

THE ACCEPTANCE MODEL OF ONLINE HYPERMARKET SHOPPING SYSTEM

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ABSTRACT

This study aims to provide an integrated model for user acceptance in online shopping system. The study used a mixed-method approach, employing both qualitative and quantitative methods. A qualitative method was applied to verify factors of user acceptance that were derived from the literature review, and to identify the relationships between the derived factors. A priori model of user acceptance in user acceptance in online shopping system is then proposed. A quantitative method was employed to validate the (a-priori) model. Questionnaires were distributed to experts who have more than 5 years' experience in online shopping system in Malaysia. Findings showed that seven factors including perceived usefulness, perceived ease of use, perceived risk, e-WOM, Level of satisfaction and cultural and regional beliefs are significant. These six factors can facilitate in the understanding on how to implement user acceptance in online shopping system effectively. Moreover, in quantitative part, a sample with 400 shoppers from four shopping complexes in Kuala Lumpur called Tesco, AEON, Giant and Cold storage were randomly selected and were examined the relationship among the variables. The findings show there significant relationships among the variables and therefore we can conclude that the factors including perceived usefulness, perceived ease of use, perceived risk, e-WOM, Level of satisfaction and cultural and regional have significant effect on behavioural intention to use online shopping.

Keywords: Acceptance Model, Online Shopping, Hypermarket, Behavioural Intention, Level of Satisfaction, Cultural Difference.

INTRODUCTION

Purchasing goods and services online has become a common practice among many people around the world. Some choose to make online purchases for convenience, others because of the competitive price offered by some e-commerce platforms. For private consumers around the globe the most well-known form of e-commerce falls into the business to consumer (B2C) category, which includes online retail or online shopping (Gillenson & Sherrell, 2002). The rapid growth of e-commerce is also affecting businesses with no online presence (Hidayat-ur-Rehman et al., 2016). The fast pace of technological advances, globalization, and the augmentation of online customers' demands are threatening the ability of business leaders to meet human needs without the use of innovation to meet sustainable goals (Sabou et al., 2017). Consumers use e-commerce to access information, knowledge, and expertise efficiently. E-commerce is a solution to improve competitiveness and reduce poverty in developing countries (Awiagah et al., 2016;

Farah et al., 2018). In 2017, an estimated 1.66 billion people worldwide purchase goods online. Based on reports, in 2021, over 2.14 billion people worldwide are expected to buy goods and services online, up from 1.66 billion global digital buyers in 2016. Moreover, during the same year, global e-retail sales amounted to 2.3 trillion U.S. dollars and projections show a growth of up to 4.48 trillion U.S. dollars by 2021(www.statista.com).

Adapting to online platform is inevitable where consumers will not stop using online shopping even if they experience delays in delivery, damaged products, technical issues, or difficulties in finding the required information (Sabou et al., 2017). There are many factors affecting online shopping acceptance and these factors can differ from one country to another. For example, in Vietnam, trusting beliefs, technology beliefs, and subjective norm beliefs influence the majority of consumers' intentions to shop online. Perceived usefulness is the most significant factor influencing online vendors, followed by trusting beliefs (Ho & chen, 2014; Salamzadeh, 2020). In Singapore, ease of use is the most encouraging factor, and the convenience of a product is the most influential factor for consumers to shop online (Sam & Sharma, 2015). The usefulness of a product and detailed product information are attributes that serve to encourage revisits to an e-commerce page (Sam & Sharma, 2015).

While there are existing studies concentrated on online shopping around the world, many of these studies conclude that there is still a need for closer examination of the online shopping intention in specific countries, very much due to the fact of cultural differences and the prior imperfection of technology acceptance relationships of varying consumer markets (Sadi & Noordin, 2011). It might be that extending of the user acceptance model by some new variables and factors will help create better understanding of the intention to shop online. Consequently, the main problem of this research is to address the user acceptance of an online shopping system and variable which affect this acceptance.

