

DEVELOPMENT OF THEORETICAL FRAMEWORK FOR ADOPTION OF OMNI-CHANNEL RETAILING BY OMNI-SHOPPERS FOR FASHION APPARELS: UTAUT2 AND THE ROLE OF PERSONAL INNOVATIVENESS, BRAND IMAGE AND FASHION INVOLVEMENT

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ABSTRACT

Advancement in technology and globalization have revolutionized the retail fashion industry in Malaysia, and the shopping preference of Malaysian consumers. An increase in the usage of internet has created a wide spectrum of opportunities, besides the traditional brick and mortar in the purchase of fashion apparels. Shopping via multiple channels is a rapidly growing phenomenon with retailers adding new channels constantly such as via mobile commerce, smartphone applications, social media, interactive media and etc. However, a seamless and interconnected purchase journey across multiple channels is becoming the way forward of retailers to fulfill the demand of the consumers in the near future. The birth of omni-channel retailing concept is perhaps one of the most important revolution in the retailing landscape; in which it enables retailers to integrate all channels available to create a smooth shopping experience that increased conveniences and satisfaction among consumers. Consumers who uses omni-channel retailing are known as omni-shoppers. This new wave of retailing is still under researched, for example in having empirical evidence to understand how omni-shoppers decides the adoption of omni-channel retailing in Malaysia. This paper aims to develop a theoretical framework with the integration of Unified Theory of Acceptance and Use of Technology (UTAUT2), Personal Innovativeness, brand image and fashion involvement, to gauge the adoption of consumers on the usage of omni-channel.

Keywords: Retailing, Omni-channel, Unified Theory of Acceptance and Use of Technology (UTAUT2), Personal Innovativeness, Brand Image, Fashion Involvement

INTRODUCTION

The competitive industry of retailing, has seen a tremendous growth in the past few decades. The evolution of digital era spurred by the Information Communication Technology (ICT) has significantly impacted the consumption pattern of consumers; who are well-informed and well-connected. The growth of online shopping, mobile shopping and ongoing digitalization has become a disrupter to the traditional brick and mortar retail industry. Consumers now use multiple platforms to interact and connect with retailers of choice and anticipate a reliable and assimilated service experience across channels (Silva et al., 2019).

The fashion retailing industry worldwide is revolutionized by technological disrupters. In Malaysia, retail experts say electronic commerce, technology, the rise of millennials as the highest purchasing group and increase of online users are some of the disruptors that are impacting and reshaping the Malaysian fashion retail market. According to Savills Asian Cities Report 1H2019, retail is no longer solely about e-commerce versus physical stores. It is a combination of both, providing millennials with in-store experiences along with the ease of shopping online (Theedgemarkets, 2019). The same report posit it that sales of certain products in physical retail stores have declined but those products are well-received online as the products are sold cheaper online especially for apparels and household goods (LaurelCap, 2019). Kaur et al. (2019) reported the increasing number of online fashion retailer opening brick and mortar stores such as Fashion Vallet, Christy Ng, Bawal Aidijuma and Poplook and few retailers who have actively moved from offline to online platforms, including social media platforms like Facebook to meet the demand of consumers such as Uniqlo, H&M, Sephora and Ariani.

The need of consumers to experience sales touch-point seamless between channels, may it be traditional brick and mortar, online, mobile, applications depending on their preferences and present circumstances, phase, time and product category has pushed retailers to develop new strategies constantly. The revolutionary strategy that has altered the way consumers purchase a product or service and how retailers operate is called "omni-channel". Omni-channel in short is a platform offered by retailers which combines all possible channels, ranging from brick and mortar, online, mobile app, social media and even gaming all within a single transaction (Rosenblum and Kilcourse, 2013, Kitewheel, 2018; Rooderkerk and Kok, 2019). And consumers who users omni-channel retailing are known as omni-shoppers (Juaneda-Ayensa et al., 2016).

The emergence of driven by new technologies such as related applications and related software (applications, mobile payments, e-wallets, e- coupons, digital flyers, location-based services) are pushing the boundaries of retailing further. The changes in Information Technology provision, reduced cost, access to technology (big data and cloud computing) further allows personalization and price optimizing for consumers (Piotrowicz and Cuthbertson, 2014; Kitewheel, 2018; Rooderkerk and Kok, 2019). The development of omni-channel retailing has raise opportunities for academicians to gauge insights that will shed some light to challenges faced by retailers. Retailers may achieve competitive edge using this strategy, only if consumers' adoption to omni-channel is accepted. This study strives to understand how to measure adoption of omni-channel strategy among consumers by reviewing a few related theories namely the Unified Theory of Acceptance and Use of Technology 2 (Venkatesh et al., 2012).

