reality. Security problems can cause a variety of issues, including the loss of an operating system or the disruption of information access. In the meantime, According to Chevers (2019), if cybercrime is not controlled and handled, it can lead to limited e-commerce adoption in both developed and developing countries including Malaysia. As a result, banks should focus their Internet banking services on giving sufficient guidelines, particularly for teenagers and young adults who are more prone to be risk-takers and like the convenience that Internet banking affords (Ernovianti et al., 2012). Customer's protection is very important in order to gain customers' confidence while using internet banking.

Based on the findings of the previous study from Tahir and Khalid Ahmad (2010), the researcher suggests that future research should include a comprehensive examination of online banking practices in organizations, considering the customer's age and educational level, as well as factors such as customer security and privacy, as well as the utility of online banking, so that managers can make decisions about marketing expansion and customer growth. It is also supported by previous study from Salem et al. (2019) stated that there is a lack of study on the importance of internet banking services and the elements that influence customers' decision to use them. More study is required to help banks better create marketing strategies and improve future service consumption. So, this opportunity is grabbed by researchers to study those factors. According to Suh and Han (2002), the most important indicator of the willingness to use internet banking is internet trust. The desire to use internet banking has grown as a result of increased trust. According to Onalapo and Anene (2016) conducted a recent study in Nigeria on internet banking among University students that solely examined the association between bank service quality and internet banking adoption among chosen students of tertiary institutions in Oyo State, Nigeria. Besides, Heryani et al. (2020) mentioned that the bank's reputation is one of the important elements for the customers to use internet banking. Last but not least, Cheng et al. (2006) discovered that perceptions of web security have a direct impact on the desire to use internet banking. Banks must ensure that internet banking and websites are secure

From that issue, the aim of the research is to determine the relationship that exists between the elements influencing internet banking usage among SAB final year students in semester 7 at UMK City Campus via the determinants of trust, service quality, reputation, and security. Hence, this research adapted the Theory of Planned Behavior (TPB).

### **3 Literature Review**

#### **3.1 Internet Banking Usage**

Internet banking is defined as a banking channel that empowers users to perform a variety range of monetary and non-monetary transactions via a bank website. According to Alwan and Al-Zubi (2016), some research has proven the benefits of using internet banking, emphasizing where this service gives advantages to both banks and customers. Danurdoro & Wulandari (2016) stated that according to the majority,

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the internet users are between the age of 18-25 years which generally stipulates that students are the most dominant internet users. The amount of internet users among students also can be revealed from the ownership and use of internet-connected devices which includes smartphones, laptops, tabs, and computers. According to internet banking services allocated by banks, the student has the ability to fully maximize the service and be able to use it with full commitment.

Businesses, particularly banks, are willing to be able to properly forecast how and why their clients, which are students in this case, prefer to change their behaviour also with their intentions in various settings. For the purpose of achieving the research objectives, a theory of planned behavior (TPB) is used as a tool for this study. TPB begins with a comprehensible characterization of the conduct of enjoyment in terms of its aim, the activity involved, some circumstances of its occurrence, and the time frame during which it arises. Each of these components can be classified at different levels of specificity and generality. All other constructions in the theory have to, nevertheless match the behaviour in all four elements after it has been described and this referred to the principle of compatibility (Ajzen, 1988).

Internet banking can provide consumers with information on banking products and services, as well as access to accounts, fund transfers, and online purchases of financial products and services. In the meanwhile, internet banking help banks save money by reducing the cost of having employees physically serve consumers, shortening financial processing times, increasing speed, and improving the flexibility of business operations (Sankari et al., 2015). With the pervasiveness of technology that defines the twenty-first century, banks are adopting a new set of procedures. The top banks of today recognise the value of offering services that are more extensive and modern than what is typically provided.

### 3.2 Trust

Customer trust was the most essential variable that influenced all other variables in a meaningful and favorable way (Jalil et al., 2014). According to Beh Yin Yee and T.M. Faziharudean (2010) in Malaysia the client loyalty to individual internet banking websites is found to be influenced by trust, habit, and reputation. This belief involves a person's level of confidence in something. In the context of the use of internet banking, customer confidence in the banking institution will encourage the use of internet banking offered by the banking institution. The ability to use internet banking is aided by trust. According to Al-Fahim (2012), previous research has stipulated that "trust" has a striking influence on users' willingness to engage in online money exchange and personal information sensitivity. "Users' thoughts, feelings, emotions, or behaviour that arise when they believe an agent can be trusted to behave in their best interests when they give up direct control," according to Patrick (2002).

In the context of e-business, trust has been described as "the readiness of a party to be vulnerable to the activities of another party based on expectation that the other will execute a particular action crucial to the trustor, irrespective of the capacity to monitor and manage the other party." Thus, there is strong theoretical support for the relationship between trust and intention to use electronic banking as well as strong empirical support. When customers trust their service provider, they are more inclined to build social bonds with them (Cater, 2008). According to Ofori et al.

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(2017), subscribers who acquire trust in their service provider are more likely to have good behavioural attitudes and intentions toward them. In this regard, it is believed that online banking users who have faith in their service providers will continue to use the service. Trust and distrust are two distinct categories that affect users' decisions regarding the use of internet banking, according to research by Benamiti and Serva (2007). Consumer acceptance of the use of the internet to communicate with their bank was found to depend on trust

### 3.3 Service Quality

Service quality offered by internet banking is something that will affect customers. Beh Yin Yee and T.M. Faziharudean (2010) stated that while service quality was found to be an important factor in influencing technology adoption, it had no significant influence on customer retention. Behavioral intentions to use internet banking have been affected by a variety of factors, including service quality, perceived risk, trust, website usability, perceived security, ease of use, access, availability, and usefulness, depending on individual characteristics, societies, economies, politics, and technologies (Yoon & Steege, 2013).

Previous research from Namahoot and Laohavichien (2018) stated that in many internet banking systems, service quality has risen in importance as a useful component in increasing behavioural intents to use. The evidence reveals that service quality and behavioural intentions to use have a positive relationship, implying that banks must provide internet banking services and that users must use these services. Therefore, it is imperative to enhance the service quality of internet banking services by incorporating data presented via internet websites, input commands, responsibility, reliability, assurance, and demonstrating empathy for customers' needs (Zeithaml et al., 1996). The findings of the Raza et al. (2015) study demonstrate that the core performance, relational performance, and elements of retail banking that are related to service quality have a significant impact on customer satisfaction. The findings of this study have suggested that the foundation of customer happiness, which will immediately result in a consistent use of internet banking, should be provided by the factors of service quality. Apart from that, service quality is one of the pillars on which customers build long-term relationships with businesses

### 3.4 Reputation

The reputation of the service provider may also influence the usage of internet banking services (Kassim & Abdulla, 2006). The reputation of banks, which is one of the primary factors, has a considerable impact on customer adoption of innovative technology-based service delivery. Reputation is based on keeping policy commitments to consumers, particularly privacy commitments, as most customers information published in an inappropriate way or exploited by others through the internet platform. customers do not appreciate their personal. Aladwani (2001) suggested that the corporate reputation is connected to how quickly a new invention like internet banking is adopted: the better the perceived company reputation, the quicker the adoption.

Without a doubt, reputation plays a role in achieving increased profitability because a positive reputation helps commercial banks draw in more clients. Customers' perceptions of an organization's reputation are dependent on such factors, as well as

the organization's solvency, dependability, and ability of the banks to obey the law. Reputation is described as the continuity over time of a characteristic of a company, such as reputation in terms of value, product quality, inventiveness, or worldwide reputation. Reputation must be interpreted as referring to the complete business, not just the website, in accordance with Casaló et al. (2008). Reputation was mentioned as a key element in determining whether or not customers would use an online organisation, particularly for internet banking.

### 3.5 Security

According to the findings of the study by Safari (2020), the intention of an internet banking user is determined by a positive attitude toward security and usability. Here it is found that security is also a factor that will affect a customer in internet banking users, especially non-users of internet banking. According to Sadeghi and Hanzae (2010) and also Ganguli and Roy (2011), many banking studies have underlined the significance of security in the acceptance and use of online banking. According to Pikkarainen et al. (2004), the security of online banking is a more concerning trigger and another element that is more likely to affect online banking adoption. The use of online banking is considered to be more difficult due to security concerns (Bhattacharjee & Premkumar, 2004). To ensure the continued use of internet banking, banks should employ trust- building measures. This necessitates banks maintaining the security of their online banking platforms.

Security is a state of being protected from danger or interference. Therefore, security exclusively influences the development of online banking. With the security improvement, the use of internet banking can be measured and given an improvement assessment to benefit a banking institution. As pointed out by Juwaheer et al. (2012), there is a security concern because of fraud and the possibility of a hacker accessing internet users' accounts. In fact, Sathye's (1999) survey found that 73% of clients were unwilling to use this service due to security concerns. The desire of consumers to use Internet-based transaction systems has been shown in numerous studies to be influenced by security and privacy, according to Wang et al. (2003) research. Protecting data or systems against unauthorised access or leaks is referred to as security.

## 4 Conceptual Framework

In a research study, a conceptual framework is an operationalization of the theory that reveals the links between the various constructs (Kumar et al., 2012). After that, the indicator items for measuring the variable were made. In the table below, four variables and their items were selected from the most relevant research, empirically tested, and adapted to the study context. Based on the various types of research and literature discussed above, this study will view the variable customer using internet banking (Y), which will be influenced by the variables trust (H1), service quality (H2), reputation (H3), and security (H4) as specified in the framework below.

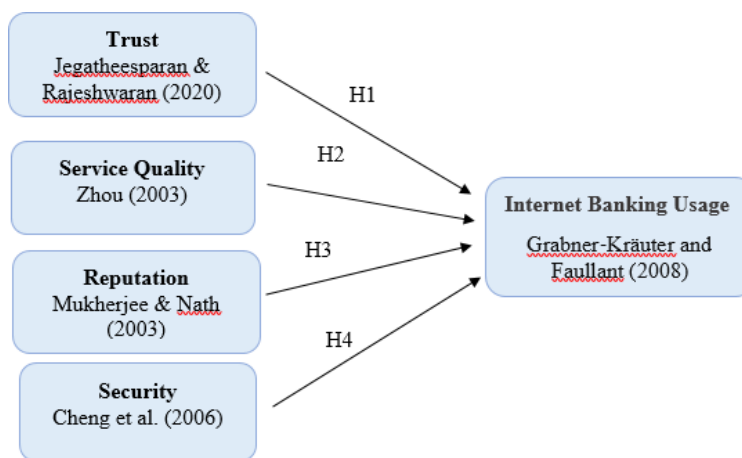


Figure 1: Conceptual Framework

## 5 Research Methodology

The research design of this study is a quantitative method by using the e-questionnaire which was made in Google form. The questionnaire was distributed to SAB final year students in semester 7 at UMK City Campus who are using Internet banking users through social networking sites such as email contacts. The researcher will select the respondents who are using internet banking at the targeted location which is UMK City Campus by using convenience sampling. According to the data active student enrolment for bachelor's degree session 2021/2022 from the Faculty of Entrepreneurship and Business, the population of students in Islamic Banking and Finance (SAB) is 200. However, as a preventative measure to protect the data being acquired, the population will be 200 and the sample will be 135. In this study the researcher using non-probability sampling technique as a medium to distribute the questionnaire. The questionnaire is by google form which will surely reach the respondents. In this study, the questionnaire is divided into three (3) parts for this review, with section A for the demographic profile, such as gender, age, and others. Section B comprises four independent variables, which are trust, service quality, reputation, and security. Section C comprises dependent variables which is internet banking usage. As a result, the reliability test will be conducted using the SPSS software version 26.0 in this study. To continue the research, all of the information will be gathered. In this research, the data obtained were investigated using the Statistical Package for the Social Science (SPSS), pilot test, descriptive analysis, reliability analysis, and correlation analysis.

## 6 Results

### 6.1 Demographic information

Demography is the study of human groups using statistical data. This demographic is found in section A of the questionnaire. In this study, the researcher asked five demographic questions, including gender, age, race, frequency of using internet

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banking, and bank type. Table 1 presents the summary results of the respondent's demographic characteristics including gender, age, race, frequency of using internet banking, and bank type. Based on the table, the female proportions is nominated for this research with 68.1 percent compare to male proportions with 31.9 percent. Majority of respondents were at age 23 years old (45.2%) while the minority of respondents age 21 years old (1.5%). In the meantime, The proportion of race consists of malay and chineserespondents with 98.5 % and 1.5%. The researcher discovered that most people now use the internet banking 2–5 times per week. This means that the highest percentage, 56% of respondents use internet banking. Following that, 21% use internet banking 6–9 times per week, which is the second highest in the chart. Aside from that, 16% use internet banking once per week, and the lowest frequency of use is 7%, 10–12 times per week. About 71.1 % of respondents are likely to use Bank Islam for internet banking transactions and Bank Rakyat become the unpopular bank which only 2.2% respondents use this bank for internet banking.

Table 1: Demographic Information about Respondents

<b>Characteristics</b>		<b>Frequency</b>	<b>Percent</b>
Gender	Male	43	31.9
	Female	92	68.1
Age	21 years old	2	1.5
	22 years old	45	33.3
	23 years old	61	45.2
	24 years old	18	13.3
	25 years old	9	6.7
Race	Malay	133	98.5
	Chinese	2	1.5
Internet Banking Usage Frequency	Once a week	21	15.6
	2-5 times a week	76	56.3
	6-9 times a week	28	20.7
	10-12 times a week	10	7.4
Type of Bank	Bank Islam	96	71.1
	Maybank	27	20.0
	CIMB	9	6.7
	Bank Rakyat	3	2.2

## 6.2 Descriptive Analysis

In a study, descriptive statistics are used to explain the basic properties of the data. It's provided concise summaries of the sample and measures.

