Acceptance of Omni-Channel Retailing Among University Student: Application of UTAUT2 on Buying Intention

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Abstract
Omni-channel retailing has become new phenomenon when the statistics show the increasing numbers of internet user who are using the technology for business activities. More user demand for the smooth buying and seamless shopping experience yet the omni-channel retailing in Malaysia is still at beginning level and more study is needed to understand the blurry line between online and physical channel. Thus, this study is to find the acceptance of Omni-channel retailing among university students. 393-sample size was collected from undergraduate's student from private universities in Pahang and been analysed using SPSS. Findings in this study shows there are significant relationship between performance expectancy, effort expectancy, social influence, habit, hedonic motivation, personal innovativeness, perceived security with buying intention.

Keywords: Omni-Channel Retailing,UTAUT2, Buying Intention

Introduction
Omni-channel retailing, is a retailing strategy to offer a seamless shopping experience to the consumer. The name reflects the fact that retailers will be able to interact with customers through countless channels - websites, physical stores, kiosks, direct mail and catalogues, call centers, social media, mobile devices, gaming consoles, televisions, networked appliances, home services, and more (Rigby, 2011) and this can happen simultaneously. The consumers who users the omni-channel retailing platform are called omni-shoppers. (Kaur et al., 2019).

Lu et al. (2005) consider mobile commerce to be the second wave of e-commerce. Most studies on end-user beliefs and attitudes are conducted long after the systems have been adopted; while initial adoption is the first step in long-term usage, the factors affecting usage may not be the same as those influencing the initial adoption, or the degree of their effect may vary (Lu et al., 2005). Few papers have addressed the issue of preadoption criteria for omnishoppers, and explanations of why users behave in a particular way toward information technologies have predominantly focused on instrumental beliefs, such as perceived usefulness and perceived ease of use, as the drivers of usage intention. Previous papers in behavioral science and psychology suggest that holistic experiences (Schmitt, 1999) with technology, as captured in constructs such as enjoyment, flow, and social image, are potentially important explanatory variables in technology acceptance.

This paper aims to advance the theoretical understanding of the antecedents of omnishoppers' technology acceptance and use in relation to early adoption of omnichannel stores. To this end, it focuses on the acceptance and use of the technology that customers use in the "information prior to purchase" and "purchase" stages.

Problem Statement

The phenomenon of integrating retail channels is not something new. In academia, there are numerous articles about channel integration in the supply chain management literature covering various aspects of this, and in the real world companies such as OfficeDepot and KB Toys have been trying to integrate their channels since 2000 (Gulati & Garino, 2000). The concept of omni-channel retailing is however rather new. The amount of academic literature on this topic is therefore quite limited and the research only dates back to around year 2012. This implies a research gap on omni-channel, something that is highlighted by McCormick et al., (2014). Supported by Neslin et al., (2014) study in the field of omni cahnnel consumer behavior is important and need further investigate to ensure the better understand in that new trend retailing channel.

In Malaysia, Kaur et al., (2019) mentioned most of the omni- retailing research had been done in the western country perspective so it is important to study the gap in Malaysia as the demand of local brands are gaining momentum and retailers in Malaysia should be prepared to face this challenge. On top of that study by Mahusni (2018) mentioned Malaysian society is still adapting with the new technological challenges and integrating between online and conventional business is something interesting to explore.

Research Questions

i. Is there are significant relationship between performance expectancy and buying intention of omni-channel retailing?
ii. Is there are significant relationship between effort expectancy and buying intention of omni-channel retailing?
iii. Is there are significant relationship between social influence and buying intention of omni-channel retailing?
iv. Is there are significant relationship between habit and buying intention of omni-channel retailing?
v. Is there are significant relationship between hedonic motivation and buying intention of omni-channel retailing?
vi. Is there are significant relationship between personal innovativeness and buying intention of omni-channel retailing?
vii. Is there are significant relationship between perceived security and buying intention of omni-channel retailing?

Purpose of Study

i. To examine if there are significant relationship between performance expectancy and buying intention of omni-channel retailing.
ii. To examine if there are significant relationship between effort expectancy and buying intention of omni-channel retailing.
iii. To examine if there are significant relationship between social influence and buying intention of omni-channel retailing.
iv. To examine if there are significant relationship between habit and buying intention of omni-channel retailing.
v. To examine if there are significant relationship between hedonic motivation and buying intention of omni-channel retailing.
vi. To examine if there are significant relationship between personal innovativeness and buying intention of omni-channel retailing.
vii. To examine if there are significant relationship between perceived security and buying intention of omni-channel retailing.

