

Factors Influencing Consumer Intention to Purchase via Omni-Channel Fashion Retail in Malaysia



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ABSTRACT

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omni-channel, Malaysia, consumer behavior, purchasing intention, perceived value, online shopping

The enormous development of technology and e-commerce in Malaysia creates a vast potential for traditional retailers to emerge with new technology and apply the omni-channel strategy concept. Customers nowadays use personal devices to enhance their shopping experience. The primary approach to promoting customization in a customer's journey to purchase is to integrate online and offline practices. This cross-sectional study focuses on factors influencing consumer intention to purchase via omni-channel fashion retail in Malaysia. The study sample consisted of 415 consumers, purposefully selected among Malaysia's fashion retailing population. The respondents were given questions regarding the perceived value of webrooming, the perceived value of showrooming, perceived compatibility, perceived risk, and the purchasing intention of omni-channel which were used to help gather responses on the intention of consumer purchase. The results revealed that perceived compatibility is the essential factor in consumer intention to purchase via omni-channel fashion retail, followed by the perceived value of webrooming, the perceived value of showrooming, and the perceived value of webrooming. This study is limited to the knowledge of consumers since the omni-channel strategy concept is still new in Malaysia and cannot yet be generalized. Due to that, the data obtained still does not reflect an accurate result regarding factors influencing consumers' intentions to purchase via omni-channel fashion retail in Malaysia. Therefore, the results suggest that the current cross-sectional study be further analyzed using qualitative research. It would be beneficial to replicate the study by region in Malaysia and add on cultural variables such as differences in gender and generation to get more generalizability. While most literature on omni-channel focuses on consumer attitudes and behavior perspectives, the current study aims to gain insight from consumer perspectives on factors that influence their intention. The study contributes to gaining knowledge on the primary factor of purchasing intention through omni-channel retail services in Malaysia, which deepens the understanding of consumer behavior to purchase from fashion retailers using the omni-channel strategy.

1. INTRODUCTION

Consumers can have seamless online and offline channel navigations through omni-channel commerce, thus tailoring their purchasing experiences [1]. The key definition of omni-channel is the integration of physical and online stores that disrupt the retail environment and blur the natural borders between these channels, delivering a seamless experience in the customer's journey [2]. The retail industry is one of the components included in a supply chain concept. It involves directly with their consumers starting from small groceries, stores, shopping malls, and supermarkets that deliver products and services to the end consumers, either for personal use or other uses. The further definition of omni-channel refers to the return of bringing people together for the goods and services that will deliver what consumers need and promote the current and upcoming lifestyle to create enjoyment and prosperity in the community [3]. On the other hand, retailing can also be defined as selling goods and services precisely to the final

consumer or ultimate buyer for their purposes [4].

The omni-channel concept in retail models is the most significant business strategy with practicality and theoretical implications [2, 5]. Furthermore, omni-channel has created excellent competition for firms in the global and local markets because the transformation is driven by technology. In addition, infotech and communication have led to the rise of retail establishments that help consumers get direct contact with the company via their customer's itinerary. The classic physical and online stores that operate through the web, social media, or any other online platforms have changed the consumer buying process from only brick-and-mortar stores or just web-based [6].

The term "omni-shoppers" refers to customers who use multiple channels during their shopping journey, expecting seamless experiences across those channels, and their number is increasing [7]. For instance, an omni-shopper searches the product characteristics online by using mobile apps or websites from their laptop to compare the price before

purchasing the product offline (physical stores). They gain information, give opinions, explain experiences, perform purchases, and communicate with the brand using new technology. Seamless and interchangeable channel utilization during searching and purchasing defines the omni-channel environment, although it is almost impossible for retailers to control [2, 8].