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Table 2: Descriptive Statistics of Research Variables

<b>Trust</b>	<b>Mean</b>	<b>Std. Deviation</b>
I trust the information that is provided in online banking.	4.11	.740
I trust the system of internet banking is trustworthy and honest.	4.09	.767
I trust all services provided by internet banking.	4.10	.638
I trust the system of internet banking offers secure personal privacy.	4.07	.749
I trust payments made through the internet banking channel will be processed securely.	4.19	.704
<b>Service Quality</b>		
The layout of the information in the internet banking web site is easy to follow.	4.21	.565
The layout information on the internet banking web site is up to date	4.26	.559
The layout information on internet banking allows me to complete a transaction quickly.	4.36	.606
The internet banking site provides professional services.	4.32	.568
This internet banking site provides on-times services.	4.20	.667
<b>Reputation</b>		
My internet banking image is good and positive.	4.28	.594
My internet banking has a positive image with its customers.	4.29	.584
My internet banking website has a good reputation compared to other rival websites.	4.17	.653
My internet banking website has a reputation for offering good services.	4.27	.588
My internet banking website has a reputation for being fair in its relationship with its users.	4.27	.591
<b>Security</b>		
I believe that internet banking will not misuse my personal information.	4.05	.746



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I believe that the bank will not expose my personal information to the third party.	4.10	.785
I believe that the platform of internet banking will process my transactions without any mistake.	4.08	.723
I feel the risk associated with online transactions is low through the internet banking website.	3.96	.771
My bank gives a lot of security instructions on how to protect accounts from scammer.	4.27	.704
<b>Internet Banking Usage</b>		
I use internet banking almost every day.	3.79	1.023
I received confirmation of every online transaction by SMS	4.46	.689
I save time and effort by using internet banking services.	4.51	.597
I will continue dealing with the internet banking services in the future.	4.52	.597
I strongly recommended the use of internet banking services.	4.53	.596

Based on table above, it shows the data for means and standard deviation for research variable for factors of trust, service quality, reputation and security in affecting internet banking usage among SAB final year students in semester 7 at UMK City Campus, Kelantan. Derived from above reports, the highest means for variable of trust is 4.19 on 'I trust payments made through the internet banking channel will be processed securely' which indicated the respondents trust that their internet banking will be process securely their transactions. In the other side, the lowest value of means is for item 'I trust the system of internet banking offers secure personal privacy' with 4.07. At the same time, the highest mean of service quality belong to 'the layout information on internet banking allows me to complete a transaction quickly' with 4.36. Meanwhile, the lowest mean is 4.20 for 'this internet banking site provides on-times services'. From that, it is shows that majority of the respondent is agree with all the element that involve in the factor of service quality in affecting the customers to use internet banking. According to the results, the highest value of means for reputation variable is 'my internet banking has a positive image with its customers' with value of 4.29. At the same time, the lowest mean value is 'my internet banking website has a good reputation compared to other rival websites' with value of 4.17. It can be summarizing that majority of the respondent believe that the positive image is the most criteria they consider in reputation factor in order to use internet banking. Besides, the highest mean score for security is 4.27, as shown in the table above which is because 'my bank gives a lot of security instructions on how to protect accounts from scammer'. Meanwhile, the lowest mean score is 4.25 which means 'I feel the risk associated with online transactions is low through the internet banking website'. It shows that the respondent believe that risk is low if using internet banking. Lastly, internet banking usage variable. From the highest mean score

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results, students can interpret that they strongly recommended the use of internet banking services with the value 4.53. While the lowest mean score of .79 for use internet banking almost every day.

### 6.3 Reliability Test

A measure's reliability indicates how well it is free of bias (error) and thus ensures consistent measurement over time and across different aspects of the instrument. According to Sekaran and Bougie (2016), by using Cronbach's alpha, item can be identified as reliability coefficient that positively correlated. As being cite in research by Shahidah and Umasugi (2021), the value of Cronbach Alpha which less than 0.60 are regarded as no acceptable, those in 0.61-0.70 is regarded as acceptable, those in the 0.71-0.80 range as good and acceptable, those between 0.81-0.90 as good and those which are greater in 0.91-1.00 is considered excellent (Konting et al, 2009). Thus, the closer Cronbach alpha to 1.0, it shows the variables is highly reliable.

Table 3: Reliability Statistic for research variable

	<b>Cronbach's Alpha</b>
Trust	.880
Service Quality	.802
Reputation	.856
Security	.852
Internet Banking Usage	.676

Table above shows the reliability statistics for research variables of trust, service quality, reputation and security and internet banking usage. First of all, the reliability analysis alpha value for independent variable trust is .880. Among all the value of independent variables, trust have the highest value of Cronbach alpha. At the same time, the value of Cronbach alpha for service quality is .802, the value for reputation is .856 and security is .852. The Cronbach's Alpha value is interpreted as having good reliability according to the table of The Alpha Cronbach Value (Konting et al., 2009), as the values of the independent variables trust, reputation, and security all fall between 0.81 and 0.90. Additionally, the service quality independent variable is in the range of 0.71 and 0.80, indicating that it is good and acceptable. Lastly the value for internet banking usage .676 which in the range of 0.61 – 0.70 that considered as acceptable. This means that all of the research variables mentioned above are trustworthy and have a good chance of being put to use.

6.4 Hypotheses Testing

6.4.1 Spearman correlation coefficient

According to Bhat (2019), Spearman correlation coefficient assesses how strongly and in what direction two ranked variables are associated. The researchers need to know whether any correlation found between two variables is significant or not, even though the correlation could range from -1.0 to +1.0. Consequently, a research hypothesis that postulates a positive significant (or negative) relationship between two variables can be checked by examining the correlation between the two (Sekaran & Bougie, 2016). There is one main dependent variable; internet banking usage while four independent variables namely trust, service quality, reputation, and security. The table below gives Interpretation Table of Spearman Rank-Order Correlation Coefficients adopted Dancey and Reidy (2004).

Table 4: Interpretation Table of Spearman Rank-Order Correlation Coefficients (Dancey and Reidy, 2004)

Spearman r	Correlation
>0.70	Very strong relationship
0.40-0.69	Strong relationship
0.30-0.39	Moderate relationship
0.20-0.29	Weak relationship
0.01-0.19	No or negligible relationship

Table 5: Spearman Rank-Order Correlation Coefficients between independent variables and dependent variable

		Trust	Service quality	Reputation	Security	Internet banking usage
Trust	Correlation Coefficient	1.000	.544**	.530**	.675**	.455**
Service quality	Correlation Coefficient	.544**	1.000	.678**	.468**	.604**
Reputation	Correlation Coefficient	.530**	.678**	1.000	.616**	.581**
Security	Correlation Coefficient	.675**	.468**	.616**	1.000	.365**
Internet banking usage	Correlation Coefficient	.455**	.604**	.581**	.365**	1.000

Table above shows the correlation between trust, service quality, reputation, security with internet banking usage. The value of correlation coefficient for trust, service quality and reputation are .455, .604 and .581 respectively which indicated that there is a strong relationship between both of independent variables and dependent variable. In the meantime, the value of correlation coefficient for security is .365 indicated that there is a moderate relationship between both of it. As a result, there are positive relationship between independent variables and dependent variable. Based on the result, the

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relationship between trust, service quality, reputation, security and internet banking usage is significant because the p-value 0.000 (p-value). So H1, H2, H3 and H4 are accepted.

Table 6: Overall Spearman Correlation.

	<b>Hypothesis</b>	<b>Spearman Correlation Result</b>	
<b>H1</b>	There is a positive and significant relationship between trust and internet banking usage among SAB final year students in semester 7 at Universiti Malaysia Kelantan City Campus.	<b>0.455</b>	Significant
<b>H2</b>	There is a positive and significant relationship between service quality and internet banking usage SAB final year students in semester 7 students at Universiti Malaysia Kelantan City Campus.	<b>0.604</b>	Significant
<b>H3</b>	There is a positive and significant relationship between reputation and internet banking usage among SAB final year students in semester 7 at Universiti Malaysia Kelantan City Campus.	<b>0.581</b>	Significant
<b>H4</b>	There is a positive and significant relationship between security and internet banking usage among SAB final year students in semester 7 at Universiti Malaysia Kelantan City Campus.	<b>0.365</b>	Significant

In the study, all the independent variable has a positive and significant relationship to internet banking usage among SAB final year students in semester 7 at Universiti Malaysia Kelantan City Campus. So, in the result of the study showed that all the objectives of the study were successfully achieved and the problem statement was also answered.

## **7 Recommendation**

Based on findings in the study, there were some aspects of the research that needed to be improved for future studies. The study is limited to students enrolled in the (SAB) Islamic Banking and Finance program. If the researcher expands the study to include all programme students on campus at Universiti Malaysia Kelantan to increase the number of respondents, the study's results may improve. This study may be relevant for future researchers who will most likely conduct similar research in the future to use it as their guideline. Every banking institution must address the issue of trust. User trust is

required for long-term relationships with your target audience. After all, it allows businesses to provide better customer experiences, increase loyalty, and retain more customers. Encourage your visitors and users to leave feedback on your products and services. Avoid shortcuts and clickbait tactics, and don't delete all negative feedback. This method will assist the banking institution in increasing the percentage of users. As a result, further research into the factors that influence trust in the development of the internet banking industry is also recommended. Next is the service quality, which is the higher value of correlation coefficient that indicated there a strong relationship service quality and internet banking usage. In future research, the researcher can do a more detailed study on the factors that affect service quality among users. It is important to improve the service quality for assists organizations in meeting their goals of increasing user percentages by satisfying users and encouraging repeat business. Because the banking institution retains customers, high service quality reduces marketing costs. User retention is less expensive than acquiring new users.

Last but not least the reputation and security also being one of the factors that affecting internet banking usage which is there also have a positive relationship between it. In future studies, researchers are also advised to find factors that affect reputation and security in the use of internet banking. This is because, the capability of a service depends on the good reputation which is it brings a positive view of the user towards the service. Finally, based on the results of this study it is hoped that this study can contribute to research for researchers in the future in continuing to study the factors that affect the independent variable in the study among others programme student and can contribute to organizations that intend to make improvements in the provision of internet banking services. It is expected that there will continue to be an increase in the use of these students, therefore future research in the future can take advantage of this study for improvements in providing better quality in the internet banking industry. At the same time, organizations that are in the internet banking industry can examine every factor that will influence individuals to get the service to ensure that the internet banking industry is more familiar among students.

## **8 Conclusion**

This research has been decided to make for purpose to know the factor affecting internet banking usage among SAB final year students in semester 7 at Universiti Malaysia Kelantan City Campus. The result of this study is the result of the data obtained from the Google form questionnaire and also the respondents are from students in year four from Islamic Banking and Finance Program (SAB) which is as it was mentioned in chapter 3. The total of respondent is 135 respondents that includes 68% of female and 32% of male. There have four independent variables have been observed that is trust, service quality, reputation, and security. After that, in chapter 4, the result and findings about this research has been carried out by using the Statistical Package for Social Science (SPSS 26.0) software that to measure the reliability analysis. Spearman correlation coefficient and analysis are used to interpret data and the final result show that there is a positive relationship between independent variable and dependent variable which is the relationship between the factors and internet banking usage are significant. In this chapter, the summarized of the result has been measure. And at the

end, for trust, service quality, reputation and security have significant relationship with the internet banking usage. In this chapter also has discussed the implication and limitation of this study to explain the important of this study and the weakness that this study faced until completing it. In particular, the current study is expected to provide a clear perspective of how the use of internet banking is closely related to the factors of trust, service quality, reputation, and security. To conclude that, the result of analysis performed in order to determine whether or not the trust, service quality, reputation and security has affecting internet banking usage among SAB final year students in semester

7 at Universiti Malaysia Kelantan City Campus. As a result, all of the research objectives have been accepted, and the entire hypothesis has been met. Lastly, by referring to this research, in general, the researchers suggest that in the future, this topic could be explore more in many areas or factors to others location of respondents. It is because this research could help many people or organization to have a clear understanding on internet banking aspect.

