Research Article

Factors Affecting Quality of the Online Delivery Service among Undergraduate Students

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Abstract: The quality of service derived from online delivery service is very paramount to customers and the service providers since there is now a drastic shift by people to buy and sell via the old-style to doing businessonline and as such, quality of service delivery among other factors should be the hall mark. The aim of this paper is to investigate the factors affecting the quality of online delivery service among the students of University Malaysia Kelantan (UMK). The probability sampling technique with emphasis on simple random sampling technique was used in this study wheredata was obtained using questionnaire and analyzed using the Statistical Package for Social Science (SPSS) software from 385 respondents from UMK, City Campus. A pilot test on the validity of the questionnaire was conducted and the reliability test results show that all the variables are above 0.7 Cronbach's Alpha value an indication of acceptability. The analytical results show that service speed, service price, information quality and perceived risk has positive affect on the online shoppers' perception towards delivery service quality of online shopping. While, Pearson correlation revealed that service speed and information quality obtained the value under the high positive correlation; service price and perceived risk under negligible correlation. In testing the hypotheses of the study, it indicates that service speed and information quality hypotheses have strong relationship with the dependent variable while service price and perceived risk hypotheses had very low relationship with the dependent variable. This study was therefore based on the SERVOUAL model to determine customers perception on online shopping context. The study recommends that different methodologies can be used by future researchersby conducting interview, or broadening the scope of the study in order to find out the exact perception of customers like students on online shopping towards delivery service quality of online shopping. Therefore, the result of this study can be used as a reference by the practitioners or the online stores, enrich the body of knowledge as well as form basis for future researchers that are interested in this field.

Keywords:Delivery Service Quality, Delivery Service Provider, Online Shopping, Online Shoppers' Perception, SERVQUAL Model

1. Introduction

Online shopping is growing fast in recent years where millions and millions of people shop online every day. Technological advancement has provide a good opportunity to the online seller in reaching the customers much faster, easier and in a more economical way possible as it holds the attention of the retail markets (Lee & Lin, 2005). If consumersneeda product or service they can now go through the internet and browse the things they need and they can eventually own them. Therefore, this research is aimed to examine the online shoppers' perception towards delivery service quality of online shopping among University Malaysia Kelantan's students.

The extant literature affirmed that there is a relationship between online shopping and delivery service since online delivery service providers need to send their products to their customers doorsteps and delivery service quality is one of the key factors used to attract customers to visit the online shopping platform (Morganti, Seidel, Blanquart, Dablanc, & Lenz, 2014; Jiang, Yang, & Jun, 2013). Again, delivery service alsoplays an enormous role to attract the positive customer perception to visit the online shopping platforms. Moreover, consumers opt for online shopping because it is much more convenient where consumers donot have to take their vehicle or bear any other cost to visit the shop to look for the products or services they need. It is convenient to be anywhere and shop for the product of their choice without moving from place to place. Once consumer decided on what they want to buy, the payment process is seamless and the order will be delivered to their doorstep or any preferred place.

Khatibi, Haque and Karim (2006) study demonstrate that there is high tendency need for online shoppers use online shopping because they have more choices compared to the local stores which are usually limited in their offerings. As a result, most online service providers encounter problems in delivery service quality such

as stock holding, on time delivery and also lack of security that is resulted from the excessive demand from the online shoppers. The problem in congestion of stock holding happens during the promotion period, where price cut will increase the demand and unavailability to deliver those products at the same period of time and will increase the stock holdings. For example, Shopee the online store has faced the same problem where customer claimed for their refund because the ordered products were not delivered at the promised date. This is because excessive demand resulted in congestion at the delivery service provider's warehouse.

According to previous studies, there are four main factors on service speed namely, service price, information quality and perceived risk that affect online shoppers' perception towards delivery service quality of online shopping. To begin with, service speed plays a significant role on online shopping because customers always want a good or service that ismore desired and take short delivery time while service price determine the level of online shopping and the lower the price, the higher the demand for the product or service and the vice-versa. Likewise, information quality is about the reliability of the information provided and appropriate information can attract more consumers to shop online. Lastly, perceived risk in online shopping is more to physical sense where consumers do not touch or feel the product and the product and may differ in real view or sense(Chen & Qi, 2016).