Literature Review

Introduction

Omni-channel Retailing

Verhoef, et al. (2015) defined omni-channel management as the "synergetic management of the numerous available channels and customer touchpoints, in such a way that the customer experience across channels and the performance over channels is optimized". Omni-channel retailing seeks to create a holistic shopping experience by integrating various touch-point, enabling customers to use whichever channel which is most suitable during the purchasing process (Harris, 2012). In the omni-channel environment, customers can move freely between channels with a single transaction process (Melero et al., 2016) while retailers try to increase customer purchasing by using various channels (Beck and Rygl, 2015). In this way, they present all distribution points as part of a single design instead of establishing a connection between brand and customer through separate channels.

Consumer's Perceptions

Online shopping is becoming common in today's life as the omni channel retailing. The study indicate that most of customer having experience of online shopping. Customer believed that online shopping is better option than manual shopping still they have belief that online shopping is expensive, delayed in delivery of products and service. Vaghela (2014) mentioned most of the customers are facing problems like return of bad / wrong product, confusing sites and ineffective customer service. According to, customers most alarming barrier for online shopping are unable to verify product personally, online payment security.

Consumer's Attitudes

Due to the increasing use of new technologies in retailing, consumer shopping habits and expectations are also changing. A new multi-device, multiscreen consumer has emerged who is better informed and demands omnichannel brands. Research has shown that omnichannel consumers are a growing global phenomenon (Schlager and Maas, 2013). Customers expect a consistent, uniform, and integrated service or experience, regardless of the channel they use; they are willing to move seamlessly between channels—traditional store, online, and mobile are depending on their preferences, their current situation, the time of day, or the product category (Cook, 2014). The omnishopper no longer accesses the channel, but rather is always in it or in several at once, thanks to the possibilities offered by technology and mobility.

Variables

Performance expectancy is defined as the degree to which using different channels and/or technologies during the shopping journey will provide consumers with benefits when they are buying fashion (Venkatesh et al., 2012). Performance expectancy has consistently been shown to be the strongest predictor of behavioral intention (e.g., Venkatesh et al., 2012) and purchase intention (Pascual-Miguel et al., 2015).

Effort expectancy is the degree of ease associated with consumers' use of different touchpoints during the shopping process. Existing technology acceptance models include the concept of effort expectancy as perceived ease of use (TAM/TAM2) or ease of use (Innovation Diffusion Theory). According to previous studies (Karahanna and Straub, 1999), the effort expectancy construct is significant in both voluntary and mandatory usage contexts (Venkatesh et al., 2003) and positively affects purchase intention (Venkatesh et al., 2012).

Social influence is the extent to which consumers perceive that people who are important to them (family, friends, role models, etc.) believe they should use different channels depending on their needs. The social influence, subjective norm, and social norm constructs all contain the explicit or implicit notion that individual behavior is influenced by how people believe others will view them as a result of having used the technology (Venkatesh et al., 2003) and positively affect purchase intention (Venkatesh et al., 2012).

Habit is defined as the extent to which people tend to perform behaviors automatically because of learning (Venkatesh et al., 2012). This concept, which was included as a new construct in the UTAUT2 model, has been considered a predictor of technology use in many studies (Kim et al., 2005, Limayem et al., 2007) and directly influences purchase intention (Venkatesh et al., 2012).

Hedonic motivation is defined as the fun or pleasure derived from using a technology, and it has been shown to play an important role in determining technology acceptance and use (Brown and Venkatesh, 2005). Numerous papers on ICT have demonstrated the influence of hedonic motivation on the intention both to use a technology and to purchase it (Thong et al., 2006).

Personal innovativeness is defined as the degree to which a person prefers to try new and different products or channels and to seek out new experiences requiring a more extensive search (Midgley and Dowling, 1978). Many papers have highlighted that consumer innovativeness is a highly influential factor in ICT adoption and on purchase intention (San Martín and Herrero, 2012; Escobar-Rodríguez and Carvajal-Trujillo, 2014).