The journey of the omni-channel becomes more complicated for the customers because a different communication channel is needed to adapt to the new shopping behaviors, either offline or online. Adaptation of the omni-channel concept, regardless of whether it is online or offline, is crucial. The omni-shopper and omni-retailer is a big wave that needs to be given great attention to develop in developing countries such as Malaysia. The vast development of technology and e-commerce in Malaysia creates a huge potential for traditional retailers to emerge with the new technology and apply the omni-channel strategy concept [9]. However, consumers find difficulties ensuring accuracy and trustability when using the omni-channel strategy [10]. Due to that, it is essential to determine the factors that drive the growth in online shopping in Malaysia, as consumers now prefer online shopping. According to the Department of Statistics Malaysia (DoSM), online retail sales grew by up to 28.9% in April 2020 [11].

The acceleration of technological changes and changes in customer behavior has led to the application of the omni-channel as one strategy to tackle the fashion retailing industry in Malaysia. According to the World Bank [12], Malaysia is considered a developing nation that is going to become a developed nation. The omni-channel strategy already existed a long time ago in developed nations, but it is still a new strategy for Malaysia to adopt this retailing strategy. According to McCormick et al. [13], omni-channel is a new trend that will surround the market, and it is crucial to focus on and consider consumer behavior. The significant problems that have led researchers to do this research are that most of the research and academic papers are focusing on the perspective of Western countries compared to Malaysia [14]. It is imperative to investigate the Malaysian market as our local brand, as imported brands have started to accelerate in the retailing business. Furthermore, Mahusni and Ghafar [15] explained that Malaysia is gradually preparing and adopting the omni-channel strategy.

Next, by using omni-channel services, customers can survey the products online (digital) or go to a physical store (brick-and-mortar). The online channel provides the customer with the advantage of comparing and collecting product information. However, they still face several problems, such as an uncertain channel that discloses privacy, unattainability, and untouchability [16]. Previous studies also mentioned the uncertainty of perceived risk and scarcity of belief yield in an online customer's intention to buy offline [17-19]. Meanwhile, offline shopping may also lead to a problem [20, 21], where they may have insufficient information regarding the product after the customer goes to the classic physical stores. This issue can affect the purchasing intention in omni-channel shopping.

Perceived compatibility is the advancement of technologies and innovations that align with the user's existing values, needs, and past life experiences [22, 23]. Innovations are new ideas, practices, or objects delivered to individuals, who then decide whether to adopt or reject the innovation [24]. The previous study postulated that perceived compatibility is the

factor that affects customer acceptance of the omni-channel approach [25]. The common issues and problems regarding perceived compatibility relating to technology and customer acceptance are the growing number of multiple channels that increase complexity from a consumer's viewpoint [26]. The evidence that supports these issues and problems regarding perceived compatibility is from Farfetch luxury boutiques, as it has successfully positioned itself by combining technology and in-store experiences by using augmented retail solutions that can enhance the consumer experience, as augmented retail solutions link the offline and online worlds using data to enhance the retail experiences [27].

Unfortunately, there have been several problems occurred in the omni-channel retailing services. Since omni-channel shopping can be accomplished through diverse platforms, such as online and offline (brick-by-mortar), problems associated with risks during the transaction process might arise. The previous qualitative study by Kazancoglu and Aydin [10] stated that the customers regarded omni-channel shopping to be uncertain because it is a new-fangled service that can lead to achievement (e.g., system failure) and financial (e.g., inconsistent price) risks. Many researchers clarify some types of risks that customers need to be aware of when using various channels (such as performance-related risk and financial) with diverse research contexts, such as mobile payment [28], online banking [29], and travel websites [30]. If customers perceive less risk while doing omni-channel shopping, they consider it a wise decision since they anticipate more advantages than disadvantages.

This paper aims to broaden one's comprehension of consumers and retailers by identifying the influence of the purchasing intention in regards to the omni-channel fashion retailing sector in Malaysia based on the following factors: (1) perceived value of webrooming, (2) perceived value of showrooming, (3) perceived compatibility and (4) perceived risks.