2. Problem Statement

Online technology in Malaysia is a new technology breakthrough since it has just begun to catapult the Malaysia retailing sector with online shopping services. In order to increase online shopping in Malaysia, understanding the online shoppers' perception towards delivery service quality should be given topmost priority. There are several issues and challenges that delivery service providers faced in order to satisfy their customers and improve the company's performance.

In the first place, delivery service providers face the problem of on time delivery which refers to the delivery of product or service at the promised date and time to the customers. This can relate to the case where the US West Coast port has been nightmare for all parties involved, due to the work slowdowns. A vessel that usually takes about two weeks to reach Asia was not discharge for almost a month. At some point, the average container pick-up time from terminal is 15 days. Another example is a strike in India, war risk in Middle East, piracy in Somalia and even Chinese New Year Holiday are all the contributing factors of this problem in one way or another (Mamman, Maidawa, & Saleh, 2015).

The second problem regarding delivery service quality is lack of security. Every customer has their own trust issues on any delivery serviceplatform in relation to their product or service. As such, the frequency of online shopping depends upon whether customers attach trust to a particular delivery service platform or not. This is because people are different in nature and thoughts where some people are comfortable in sharing their personal details in online dealing while some of them are scaredofundertaking business transactions online (Wang, 2015).

Another problem that is related to delivery service quality is issues in congestion of goods and services. This can relate with the congestion in Metropolitan areas in Malaysia (Almselati, Rahmat, & Jaafar, 2011). The congestion has affected delivery service speed where goods did not arrive at the appointed place within the expected time because the price cut on the promotion periods in online shopping has increase the demand for the products. Therefore, it contributes to the problem where it increases the stock holding and the need to deliver the products at the same period of time to the customers. Therefore, this study investigated if there is positive significant relationship between the service speed, service price, information quality and perceived risk on online shoppers' perception on delivery service quality among students who form a larger market in the online business.

3. Literature Review

3.1 Online Shoppers' Perception on Delivery Service Quality

Perception can be defined as a process that involves selecting, organizing and interpreting the basic stimuli such as sound, smell, sight, taste and feelings of the customers and the perception of online shopper's is only based on sight stimuli used to evaluate the products or service due to the visual images of products and services shown on the online shopping platform(Madichie, & Gallant, 2012). This is so because, though customers are exposed to the same environment, their experience may differ from each other. Upon this premise, Aspfors (2010) posits that customers' perception depends on how they perceived the service quality that is offered to them and also by estimating their satisfaction level and Parasuraman, Zeithaml, and Berry, (1988) termed it as an evaluation or attitude of the overall excellence of services provided.

3.2 Service Speed

Service speed refers to the key movement of goods from one location to final destination within the expected time (Kovač, Naletina, & Kuvač, 2017). Speed of delivery is measured through the length of time taken where online shoppers placed their orders until they received the orders. This length of time may be affected by the error processing time, order resetting or transport delivery time.

3.3 Service Price

Service price or shipping cost is the key aspect of online shopping. It is defined as a fee or charge that is paid for the transport delivery service stipulated by third party logistic company for the expenditure that incur in providing the service such as labor costs, fuel, or other vehicle operating costs (Chen & Qi, 2016). The differences in service price across different countries will influence customer's purchasing power and their willingness may differ if the delivery costs is too high (Okholm et al., 2016).

3.4 Information Quality

Information quality is critical concern of organization to make sure that they always provide the best information to their customers(Lee, Strong, Kahn, & Wang, 2002). Again, Sachidananda, Khelil and Suri (2010) study revealed that the quality of delivered information should be assessed based on the required or expected quality. This means that the information provided along with the products should always be accurate to ensure customer loyalty to the specific seller and the online shopping platform as well.