Perceived security can be defined as the perception by consumers that the omnichannel companies' technology strategies include the antecedents of information security, such as authentication, protection, verification, or encryption (Kim et al., 2008). If consumers perceive that the online channels have security attributes, they will deduce that the retailer's intention is to guarantee security during the purchasing process (Chellappa and Pavlou, 2002). There is some evidence that the perceived security of online channels positively affects the intent to purchase using these kind of channels (Frasquet et al., 2015).

Theoretical Framework and Hypothesis Development

Our research framework is based on an additional extension of the extended Unified Theory of Acceptance and Use of Technology (UTAUT2) model (Venkatesh et al., 2012) that seeks to identify the drivers of technology acceptance and use during the shopping journey to purchase in an omnichannel environment. UTAUT2 model was chosen because it provides an explanation for ICT acceptance and use by consumers (Venkatesh et al., 2012). UTAUT2 is an extension of the original UTAUT model that synthesizes eight distinct theoretical models taken

from sociological and psychological theories used in the literature on behavior (Venkatesh et al., 2003).

This theory contributes to the understanding of important phenomena such as, in this case, omnichannel consumers' attitudes toward technology and how they influence purchase intention in the shopping-process context. Under UTAUT2, a consumer's intention to accept and use ICT is affected by seven factors: performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivations, price value, and habit.

As proposed by Venkatesh et al. (2012), UTAUT 2 needs to be applied to different technologies and context, and other factors need be included, to verify its applicability, especially in the context of consumer behavior. To this end, building on previous work, in this study, we included personal innovativeness (San Martin and Herrero, 2012); Escobar-Roddriguez and Carvajal-Trujillo, 2014) and perceived security (Kim et Al., 2008; Escobar-Rodriguez and Carvajal-Trujillo, 2014) to shed light on the degree to which the different factors included in the model influence consumers' purchase intentions.
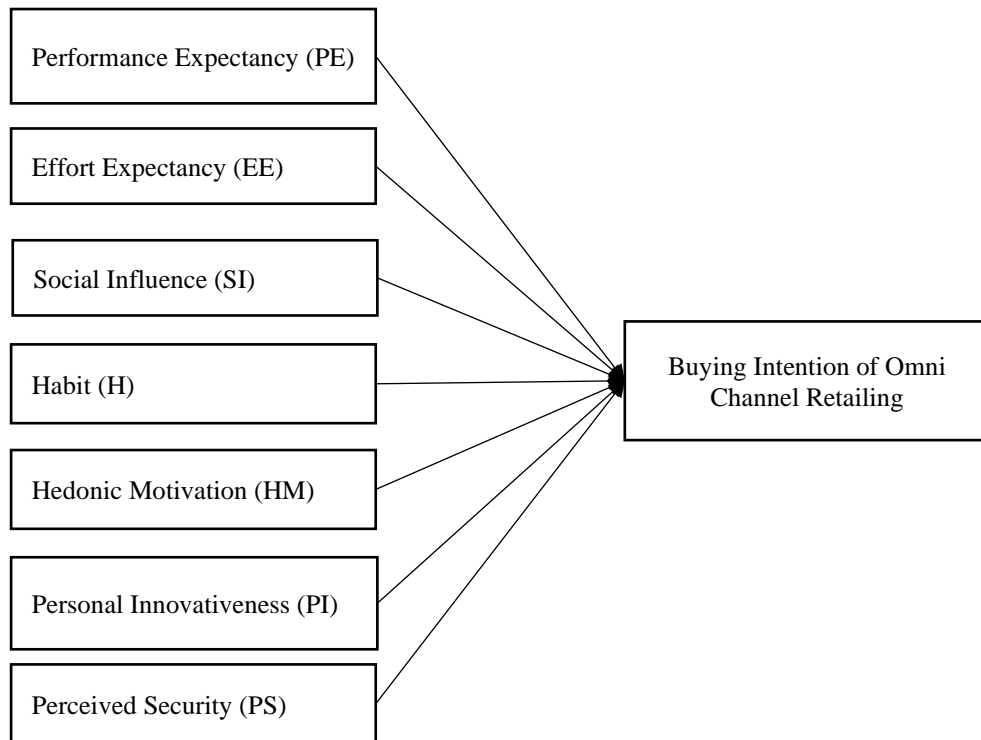
Theoretical Framework

Figure 1: Theoretical Framework

Figure 1: Model of the relationships between Performance Expectancy, Effort Expectancy, Social Influence, Habit, Hedonic Motivation, Personal Innovativeness, Perceived Security and Buying Intention of Omni Channel Retailing.