Although omni-channel is believed to be the forefront agenda of the retailing industry, but there are scarce literature on the area especially in Malaysia. Retail consulting firm Retail Group Malaysia (RGM) managing director Tan Hai Hsin reports that Malaysian retailers are already moving towards omni-channel retailing concept but it is still at infant stage of implementation (TheSun, 2018). Consumers in Malaysia are becoming increasingly accustomed to shopping online through a range of electronic devices such as computers, tablets and mobile phones. With the nation's developed telecommunication infrastructure and high mobile penetration rates, many consumers have access to the internet and online stores. With rising disposable incomes, middle income consumers are more willing to spend on non-discretionary goods such as fashion apparel and footwear, bags, luggage, consumer electronics, home appliances and beauty and personal care products (Euromonitor, 2017).

Brick and mortar is the main purchase channel for retail clothing; however, electronic commerce (e-commerce) is rapidly gaining market share. In Malaysia, e-commerce spend was estimated at USD1.3 billion by Ken Research in 2014 and is projected to grow by 19.5 percent to reach USD3 billion by 2019. A survey undertaken by Shoppu in 2015 found that 75 percent of Malaysia's shoppers were purchasing products both online and offline, with 7 percent preferring online purchasing. Fashion and accessories was found to be the most popular category for purchase (Euromonitor, 2018).

Hamburg-based online statistics company Statista predicts that Malaysia recorded USD1.07 billion revenue from electronic commerce in 2017 which is an estimated annual growth rate of 18.7% (2017 to 2022) which will result in a market volume of USD2.5 billion by 2022. Statista predicted that Malaysia's online retail penetration will hit 47.9% in 2017 and will continue to climb to 63% by 2022. This is evident with the trend of traditional retail stores that have embraced technology by having online presence, and online retailers opening physical stores in Malaysia. Some of the examples of online fashion retailers reported by RGM (2018), that have opened physical stores in Malaysia include Christy Ng (five stores), Fashion Valet (four stores), Bawal Aidijuma (22 stores), Poplook (three stores), Imaan Boutique (six stores), Reebonz (one store) and FInelycup (one store). The same report, states that retailers need to change with time or they will be phased out from the competition (TheSun, 2018).

The significance of this study is mainly addressing the way technology is changing the way consumers to shop, especially in the omni-channel environment. Smartphones, tablets, smartwatches, and many devices have become essential tools in daily life and gaining importance in the retailing industry. This study aims to develop a sound research framework to empirically measure the adoption of omni-channel retailing. This research is structured firstly by understanding of omni-channel followed by reviewing few related theories, proposed conceptual model along with the development of specific research hypotheses. This will be followed by specific research methodology and limitation of the study.

OMNI-CHANNEL RETAILING

The word omni is a latin word "*Omini*" meaning everything. There are various ways omni-channel is defined but in essence most researchers and industry practitioners agree that omni-channel retailing is a form of retailing that integrates online and offline (Brynjolfsson et al., 2013; Piotrowicz and Cuthberston, 2014; Bell et al., 2014; Zach et al., 2017; Heleen et al., 2019). This strategy enables integration of all channels and touchpoints in order to deliver a seamless shopping experience (Verhoef et al., 2015) and enables cross-channels experience (Mosquera et al., 2017).

Rigby (2011) was the pioneer to moot the idea of concept of omni-channel which focus on the concept of integrated sales experience that melds the advantages of the physical stores with the information-rich experience of online shopping. From there on, the concept of omni-channel has been further expanded with the new store technologies such as virtual screens and aisles, virtual mirror-fitting rooms, digital signage, intelligent self-service kiosk, vending machines, dynamic menus, QR codes and the latest being Google Glass are all part of omni-channel which are catalyzed further with the advancement of technology.

Omni-channels shoppers also known as omni-shoppers can browse, compare prices, read reviews, and make purchases online from desktop, laptop, hand phone or tablet, by phone or by going to the traditional brick and mortar store for a single seamless purchase experience. Omni-shoppers are able to create a flexible, convenient and dynamic path to purchase that fits their preferences and needs (Peltola et al., 2015). The omni-shopper goes through five phases, reflecting the different activities that consumers carry out; which includes researching, testing, purchasing and receiving products and potentially returning the product (Cook, 2014; Schoutteet et al., 2017).