2. LITERATURE REVIEW

2.1 Concepts of omni-channel retailing

Purely satisfying the customers is insufficient; appreciating them by presenting surprising, advanced, and amazing services has become vital [31]. Nowadays, the explosion of social media, tablets, and mobile channels has improved the number of drop points that customers navigate. Therefore, current research highlights a multi-channel retailing shift, which indicates consumers' transition to an omni-channel pattern [2, 32]. Kamaljeet et al. [1] regarded omni-channel retailing as an invention in the retailing industry, integrating offline and online clothes shopping channels and offering clients continuous and substantial shopping involvement across every channel. Furthermore, customers shopping through numerous channels are passionate users of those channels, which are various touchpoints by businesses [33]. Based on this perspective, the rapid proliferation of the latest technology has made customers more connected, soliciting a seamless experience across channels within single transactions [34, 35]. Moreover, integrating conventional and digital sales channels to accommodate synergistic management while simultaneously satisfying customers' demands has been regarded as the most substantial hindrance by retailers [34]. Synchronization and integration of customer information,

price, and inventory across every sales channel are achievable by adopting omni-channel [36]. Managing logistical operations has become more challenging due to the increase of interconnected channels since merchants must accomplish several tasks at the same time (i.e., meeting and predicting customer demand, managing inventory, and ensuring the lowest possible costs) for all channels [37].

Retail businesses in Malaysia experience a positive growth rate due to rapid technological advancement and broader internet access. Every retailer aims to enhance customer experience, retention, and purchase processes by adding more accessible channels to consumers [38]. The retail industry in Malaysia has seen an increase in traditional retailers adopting online sales and online retailers opening physical stores. Over the last decade, Malaysians have become more accustomed to online shopping [39, 40]. Retailers must adapt to the changing market or risk losing out to their competitors. Amazon, eBay, and several other online-specific retailers have initiated developing their physical presence to secure a broader market segment. Especially following the outbreak of COVID-19, this tendency has significantly increased.

2.2 Purchasing intention of omni-channel

Customers shopping using omni-channel are active users of retailers' channels and touchpoints (smartphones) [41]. Typically, customers on omni-channel use apps or websites to compare product prices, download discount vouchers, purchase online, or use apps for self-pickup in physical stores [41]. Furthermore, consumers might use in-store devices and digital gadgets such as a catalog, tablet, or price-checker [41]. Purchase intention is defined as the customer's potential purpose and intention to purchase a desired good or service [42, 43]. Fishbein and Ajzen [44], through their Theory of Reason Action, claimed that the combination of behavioral-concern subjective norm and personal attitude determine the intentions, which later predict behaviors. Previous studies also showed that purchase intention could lead to the customer's behavior [45, 46]. The constructive buying interest of customers contributes to the actual purchasing behavior [47].

In the context of the purchase intention of an omni-channel, a physical store, and its visual element are the factors that can build a customer's experience and shopping intention. Customers are significantly influenced by the visual indication created by marketing communication, such as sales promotion in-store and product display at the physical stores [48]. Consequently, this will immediately influence a customer's shopping decisions as soon as they arrive at the store [49]. According to Thaichon et al., full-channel integration is achievable via a seamless omni-channel buying experience by customers through incorporating a comprehensive product catalog, ordering options, shipping services, and return policies, especially during searching and decision-making processes [50]. Consumers can also concurrently utilize presently available channels to retailers to obtain information, like adopting purchase channel forms, including physical stores, catalogs, mobile apps, websites, social networks, and more recent blended channels. For instance, customers can purchase online and pick it up in-store or buy in-store and have it delivered to their home. They can also use various return channels, such as returning products to a retail store or shipping them to the retailer's warehouse or the manufacturer's factory.

2.3 Research shopping behavior (perceived value of webrooming and perceived value of showrooming)

Truong [51] mentioned that, in the context of omni-channel, research shopping behavior is based on two items: the perceived value of webrooming and the perceived value of showrooming. Numerous researchers agree that research shopping is the new behavior built in this new era. Webrooming behavior means the customer first conducts online searches to obtain information before purchasing the product through offline or physical stores (brick-and-mortar) [2]. Meanwhile, showrooming is the opposite: customers gain information offline and purchase it online. Physical shopping comprises face-to-face dealings, swift product distribution, and first-hand product understanding; meanwhile, online sales involve transparent pricing, product evaluations, and product variations [32, 52]. Therefore, internet channels complement offline and online retail channels, leading to numerous positive upshots. It can be summarized that an increasing number of consumers emphasizing efficient omni-channel strategies increases user satisfaction [1].