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**The Influence of Perceived Usefulness, Perceived Ease of Use and Perceived  
Security Towards E-Wallet Usage Among UMK Students**

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**Abstract:** *Due to the growth of financial technology, cashless transactions have increased significantly. Correspondingly of the development of fintech products such as E-Wallet, consumers are moving away from cash-based to cashless transactions. The objective and primarily aim of this research to determine the influence of perceived usefulness, perceived ease of use and perceived security towards E-Wallet usage among UMK students. This paper contributes by examining the E-wallet acceptance among UMK students. In this study, the TAM model was applied. A total of 265 respondents of SAB student took part in the online survey that yielded these results. Results revealed that Spearman's correlation value of all independent variable had positive relationship which is above 0.50 value towards the use of E-Wallet and was explained by the three variables which is perceived usefulness (0.508), perceived ease of use (0.542) and perceived security (0.517). This research's findings will attract students' interest in using E-Wallets for purchases.*

**Keywords:** *E-Wallet, perceived usefulness, perceived ease of use, perceived security*

## **1. Introduction**

Technology is the application of acquired knowledge to all methods, procedures, techniques, and skills employed in scientific research and industrial production. The purpose of human-made technology was to raise the living level for the entire human race. E-wallets, known as electronic wallets, are the new way to make payments that offer a convenient experience and are faster and more secure (Martia et al., 2020). E-wallets are electronic devices, digital services, or software applications that enable one party to conduct electronic transactions with another, primarily through exchanging digital currency units for goods and services. The only

differences between E-wallets and traditional wallets are that the funds are stored digitally, and the E-wallets are accessed through an app on the user's mobile device. It is optional to do anything more than add cash to the E-wallets; moreover, most applications let users do so by using credit cards, debit cards, or online bank transfers (Alam et al., 2021). This may involve purchasing online using a computer or in-store purchases with a smartphone. The individual's bank account can be linked to the digital wallet, or money can be placed in the wallet prior to any transactions. There are two types of E-wallets on this day: QR codes and NFC technology. The development of RFID technology eventually led to the creation of "Near Field Communication." NFC is applied to debit and credit cards as a pay wave feature. Paywave is a payment system that enables users to use enabled cards or mobile devices at the point of sale. At checkout, consumers wave their card or mobile device in front of a security scanner instead of swiping it or giving it to a cashier.

The Malaysian government funded the "ePemula" initiative in April 2022 as one of the measures in Budget 2022 to minimize adolescent expenses, boost youth cashless spending and enhance brick-and-mortar business cashless transactions. About 2 million Malaysians would benefit from this program, which costs RM300 million (Bernama, 2022). There is a promising future for digital payments and E-wallets in 2020 and beyond, with an internet penetration rate of 80% and a smartphone penetration rate of 63% (Jeremy Chew, 2019). The total value of the worldwide mobile wallet market was estimated to be USD 6.2 billion in 2021. Between 2022 and 2030, the market is anticipated to rise at a compound annual growth rate (CAGR) of 27.4%. The expanding use of smartphones and internet connectivity and the expansion of the online shopping industry is important factors propelling the market growth. A mobile wallet is a type of e-wallet that allows users to effortlessly make payments using a credit card, debit card, or bank account while maintaining the confidentiality of their financial information. A mobile wallet allows users to do financial operations such as recharging their mobile devices, paying bills, making reservations for movies or travel, and transferring money from one bank account to another (Grand View Research, 2023). E-wallets play a dominant role in transforming nations towards a cashless future, but to what extent is E-wallet usage among students in UMK.

## **2. Problem Statement**

Even though there are many benefits to using an E-wallet, there are still a lot of people out there who want to avoid using it. For instance, some consumers are still reluctant to use conventional payment methods, such as cash, debit cards, credit cards, and checks. This is because they are skeptical about the usefulness of electronic wallets. One of the issues is that they do not feel the usefulness of the electronic wallet, which is supported by the statement from Ellia (2019) that consumers refused to adopt an E-wallet because they did not perceive the system setting to be useful and able to fulfil their expectation and requirement. Another issue is that they do not feel the usefulness of the electronic wallet. Therefore, it is crucial to investigate the usefulness factor to discover the factors that influence the usage of E-wallets at UMK.

According to studies conducted by (Kustono et al., 2020), an application that is simple to use develops more positive views among its users. People would believe that using this application

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will expedite the completion of their activity. On the other hand, Kustono's earlier research revealed problems with the response rate of his survey form. Kustono said that low response rates could result from poor timing decisions. In terms of data-gathering techniques, researchers had attempted to boost the response rate. Multiple attempts were undertaken by repeatedly contacting responders. Nonetheless, the response rate remained relatively low. Future studies must address the timing of questionnaire distribution to maximise response rates. The findings of the Kustono research, which indicated that perceived ease of use is high compared to other criteria, cannot be used to support the acceptance of E-Wallets among students.

Lastly, security also plays an essential role in attracting students' attention to using E-Wallets. This is because students claimed that if they experienced a data leak, they would refuse to do online transactions (Mohd Razif et al., 2020). To register for the E-wallet application, users must enter essential details such as bank details and identification. The E-wallet has grown in popularity due to its simplicity of use, as said by . Individuals, however, continue to lack comprehension and awareness, as well as apprehension about doing transactions due to security concerns. This study is also supported by Milberg et al. (2000), saying that a lack of security and privacy prevents buyers from acquiring things.

### 3. Literature

#### 3.1 Technology Acceptance Model (TAM)

An information systems theory called the Technology Acceptance Model (TAM) explains how humans embrace and use technology. When the technology is actually being used, people use it. Behavioral intention is a component that motivates individuals to use the technology. The attitude, the broad perception of the technology, influences the behavioral intention. Acknowledging the complexity of human behavior allows inventors in the technology industry to forecast how people will interact with technology products. Fred Davis released the Technology Acceptance Model (TAM) in 1986, based on the TRA. TAM is a well-known field of academic research that examines the adoption and use of new technology advancements (Aydin & Burnaz, 2016). This model defines the intention to use the product as the user's decision to accept or reject a new information technology product. The intention to use the product is described by two components, perceived usefulness (PU) and perceived ease of use (PEU). (Aydin & Burnaz, 2016).

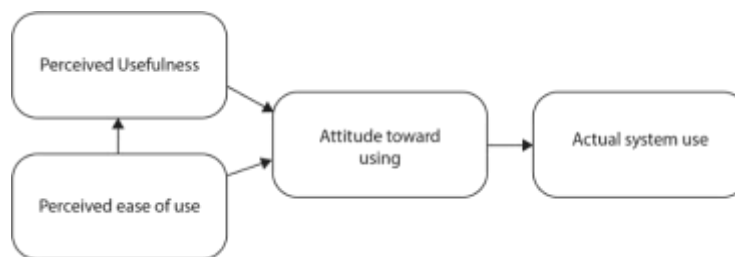


Figure 1: Original TAM Framework (Davis, 1993)

The theory of technology acceptance model, often known as TAM, is the most widely used theory that may discuss the continuance intention (Foroughi et al., 2019). This study proposed a way of determining the long-term intention to use E-wallets by applying the foundations of the primary components associated with TAM. The major constructs that describe the impact of a student's anticipation of E-wallet systems on user satisfaction and intention to continue using will be explored from the perspective of system characteristics and behavioural beliefs. (Gupta et al., 2020); Liao et al., 2007) The TAM idea represents the perceived ease of use and usefulness of specific technologies or systems. It refers to E-wallet services in this aspect. According to research, human behavior toward technology acceptance is multifaceted and requires more than one model, i.e., an integrated approach (Shen et al., 2010). The crucial constructs will be examined from the perspective of system characteristics and behavioural beliefs to emphasise the effect of students' anticipation of E-wallet systems on user satisfaction and intent to continue using them (Thusi & Maduku, 2020). Thus, both models would be completely integrated in a complementary manner to gain a deeper understanding of the elements that encourage customers to continue using E-wallet services. The TAM theory has been extensively utilized to analyze the adoption of many innovations, including advanced technologies (Gupta et al., 2020), mobile payment (Ariffin & Lim, 2020), and mobile payment services (Ariffin & Lim, 2020). However, little research has been undertaken using the TAM approach on E-wallet services.

### *3.1.1 Perceived Usefulness*

Usefulness means the quality of having utility and efficient worth or applicability, while perceived means having a belief about something. According to Goh (2017), perceived usefulness refers to the extent to which a consumer perceives that they will benefit from utilizing E-wallets services. The E-wallet payment service method is thought to provide much more advantages than cash payments, such as the ability to pay a very small amount and faster transaction completion. E-wallets are becoming increasingly popular, and many individuals now use them for day-to-day transactions, such as shopping, paying bills, keeping track of monthly expenditures, and other activities that traditionally require cash.

According to a study by Karim et al. (2020) using E-wallets to make any payment saves you time and makes the process more convenient. According to research by Isrososiawan

et al. (2019), they agreed that perceived usefulness has significance in using the E-wallets. This is because people tend to use the technology if it has benefits and can help increase their daily work performance.

### *3.1.2 Perceived Ease of Use*

According to studies done on the variable, perceived ease of use positively and statistically significantly influences mobile payment usage. The term perceived ease of use refers to "the degree to which utilizing a certain system will be devoid of effort" (Davis, 1989). Perceived ease of use consists of elements such as learnability, controllability, clarity and comprehension, adaptability, and skill acquisition. This definition suggests that the concept of ease of use may influence an individual's decisions about the use of technology. If a person thinks that technology is easy to use, then he uses it. Conversely, if the technology is challenging, he decides not to use it. Consumers would be intended to adopt any new technology if less effort was required. Even if most individuals are experienced using smartphones, they may be new to some mobile applications. Eventually, capabilities like performing a transaction payment using a mobile application could be a challenging and complicated process for a new user. Hence, if E-wallets are straightforward and effortless, it will significantly influence E-wallets' acceptability (Sunny & George, 2018).

Nowadays, E-Wallets providers have ensured that the E-wallets applications are easy for customers to use. According to Chong et al. (2018), the customer may hesitate to utilize E-wallets if the application process is complicated or time-consuming. Additionally, applications that are clear and simple to comprehend are often more accepted. This is because consumers understand the application's essential purpose and advantages better. The easier it is to understand the E-wallets technology, the more consumers will benefit from using it and will tend to accept the technology. Numerous studies have supported the statement that perceived ease of use could affect the consumers' use of E-Wallets. In addition, the study by Yang et al. (2021) revealed that the majority of young customers' perceptions of E-wallets rely on their perceived ease of use. Users will receive several benefits as a result of the implementation of E-wallets that are less difficult to operate. This is due to the fact that consumers can utilize electronic wallets more effectively. This statement is consistent with the findings of Liébana-Cabanillas et al. (2017); Wong (2018). Furthermore, as said by Mun et al. (2017), perceived ease of use considerably affects the propensity to utilize E-wallet payment services.

### *3.1.3 Perceived Security*

According to the study of the variable, perceived security was identified to have a strong impact on using the E-wallets. Perceived security is a person's belief that a particular procedure is safe. In terms of perceived security, Flavián & Guinalú (2006) define it as the subjective probability that consumers believe that personal data can be stored in both personal and financial forms during transaction and storage. So, to reduce users' suspicions about handling personal data, system security is critical in ensuring the security of personal data and also their card information such as debit or credit card. Stroborn et al. (2004)

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acknowledge that, in any e-transaction, an e-payment system requires solid protection. Customers need some degree of privacy on online platforms, and websites that do not provide clear privacy and security statements are essential to online consumers. The user's perspective on the security of online transactions depends on their expectations and past experiences. This also applies when consumers guarantee the security of their digital payment. Having said that, adequate safety information can influence the user's perceptions of safety (Mukherjee & Nath, 2003).

Relative to the study of the variable, perceived security was identified to have a strong impact on using the E-wallets. Several researchers have shown that it is an important e-wallet platform that focuses on transaction processes such as authentication, correction and authentication of technically protected data, including confidentiality and integrity (Lincket al., 2007). Abrazhevich (2004) also supported this finding, stating that security is the most important research area for e-wallet platform systems. This is because users want to protect the safety of their securities when making online purchases. On the other hand, banking and payment service organisations want to secure themselves against the theft or misuse of money, financial or personal data. There is a counterfeit aspect to the security of electronic money systems. Consumer security issues affect the use of electronic payment systems, as acknowledged by (B. Lim et al., 2007).

#### **4. Methodology**

##### **4.1 Sample Size**

Etikan et al. (2016) stated that the sample size is the number of observations made on a subject established for a specific research purpose. For most of the research studies, 30 to 500 samples are valid (Roscoe, 1975). Seeing as the total number of students enrolled in the Bachelor of Business Administration in Islamic Banking and Finance is 802 students, the sample size, according to Krejcie and Morgan, (1970) would be around 265 students' responses. Therefore, 265 self-completed questionnaires are distributed to UMK students through a google form.

#### **5. Result**

The study aims to determine whether there is any association between the independent and dependent variables for both variables. The study also discovered a link between perceived usefulness, perceived ease of use, and perceived security as having a significant impact on UMK students' use of E-Wallets. Overall, some of the respondents have used the E-Wallet in their daily life where most E-Wallet users are female, 58.1% and male is 41.9%. In addition, since 267 respondents, 85.8% have used the E-Wallet as a payment medium. Most of them use the E-Wallet often, which is 33.3%, and some students never use E-Wallet, which is 13.1%. With this, it is proven that most respondents are aware that using an E-Wallet can make it easier to make payments quickly. This proves that E-Wallet has reached a significant number of users. Most of the respondents know about perceived usefulness, perceived ease of use, and perceived security in using E-Wallet. As a result, it has been proven and drawn from evidence that the use of the E-



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Wallet is influenced by perceived usefulness, perceived ease of use, and perceived security. The objectives were achieved because the correlation analysis produced a significant result. The goal of this study was accomplished.

This study aims to investigate the impact of perceived usefulness, perceived ease of use, and perceived security on E-wallet usage among UMK students using the Technology Acceptance Model (TAM). Perceived usefulness, perceived ease of use, and perceived security are all essential factors in E-wallet usage.