The concept of omni-channel emerged from the platform of multi-channel retailing. Multi-channel retailing concept was highlighted by Neslin et al. (2006). Multichannel retailing is the set of activities involved in selling merchandise or services to consumers through more than one channel (Levy and Weitz 2009). The multi-channel retailing operates independently, and there is an inconsistency of branding and trust among consumers it serve (Jo and Lee, 2019). Omni-channel is able to achieve the strategic integration through the cross-channel in which multiple channels are operated as on system in single policy (Simone and Sabbadin, 2018).

Omni-channel management offers for an interdependent management of all possible available channels and customer touch points to ensure the buying process journey for the consumers via multiple channels are optimized (Herhausen et al., 2015). The terms multichannel and omni-channel are very often mixed because of the concept of digital world and retailing. However, current literature has begun to segregate the two concepts, by defining omni-channel retailing as a separate paradigm. To summarize the differences of multi-channel retailing and omni-channel retailing, Table 1 will describe key differences between multi-channel and omni-channel retailing.

	Multi-channel Retailing	Omni-Channel Retailing
Channel Administration	Every channels and customer checkpoints geared towards optimizing the experience separately.	Synergies between all the channels and customer touchpoints to optimizing the integrated experience.
Channel Function	Multi-channel	Cross-channel
Channel Scope	Retail channels; store, website, mobile channel and direct marketing (catalogue)	Retail channels: store, website, mobile channel, social media, customer touchpoints (mass communication channels, TV, radio, print, customer to customer, etc) direct marketing
Customer Connection Focus	Customer-retail channel	Customer-retail channel-brand
Customers	Stimulate interaction not possible	Can stimulate complete interaction
Distinguish Relationship	Distinguish relationship among the channels	Distinguish relationship with the brand
Goals	Channel goals (sales per channel, experience per channel)	Integration to offer a valued customer experience
Retailers	No integration in their all channels	Have to provide full integration in their all channels
Objectives	Channel objectives (e.g. sales per channel; experience per channel)	Overall retail customer experience, total sales over channels
Sales Team	Cannot able to add value to the customer	Can add more value by understanding each customer's needs and knowledge for product
Theory	All channel are different units	Integration of all the channels as one

Source: Based on Rigby (2011), Piotrowicz and Cuthnertson (2014), Verhoef et al. (2015) and Syed and Danish (2019)

THEORETICAL BACKGROUND

Various adoption theories were reviewed, in order to select the most appropriate theory to measure adoption of omni-channel retailing among consumers. Adoption and technology based theories such as Innovation Diffusion Theory (Rogers and Shoemaker, 1971; Rogers, 1995), Task-Technology Fit (Strong, Deshaw and Bandy, 1973), Expectation Disconfirmation Theory or Expectation Confirmation Theory (Oliver, 1980), Theory of Reasoned Action (Fishbein and Ajzen, 1975), Theory of Planned Behaviour (Ajzen, 1985, 1991), Technology Acceptance Model (TAM) (Davis, 1989), Model of PC Utilization (Thompson et al. 1991), Motivation theory (Davis, Bagozzi and Warshaw, 1992), Decomposed TPB (DTPB) was introduced by Taylor and Todd (1995), Technology Acceptance Model 2 (TAM2) (Venkatesh and Davis, 2000), Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, Davis and Davis, 2003), and Extended Unified Theory of Acceptance and Use of Technology (UTAUT2) 2012 were reviewed.

The theories were improved over time with the limitations identified by scholars. Based on the analysis done and the characteristics of the omni-channel retailing, the best theory to measure adoption was the Unified Theory of Acceptance and Use of Technology (UTAUT2) by Venkatesh et al. (2012) and personal innovativeness. The UTAUT 2 theory contains the Theory of Acceptance (TAM) Model by Davis (1989) and Davis et al. (1989); which was added with performance expectancy, effort expectancy and social influence from UTAUT and habit and hedonic motivation from UTAUT 2; with an additional construct of personal innovativeness.

Based on literature that was reviewed, the closest to the field of study in the proposed research is on omni-channel purchase intention. Out of the 30 studies reviewed, 7 of the studies used the UTAUT (including UTAUT2) Theory as the underpinning theory and followed by the TPB theory. Based on critical analysis of the theories, for the purpose of this study the UTAUT 2 would be deemed the best theory to be used. The following are variables which would be used in UTAUT 2. Under this model, a customer's intention to accept and use a new technology is affected by seven factors: performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit.