Hypotheses Development

H1 : There is a significant positive relationship between performance expectancy and buying intention of omni channel retailing

H2 : There is a significant positive relationship between effort expectancy and buying intention of omni channel retailing

H3 : There is a significant positive relationship between social influence and buying intention of omni channel retailing

H4 : There is a significant positive relationship between habit and buying intention of omni channel retailing

H5 : There is a significant positive relationship between hedonic motivation and buying intention of omni channel retailing

H6 : There is a significant positive relationship between personal innovativeness and buying intention of omni channel retailing

H7 : There is a significant positive relationship between perceived security and buying intention of omni channel retailing

Method

Online survey questionnaires were distributed to respondent at two selected private university. The instrument for independent variables in the survey was adopted from Ayensa et al. (2016) and the instrument for dependent variable in the survey was adopted from Pantano and Viassone (2015). Each questions is considered reliable when the The Cronbach's Alpha value is above 0.70. There are 393 feedback were collected and been analyzed. A linear regression was used to analyze the data using SPSS software.

Findings

The finding below shows the profile of respondents involved in this study. It shows that the male respondent is higher with total 60% from female respondent which is 40%. Most of the students are range from 18 years old to 34 years old, with most of them are the bachelor's level students followed by diploma level students, foundation and post-graduate students.

Table 1: Gender, Age Group and Education Level.

Criteria	Category	Number	Percentage
Gender	Male	238	60%
	Female	155	40%
Age Group	18-21	181	46.1%
	22-25	185	47.1%
	26-29	11	2.8%
	30-34	16	4.1%
Education Level	Foundation	74	18.8%
	Diploma	148	37.7%
	Bachelor	155	39.4%
	Post Graduate	16	4.1%

Table 2: Result of Hypothesis.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.617	7	4.945	35.370	.000[b]
	Residual	53.829	385	.140		
	Total	88.446	392			

a. Dependent Variable: BOMR
b. Predictors: (Constant), PS, EE, SI, PI, PE, H, HM

Refer to the Table 2, linear regression was used to analyze between each independent variable (PE, EE, SI, H, HM, PI and PS) with dependent variable (BOMR=Buying Intention On Omni Channel Retailing). This study was tested with significant value $\alpha = 0.05$.

Table 3: Model Summary.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.626ª	.391	.380	.37392	.391	35.370	7	385	.000

a. Predictors: (Constant), PS, EE, SI, PI, PE, H, HM

Refer to the Table 3, p value = 0.000. Since p value = 0.000 < 0.05, it was found there is a significant relationship between Perceived Security(PS), Effort Expectancy(EE), Social Influence(SI), Personal Innovativeness(PI), Performance Expectancy(PE), Habit(H), and Hedonic Motivation(HM) toward Buying Intention on Omni Channel Retailing. However, correlation r = 0.626 indicating a good relationship.

Table 4: Coefficients.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.082	.212		9.808	.000
	PE	.127	.033	.183	3.841	.000
	EE	.097	.038	.152	2.568	.011
	SI	.058	.031	.080	1.857	.064
	H	.242	.039	.348	6.137	.000
	HM	-.351	.063	-.360	-5.551	.000
	PI	.023	.057	.020	.397	.692
	PS	.284	.036	.452	7.991	.000

a. Dependent Variable: BOMR (Buying Intention on Omni Channel Retailing)

Refer to the Table 4, the significant value for each independent variable are; Performance Expectancy(PE), p value = 0.000<0.05, Effort Expectancy(EE), p value = 0.011<0.05, Social Influence(SI), p value = 0.064 > 0.05, Habit(H), p value = 0.000<0.05, Hedonic Motivation(HM), p value = 0.000<0.05, Personal Innovativeness(PI), p value = 0.692>0.05 and Perceived Security(PS), p value = 0.000<0.05.

Discussion and Conclusion
Performance expectancy is defined as the degree to which using different channels and/or technologies during the shopping journey will provide consumers with benefits when they are buying fashion (Venkatesh et al., 2012). Based on the results found, performance expectancy have significant relationship towards buying intention on omni channel retailing with significant value = 0.000<0.05. It was found that the performance expectancy positively related

to buying intention on omni channel retailing. Moreover, it is particularly important to note that performance expectancy was found to be significant influence that determined buying intention on omni channel retailing when tested. Based on the past study, the performance expectancy has consistently been shown to be the strongest predictor of behavioral intention (e.g., Venkatesh et al., 2012; Escobar-Rodríguez and Carvajal-Trujillo, 2014) and purchase intention (Pascual-Miguel et al., 2015).