OBJECTIVE	RESEARCH QUESTION (RQ)	HYPOTHESIS	RESULT
To determine the relationship of perceived usefulness affects the use of E-wallets by UMK students.	What does perceived usefulness affect the use of E-Wallet by UMK students?	Perceived usefulness will be a significant influenced on the E-Wallet use.	0.508
To determine the relationship between perceived ease of use and the use of E-wallets by UMK students.	What does perceived ease of use affect the use of E-Wallet by UMK students?	Perceived ease of use will be a significant influenced on the E-Wallet use.	0.542
To determine the relationship between perceived security and the use of E-wallets by UMK students.	What does perceived security affect the use of E-Wallet by UMK students?	Perceived security will be a significant influenced on the E-Wallet use.	0.517

## 6. Recommendation and Conclusion

Several restrictions will be found when doing this investigation. As a result, there are several recommendations and suggestions that future researchers might use to address the limitations described in this work. Future studies should broaden the target population's gender, age range, and generation. Future studies should broaden the age range of the target group, encompassing not just the young but also the elderly. As a result, to improve the accuracy of the findings, different generations of people have grown up with varying levels of technological growth, which strongly associates with the E-wallet payment system.

Moreover, it is advised that diverse educational qualifications of University of Malaysia Kelantan (UMK) students be included in the sample size. Students pursuing diplomas, degrees, master's, and doctoral degrees at the University of Malaysia Kelantan, for example, may have a distinct perspective and impact UMK students' intentions regarding E-Wallet usage. As a result, future

research should be undertaken with participants from various educational backgrounds in order



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forthem to perform better in their study of the E-Wallet payment system.

It is recommended that a few more factors be added to the E-Wallet use factors. Future research on E-wallet use should add factors such as trust, cost, and reliability. Therefore, future research can be reproduced by employing the same concept in a different setting to examine the factors that can be implemented in using E-wallets. Future research could also involve focus group discussions and in-depth interviews to comprehend the respondents' perspectives further. In addition, due to time and financial constraints, the present study should have addressed cultural influences. Nevertheless, future research may investigate cross-cultural differences in the adoption aim of digital wallets.

In this study, there are three independent variables which included perceived usefulness, perceived ease of use, and perceived security. All independent variables have significant relationship with the influence towards E-wallet usage among UMK students. Relative to the correlation coefficient value, all variables are positively related. The summary of major findings, discussion of hypotheses, implication of the study, limitations of the study and future research paper and overall conclusion are highlighted in this chapter.

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**The Study on The Factors Affecting the Intention to Continuously Use  
Financial Technology (Fintech) Among Universiti Malaysia Kelantan  
(UMK) Students Post-COVID-19**

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***Abstract:***

*Malaysian financial institutions have started shifting towards adopting fintech, and the COVID-19 health crisis has provided new opportunities for digital financial services to accelerate financial inclusion. Consumers are shifting from cash-based to cashless transactions because of the development of financial services such as e-wallets. The purpose of this study is to investigate the factors affecting the intention to continuously use financial technology (Fintech) among Universiti Malaysia Kelantan (UMK) students post-COVID-19. In this study, the theories of Technology Acceptance (TAM) and Unified Theory of Adoption and Use of Technology (UTAUT) were used. A total of 350 questionnaires were collected from students at the University of Malaysia Kelantan (UMK). The result shows that there is a significant relationship between the independent and dependent variables. This is because the p-value is less than 0.001, indicating that there is a significant relationship between the independent and dependent variables. The independent variables are trust, quality administrative services, and data security and privacy data, while the dependent variable is the intention to continuously use Fintech post-COVID-19. Therefore, all variables significantly affect the intention to continuously use financial technology (Fintech) among Universiti Malaysia Kelantan (UMK) students post-COVID-19.*

**Keywords:** COVID-19, Financial Technology (Fintech), Intention, Theories of Technology Acceptance (TAM), Unified Theory of Adoption and Use of Technology (UTAUT)

## **1 Introduction**

The COVID-19 health crisis has provided new opportunities for digital financial services to accelerate financial inclusion in the context of social distance (Agur et al., 2020). The health crisis resulted in the Movement Control Order (MCO), as country authorities opted for severe containment measures. Fintech<sup>1</sup> can assist individuals and businesses in maintaining and expanding access to financial services during lockdowns and business reopening. Numerous national governments have encouraged its use by introducing measures to lower costs and increasing the limits on transactions for digital transactions

(e.g., Ghana, Kenya, and Myanmar, among others) (Sahay et al., 2020). After the MCO lockdown, fintech has become an essential part of Malaysia's financial industry. The landscape of the financial sector has changed over the past few years as the number of physical commercial bank branches and ATMs has decreased. These developments could help accelerate the shift toward digital financial services from conventional financial services.

Despite the benefits and opportunities of Fintech, this innovation will eventually suffer from several possible risks in the long run (Gulati et al., 2021). Even if no money is involved, stealing personal information is the most destructive act in an online system. Theft of user accounts is possible due to transaction system vulnerabilities, such as a weak password. There is also a significant concern about the misuse of personal data, which has a significant negative effect on the decision to continuously use Fintech or not (Bohme & Moore, 2012).

Millennials will be the primary consumers of banking services, particularly Fintech, in the near future (Vaicondam et al., 2021). University students are more likely to adopt new or advanced technology as they value the service's convenience and speed. In accordance with the purpose of this study, which is to investigate the factors affecting (trust, quality administrative services, and data security and privacy data) the intention to continuously use Financial Technology (Fintech) among Universiti Malaysia Kelantan (UMK) students post COVID-19.

## **2 Literature Review**

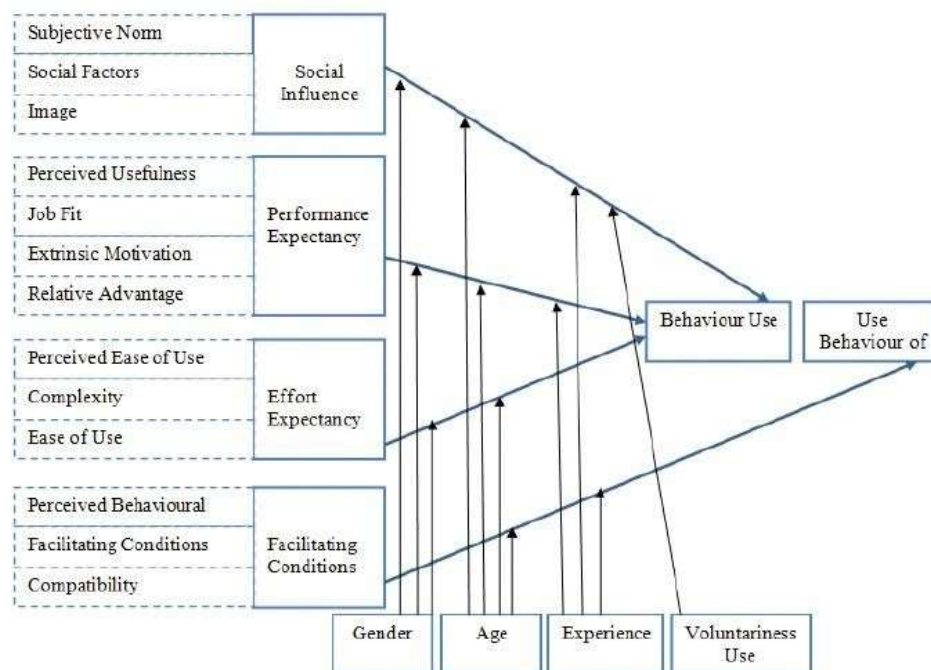
### **2.1 Theories of Technology Acceptance (TAM)**

The Technology Acceptance Model (TAM) was created by Davis et al., (1989), it has been one of the most influential models of technology acceptance. According to Widiatmo, (2021), TAM aims to explain on the reasons behind people's decision to use a certain piece of technology to complete a task. This theory can be used to evaluate the value of technology.

People develop attitudes and behavioural intentions about attempting to learn how to use modern software prior to undertaking activities aimed at using it. This is because emerging innovations, such as desktop computers, are complicated, and there is an element of mystery in the minds of decision-makers over the successful adoption of technology. The attitude (A) is the general view of the innovation, and the behavioural intention (BI), which is the desire to behave in a certain way. Later, Davis et al., (1989) discovered that perceived usefulness and perceived ease of use exert a strong influence on behavioural intention, whereas the effect of attitude diminishes over time. Using this justification, they decided to eliminate the latter component from the TAM model. Attitude was removed from the model when Venkatesh and Davis (2000), studied the antecedents of perceived ease of use.

<sup>1</sup> "What Is Fintech? Financial Technology Definition | Built In." 18 Aug. 2022, <https://builtin.com/fintech>.

Over time, the perceived usefulness model has been implemented in a variety of contexts beyond the mere acceptance of computers in the workplace. The first of TAM's extensions, TAM2 Venkatesh and Davis (2000) is based on the expansion of perceived usefulness's predecessors. It integrates additional theoretical categories spanning social influence processes (subject norm, voluntariness, and image) and cognitive instrumental processes by building on TAM (job relevance, output quality, result demonstrability, and perceived ease of use). Furthermore, Venkatesh and Davis (2000), created TAM3 with the same objective as TAM2 that is to complete the model by including the antecedents of the original TAM. Specifically, if TAM2 introduced the antecedents of perceived usefulness, TAM3 was expanded to include the components that precede perceived ease of use, which were previously outlined in Venkatesh and Davis (2000) and Davis et al., (1989). Venkatesh and Bala (2008) created a model of the determinants of perceived ease of use based on the anchoring (computer self-efficacy, computer anxiety, computer playfulness, and perceptions of external control) and adjustment framing (perceived enjoyment and objective usability) of human decision making



Source: (Venkatesh & Davis, 2000)

Figure 1: Theories of Technology Acceptance (TAM) model

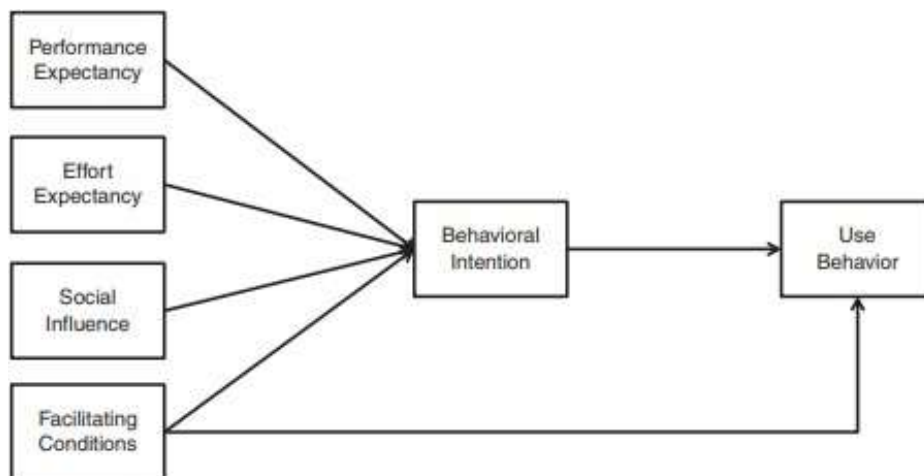
## 2.2 Unified Theory of Adoption and Use of Technology (UTAUT)

The theory was developed by an analysis and synthesis of the components of eight models used in past research to characterize the use of information systems. These models and theories are the Theory of Reasoned Action (TRA), the Technology Acceptance Model (TAM), the Motivational Model (MM), the Theory of Planned Behavior (TPB), a model

combining the Technology Acceptance Model and the Theory of Planned Behavior (C-TAM-TPB), the model of PC utilization, the Innovation Diffusion Theory (IDT), and the Social Cognitive Theory (SCT). These models were developed to describe the behaviour of data management systems (Ahmad, 2014). A little more than a decade has passed since the conception of the unified theory of acceptance and use of technology (UTAUT). It has been utilised extensively in information systems (IS) and other fields, as seen by the vast number of references to the original book that introduced the concept.

Based on those, they developed an integrated approach that integrates elements from all eight models. Their new model was then empirically tested to ensure that it was as reliable as they could make it. Compiling theories from separate models and major moderating variables, UTAUT advances cumulative theory while keeping its structure simple. The theory serves as a valuable indication of Technology Acceptance based on four theoretical components that describe drivers of intention to use or usage behaviour (Ahmad, 2014). The key constructs include Performance Expectancy, Effort Expectation, Social Influence, and Facilitating Conditions. In addition to these variables, the theory also considers moderating factors that influence the interactions between various variables and Intention to Use. These variables serve as moderators are gender, age, experience, and voluntary use.

UTAUT has identified key elements and circumstances that indicate behavioural intention to use a technology, particularly organizational technology. UTAUT has been used to examine numerous technologies in organizational and non-organizational settings. UTAUT, like TAM and TRA, is internal-focused. Designed for corporate technology adoption. Its structures are utilitarian. Numerous studies have shown the value of UTAUT in various settings, but a thorough analysis and theorization of the key features that pertain to consumer technology usage is still needed.



Source: Venkatesh *et al.* (2003)

Figure 2: Unified Theory of Adoption and Use of Technology (UTAUT) model

### 2.3 Intention to Continuously Use Financial Technology (Fintech)

Intention is defined as the conscious action or behaviour focused on a specified objective



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(Widiatmo, 2021). The definition of intention to use is "the strength of one's intention to engage in a particular behaviour" (Ali et al., 2015). Intention is an aspect of the human personality that adds additional focus or pleasure to an object, so encouraging it to pursue a particular objective (Vaicondam et al., 2021).

According to research from Davis et al., (1989), the behavioural intention to use is the proclivity to utilize technology in the future. In determining whether to accept or reject a person, item, or proposal to perform employment, the desire to employ is crucial. Individual purpose is influenced by a variety of factors, including technical study (Ali et al., 2015). A person's desire to engage actions derives from their behavioural intent to use them (Ali et al., 2015). Multi-attribute models predict the behavioural intention to utilize a technology based on their evaluations of the system's usability and utility.