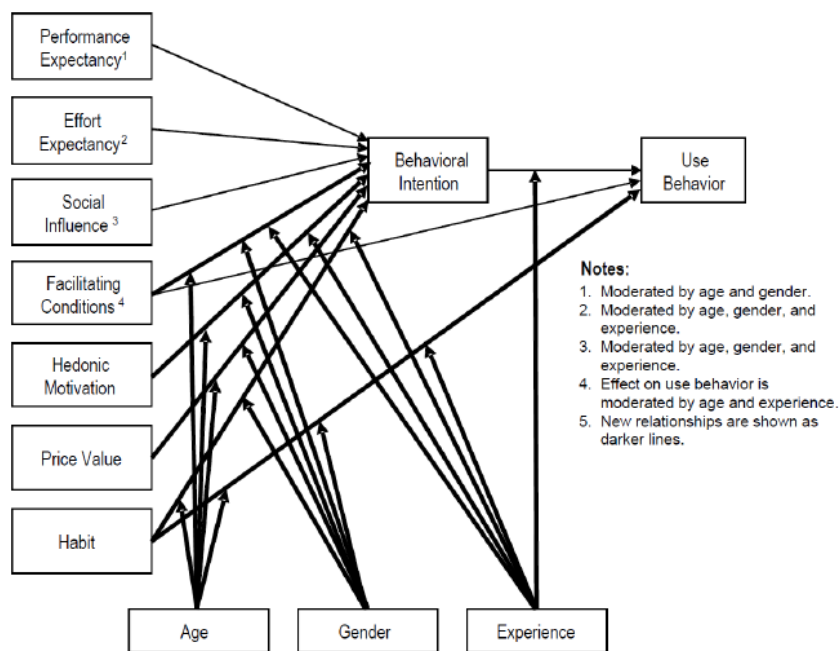


Figure 1: UTAUT2 (Venkatesh et al., 2012)

Independent Variable: Performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, habit

Moderator: Age, gender and experience

PROPOSED CONCEPTUAL MODEL AND HYPOTHESIS

The proposed research framework is based on the unified theory of acceptance and use of the technology (UTAUT2) theory (Venkatesh et al., 2012) which is an extension of the original UTAUT theory (Venkatesh et al., 2003). The UTAUT 2 theory was chosen because based on past literature, UTAUT2 has been robust in explaining information and communication technology (ICT) acceptance and use by consumers and can be applied to different technologies and contexts (Venkatesh et al., 2012). Moreover, Marriott et al. (2017) posit few additional reasons on why UTAUT2 theory is the most appropriate theory. Firstly, UTAUT 2 was created in relation to mobile utilization. Second, UTAUT2 incorporates the cost-benefit factors of performance expectancy and effort expectancy. And finally, UTAUT 2 accounts for voluntary situations and allows for time factors to be considered. Under this theory, a customer's intention to accept and use a new technology is affected by seven factors: performance expectancy (PE), effort expectancy (EE), social influence (SI), facilitating conditions (FC), hedonic motivation (HM), price value (P), and habit (HA). Although the theory has been used previously to explain customer behavior in the context of mobile commerce (e.g., Baptista and Oliveira, 2015; and Hew et al., 2015) but there has been scarce empirically evidence of the applicability of omni-channel retailing in Malaysia.

UTAUT 2 is one of the most appropriate theory to explain technology acceptance in consumer perspective to date. The UTAUT 2 theory has been empirically tested across various fields such as acceptance of Pad phones (Huang et al., 2013), mobile payment (Slade et al., 2014), mobile learning, mobile internet or mobile commerce technology adoption (Sombultawee, 2017), mobile internet adoption (Wang and Wang, 2010). Thus, the UTAUT 2 is selected for the theoretical foundation for the conceptual framework to understand the adoption of omni-channel retailing. In line with recommendation of (Venkatesh et al., 2012), other factors such as personal innovativeness, brand image and fashion involvement is also incorporated in the research framework, is incorporated to ensure the element of online and offline is adapted in relations on fashion apparel purchases using omni-channel retailing.

Adoption

Adoption to use a product or service is also known as behavioral intention. Behavioral intention indicates of whether an individual or consumers will use the service or product. According to Ajzen and Fishbein's (1980) Theory of Reasoned Action, behavior can be predicted from intentions that relate directly to that behavior. Behavioral intention has been used in various technology adaption of consumer behavior (Venkatesh and Davis, 2000; Pappas et al., 2014; Frassetto et al., 2015; Soni et al., 2019; Syed and Danish, 2019). Therefore, adoption is deemed to be an important variable in the development of the research framework.