LITERATURE REVIEW

Online shopping factors were analysed among the university students in Malaysia and revealed that user perceived usefulness has positive relation with consumer behaviour (Farah et al., 2018). The subjective norms towards the attitude among the consumers for the purchase intention among the Iranian indicated that subjective norms influenced purchase intention (Nejati et al., 2011). Chin & Goh (2017) analysed several factors to study online shopping intention in Malaysia. The results showed that received ease-of-use (PEOU) and perceived usefulness (PU) had a positive relationship with online intention. Findings indicated that an increase in social co-creation activities, as moderator, positively affects customer citizenship behavior on service innovativeness, and negatively affects customer participation behavior on service innovativeness (Moghadamzadeh et al., 2020) According to the President and Chief Executive Officer of Rakuten Online Shopping Malaysia, Masaya Ueno, there are more than 90,000 products from over 300 merchants with diverse selections ranging from electronics gadgets, computers and IT to healthcare, fashion apparel, jewellery and accessories (Hoa et al., 2019). Online shopping is strongly influenced by the gender and income of the individual (Lubis, 2018; Ahmed et al., 2019).

It can be seen from the increasing number of domestic online web store such as 11 street and Lelong.my in the competitive e-commerce market. Sidhu (2017) claims that Malaysia had become the fast-growing e-business in South East Asia because the growth in sales that surpass 100% in 2016 had caused a threat to traditional retail store as numerous of outlets are facing difficulties in finding tenants to fill up the shop lot space. Despite the purpose and advantages of

online shopping system, there are a huge number of people who are not using the system. For instance, a new survey from Farah et al., (2018) found that while a quarter of global respondents are using online grocery ordering and 55% are willing to use it down the road, 61% reported that they still find grocery shopping at the store to be an “enjoyable and engaging experience.” Nearly as many as—57%—said that retail grocery shopping is a “fun day out for the family. The survey, which polled 30,000 online respondents in 60 countries, found most people do not fully rely on online or offline shopping; they use a mix of both. But certain shoppers are more likely to choose the Internet than others. Some of them might not even know the existence of the system. Unlike the users in more mature markets like the US, Malaysians are not yet buying everything online. According to the Consumer Barometer by Google in 2017, Malaysians are most likely to buy flights, hotels, music, ground travel and clothing and footwear online. This means that not all products will see online sales (Muda et al., 2016). At the moment, internet penetration in Malaysia has reached almost 140%. On top of that, following the global trend, more and more Malaysians are also shifting to mobile. In fact, Malaysians boast one of the highest mobile penetrations in the world at 85.7%. Other than buying on marketplaces and e-commerce stores, according to Bain & Company, about a third of Malaysians prefer buying informally using through Facebook and Instagram. This is the reason why social commerce is thriving in Malaysia (Lim et al., 2016).

Abbasi et al. (2019) claimed that Malaysia has a low score of 41 percent in pragmatism dimension indicating Malaysian has a normative culture. The consumers tend to listen to verbal recommendations from close families and relatives, friends or even media before making a shopping decision. Therefore, to change the Malaysian consumers’ perception to e-store, online retailers need to maximize efforts in doing promotion and performing good customer services in order to raise their interest in online shopping (Muda et al., 2016). Results revealed that interaction of perceived value dimension and individual culture significantly affects trust, perceived risk and purchase intention to use online shopping. Findings from this study provided insights for managerial implications relevant for enhancing online shoppers trust with varying cultural values (Akinbode et al., 2010).

A study by Natalie & Wandebori (2018) found that 71 percent of Malaysian online shoppers tend to regret their online purchases, 48 percent were dissatisfied due to mismatched expectations, 29 percent were disappointed with the poor product quality and 30 percent of Malaysians failed to complete their online purchases. The consumers also consider it a hassle when they faced difficulty to log in into the account, product information provided are limited and difficult to reach the online retailers by phone. Overall, the studies highlighted that the environment in Malaysia is ready for e-commerce growth. Internet and mobile penetration in the country is one of the highest in Southeast Asia and the logistics and legal infrastructure is prepared to take on a high volume of daily orders. The results showed that social network elements including identity, presence, sharing, fame, groups, relations and conversation positively affected entrepreneurial intention of respondents (Tajpour et al., 2019).

One of the most important issues in developing an online shopping system is determining the effect of different variables on the e-commerce acceptance. The scientific concern with user acceptance is comparatively recent, since traditionally, developers and procurers of new technology could rely on authority to ensure that technology was used, at least in many industrial or organizational contexts (Yeganegi & Elias, 2016). Without knowing the relationship between independent variables such as perceived usefulness, perceived ease of use, perceived risk, Word

of Mouth, level of satisfaction and cultural difference, and regional beliefs towards intention to online shopping system the improvement of system and the number of its users are impossible. While there are existing studies concentrated on online shopping around the world, many of these studies conclude that there is still a need for closer examination of the online shopping intention in specific countries, very much due to the fact of cultural differences and the prior imperfection of technology acceptance relationships of varying consumer markets (Salamzadeh et al., 2021).