Moreover, continuance intention was greatly influenced by perceived benefit, including three types of benefits which are convenience, economic benefits, and seamless transaction. Fintech facilitates convenience by altering the user's preference for cash transactions to non-touch transactions. In addition, users can execute numerous remote banking services using smart devices. This encourages the engagement of a youthful user group in the usage of Fintech services; this group adopts technology quickly and prioritizes convenience in their daily life.

Lastly, seamless transaction influences the advantages of sensation. Effortless transactions let clients obtain immediate benefits by facilitating contact with user-friendly platforms for financial services (Zavolokina et al., 2016). Traditional finance is characterized by the fact that users cannot trade while trading institutions have violated their agreements, however Fintech allows users to trade at any time. Also worthy of consideration is the economic gain, as the fee is exempt from fixed costs such as those imposed by the trading system and the personnel is substituted by technology. This has an impact on the trading expenses of Fintech platforms.

## **2.4 Trust**

Trust is the willingness of one party to be vulnerable to the acts based on the expectation that the other will do a particular activity that is significant to the trustor, regardless of the trustor's ability to monitor or control the other party (Al nawayseh, 2020). Users of information technology require trust to increase their individual performance when conducting organizational or business activities. Trust also facilitates the reduction of social complications in the face of unwanted situations (Al nawayseh, 2020). Users have trust in Fintech applications because of their abilities, integrity, and morals (Stewart & Jürjens, 2018). Trust is essential for technology transactions such as Fintech. This concept of trust suggests that users have trust in this technology's ability to provide them with security, such that the risk of losing data or information is reduced. According to a previous study by Hu et al. (2019), users' trust in Fintech services has a substantial effect on their attitudes toward the adoption of Fintech.

Trust significantly influences consumer attitudes and customers are more likely to have a favourable opinion toward Fintech services if they believe the information provided is accurate (Ali et al., 2015). Trust results in an uncertain and risky situation that will lower risk (Ali et al., 2015). As a result, goodwill to use new technologies

because of the large and multidimensional data involved in the service, the role of trust is more critical in implementing Fintech. Therefore, it is essential to research how trust influences the attitudes and propensity of potential users to adopt Fintech.

*H1: There is a positive relationship between trust and the intention to continuously use Financial Technology (Fintech) among Universiti Malaysia Kelantan (UMK) student post COVID-19.*

## **2.5 Quality Administrative Services (QAS)**

Quality Administrative Services (QAS) is a term that refers to the quality of contract and subcontractor administration, online transaction management and problem-solving. Quality of administrative services (QAS) is a human-connected method, whereas most online transactions are based on technology solutions. As a result, the quality administrative services is a symbol of both bank credibility and brand image (Anyfantaki, 2020). As soon as a user notices suspicious activity, such as fraud or an improper amount of money being sent, they should immediately halt the transaction and contact the quality of administrative services. If customers have issues or have a negative experience with these services, they will look for alternative (Huet al., 2019).

In addition, past studies have found that excellent-quality administrative service members play a crucial role in maintaining the satisfaction of current users. Even in this day of advanced technology, this study highlights the importance of humans. It indirectly increases the intent to serve or the level of loyalty. It builds customer loyalty indirectly. Furthermore, the results contribute to our understanding of how fintech services may increase and maintain the loyalty of existing customers (Anyfantaki, 2020). Therefore, improving the system's administrative service quality should be a top priority.

The study then investigated the extended factors affecting the intention to use Fintech, which increased the intention to utilize the service (Stewart & Jürjens, 2018). In addition to perceived usefulness, the theory of planned behaviour was introduced as a determinant of Fintech service adoption. The results indicate that after the COVID-19 shutdown, the three factors (trust, quality of administrative services, and data security and privacy) had a stronger influence and contributed more to the perceived usefulness of the system. According to Al nawayseh (2020), due to the COVID-19 lockdown, customers are more likely to utilize fintech services than traditional process development. The COVID-19 lockout intensifies the situational impact, but it also presents a chance to increase the perceived value of Fintech services. The COVID-19 lockdown mandate has made Fintech services more appealing to users, who are now more likely to use them because of the service's usefulness. Factors like service quality and safety and security have been found to contribute to the value of this research. So COVID-19 is an efficient access mechanism for Fintech services, which allows users to recognize the usefulness of the service that they are using now even post lockdown. Users will continue to use and develop accustomed to the service as long as the aforementioned factors are maintained.

*H2: There is a positive relationship between quality of administrative services and the intention to continuously use Financial Technology (Fintech) among Universiti Malaysia Kelantan (UMK) student post COVID-19.*

## 2.6 Data Security and Privacy

Customers must have trust in data security and privacy in order to use a digital financial service (Le, 2021). Downloading and installing applications exposes mobile device users to extra risks, such as design flaws, malware assaults, and the theft of personal information. Users are afraid that their personal and financial data may be compromised or stolen (Noor et al., 2019). Significant amounts of money have been stolen as a direct result of compromised information and a gap in the security of financial systems. Despite the worries raised by a huge number of users, mobile app downloads continue to increase globally.

Previous studies show that security concerns have become the barrier towards the adoption of mobile payments as this type of transaction requires the revelation of financial information which is highly personal and sensitive (Keng-Soon et al., 2019). Consequently, this study posited that security concerns will also have a substantial impact towards the intention to adopt FinTech. Security concern toward the adoption of Fintech security concern is defined as the ability and willingness to keep monetary information confidential from security breaches during transmission and storage (Taherdoost, 2018). Consumers will evaluate if technology providers are willing and able to keep hackers from accessing their financial information (Taherdoost, 2018). Security issues have become a debatable topic and a barrier to technology adoption (Le, 2021) mobile payment use (Tseng et al., 2017), and e-commerce (Le, 2021).

*H3: There is a positive relationship between data security and privacy and the intention to continuously use Financial Technology (Fintech) among Universiti Malaysia Kelantan (UMK) student post COVID-19.*

## 2.7 Conceptual Framework

Based on the discussion and the previous article, Theoretical Framework for this study is as below:

Independent Variables (IV)

Dependent Variable (DV)

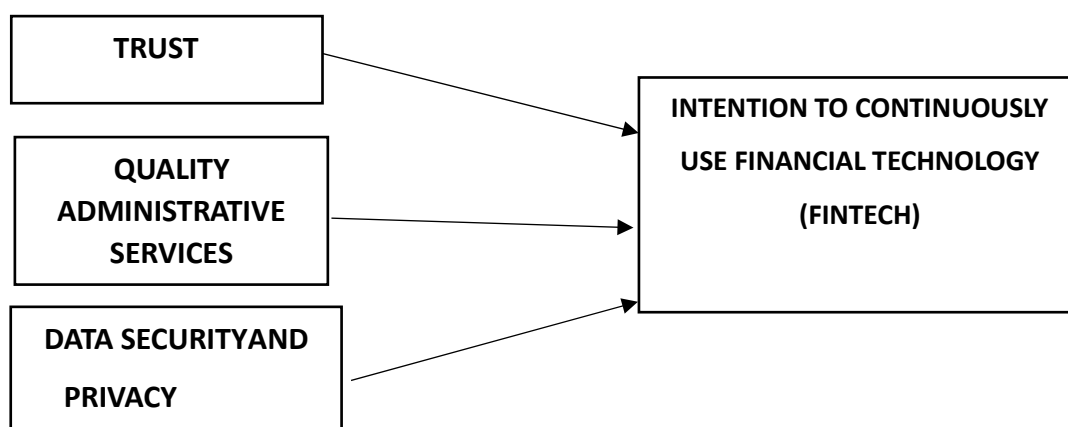


Figure 3: The Conceptual Framework

Accordingly, the research framework of this study is constructed based on the above hypotheses. This study used three independent variables and one dependent variable, namely trust, quality administrative services, data security and privacy, and the intention

to continuously use financial technology (Fintech).

### **3 Research Methodology**

#### **3.1 Research Design**

The purpose of this study is to investigate if there is a relationship between three factors. Following COVID-19, the researchers wanted to know whether or not University Malaysia Kelantan (UMK) students intended to continue using Financial Technology (Fintech). Quantitative information is gathered by distributing questionnaires to university students only on the Pengkalan Chepa campus, who then respond to questionnaires produced with Google Form. The respondents participating in the survey must be using fintech in their daily lives, even post-COVID-19.

The primary data is gathered utilizing the quantitative technique to test the hypotheses. Multiple-choice surveys are used to collect data from respondents, and the questionnaire method is used to do so. Questionnaires are a great way to collect data from respondents on a wide range of topics, including demographics, trust, quality administrative services, and data security and privacy. Two of the most important characteristics of a research framework are uniformity and normalization. The unit of analysis in this study is the individual. The questionnaires are disseminated by means of online media such as social media, where this question is given to university students in Pengkalan Chepa who used fintech in their daily lives even post COVID-19.

#### **3.2 Data Collection Method**

This study's research approach uses a quantitative method to collect data. A questionnaire was used in this study as part of a quantitative research technique. The researchers will be able to access the relationship between the dependent and independent variables. The respondents are required to rate the factors of trust, quality administrative service, and data security and privacy through a 5-point Likert-type scaling range. A questionnaire is a series of pre-written questions to which respondents record answers, which are often limited to a few possibilities. This approach is typically used to collect data from a large number of individuals.

#### **3.3 Population and Sample size**

The population selected by the researcher is the University Malaysia Kelantan (UMK) students from the Faculty of Entrepreneurship & Business (FKP) in Pengkalan Chepa campus. While the target population are the University Malaysia Kelantan students from the Faculty of Entrepreneurship & Business (FKP), who are continuously using Financial Technology (Fintech) post COVID-19. Individuals are the unit of analysis in this research. Since the total number of Financial Technology users among University Malaysia Kelantan students in the Faculty of Entrepreneurship & Business (FKP) is around 3,514, the sample size would be approximately 346 according to Krejcie & Morgan (1970).

### **3.4 Sampling Technique**

Purposive sampling is a collection of non-probability sampling approaches. Purposive sampling, also known as judgmental, selective, or subjective sampling, relies on the researcher's judgement when picking the units (e.g., persons, cases/organizations, events, pieces of data) to be researched. Usually, the analyzed sample is rather small, particularly when compared to probability sampling techniques (Lærd Dissertation, 2015). It is a form of non-probability sampling in which decisions on the individuals to be included in the sample are made by the researcher based on several criteria, such as specialist knowledge of the research subject or capability and willingness to participate in the study (Jupp, 2015)

### **3.5 Questionnaire Design**

The questionnaire consists of a network of questions and other indicators for the purpose of gathering information from the community respondents of the user of Financial Technology (Fintech). There are 5 sections in the questionnaire where it contains clear and basic guidelines for each section. Around 10-15 minutes is needed to complete the survey. We're using data from previous studies to build this survey. Questions range from "strongly disagree" to "strongly agree" on a five-point Likert scale. The questionnaires were developed in English. This questionnaire consists of five sections: sections A, section B, section C, section D and section E.

## **4 Discussion**

### **4.1 Demographic Analysis**

Table 1: Demographic Data

	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Male	159	45.0
Female	194	55.0
<b>Age</b>		
19-20 years old	74	21.1
21-22 years old	91	26.0
23-24 years old	128	36.6
25-26 years old	57	16.3
<b>Race</b>		
Malay	156	44.6
Indian	71	20.3
Chinese	94	26.9
Others	29	8.3
<b>Semester</b>		
Semester 1	49	14.0
Semester 2	43	12.3
Semester 3	35	10.0
Semester 4	34	9.7

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Semester 5	62	17.7
Semester 6	52	14.9
Semester 7	75	21.4
<b>Course</b>		
SAB	96	28.0
SAA	29	8.3
SAL	81	23.1
SAR	51	14.6
SAK	58	16.6
SAE	33	9.4
<b>Frequency on Usage</b>		
Frequently	257	73.4
Often	59	16.9
Sometimes	20	5.7
Rarely	14	4.0

A total of 350 responses were successfully collected from the questionnaire that the researcher distributed via Google Form to Universiti Malaysia Kelantan (UMK) students from the Faculty of Entrepreneurship & Business (FKP) in Pengkalanchepa campus. There were 141 males and 191 females responding to the 350 sets of questionnaires. It also represents 45.4% of male respondents and 54.6% of female respondents who took part in the questionnaire. Next, there are four groups of age, which are: 19 and 20 years old; 21 to 22 years old; 23 to 24 years old; and 25 to 26 years old. In this study, 74 (21.1%) respondents are 19 and 20 years old, 91 (26.0%)

respondents are 21 to 22 years old, 128 (36.6%) respondents are 23 to 24 years old, and 57 (16.5%) respondents are 25 to 26 years old. Moreover, the questionnaires have been distributed to respondents of different races, that includes Malay, Chinese, Indian, and others. Thus, the result shows that 156 (44.6%) of the respondent is Malay, being most of the questionnaire respondents, whereas 94 (26.9%) respondents are Chinese, and 71 (20.3%) respondents were Indian, while those of the remaining 29 respondents consist of the other. In addition, Respondents were mostly students that enrolled in different semesters. There were 49 respondents (14%) was in Semester 1, followed by 43 respondents (12.3%) in semester 2, In Semester 3 there was 36 respondents (10.3%) while in Semester 4 there was 34 respondent (9.7%) and lastly in Semester 5 there was 62 respondents (17.7%), And Semester 6 was 52 respondents (14.8%). Lastly, Semester 7 was 75 respondents (21.4%). Then, the result demonstrate that the higher number of respondents was from SAB with 98 respondents (27.9%) followed by SAL with 81 respondents (23.1%). Next, course was SAK with 58 respondents (16.5%) and SAR with 52 respondents (14.8%). While the reminder course was SAE with 33 respondents (9.4%) and the lowest result in data was SAA with 29 respondents (8.3%). Lastly, on the frequency of Fintech usage. The frequency is ranged from frequently, often, sometimes rarely. Different people have different usage rate when it comes using Fintech in their daily life. Majority of respondents that answered the questionnaire uses Fintech frequently (every day) in their daily life with 257 (73.4%). Followed by 59 (16.9) respondent that only often (several times a weeks) use Fintech, while remain is people who use Fintech sometimes (several month), sometimes 20 (5.7%) and people who to rarely use it is 14 (4.0%).