Performance expectancy

As part of the UTAUT 2 Theory by Venkatesh et al., 2012; Performance expectancy is defined as the degree to which an individual believes that using the system will help him or her to attain gains in job performance (Venkatesh et al. 2003) and the ease of use of the technologies (Panatan and Di Pietro, 2012; Thomas, Singh and Gaffar, 2013). Performance expectancy has been considered as the strongest predictor to behavioural intention (Davis, 1989; Venkatesh et al., 2003; Venkatesh et al., 2013; Pascual – Miguel et al., 2015; Juaneda-Ayensa et al., 2016). The performance expectancy was derived from the perceived usefulness (San Martin and Herrero, 2012).

Effort expectancy

Effort expectancy refers to the degree of ease associated with the use of the system (Venkatesh et al., 2003). It relates to touchpoint technology in purchase process (Venkatesh et al., 2012; Juaneda-Ayensa et al., 2016). Effort expectancy is one of the main construct from the Theory of Acceptance Model (Venkatesh and Davis, 2000). Previous researchers have proven that effort expectancy is an important variable in predicting purchase intention (Davis, 1989; Venkatesh et al., 2012; Pantano and DiPietro, 2012; Juaneda-Ayensa et al., 2016).

Social influence

Social influence refers to an individual's perception that significant others believe the individual should adopt the information system (Venkatesh et al., 2012). Leong, Hew, Tan and Ooi, 2013). Social influence is a variable that measures effects on behavioural intention in the earliest research related with acquiring technology (Fishbein and Ajzen, 1975; Schiter and Ajzen, 1985; Davis, 1989; Davis et al., 1989; Moore and Benbasat, 1991).

Facilitating conditions

Facilitating condition is the perceived extent to which the organisational and technical infrastructure required for the support of the technologies exist (Thomas, Singh and Gaffar, 2013). Facilitating conditions is whether an individual has the appropriate tools to use the omni-channel retailing platform. Facilitating condition is a robust predictor, which can be used to forecast technology adoption and has a significant impact on the user's intention (Ajzen, 1991; Taylor and Todd, 1995).

Hedonic motivation

Hedonic motivation is the motivation or reason to do a certain activity due to internal satisfaction (Ryan and Deci, 2000) or fun or pleasure derived from using a technology (Brown and Venkatesh, 2005). Previous literature posit, that hedonic experiences and attributes influences technology adoption by consumers (Lu, Zhou and Wang, 2009). Hedonic actually encompasses the value associated with experience than emotion and product (Holbrook and Hirschman, 1982) and these consumers are more likely to purchase a product when the consumer has a reasonably pleasant feel and offers entertainment (Babin and Attaway, 2000; Diep and Sweeney, 2008; Teller, Thomas and Peter, 2008).

Price value

Price value in the UTAT2 is defined as the trade-off between the cost paid for using the technology and the perceived benefits received (Dodds, Monroe and Grewal, 1991; Venkatesh et al., 2012). This includes the charges to purchase or use the service like device, software data, and other types of charges (Wei et al., 2009). Zhou and Wong (2004) posit that price is one of the most critical drivers in purchase impulse. Monsuwe et al. (2004) stressed that price is a significant factor for purchases online as savings online shopping is a very important factors why consumers purchases online.

Habit

Habit is the extent that individuals tend to execute behaviours automatically (Limayem et al., 2007). Venkatesh et al. (2012) discovered that habit directly and indirectly effects on intention to use technology. Habit has been empirically tested as a variable which influences purchase intention (Khalifa and Liu, 2007; Chiu et al., 2012). Increased experience would influence the adoption either positively or negatively depending on the nature of experience and difficulty or ease to use for the consumer (Venkatesh and Bala, 2008). In essence habit is formed through repeated experiences.

Brand image

According to (Hsieh, Pan, and Setiono, 2004) successful brand image enables consumers to identify the satisfaction of a brand, compare the difference between the brands from its competitors and increases the chances for consumers to repurchase the brand. Brand image is an important indicator during the process of consumers' purchase decision making. Favorable brand information positively influences perceived quality, perceived value, and consumers' willingness to buy (Dodds, Monroe and Grewal, 1991; Monroe and Krishnan, 1985). Consumers are more likely to buy a product which is well-known brand which has a positive brand image, because a brand with a more positive image does have the effect of lowering consumers' perceived risks (Akaah and Korgaonkar, 1988; Rao and Monroe, 1988) or increasing consumers' perceived value (Loudon and Bitta, 1988; Fredericks and Slater, 1998; Romaniuk and Sharp, 2003; Aghekyan, Forsythe, Kwon, and Chattaraman, 2012).