3.5 Perceived Risk

The term perceived risk means the person subjective believe about potentially negative outcome from his or her decision. In other words, "perceived" is used as opposed to objective outcome distributions of an alternative or a product class that a customer is associated with(Samadi & Nejadi, 2009). Delivery risks are inconsistencies between the ordered product and the delivered product (Hong, Chan, Thong, Chasalow, & Dhillon, 2014). In online transactions, customers need to wait before receiving the ordered products and during this period of time, the items can get lost, damaged or even delayed (Aghekyan-Simonian, Forsythe, Suk Kwon, & Chattaraman, 2012) and products purchased in online shopping may be sent to the wrong address and may be recognized as the risk associated to online shopping.

3.6 Theoretical Framework

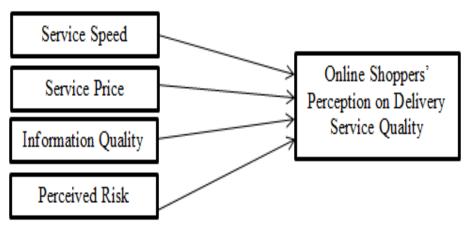


Figure 1. Research Framework of Online Shoppers' Perception towards Delivery Service Quality among University Malaysia Kelantan Student (Source: Chen & Qi, 2016)

3.7 Research Hypothesis

H1: There is a positive significant relationship between service speed and online shoppers' perception towards delivery service quality.

H2: There is a positive significant relationship between service price and online shoppers' perception towards delivery service quality.

H3: There is a positive significant relationship between information quality and online shoppers' perception towards delivery service quality.

H4: There is a positive significant relationship between perceived risk and online shoppers' perception towards delivery service quality.

4. Methodology

This study employed a questionnaire survey method to measure the online shoppers' perception towards the delivery service quality for online shopping from four perceptions which are service speed, service price, information quality and perceived risk. The target respondents for this research are students who studied in University Malaysia Kelantan City Campus, Pengkalan Chepa, Kelantan. To facilitate the data collection, a webbased questionnaire survey has been created for this research to collect the data from the respondents using Google Form platform. The questionnaire is divided into 3 sections which included the details of respondents and also all variables related questions.

The first part of the questionnaire was on the background of the respondents which involved sixpersonal information questions including gender, age, course, ethnics, marital status and the experience of respondents for online shopping. The second section was about the online shoppers' perception towards the delivery service provided for the online shopping with a total of 8 questions. The third section consists of four partswith each part containing fivequestions meant to determine the perception of online shoppers towards the delivery service during shopping online which are service speed, service price, information quality and perceived risk.

The questionnaire was designed using 6-point Likert scale ranging from strongly disagree, disagree, slightly disagree, slightly agree, agree, strongly agree, since the 6-point Likert scale will generate more accurate data to indicate the validity of the feedback of the respondents (Beglar & Nemoto, 2014). Respondents used the scale to provide feedback regarding their perception towards the questions provided and also made it easierto evaluate the data.

This study used the probability sampling technique by adoptingsimple random samplingwhere each element in the study population has an equal chance of being selected (Taherdoost & Group, 2017). From Krejcie & Morgan, (1970)table of determining sample size of a known population, the requiredrespondents for this study was 357, but using the Google Form platform, 385 respondents was finally generated.

5. Result and Analysis

This study used the Statistical Package for Social Sciences (SPSS) to analyze the data collected from the questionnaires. There are 3 types of data analysis method used in this research to evaluate the result to answer the research objective. The data was then analysed under three methods thus, descriptive analysis, reliability analysis, and Pearson Correlation analysis.

5.1 Descriptive Analysis

A descriptive analysis to evaluate the basic information of respondents in this study is presented by Table 2.