It might be that extending of the user acceptance model by some new variables and factors will help create better understanding of the intention to shop online. Consequently, the main problem of this research is to address the user acceptance of an online shopping system and variable which affect this acceptance.

METHOD

This study is based on the triangulation approach since it merges qualitative and quantitative research approach. At this first part of the study, qualitative approach is appropriate as research questions are required to be considered. The statistical population of qualitative section in the current study is the experts who have more than 5 years' experience in online shopping system. Experts were selected based on their experience in information system development and any participation or involvement they were performed or received, and who have more than 10 years' experience. All interviews followed the same policy and structure. An open discussion was conducted to identify the factors of user acceptance in online shopping system. Subsequently, the factors that are derived from the literature were introduced, and the experts' opinion on the importance of this variable was sought.

In the second part of the study, quantitative approach is appropriate as hypotheses are required to be tested out. This study employed survey research design and a structured questionnaire as a means of data collection for quantitative level. The target population of quantitative part consists of shoppers from four shopping complexes in Kuala Lumpur called Tesco, AEON, Giant and Cold storage, who have purchased at least once from e-commerce platform. In this study sample was selected from a population of shoppers from Tesco, AEON, Giant and Cold storage shopping complexes. Participants were randomly selected via questionnaires being distributed in the shopping mall. The participants were limited to those who had used online shopping.

About 500 questionnaires were distributed randomly selected respondents. The expected correct response rate without extreme response is around 90-95% because extreme response has not been included in the study as it might give bias to the analysis. Finally, after reviewing the questionnaires and discarding the distorted and unanswered questionnaires, 400 questionnaires were selected and analyzed.

STATISTICAL RESULTS

Qualitative Findings

First interview session results

In this study, 8 factors have been identified and discussed. These factors were derived based on content review and mapping, and they are named as (1) Performance Expectancy, (2) Effort Expectancy, (3) Social Influence, (4) Facilitating Condition, (5) Perceived Cost, (6) Perceived Trust, (7) Behavioral Intention, and (8) Word-Of-Mouth.

The first interview session was conducted with 7 experts, to identify the factors of user acceptance in online shopping. Table 1 shows the findings summary of the first session of the experts' interview. The summary shows that all experts agree in the factors that are delivered from the literature review. Furthermore, some experts out of seven suggest adding two new factors named the level of satisfaction and cultural and regional beliefs .Based on the results of the first session of the experts' interview, we re-specify the factors that are highlighted as components for user acceptance in online shopping. These factors are named: Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition, Perceived Cost, Perceived Trust, Behavioral Intention, Word-Of-Mouth, Level of Satisfaction and Cultural and Regional difference. Table 1 and Table 2 show the results of the first stage of an interview with experts.