Fashion involvement

Fashion involvement is a very important criteria for consumer’s fashion adoption process (Goldsmith et al., 1999). The involvement of a consumer in fashion will be his/her intention to buy that fashion. O’Cass (2000) contends that fashion involvement is related to the personal characteristics of consumer that echoes their subjective knowledge of fashion, which in outcome results in their intentions to adopt new fashion. Involvement is said to be as products that relevant to consumers’ life and their preference towards the products (Khare and Rakesh, 2010). O’Cass (2004) stated that involvement embraces arousal of motivational or interest evoked by certain stimulus which showed through properties of drive. Consumers’ involvement states the resonance of a person towards a product (Cohen, 1983) whereas the immersion of product is resolute of their personality. A number of researchers had agreed stated that involvement could be a supportive metric which best describes consumer behavior and categorizing the consumer segments.

Personal innovativeness

Personal innovativeness is also referred as the willingness of an individual to try out any new information technology. It plays an important role in determining the outcomes of user acceptance of technology (Yi et al., 2006). Personal innovativeness has been examined in not only innovation diffusion research (Rogers, 2002, 2005) but also information system fields (Agarwal and Prasad, 1998). Various decisions related to consumer’s adoption to technology are positively related to consumer’s innovativeness (Leung and Wei, 1998). Jianlin and Qi (2010) found that consumers with high level of personal innovativeness adopt to online shopping better than others with lesser or no personal innovativeness.

Based on the extensive literature review, to best understand the adoption of omni-channel retailing, the UTAUT 2 model has been identified alongside with three more factors namely, brand image, fashion involvement and personal innovativeness. Since omni-channel retailing is an integration of online and offline, a careful selection of variables were identified and in total of eleven identified factors are chosen. Figure 2, is the proposed research framework to measure the adoption of omni-channel retailing in the purchase of fashion apparels.

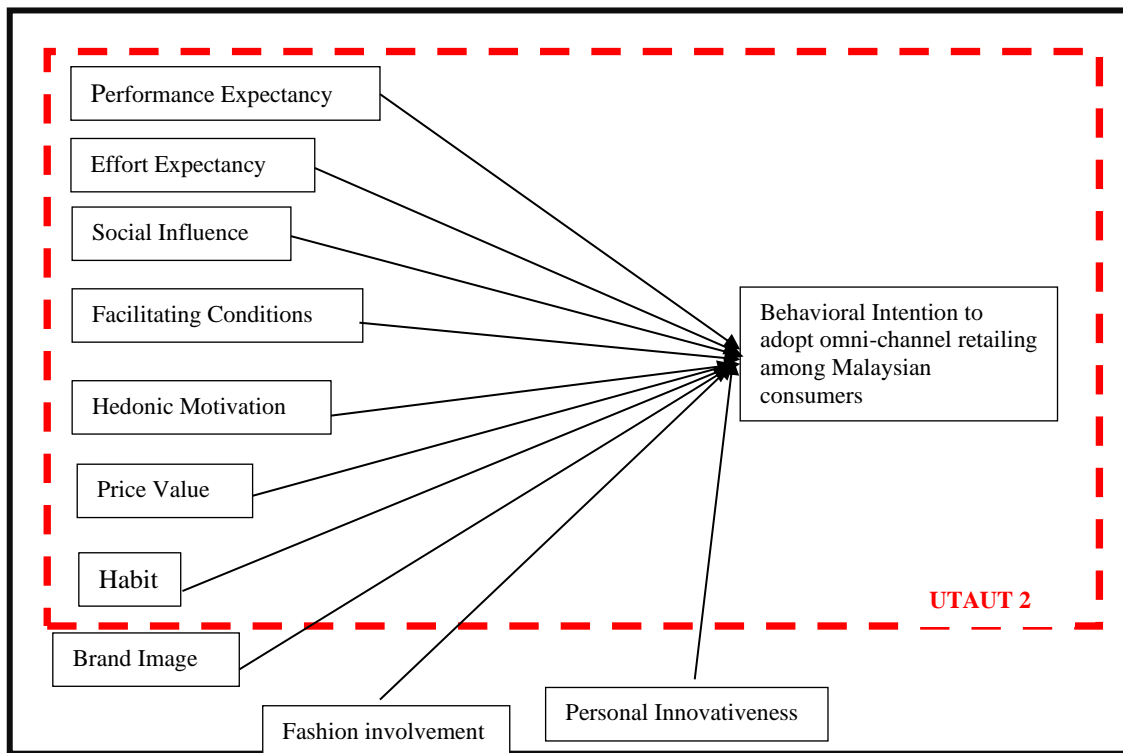


Figure 2: Proposed Research Framework

RESEARCH METHODOLOGY

The fashion apparel industry was chosen because it is one of the fastest growing sectors in digital purchases, able to attract different consumers profile through online and offline channels (Rodríguez, 2016; Mosquera et al., 2018). An online survey will be used to collect data. For the purpose of this research, the omni-shoppers are defined as shoppers who used at least two shopping channels in the purchase of a fashion apparel from the same brand (Juaneda-Ayensa et al., 2016; Mosquera et al., 2018).