#### 4.2 Descriptive Analysis

Table 2: Average Score for Mean and Std. Deviation

<b>Trust</b>			
	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
This Fintech service is trustworthy	4.42	.688	350
This Fintech service is reputable	4.53	.692	350
This Fintech service make honest claim	4.50	.713	350
This Fintech service has long-lasting nature	4.47	.700	350
Wherever I go, this Fintech service is present	4.48	.717	350
<b>Quality Administrative Services</b>			
	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
Administrators of Fintech services show the confidence in customers	4.45	.682	350
I feel safe in my transactions with Fintech services	4.49	.709	350
Customer service of Fintech are consistently courteous with me.	4.50	.721	350
Administrators of Fintech services have the knowledge to answer my questions	4.49	.737	350
<b>Data Security and Privacy Data</b>			
	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
I trust in the technology of a Fintech service is using	4.45	.691	350
I trust in the ability of a Fintech service to protect my privacy	4.49	.733	350
I trust in a Fintech service as a bank	4.51	.721	350
Using a Fintech service is financially secure	4.47	.712	350
I am not worried about the security of a Fintech service	4.46	.759	350
When a Fintech service promise to do something by a certain time, it does so	4.47	7.44	350
<b>The Intention to Continuously use Financial Technology (Fintech) post COVID-19</b>			
	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
I intend to continuously use Fintech services in the future	4.47	.708	350
I predict I will continuously use Fintech services in the future	4.53	.692	350
I plan to continuously use Fintech services in the future	4.52	.667	350
I will strongly recommend using Fintech services to others	4.49	.697	350
If I have access to Fintech services, I want to use it as much as possible	4.52	.667	350

Table 2 shows the means of each variable's question items. The mean value obtained from respondents' answer for Trust are from 4.42 to 4.53, while for the Quality Administrative Services are from 4.45 to 4.50 and the mean value obtained from respondents' answer Data Security and Privacy Data are from 4.45 to 4.51. This indicates that students from the Faculty of Entrepreneurship & Business (FKP) at the University Malaysia Kelantan (UMK) who are continuously using Financial Technology (Fintech) post-COVID-19 have a high level of trust, value the convenience of having quality administrative services, and prioritize data security and privacy with using fintech service or fintech platforms.

### 4.3 Validity and Reliability Test

Table 3: Reliability Test

<b>Variables</b>	<b>Cronbach's Alpha</b>	<b>No of Items</b>	<b>Level of Reliability</b>
Intention to continuously use Fintech post COVID-19	0.947	4	Excellent
Trust	0.939	4	Excellent
Quality Administrative Services	0.925	4	Excellent
Data Security and Privacy Data	0.946	4	Excellent

Based on the table, the value of Cronbach's alpha obtained for the variables is greater than 0.6 which is ranged from 0.925 to 0.947. Therefore, this indicated that the measurements for all variables are excellently reliable in this study.

### 4.4 Normality Test

Table 4: Normality Test

<b>Variable</b>	<b>Kolmogorov-Smirnov<sup>a</sup></b>	<b>Result</b>
The Intention to continuously use Fintech post COVID-19	0.000	Abnormal distributed
Trust	0.000	Abnormal distributed
Quality Administrative Service	0.000	Abnormal distributed
Data Security and Privacy Data	0.000	Abnormal distributed



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Given that the total sample is 350 respondents (N=350), then the researcher uses the data normality test Kolmogorov-Smirnov<sup>a</sup> because N > 30. The results of the analysis show that the table tests of normality for all dependent and independent variables have significant values 0.000. This means the data is not normal because the value of 0.000 is smaller than 0.05.

**4.5 Spearman Correlation Coefficient Analysis**

Table 4: Spearman Correlation Coefficient

<b>Variable</b>		<b>The Intention to continuously use Fintech post COVID-19</b>	<b>Trust</b>	<b>Quality Administrative Services</b>	<b>Data Security and Privacy</b>
<b>The Intention to continuously use Fintech post COVID-19</b>	Correlation Coefficient	1.00	.833**	.847**	.815**
	Sig. (1-tailed)		.000	.000	.000
	N	350	350	350	350
<b>Trust</b>	Correlation Coefficient	.833**	1.000	.893**	.915**
	Sig. (1-tailed)	.000		.000	.000
	N	350	350	350	350
<b>Quality Administrative Services</b>	Correlation Coefficient	.847**	.893**	1.000	.897**
	Sig. (1-tailed)	.000	.000		.000
	N	350	350	350	350
<b>Data Security and Privacy</b>	Correlation Coefficient	.815**	.915**	.897**	1.000
	Sig. (1-tailed)	.000	.000	.000	
	N	350	350	350	350

\*\*Correlation is significant at the level of 0.01 level (1-tailed)

According to the statistical results obtained, the p-value is less than 0.001, indicating that there is a significant relationship between the independent (Trust, Quality Administrative Services, and Data Security and Privacy Data) and dependent variables (The Intention to Continuously Use Fintech Post COVID-19). The correlation coefficient for trust is 0.833, 0.847 for quality administrative services, and 0.815 for data security and privacy. Thus, all the values that fall under the alpha coefficient range of 0.70 to 0.90. Hence, the strong relationship between all independent variables and dependent variables is highly positive.

## **5 Conclusion**

From the results of this study, there are several factors, such as trust, quality administrative services, and data security and privacy, that influence the intention to continuously use financial technology among Universiti Malaysia Kelantan students post-COVID-19. The study shows that these variables have a significant relationship with the intention to continuously use financial technology among Universiti Malaysia Kelantan students post-COVID-19. This study produces the same results as past studies in terms of having a strong relationship between all independent variables and dependent variables that are highly positive.

Furthermore, there are some limitations to enable the results of this study to be used as a comprehensive reference on the factors affecting the intention to continuously use Financial Technology (Fintech) among post COVID-19. This is because only Universiti Malaysia Kelantan (UMK) students took part in this research. The researcher limited this study to University Malaysia Kelantan students to speed up research and data collect. Due to time constraints, the sample size is limited, and it would be challenging for the researcher to do research and collect data if they focused on all Malaysian communities. This situation will eventually cause the results of this study cannot be released in general or cannot be concluded comprehensively about the factors affecting the intention to continuously use Financial Technology (Fintech) among post COVID-19, especially the community that is not from among students. In a simpler sense, the results of this study are limited because they are based solely on the perspectives of the students, who cannot represent all segments of society due to their various career backgrounds. Thus, future research could be based on a large sample size, as this study only focused on undergraduate students. Also, given the scope of this research is limited to universities students, conclusions regarding the level of public acceptability of Fintech cannot be made based on the responses of university students themselves. Therefore, future researchers can expand the study by concentrating on other diverse segments of Malaysian society. Lastly, this research has the potential to resolve any misconceptions regarding financial technology among consumers, especially for those who are unaware of it or do not know how to use it (the older generation).

## Acknowledgment

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# Factors Influencing Customer's Intention To Continuously Use Cashless Transaction Mode Among Universiti Malaysia Kelantan (UMK) Students

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## **Abstract:**

*This paper aims to examine factors influencing customers' intention to continuously use cashless transaction mode among Universiti Malaysia Kelantan (UMK) students using a well-established model Theory of Technology Acceptance (TAM) and Unified Theory of Adoption and Use of Technology (UTAUT). The results also find that perceived ease of use, perceived trust, and facilitating condition are positively related to the intention to continuously use cashless payments. Mobile banking, instant payments, and digital commerce are some of the trends affecting the payments market. The major instrument for the data collection is an online questionnaire that was designed by 5-point Likert scale to be able to collect quantitative data. This study evidenced the mediating effect of the intention to continuously use cashless payment on the correlations between the predictors and the adoption of online transactions. The researchers applied a Spearman's correlation to determine if a significant correlation existed. The results of study revealed significant data that had a significant impact influence customer adoption to use cashless transactions. The study outcomes serve to make the payment process easier and more convenient for users. The e-commerce sector is witnessing a spike in demand as consumers order essential items such as food and clothes through e-commerce websites, where most consumers among students prefer the digital mode of payment. It is concluded that the evolution of digital payment systems will be convenient, safe, and can use time-limitless transactions. Privacy, convenience, security, and decentralization will mean wider inclusion for all global citizens regardless of age. Moreover, young people now use advanced technology in their daily life. Ultimately, factors perceived ease of use, trust and facilitating condition encourage higher online banking adoption rates in developing countries.*

*Keywords: Cashless, Cashless transactions mode, Intention to continuously use, mobile banking, inclusion*

## **1 Introduction**

Cashless transactions are becoming increasingly popular in our daily lives. A cashless transaction payment technique eliminates the usage of money by exchanging goods or services with electronic or non-electronic payment. The era of digital innovation has resulted in a shift in the global corporate environment from cash-based transactions to electronic-based transactions. People continue to adopt cashless transaction payment methods because they are easy, fast, and secure (Peggie & Ismail, 2021). According to Peggie & Ismail (2021), The global payment system was linked with current trends of cashless transactions between people, businesses, and governments that use the electronic payment system. The consumer likes a simple form of payment. To complete transactions, the user can select either the digital payment<sup>1</sup> system or the mobile payment system. buying and selling transactions using smartphone applications, allowing one to conduct online

shopping quickly and without fuss. Despite these advantages, cashless payments involve security risks, require charging one's device, and can result in rash spending (Yang et al., 2021). Smartphones are currently used for the majority of transactions since they are convenient and efficient. Smartphone users, which make merchants, financial institutions, and telecom providers, are taking advantage of the opportunity to increase the number of internet-enabled services available (Mohd Sopian & Norziah Ismail, 2021). The development of mobile technology and digital commerce has had an effect on daily life and led to the introduction of several new services. Students are more likely to embrace cashless transactions due to their preference for rapid and efficient service (Kim et al., 2010). By the 2050s, physical money may become obsolete, with virtual currencies traded on digital networks replacing it (Teket et al., 2022). Prior studies have probed the perceived ease of use, perceived trust, facilitating condition, and intent towards the adoption of cashless payment (Peggie & Ismail, 2021). Therefore, it is interesting to examine the factor influence of the usage of cashless payment among students.

Payment will be more convenient, quick, and secure. The use of cashless payment is related to digital money by using online banking, debit or credit cards, and various other payment systems to improve the point of sale anytime and anywhere. Furthermore, cashless transactions facilitate

## **2 Problem Statement**

One of the problems highlighted in this research is cybercrime, stealing personal information from an online system is the most destructive behaviour. Theft, fraud, and unauthorized access are the most security threats consumers face while using an e-payment system (Niranjanamurthy & Chahar, 2013). University students lack the knowledge required to execute cashless transactions. In reality, not all students are keen to use new tools. Daily student activities are increasingly revolving around digital technologies. On the other hand, some individuals prefer to pay with cash in the traditional manner (Peggie & Ismail, 2021). There are several types of research on cashless payment. However, most of them are from countries other than Malaysia, like India, Nigeria, and other European nations. There is a scarcity of studies on the factors that impact the desire of university students to adopt cashless transactions. This study aims to determine what factors impact a consumer's decision to choose cashless transactions.

## **3 Literature Review**

### **3.1 Intention to Continuously Use Cashless Transaction Mode**

The origins of intentions to use technology have been investigated by various researchers. The Technology Acceptance Model must be expanded in order to fully account for why consumers intend to keep using technology. According to Singh and Sinha (2020), in a study on the acceptance of cashless mode of transactions indicated that satisfaction, perception, and preference are some determiners of the mobile wallet's usage. Singh and Sinha (2020), explained that the dimensions of the cashless transaction mode quality including security or privacy, social, aesthetics or design, and enjoyment impact the relationship quality such as commitment, trust, and satisfaction. However, there is no available literature that focuses on the quality aspects of the antecedents of the cashless transaction modes such as system quality, information quality, and quality of the services provided. Soman (2003), claimed that, unlike cash or credit card transactions, cashless transactions do not elicit negative feelings in

customers when they overspend. When cashless transactions are widely adopted, people will no longer pay with cash. Cashless transaction mode expedites the settlement and transfer of funds, resulting in a large reduction in transaction time and a vast improvement in transaction efficiency for both businesses and customers. This is related to the increased convenience and security of sensitive data. When consistently employing cashless transactions, buyers are likely to be more concerned with the product's benefits than with the purchase price (Lin et al., 2020). The intention of the continuous use of cashless transactions is important in moving into a cashless society (Peggie & Ismail, 2021).