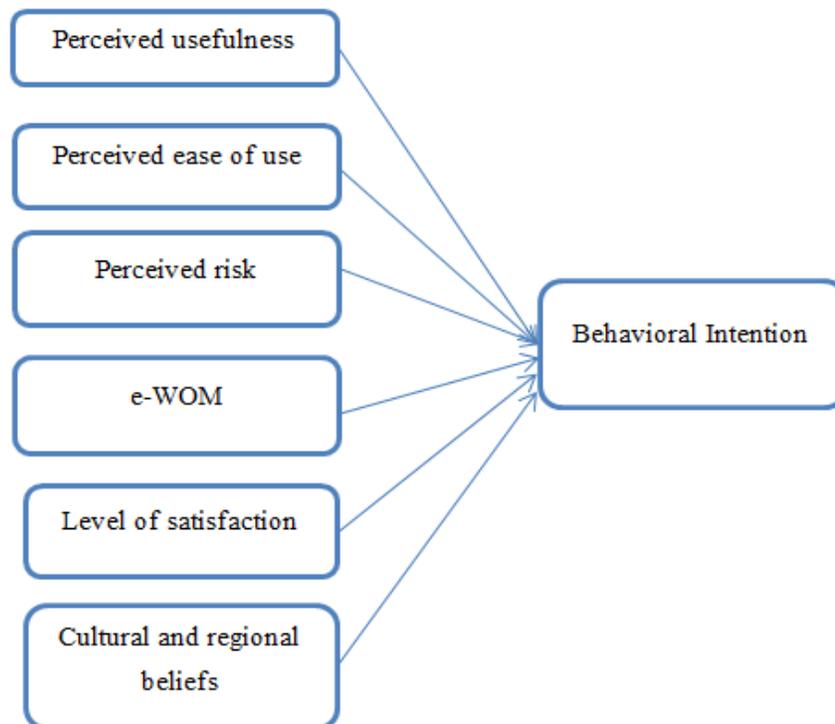
Factors	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert 6	Expert 7
	Experience = 7 years	Experience = 10 years	Experience = 6 Years	Experience = 8 Years	Experience = 7 years	Experience = 9 Years	Experience = 6 Years
Performance Expectancy	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Effort Expectancy	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Social Influence	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Facilitating Condition	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Perceived Cost	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Perceived Trust	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Behavioural Intention	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Word-Of-Mouth	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Socio-demographic factors	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Level of Satisfaction	Suggested			Suggested	Suggested		Suggested
Cultural and Regional difference	Suggested	Suggested		Suggested	Suggested	Suggested	

Experts/Experience	A: Important Factors	B: Suggested Factors
Expert 1 7 years	All Factors are important	Level of Satisfaction, Cultural and Regional difference
Expert 2 10 years	All factors are important	Cultural and Regional difference
Expert 3 6 Years	All factors are important	
Expert 4 8 Years	All factors are important	Level of Satisfaction, Cultural and Regional difference
Expert 5 7 years	I think all factors are important	Level of Satisfaction, Cultural and Regional difference
Expert 6 9 Years	Agree with all the factors	Cultural and Regional difference
Expert 7 6 Years	All factors are important	Level of Satisfaction

Second Interview Session Results

The purpose of the second session was to identify the relationships between the derived factors from the first interview session to construct a-priori model of user acceptance in online shopping. In the second session, the researcher elaborates the sample size of the experts from 7 in the first to be 11 experts. The results of the second session of interviews are summarized in Table 3. The number that appears in the table demonstrates the answers of experts towards if there is a relationship or there is no relationship between the derived factors and user acceptance. Table 3 indicated that the most of experts believe there are relationships between the derived factors from the first interview session. Figure 1 shows a- priori model that contains all the identified relationships that are asked during the second session of the interview.

Table 3 SECOND STAGE FINDINGS SUMMARY		
Questions	Yes	No
Is performance expectancy a factor for user acceptance?	11	
Is effort expectancy a factor for user acceptance?	11	
Is social influence a factor for user acceptance?	10	1
Is facilitating condition a factor for user acceptance?	11	
Is perceived cost a factor for user acceptance?	11	
Is perceived trust a factor for user acceptance?	11	
Is behavioural intention a factor for user acceptance?	10	1
Is level of satisfaction a factor for user acceptance?	10	1
Is cultural and regional difference a factor for user acceptance?	11	



**FIGURE 1
A-PRIORI MODEL OF USER ACCEPTANCE IN ONLINE SHOPPING SYSTEM**

Quantitative Findings

Socio demographic characteristics

Based on the results, (n=257, 64.3%) of the respondents were Female. Moreover, the majority of the respondents (n=229, 57.3%) are 18-25 years old where small numbers of participants are age above 40 years old as (n=22, 5.5%).

Normality Assessment of the Research Variables

In this study, the absolute values of skewness and kurtosis for all the research variables are less than 1. Following Kline (2015) when the absolute values of skewness and Kurtosis fall within (3,10), we can accept the normality of the variable. Therefore we can conclude that statistical distributions of the research variables do not have significant deviation from the normal curve and can be accepted their normality.

DISCUSSION AND HYPOTHESIS TESTING

In this study, the hypothesis is formulated based on the conceptual model that derived from the two interview sessions, to analyze the impact and relationships among factors of user acceptance in online hypermarket shopping system and behavioral intention. The research hypotheses are listed as:

H₁ There is a significant and positive effect between Perceived usefulness and behavioral intention in online hypermarket shopping system.