Table 2. Basic information of respondents

Variable(s)	Frequency	Percent	
Gender			
Male	113	29.4	
Female	272	70.6	
Age			
19-20 years old	68	17.7	
21-22 years old	154	40.0	
23-24 years old	148	38.4	
25 years old and above	15	3.9	
Program			
SAK	58	15.1	

SAP	29	7.5
SAH	50	13.0
SAW	46	11.9
SAL	81	21.0
SAR	61	15.8
SAB	47	12.2
SAE	13	3.4
Ethnics		
Malay	146	37.9
Chinese	102	26.5
Indian	113	29.4
Others	24	6.2
Marital Status		
Single	351	91.2
Married	31	8.1
Others	3	0.8
Do you have online shopping experience?		
Yes	377	97.9
No	8	2.1
Note: Total respondents = 385		

Based on the result above, the respondents have provided the suitable information regarding this study.

5.2 Reliability Analysis

To achieve a reliable result, the respondents' feedbackwas tested using the SPSS platform to ensure that the results are valid and supports the Cronbach's Alpha rule of Cronbach, (2016)as shown by Table 3and Table 4 where a reliability analysis have been conducted and the independent and dependent variables of the study tested.

Table 3. Rule of Cronbach's Alpha

Cronbach's Alpha	Internal consistency	Internal consistency	
$\alpha \ge 0.9$	Excellent		
$0.9 > \alpha \geq 0.8$	Good		
$0.8 > \alpha \ge 0.7$	Acceptable		
$0.7 > \alpha \ge 0.6$	Questionable		
$0.6 > \alpha \ge 0.5$	Poor		
$0.5 > \alpha$	Unacceptable		

Source: Cronbach, (2016)

Table 4. Result of Reliability Analysis

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Variables	Cronbach's Alpha	No. of Items	Remarks	
Online Shoppers' perception	0.826	8	Good	
Comition Control	0.072	5	C 1	
Service Speed	0.872	5	Good	
Service Price	0.737	5	Acceptable	
Information Quality	0.773	5	Acceptable	
Perceived Risk	0.749	5	Acceptable	

The above results suggest that all questions provided in the questionnaire based on the independent and the dependent variables have been accepted and supports the argument of the study.

5.3 Pearson Correlation Analysis

The Pearson correlation analysisused to examine the correlation between the independent variables thus; service speed, service price, information quality and perceived riskandonline shoppers' perception towards delivery service quality which is the dependent variable and the tested hypothesisis displayed by Table 5. The table furthershows the rule of measurement of correlation for the dependent and independent variables as reported by Andale, (2012) where Table 6 shows the result of the Pearson correlation analysis and Table 7 depicting the tested hypothesis of the study.

Table 5. Measurement of Pearson Correlation

Size of correlation	Interpretation
0.90 to 1.0 / (-0.90 to -1.0)	Very high positive (negative) correlation
0.70 to 0.90 / (-0.70 to -0.90)	High positive (negative) correlation
0.50 to 0.70 / (-0.50 to -0.70)	Moderate positive (negative) correlation
0.30 to 0.50 / (-0.30 to -0.50)	Low positive (negative) correlation
0.00 to 0.30 / (-0.00 to -0.30)	Negligible correlation

Source: Andale, (2012)

Table 6. Result of correlation of dependent variable and independent variables

		Servic	Service	Information	Perceived
		e	Price	Quality	Risk
		Speed			
Online	Pearson	.724*	.087*	.718*	.087*
Shoppers'	Correlation				
Towards					
Delivery	Sig. (1-tailed)	.000	.044	.000	.043
Service					
Quality	N	385	385	385	385

^{*.} Correlation is significant at the 0.05 level (1-tailed).

According to the results of Table 5 and 6, all the independent variables showed a positive and significant relationship with the dependent variable where "Service speed" and "information quality" shows a strong positive association with online shoppers' perception towards the delivery service quality. However, the results show that "service price" and "perceived risk" depicted weak and negligible relationship with online shoppers' perception towards the delivery service quality of shopping online.