### 3.2 Technology Acceptance Model

According to Davis et al. (1989), TAM is an information systems theory that describes how customers learn to accept and use technology. The actual system usage is the point at which humans employ technology. TAM is the most popular paradigm for studying internet banking behaviour. Model replication TAM constructs perceived usefulness and perceived ease of use have theoretical underpinnings (Normalini et al., 2019). Massilamany and Nadarajan (2017), identify the theory of social influence as a driver of perceived usefulness, resulting in TAM2. As mediators, they have added insight and willfulness to the current worldview. Massilamany and Nadarajan (2017) proposed enabling circumstances and computer self-efficacy as perceived ease of use factors. TAM3 is an improved TAM model created by combining 15 TAM2 models. TAM3 is the most stable TAM variant, but no research has been conducted to put it to the test in the field of internet banking (Massilamany & Nadarajan, 2017). As such this present study examined perceived ease of use, perceived trust to measure factors towards cashless transaction usage among UMK City Campus.

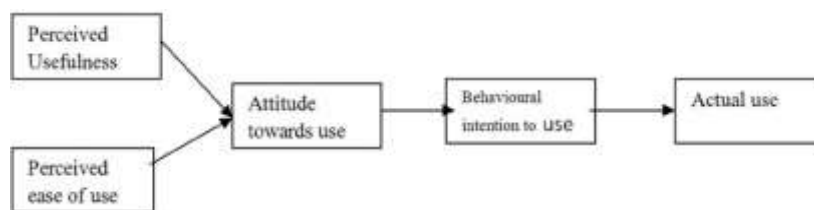


Figure 1: The Original Technology Acceptance Model (TAM)(Sources: Davis, 1989)

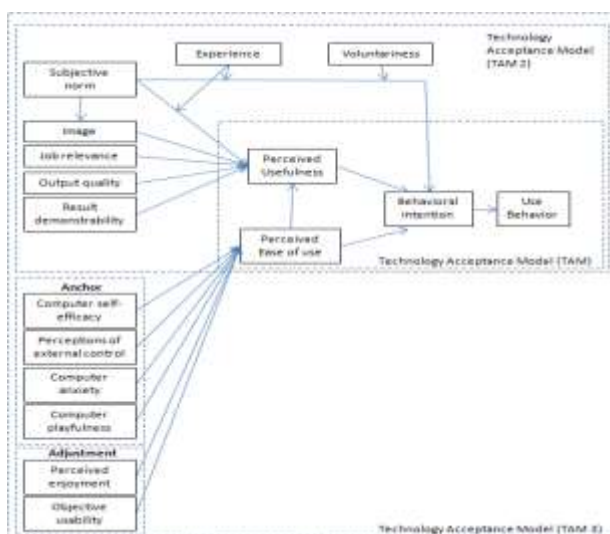


Figure 2: Technology Acceptance Model (TAM, TAM2 and TAM3)(Sources: Davis, 1989)

### **3.2.1 Perceived Ease of Use**

Perceived ease of use refers to the degree to which an individual feels that utilising a certain technology will be effortless. Additionally, ease is defined as the absence of difficulty or substantial effort (Davis, 1989). According to Basuki et al. (2022), perceived ease of use is a crucial antecedent of attitudes and behavioural intentions in the context of technology adoption. Technology adoption behaviour is influenced by perceived ease of use. Al-Gasawneh et al. (2022), found that the perceived ease of use significantly predicted consumer attitudes, which in turn determined the behavioural intentions to adopt new technologies. The user's perception of the platform's or technology's usability is a crucial factor in the acceptance of platforms and technologies that take time and effort. Therefore, when people sense greater utility, they will adopt a more positive mindset and have more favourable intentions (Morris & Dillon, 1997). The study examined consumers' behavioural intentions to use technology. A study by Lee et al. (2012), also concluded that there is a positive relationship between perceived ease of use in influencing users' intention and the adoption of technology.

*H1. There is a positive relationship between perceived ease of use and intention to continuously use cashless transaction mode among Universiti Malaysia Kelantan students.*

### **3.2.2 Perceived Trust**

Mayer et al. (1995) defined trust as the "intention to take a risk and the trustor's perception of a trustee's character." When it comes to new self-service technologies, where there isn't much personal interaction and money is often a sensitive topic, trust is a very important idea. When customers feel more comfortable with a company, platform, or service provider, they are more likely to make repeated use of an application to buy (Jose & Varghese, 2020). According to Karim et al. (2022), perceived trust plays a significant part in determining a person's intention to make a purchase since it lowers the amount of risk that is associated with the transactions. As a result, the level of trust that customers have in a mobile payment system is one of the most important factors in determining how much money a company makes. According to Kim et al. (2017), perceived trust has an important role in predicting a person's purchasing intentions by reducing perceived risk during a transaction. Therefore, the perceived trust in mobile payment systems is an important factor in increasing business profitability.

*H2. There is a positive relationship between perceived trust and intention to continuously use cashless transaction mode among Universiti Malaysia Kelantan students.*

### **3.3 Unified Theory of Acceptance and Use of Technology**

The theory was established on four theoretical constructs representing determinants of Use Behaviour or the Intention to Use, which play essential roles as surrogates of Technology Acceptance. According to the idea, there are four fundamental components, which are as follows:

1) social influence, 2) performance expectation, 3) effort expectancy, and 4) facilitating condition (Ahmad, 2014). Venkatesh et al. (2003), proposed an integrated model, the UTAUT model, which can explain 70% of the variance in user intention, based on a thorough analysis and comparison of the aforementioned models. According to the findings of that empirical study, the UTAUT model is the best model for analysing technology acceptance. UTAUT was



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used as a variable factor which was only facilitating condition to measure factors towards cashless transaction usage among UMK City Campus.

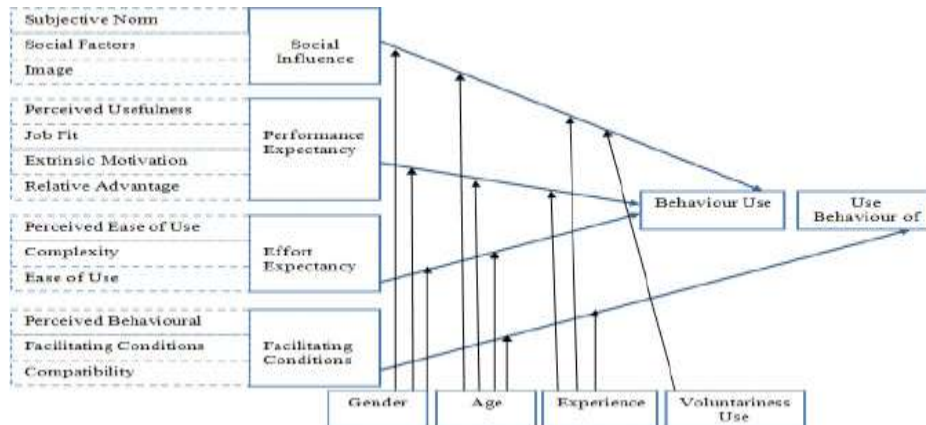


Figure 3: The Root Core of Constructs Unified Theory of Acceptance and Use of Technology (UTAUT)

(Sources: Venkatesh et al., 2012)

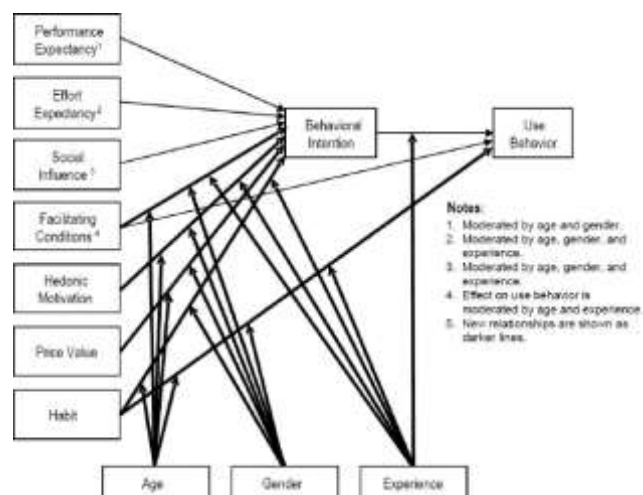


Figure 4: Theory of Acceptance and Use of Technology 2 (UTAUT2)

(Sources: Venkatesh et al., 2012)

### 3.3.1 Facilitating Condition

According to Abdullah et al. (2020), the degree to which the person feels that an organizational and technological system is required to enable the usage of the system is referred to as the Innovation Characteristics of that system. The presence of conducive conditions denotes the presence of objective elements that, when combined, can simplify the execution of a specified behaviour. It has been determined that the elements and the technological infrastructure that increase mobile banking are referred to as "facilitating circumstances". Some examples of these

factors are instructions on how to utilise mobile banking or the capacity and resources of a customer. In addition, Widayat et al. (2020) demonstrated that favourable settings had a beneficial impact on the understanding behaviour of employing technology during this period of digital advancement. According to these findings, students frequently engage in activities associated with virtual societies when the appropriate circumstances are present. After attitude toward the use of technology between users and extrinsic motivation between nonusers, performance expectancy and relative advantage was shown to be the most important factors in facilitating uptake. These findings highlight the need to re-examine the relationship between facilitating condition and intention, together with the contradictory findings regarding the adoption of mobile banking (Yang et al., 2021).

*H3. There is a positive relationship between facilitating condition and intention to continuously use cashless transaction mode among Universiti Malaysia Kelantan students.*

#### **4 Conceptual Framework**

In the conceptual model, there are three independent variables with perceived ease of use, perceived trust and facilitating condition are directly influenced the intention to continuously use cashless transaction mode in the study.

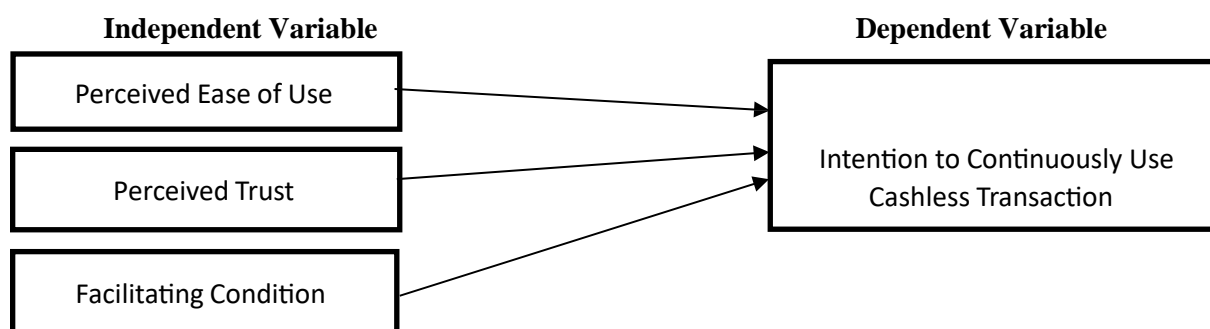


Figure 5: Conceptual framework of factors that influence customer's intention to continuously use cashless transaction mode

#### **5 Methodology**

##### **5.1 Research Design**

The research design approach is quantitative, and it uses an e-questionnaire created in google form. Quantitative research is more reliable and objective. The questionnaire consists of five sections include demographic, three independent variables and, one dependent variable. Type of analysis of data is descriptive analysis, it can use a wide variety of research methods to investigate one or more variables. The unit of analysis in a study is the individual student. The data collected from the questionnaire will assist researchers in identifying the relationship between perceived ease of use, perceived trust, and facilitating condition with the intention to continuously use cashless among UMK City Campus students.

## **5.2 Data Collection Method**

The researcher decided to use the quantitative method of data collection since they provide the researchers with the opportunity of asking closed-ended questions with a list of choices of possible answers. The reason for use of this method by the researcher is that it was easier for respondents since they only have the task of picking from a provided list of responses. The questionnaire was distributed to the respondents using an online survey which in Google Form. This method was used by the researcher to help reach a wider audience, and enable him to tailor questions to the respondents on the spot since it is conducted via the internet, phone calls and media social.

## **5.3 Population and Sampling Technique**

The target population are the students in UMK which is the campus of Campus City, Kelantan. The active student enrolment data for the Faculty of Entrepreneurship and Business (FKP) indicates that the total number of students currently enrolled in the programmed is 3514. The reason for choosing this target population because students at the institution would be more ready to accept new or contemporary technologies. The inclination to do cashless transactions may result from young generation. The sample was taken from among the 3514 students that are currently enrolled in the Faculty of Entrepreneurship and Business at Universiti Malaysia Kelantan. According to Krejcie and Morgan (1970), the total number of students in the sample was around 346.

Non-probability sampling, also known as convenience sampling, is utilised to select the respondents. The sample was distributed to the 346 respondents, which include UMK students. Convenience sampling is a sampling method in which representatives are selected based on ease of access and ability to reach the respondent by randomly distributing questionnaires.

## **5.4 Construct Measurement**

In this research, there are five sections which include section A, section B, section C, section D, and section E. Section A collects information about the respondent's profile such as age, gender, race, course, semester, and frequency of cashless use. Section B describes five aspects related to a respondent's intentions when using this cashless transaction. Next, Section C was about perceived ease of use to determine how respondents feel about the convenience of cashless transactions. Section D was about perceived trust to determine how respondents feel about their trust in cashless transactions and, Section E was about facilitating condition to measure the method that will make this cashless transaction easier for the respondent. This question utilised a five-point Likert scale, ranging from strongly disagree to strongly agree.