To best achieve the objective of the study, a quantitative cross-sectional research strategy will be administered (Bryman and Bell, 2015). Primary data will be collected through a web-based survey administered to a sample of internet users through a non-probabilistic sampling process, by conveniences and snowballing technique, using the social media platform such as Facebook, Instagram and WhatsApp and also by mall-intercept by distributing self-administered questionnaire. The respondents will be requested to share the survey amongst their social network friends to participate and spread the questionnaire via their contacts.

The data collection would be done among Malaysians, and data collection process is scheduled to be conducted in the time span of three months. The survey instrument has been adapted and adopted from previous researchers as shown in Appendix 1. The population of this study are Malaysians who have had experience using omni-channel retailing to purchase fashion apparel, and there are no accurate number of populations of active social media users therefore the population size is unknown. Therefore, the Cochran (1977) formula was used in determining the sample size, which is 384 with a 95% of confidence level. Since the study is using both online and offline in the data collection method, approximately 200 online respondents and 200 offline respondents would be divided to for sample size.

Limitation, Future Research of Study and Conclusion

The limitation of the study would be time frame and cost factors, to collect data from the sample size that can be generalized. Moreover, the sample size is collected via convenience sampling process, because the non-probabilistic method, does not allow the study to be generalized to the whole Malaysian population.

Other variables that might be able to contribute the adoption of omni-channel that can be included in the future studies are quality of service, loyalty, trust, service quality, motivation and time among few others. Future studies also would want to focus on non-users of the omni-channel approach in order to understand the reasons for their non-adoption. Qualitative study might be deemed appropriate to focus on the non-users of omni-channel.

This research will only focus on fashion apparel products. Future studies might look into other categories such as electronic, fast moving consumer goods and services. A comparative study also could be conducted among product and service categories and consumer segments. And lastly, a longitudinal study to verify the evolution of variables used in this study are valid after a certain time frame.

To summarize, this study is mainly focusing on the potential theoretical framework that will be used to measure the adoption of omni-shoppers in Malaysia using omni-channel retailing in the purchase of fashion apparels. The UTAUT2 (Venkatesh et al., 2012) was used the underlying theory with the integration of brand image, fashion involvement and personal innovativeness, to capture the essence of fashion apparel products and integration of online and offline element of retailing.

Appendix 1

Independent Variables	Instruments	Likert Scale	Source
Performance Expectancy	6	7	Venkatesh et al., 2003
PE1: Being able to use omni-channel throughout the purchase of fashion apparels allows me to purchase quickly. PE2: Being able to use omni-channel throughout the purchase of fashion apparels is useful to me. PE3: Being able to use omni-channel throughout the purchase of fashion apparels makes my life easier. PE4: Being able to use omni-channel throughout the purchase of fashion apparels increases my savings. PE5: Being able to use omni-channel throughout the purchase of fashion apparels makes me empowered and in control. PE6: Overall, I find the use of omni-channel throughout the purchase of fashion apparels to be advantageous.			
Effort Expectancy	6	7	Venkatesh et al., 2003
EE1: I find fashion apparel retailer’s offering their products using omni-channel (websites, mobile app, QR codes, coupons, Cash on Delivery, etc) easy to use. EE2: Learning how to use omni-channel is easy for me. EE3: It is easy for me to be skillful at using omni-channel throughout the purchase of fashion apparels. EE4: Learning to shop using omni-channel retailing platform is easy for me. EE5: I find it is easy for me to become skillful at using omni-channel retailing. EE6: I find it easy to use omni-channel retailing to do what I want it to do.			
Social Influence	5	7	Venkatesh et al., 2003
SI1: People who are important to me think I should use omni-channel retailing for the purchase of fashion apparels. SI2: People who influence my behavior think I should use omni-channel, retailing for the purchase of fashion apparels. SI3: People whose opinions I value prefer that I use omni-channel, retailing for the purchase of fashion apparels. SI4: Friend’s, suggestion and recommendation will affect my decision to use omni-channel, retailing for the purchase of fashion apparels. SI5: I would use omni-channel retailing because the proportion of my friends uses omni-channel retailing in the purchase of fashion apparels.			
Facilitating Conditions	5	7	(Venkatesh et al., 2003, 2012; Thomas et al., 2013)
FC1: I have the resources necessary to use omni-channel retailing to purchase fashion apparels.			