Table 7.Hypothesis Testing Result

Hypoth	esis	Pearson Correlation	Sig (1-tailed)	Result
H1	IV 1 has a positive significant relationship between DV.	r = 0.724	0.000	Supported
H2	IV 2 has a positive significant relationship between DV.	r = 0.087	0.044	Supported
Н3	IV 3 has a positive significant relationship between DV.	r = 0.718	0.000	Supported
H4	IV 4 has a positive significant relationship between DV.	r = 0.087	0.043	Supported

^{*} IV 1 = Service Speed, IV 2 = Service Price, IV 3 = Information Quality, IV 4 = Perceived risk, DV = Online Shoppers' Perception towards Delivery Service Quality

The above discussed result shows that the hypotheses of the study have been tested using the Pearson correlation analysis and at the significant level of p < 0.05 and that all the hypothesisachieved the significant value below 0.05. This means that all the hypotheses are supported by the result of the study with p < 0.05. The r – value for IV1 and IV3 indicate that the two variables have strong and significant relationship with the DV except with IV2 and IV4 where the r -value is a bit low an indication that these two variables have no strongand significant correlation with the DVof the study.

6. Discussion

This study indicates that service speed, service price, information quality and perceived risk affect online shoppers' perception towards delivery service quality among University Malaysia Kelantan student where all the factors of delivery service quality served as positive and significant predictors. From the study, service speed had high positive correlation with the online shoppers' perception towards delivery quality service (r = 0.724, p = 0.000, p < 0.05) and information quality (r = 0.718, p = 0.000, p < 0.05). While, service price has negligible correlation with the online shoppers' perception towards delivery quality service (r = 0.087, p = 0.044, p < 0.05) and perceived risk (r = 0.087, p = 0.043, p < 0.05).

Again, the findings of this study demonstrate that "service speed" had positive and significant association with online shoppers' perception towards delivery service quality, an indication that "service speed" is regarded as an integral factor among respondent'sperception towards delivery service quality. This result support (Chen & Qi, 2016) view that service speed is one of the important factors that affect online shoppers' perception since the faster the service speed, the more satisfied customers towards logistic service quality of online shopping.

Additionally, this study revealed a positive and significant connectionof information quality and online shoppers' perception towards delivery service quality and confirmed Lin, (2010) study that "information quality" is one of the key elements that affect the commitment of customers towards the online services. This result further supports Ladhari, (2010), who posits that "information quality" is the key dimension that affect delivery service of e-commerce.

More so, the results of this study shows that a positive and significant relationship exists between "service price" and online shoppers' perception towards delivery service quality and agree with Kovač, Naletina and Kuvač, (2017)who indicated that online shopping has correlation with service or delivery costs. Also, They (Chen & Qi, 2016)reiterated that, delivery "service price" also have a low positive relation customers decision topurchase online if the delivery costs are not clearly explained. For that matter, this study revealed a low satisfaction from online shoppers towards delivery service quality. Nonetheless, the findings of this studyshowa positive and significant relationship between "perceived risk" and online shoppers' perception. This confirmed Dai, Forsythe and Kwon, (2014)who summarized that perceived risk is a most critical variable that affect the perception of online shoppers towards delivery service quality and also supportMasoud, (2013) that perceived risk also serve as an important issue that can affect online shoppers' perception for delivery service.

7. Conclusion

This present study was designed to determine the effect of online shoppers' perception of the quality of service delivery among students of Universiti Malaysia Kelantan and to drive implications to advance current studies exploring the links between online shoppers' perception of the quality of service delivery, and to get implications and applications that can inform the actions for online service providers. The study confirmed that quality of the delivery service in e-commerce among online shoppers and is vital to customers and boost online business transaction. The findings from this study suggest that there is a positive and significant relationship between the independent variables and the dependent variable thus; service speed, service price, information quality and perceived risk had significant impact on online shoppers' perception of the quality of service delivery. Among some of the key aspects that needs to be further investigated by future researchersare that in future, data could be collected from other states of Malaysia to verify whether or not different cultural backgrounds will have an impact on the results of the research. Again, instead of using a cross-sectional research design to collect data from respondents at once, the data could be taken over a long period of time and as well broaden the scope of the study to compare the results with this study. Similarly, studies could be done using interviews with the online customers and service providers to make additional input to the body of knowledge stressing the need for online service delivery by providers. Finally, one limitation of this research however is that the survey is conducted only in the Kelantan area at once and within a short duration of time.

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