## **6 Results and Discussion**

### **6.1 Result**

#### **6.1.1 Descriptive Analysis**

In the section A it is about demographic profile of respondent. The sample consists of a total of 353 respondents. This part of investigation consists of information related to age, gender, race,

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course, semester and how often do you use cashless in the respondents involved in this research was summarized in the following tables. The data are analysed by using Statistical Package for the Social Science (SPSS).

**6.1.1.1 Respondent Age**

The gender age range between 18 to 21 years old was 153 respondents (43.3%), followed by between 21 to 25 years old 186 respondents (52.7%), and more than 26 years old 14 respondents (4.0%). The total number of frequency respondents by age out of 353 respondents who were responding to this questionnaire.

**6.1.1.2 Respondent Gender**

The total number of frequency respondents by gender out of 353 respondents who were responding to this questionnaire. More than half of the respondents were males which are 194 respondents (55.0%) and the remaining 159 respondents (45.0%) were females.

**6.1.1.3 Respondent Race**

There are 200 respondent (96.1%) are Malay, followed by Indian 53 respondents (2.0%), Chinese 89 respondents (0.7%), and others race 11 respondents (3.1%).

**6.1.1.4 Respondent Course**

Course of respondents were as follows available at this university which are Bachelor of Business Administration (Islamic Banking and Finance) (SAB), Bachelor of Business Accounting (SAA), Bachelor of Entrepreneurship (Logistics and Distributive Trade) (SAL), Bachelor of Entrepreneurship (Retailing) (SAR), Bachelor of Entrepreneurship (Commerce) (SAK) and Bachelor of Entrepreneurship (SAE). The result demonstrate that higher respondents was from SAK (24.6%). Followed by student from SAB (22.4%), SAL 57 (16.1%), and SAR (15.6%). The remainder were students from SAE (14.4%), and SAA (6.8%).

**6.1.1.5 Respondent Semester**

There are 68 respondents (19.3%) from Semester 1, followed by Semester 2 and Semester 3 (12.2%). Next, Semester 4 (9.3%), Semester 5 (4.5%), and Semester 6 (11.0%). Lastly, Semester 7 was (31.4%).

**6.1.1.6 Frequency of Using Cashless Transaction**

Majority of respondents use cashless transaction with everyday usage was 40.8% and several times a week was also 40.8%. The remainder used cashless transactions several times a month, (14.2%), and several times a year, (4.2%).

**6.1.2 Means and Standard Deviation**

Appendix B demonstrates the central tendencies' measurement of each of the constructs. The

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mean and standard deviation value for the perceived ease of use range between 4.35 to 4.45 and 0.590 to 0.655, the perceived trust value between 4.25 to 4.37 and 0.626 to 0.758, the facilitating condition variable ranges from 4.34 to 4.47 and 0.593 to 0.680. This shows that the majority of the respondents of this study believe that the current organizational and technological infrastructure can support the use of technology. They believe this cashless way of transaction can be accessed anywhere using mobile devices, credit cards, and mobile payment apps. Intention to use cashless as the dependent variable in research. The mean and deviation value for the intention to use range is between 4.40 to 4.41 and 0.639 to 0.684. This result demonstrates that most of the respondents choose to agree and strongly agree. This indicates that the Universiti Malaysia Kelantan students in this study intend to use cashless transaction mode as a payment method, which has a significant impact on their desire to continue using this service.

**6.1.3 Validity and Reliability Analysis**

The more reliable a set of scales or scale items, the more certain we may be that the score obtained from the researcher's test is substantially the same as the score obtained if the test were repeated. Validity testing, on the other hand, investigates the extent to which the instruments are designed to measure the concept being evaluated. The content validity was assessed using a questionnaire that had previously been completed and published in the journal by another researcher. The instrument's dependability was determined using Cronbach's alpha. When the Cronbach's alpha value for each construct hits 0.7, the internal consistency dependability of a measurement model is great; nonetheless, values of 0.8 or 0.9 are ideal in the following phases.

Table 1: Result of Cronbach's Alpha

<b>Cronbach's Alpha</b>	<b>Cronbach's Alpha Based on Standardized Items</b>	<b>Number Of Items</b>
.938	.938	21

According to Table 1, the dependability of all variables is 0.938, which represents the Cronbach's alpha coefficient. As a consequence, the questionnaire is trustworthy and acceptable for use in the study.

Table 2: Results of the reliability analysis on constructs

<b>Study Instruments</b>	<b>Number Of Items</b>	<b>Cronbach's Alpha</b>
Intention To Continuously Use Cashless	5	0.886
Perceive Ease of Use	5	0.858
Perceived Trust	6	0.931
Facilitating Condition	5	0.855

The significant coefficient alpha of perceived ease of use is 0.858 when 16 independent factors are included. Aside from that, the alpha for the perceived trust is 0.93. Facilitating condition,

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the last component, with an alpha of 0.855. Overall, the test scores range from 0.855 to 0.931, which are considered high reliabilities and an optimistic sign for the study.

**6.1.4 Normality Test**

The normality tests help in the graphical examination of normality. The Kolmogorov-Smirnov normality test is predicated on the most extreme distinction between actual appropriation and anticipated cumulative-normal dispersion (Ghasemi & Zahediasl, 2012). This exam has been demonstrated to be less impressive than other assessments in general. It is listed because of its historical significance. The Shapiro-Wilk test is frequently the most noteworthy. The test is not run when a frequency variable is supplied

Table 3: Test of normality

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Intention To Continuously Use Cashless	.164	353	0.0001	.889	353	0.0001
Perceive Ease Of Use	.185	353	0.0001	.884	353	0.0001
Perceived Trust	.135	353	0.0001	.898	353	0.0001
Facilitating Condition	.146	353	0.0001	.901	353	0.0001

As a result, the Kolmogorov-Smirnov and Shapiro-Wilk were used. Normality was tested using plot and Kolmogorov-Smirnov tests. Table 3 shows that the data is not normal, since the significance value is less than 0.05. To get the normal data, the critical values must be more than 0.05 (Ghasemi & Zahediasl, 2012).

**6.1.5 Hypothesis Testing**

Spearman's correlation coefficient measures the statistical relationship between two continuous variables (independent and dependent variables). The goal of this test is to determine whether the correlation coefficient is significant and whether hypotheses should be accepted or rejected. According to the table below, the p-value is less than 0.05, indicating that there is a significant link between the independent and dependent variables.

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Table 4: Spearman correlation coefficient analysis

Correlations			Intention To Continuously Use Cashless	Perceived Ease of Use	Perceived Trust	Facilitating Condition
Spearman 's Rho	Intention To Continuously Use Cashless	Correlation Coefficient	1.000	.507**	.492**	.507**
		Sig. (1- Tailed)	.	0.0001	0.0001	0.0001
		N	353	353	353	353
	Perceived Ease Of Use	Correlation Coefficient	.507**	1.000	.411**	.659**
		Sig. (1- Tailed)	0.0001	.	0.0001	0.0001
		N	353	353	353	353
	Perceived Trust	Correlation Coefficient	.492**	.411**	1.000	.545**
		Sig. (1- Tailed)	0.0001	0.0001	.	0.0001
		N	353	353	353	353
	Facilitating Condition	Correlation Coefficient	.507**	.659**	.545**	1.000
		Sig. (1- Tailed)	0.0001	0.0001	0.0001	.
		N	353	353	353	353

\*\*\*Correlation is significant at the level 0.01 level (1-tailed)

The findings indicate a positive correlation between the intention to employ cashless transactions and perceived ease of use,  $r = 0.507$ ,  $n = 353$ ,  $p = 0.0001$ . The first hypothesis is therefore accepted. There is a strong and positive correlation between the intention to use cashless transactions and perceived ease of use. Next is the second relationship between the intention to use cashless transactions and perceived trust. The result,  $r = 0.492$ ,  $n = 353$ ,  $p = 0.0001$ , shows that there is a positive relationship between the intention to use cashless transactions and perceived trust. The analysis shows that there is a weak and positive link between the intention to use cashless transactions and perceived trust. Finally, cashless transaction usage intention and facilitating condition. The results demonstrate a positive link between cashless transaction usage intention and facilitating condition,  $r = 0.507$ ,  $n = 353$ ,  $p =$

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0.0001. The analysis finds that there is a positive and significant association between cashless transaction usage intention and facilitating conditions.

Table 5: Summary of hypothesis

<b>Hypothesis</b>	<b>Relationship</b>	<b>Correlation</b>	<b>Result</b>
H1	Relationship Between Perceived Ease of Use and Intention to Continuously Use Cashless Transaction Mode Among Universiti Malaysia Kelantan Students	Strong	Accepted
H2	Relationship Between Perceived Trust and Intention to Continuously Use Cashless Transaction Mode Among Universiti Malaysia Kelantan Students	Weak	Accepted
H3	Relationship Between Facilitating Condition and Intention to Continuously Use Cashless Transaction Mode Among Universiti Malaysia Kelantan Students	Strong	Accepted

## 6.2 Discussion

This study shows to regulate the relationship between the independent variables which are perceived ease of use, perceived trust, and facilitating condition with the dependent variable which is the intention to continuously use cashless transaction mode. Based on Table 4, Spearman's correlation analysis was used to examine the relationship between factors influencing customers and their intention to continuously use cashless transactions. The result revealed that there is a positive and significant relationship between perceived ease of use and intention to continuously use cashless transaction mode among Universiti Malaysia Kelantan students. Thus, even if an application is useful, it will only be used if it is perceived to be simple to use. The result from this study confirmed that there is a positive and significant relationship between perceived trust and intention to continuously use cashless transaction mode among Universiti Malaysia Kelantan students. Hence, identifying the opportunity to leverage the existing knowledge of the consumer to build trust can intensify the consumer's purchase intention. Trust is one of the variables influencing the intention to utilise technology when it comes to adoption. When it comes to online transactions, trust can be defined as the client's confidence in the service provider that their funds and personal information won't be stolen and that, despite system flaws, the client's interests will be taken into consideration by all pertinent parties (Kiew et al., 2022). This study's findings reveal a significant relationship between facilitating conditions and the intention to continuously use cashless transactions among Universiti Malaysia Kelantan students. Most of the studies revealed a significant relationship between facilitating conditions and the intention to use cashless payment. Understanding using cashless payment demands some support resources, and enhanced skills to operate the cashless transaction, for example, an internet connection and knowledge of mobile security (Che Nawi et al., 2022). A person will be more inclined to use technology if it is



facilitating condition to use and has support services available if they need them. It is clear from the current state of cashless transactions and the study's findings that the facilitating condition using online payment is a significant effect on the interest in using online payment (Widuri et al., 2020).

The most impactful antecedent is perceived ease of use, and facilitating condition because the correlation of this antecedent is the highest (0.507). The researchers also found that perceived trust has the lowest correlation (0.492) and needs to be improved.

## **7 Conclusions and Future Research**

Cashless transactions have supplanted physical currency as the predominant mode of payment in modern society. In their daily lives, consumers are more likely to use cashless transaction methods such as debit cards, online, and mobile wallets. Students at universities are more likely to utilise new technologies. This study was conducted to determine the level of consumer awareness of cashless transaction modes and the factors that influence UMK students' intentions to use cashless transaction modes. The questionnaire was designed by the researcher to collect data. Using descriptive analysis, reliability analysis, normality test, and correlation test the data were analysed. High consumer awareness of cashless transaction methods exists. A cashless mode of transaction that is user-aware is convenient and advantageous for them. Effective factors, perceived ease of use, perceived trust, and facilitating conditions are independent variables in this study, while the intention of users to engage in cashless transactions is the dependent variable. The perceived ease of use value of the variable is 0.507, and the perceived trust value of the variable is 0.492.

Perceived ease of use, perceived trust, and a facilitating condition are the factors that influence the intention to use the cashless transaction mode. A high correlation coefficient exists between the perception of ease of use and the intention to use a product or service. In this study, the hypothesis was proven to be true. This study offers universities and others the chance to learn about cashless transaction methods. There are some constraints on the conduct of this study. The limitations include sample size and population limitations. There are also some recommendations for future research. The researcher suggests conducting future studies with different samples and a larger sample size. This study revealed that a high level of awareness and four factors significantly influence consumers' intentions to use cashless payment methods. Perceived ease of use is the factor that has the greatest impact on user intent. This research has achieved its objectives.

In the future, the government should pursue infrastructural improvements in the future to facilitate cashless transactions. Next, provide rural areas with high-speed internet access, large cell networks, and cashless transactions. Additionally, enhance financial literacy and public awareness, and educate individuals on how to make payments through banks and cashless transaction platforms. Individual initiatives in schools, colleges, panchayats, etc., intended to increase awareness of cashless transactions or banking. Schools and universities can assist in educating the youth about cashless transactions and linking all charitable efforts to bank accounts. With a speedy complaint response and receipt system, concerns regarding cashless transactions can be resolved. Incorporate public transportation and services into cashless transactions. Promote cashless transactions and the use of mobile wallets for e-commerce

transactions, such as the purchase of train tickets, utility bills. In addition, enhance cybersecurity and security measures to maintain the integrity of online data and information in order to alleviate consumer concerns regarding potential fraud. Fintech industry- introduced technological innovation and government legal initiatives must collaborate to promote the acceptance of cashless transactions and foster future innovation. It is advised that additional studies be conducted in the field of cashless transaction security in Malaysia in order to examine the factors of transaction security. This cashless and comprehensive model contributes to the literature on the issue. In addition, efforts can be made to establish which aspects of security lead to negative attitudes against these transactions and how attitudes might be altered to boost the intention to use cashless transactions.

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