FC2: I have the knowledge necessary to use omni-channel retailing to purchase fashion apparels. FC3: I can get help from others when I have difficulties using omni-channel retailing to purchase fashion apparels. FC4: Using omni-channel retailing to purchase fashion apparels is entirely within my control. FC5: Support from retailers is available when problems are encountered while using the omni-channel retailing to purchase fashion apparels.			
Hedonic Motivation	6	7	Childers et al., 2001; Brown and Venkatesh, 2005
HM1: Being able to use omni-channel throughout the purchase of fashion apparels is enjoyable. HM2: Being able to use omni-channel throughout the purchase of fashion apparels is pleasurable. HM3: Being able to use omni-channel throughout the purchase of fashion apparels is interesting. HM4: Being able to use omni-channel throughout the purchase of fashion apparels is exciting. HM5: Being able to use omni-channel throughout the purchase of fashion apparels is delightful. HM6: Being able to use omni-channel throughout the purchase of fashion apparels is thrilling.			
Price Value	4	7	Dodds et al. 1991; Venkatesh et al., 2012
PV1: Buying fashion apparels using omni-channel are reasonably priced. PV2: Buying fashion apparels using omni-channel are reasonably priced comparing with buying from only one channel. PV3: Buying fashion apparels using omni-channel are a good value to money. PV4: At the current price, buying fashion apparels omni-channel provide a good value.			
Habit	5	7	Limayem and Hirt, 2003; Venkatesh et al., 2012
H1: The use of omni-channel throughout the purchase of fashion apparel has become a habit for me. H2: I must use using omni-channel retailing to purchase fashion apparels. H3: I am addicted to using omni-channel retailing to purchase fashion apparels. H4: Using omni-channel retailing has become natural to me. H5: Using omni-channel retailing is something I do without thinking.			
Brand Image	6	7	(Lin, 2009)
BI1: Brand image is an important aspect for me to purchase fashion apparel using omni-channel offered by the retailer. BI2: Fashionable and trendy of fashion apparel is an important aspect for me to purchase fashion apparel using omni-channel offered by the retailer. BI3: Reputation for quality of fashion apparel is an important aspect for me to purchase fashion apparel using omni-channel offered by the retailer. BI4: Elegance of fashion apparel is an important aspect for me to purchase fashion apparel using omni-channel offered by the retailer. BI5: Sophistication of fashion apparel is an important aspect for me to purchase fashion apparel using omni-channel offered by the retailer. BI6: Well known and prestigious brand image of fashion apparel is an important aspect for me to purchase fashion apparel using omni-channel offered by the retailer.			
Fashion Involvement	13	7	Myung-Hee Chae, Catherine Black and Jeanne Heitmeyer (2005)
FI1: Fashionable fashion apparel matters to me. FI2: I read about fashion to keep up with the latest fashion apparels. FI3: My friends turn to me for advise on fashion apparels. FI4: I have many latest fashion apparels which follow trends. FI5: I like to shop for fashion apparels. FI6: I like to shop for fashion apparels using omni-channel retailing. FI7: My fashion apparels are influenced by people, I admire. FI8: I consider myself to be fashion conscious. FI9: I make purchases only when needed, not on impulse. FI10: When shopping, I compare for the best prices. FI11: I heavily rely on omni-channel retailing to purchase fashion apparel. FI12: Quality is more important than the price. FI13: I am usually satisfied with the fashion apparels I purchase using omni-channel retailing.			
Personal Innovativeness	4	7	Goldsmith and Hofacker, 1991; Lu et al., 2005
PI1: I like to experiment with new technologies, like omni-channel retailing platform. PI2: Among my peers, I am usually the first to try out new information technologies, like omni-channel retailing platform. PI3: In general, I would not hesitate to try out new information technologies, like omni-channel retailing platform. PI4: I would look for ways to experiment with new technologies, like omni-channel retailing platform.			
Dependent Variable			
Adoption of Omni-channel	6	7	Venkatesh et al., 2003, 2012; Pantano and Viassone, 2015
BIA1: I intend to adopt using retailers offering omni-channel to purchase fashion apparels. BIA2: I would tell my friends to purchase from omni-channel retailers. BIA3: I would like to repeat my experience purchasing fashion apparel which offers omni-channel retailing platforms. BIA4: I plan to continue to use omni-channel to purchase fashion apparels. BIA5: I will always try to use omni-channel to purchase fashion apparels.			

BIA6: I will often use omni-channel to purchase fashion apparels.

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