Effort expectancy is the degree of ease associated with consumers' use of different touchpoints during the shopping process. (Brown and Ventakesh 2005). The hypothesis tests of H2 indicate that effort expectancy has significant relationship towards buying intention on omni channel retailing. Since p value = 0.011<0.05, it was found that the effort expectancy is positively related towards buying intention on omni channel retailing. It is particularly to note that effort expectancy found to be significant influence that determined buying intention on omni channe retailing when tested. This result been supported by the past study where they stated the effort expectancy construct is significant in both voluntary and mandatory usage contexts (Venkatesh et al., 2003) and positively affects purchase intention (Venkatesh et al., 2012).

Social influence is the extent to which consumers perceive that people who are important to them (family, friends, role models, etc.) believe they should use different channels depending on their needs. Based on the results found, social influence has no significant relationship towards buying intention on omni channel retailing with significant value = 0.064>0.05. This study discovered that social influence has insignificant relationship between buying intention on omni channel retailing. Although the literature has recognized the influence of normative factors such as social influence on people's attitude, intentions, and behavior (Venkatesh et al., 2012), our results show that this factor does not influence the intention to purchase in an omnichannel environment. On the contrary, in line with previous work (Herrero, 2012), social influence was found not to affect purchase intention. This finding contrasts with those reported elsewhere (Pelegrín-Borondo et al., 2016). This may be because technology use is not conditioned by other people's opinions; it could also be due to the specific sector under study. In either case, it is a topic that should be studied further.

According to other past studies (Venkatesh et al., 2012), habit is defined as the extent to which people tend to perform behaviors automatically because of learning. The hypothesis tests of H4 indicate that habit has significant relationship with buying intention on omni channel retailing. Since p value = 0.000<0.05, habit is positively related to buying intention on omni channel retailing. It is particularly to note that habit has significant factor that determined the buying intention on omni channel retailing when tested in model. This result been supported by past study (Limayem et al., 2007) state that habit has been considered a predictor of technology use in many studies and directly influences purchase intention.

Hedonic motivation is defined as the fun or pleasure derived from using a technology, and it has been shown to play an important role in determining technology acceptance and use (Brown and Venkatesh, 2005). Based on the result found, hedonic motivation has significant relationship towards buying intention on omni channel retailing with the significant value = 0.000<0.05. It was found that hedonic motivation positively related to buying intention on omni channel retailing. Moreover, it is particularly important to note that hedonic motivation was found to be significant factor that determined the buying intention on omni channel retailing when tested. This results can be related to past study where (Van Der Heijden, 2004; Thong et al., 2006)stated that numerous papers on ICT have demonstrated the influence of hedonic motivation on the intention both to use a technology and to purchase it.

According to past study (Midgley and Dowling, 1978) , personal innovativeness is defined as the degree to which a person prefers to try new and different products or channels and to seek out new experiences requiring a more extensive search. Based on the results found, persona

innovativeness has no significant relationship towards buying intention on omni channel retailing with significant value = 0.692>0.05. This study discovered that personal innovativeness has insignificant relationship between buying intention on omni channel retailing. *Personal innovativeness* is the strongest predictor of purchase intention in the omnichannel context. This factor plays an important role as a direct driver of omni channel buying intention. But in this findings is inconsistent with the past study (San Martín and Herrero, 2012; Escobar-Rodríguez and Carvajal-Trujillo, 2014).

Perceived security can be defined as the perception by consumers that the omnichannel companies' technology strategies include the antecedents of information security, such as authentication, protection, verification, or encryption (Kim et al., 2008). The hypothesis tests of H7 indicate that there is significant relationship between perceived security and buying intention on omni channel retailing. Since p value = 0.000<0.05, it was found that perceived security is positively related to buying intention on omni chanel retailing. Moreover, it is particularly important to note that perceived security has significant influence that determined the buying intention on omni channel retailing when tested. According to other past study (Frasquet et al., 2015) stated there is some evidence that the perceived security of online channels positively affects the intent to purchase using these kind of channels.

It is recommend that for future research the same study is conduct for different target group of consumer as this study is only focus on student only. It would also interesting to know the result of the study if it is extend to other field of activities besides academic, in order to be able to generalize the results.

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