By using a suitable statistical technique called Pearson coefficient correlation, we assess the relationship among Perceived usefulness and behavioral intention in online hypermarket shopping system in Malaysia. According to the findings, there is a positive significant statistical correlation with moderate magnitude between Perceived usefulness and behavioral intention in online hypermarket shopping system ($r=0.425$, $P<0.01$). It means with 99% confidence with any improvement in Perceived usefulness, the level of behavioral intention to use online hypermarket shopping system will increase and vice versa. Consequently we conclude the research hypothesis is accepted.

H₂ There is a significant and positive effect between Perceived ease of use and behavioral intention in online hypermarket shopping system.

According to the findings, there is a positive significant statistical correlation with moderate magnitude between Perceived ease of use and behavioral intention to use online hypermarket shopping system ($r=0.524$, $P<0.01$). It means with 99% confidence with any improvement in Perceived ease of use, the level of behavioral intention to use online hypermarket shopping system will increase and vice versa. Consequently we conclude the research hypothesis is accepted.

H₃ There is a significant and positive effect between Perceived risk and behavioral intention in online hypermarket shopping system.

According to the statistical results, there is a positive significant statistical correlation with low magnitude between Perceived risk and behavioral intention to use online hypermarket shopping system ($r=0.470$, $P<0.01$). It means with 99% confidence with any improvement in

Perceived risk, the level of behavioral intention to use online hypermarket shopping system will increase and vice versa. Consequently we conclude the research hypothesis is accepted.

H₄ There is a significant and positive effect between e-WOM and behavioral intention in online hypermarket shopping system.

Based on the statistical findings, there is a positive significant statistical correlation with low magnitude between e-WOM and behavioral intention to use online hypermarket shopping system ($r=0.568$, $P<0.01$). It means with 99% confidence with any improvement in e-WOM, the level of behavioral intention to use online hypermarket shopping system will increase and vice versa. Consequently we conclude the research hypothesis is accepted.

H₅ There is a significant and positive effect between Level of satisfaction and behavioral intention in online hypermarket shopping system.

The results of Pearson correlation analysis reveal that, there is a positive significant statistical correlation with low magnitude between level of satisfaction and behavioral intention to use online hypermarket shopping system ($r=0.429$, $P<0.01$). It means with 99% confidence with any improvement in level of satisfaction, the level of behavioral intention to use online hypermarket shopping system will increase and vice versa. Consequently we conclude the research hypothesis is accepted.

H₆ There is a significant and positive effect between Cultural and regional beliefs and behavioral intention in online hypermarket shopping system.

The results of Pearson correlation analysis show that, there is a positive significant statistical correlation with low magnitude between Cultural and regional beliefs and behavioral intention to use online hypermarket shopping system ($r=0.502$, $P<0.01$). It means with 99% confidence with any improvement in Cultural and regional beliefs, the level of behavioral intention to use online hypermarket shopping system will increase and vice versa. Consequently we conclude the research hypothesis is accepted.

CONCLUSION

The main goal of this study was to explore the factors that effect on behavioral intention. In addition to building the a-priori model. The model was tested using a survey as a collection method. The effective cases that were analyzed with the SEM techniques were 192. SEM techniques were implemented to validate the theoretical model and examine the research hypotheses to address the study questions. Impact of four factors including perceived usefulness, perceived ease of use and perceived risk on behavioral intention are studied in this paper. This study also introduces two more constructs named level of satisfaction and cultural and regional beliefs in the proposed model. These six factors were identified through a literature review, and the delivered factors were refined based on a qualitative study (Interview with Experts) to check its efficiency to contribute to online hypermarket shopping system. The results partially supported direct relationships. More specifically, factors such as overall perceived usefulness, perceived ease of use, perceived risk and e-WOM as indicated by the experts and influenced the acceptance of online hypermarket shopping system. This research also showed that two new factors recommended by the experts such as level of satisfaction and cultural and regional beliefs are directly related to the behavioral intention to use online hypermarket shopping system. All supported hypotheses provide important insights and implication for researchers and marketers.

The conceptual framework contributed to the existing knowledge because it added many unexplored dimensions that influence the acceptance of online hypermarket shopping system. The finding from this study also provides further research motivation to academics and practitioners in online shopping, given the implication of level of satisfaction and cultural and regional beliefs. In short, this study is to find out the relationship of the elements recommended by the online shopping experts with behavioral intention.

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