Three main factors that influence the research shopping phenomenon in the context of omni-channel have been reported in the literature. Earlier studies mentioned that the attribute of driven decision-making, cross-channel synergy, and shortage of channel lock-in is one of the factors that drive the research shopping phenomenon to occur, which is about the characteristics of the customer itself, for example, price sensitivity, innovation, and brand loyalty. The main problems with research shopping behavior are difficulties maintaining the customer during the searching and decision-making phases since customers in the pre-purchase and purchase phases might be dissimilar [53].

2.4 Perceived compatibility

Perceived compatibility is the degree to which something is perceived to match the exact values, habits, beliefs, and past experiences in using objects or services [54]. Rogers supported this, claiming perceived compatibility as a degree of consistency of innovation with the existing values, needs, and past experiences [55]. It is being accepted as an innovation characteristic in the Innovation Diffusion Theory (IDT) [56, 57]. In the omni-channel approach, innovation and technology are still new, and the consumer chooses either the acceptance or adoption of omni-channel in the retailing industry. This is proven by Dwivedi et al. [24], who stated that an individual decision on the acceptance and adoption or rejection is based on their perception and beliefs. Among the thought stages involved in the innovation decision is the perception before the adaptation (early stages), the characteristics of the innovations in adapting, and finalizing either adopting or rejecting the innovation.

In this study, the innovation and technology derived from omni-channel purchasing intention will influence the characteristics of accepting the omni-channel strategy. Carrol and Guzmán [58] mentioned that omni-channel shopping is treated as a way of innovation in retailing sector strategy, and perceived compatibility is one innovation characteristic that leads to purchasing intention via the omni-channel.

2.5 Perceived risk

Based on the Cambridge Dictionary, risks are associated with danger, harm, or losses. In simple terms, they are risks

relating to the possibility of something terrible that will occur, also known as uncertainty. Several perceived risks were discussed, such as operational, financial, physical, social, psychological, and time risks [59]. A study by Libermann and Stashevsky [60] mentioned that perceived risks are significant in determining customer decision-making. The concept of perceived risks is well explained in the study by Stern et al. [61] perceived risks are associated with the purchasing situation, as a consumer may receive a certain degree of uncertainty that involves the decision to purchase a product or brand by using the services. Furthermore, perceived risks related to consumer purchasing behavior are seen as understanding the perceived risks that could reduce such risks in the transaction process.

In omni-channel retail services, perceived risks refer to the overall activity resulting in uncertainty and directly influencing the shopping journey [62]. Perceived risks focus on the financial risk that might occur using several channels through omni-channel. Vasiliev and Serov [63] postulated that customers require a high level of uninterrupted and trusted services, like the ability to switch from different channels in omni-channel sales. Herhausen et al. [62] confirmed a significant impact of shopping risks across an omni-channel retailing environment. Many researchers have attempted to illustrate the types of risks that occur to the consumer upon reaching various channels. However, there is still insufficient evidence to measure the level of risks associated with omni-channel. Hence, this study is conducted to measure the level of risks that potentially occur in omni-channel based on customer perspectives of purchasing intention.

2.6 Theoretical underpinning

Several recent studies investigating consumer purchasing behavior on omni-channel have utilized the Technology Acceptance Model (TAM), the Theory of Reasoned Action (TRA), and the extended Unified Theory of Acceptance and Use of Technology (UTAUT2) models [64]. This study adopted the Theory of Planned Behavior (TPB) from Ajzen, which explained the independent variables as attitude behavioral intention, subjective norm, and perceived behavioral control towards purchasing intention from the omni-channel [65]. It also explains influences on a person's attitude, behavior, and beliefs. The Theory of Planned Behavior is central to this study to test the subjective norms and perceived behavior control, which are the independent variables. Ajzen [66] mentioned that the future behavior of any individual is predictable from the intention to perform it. Furthermore, Ajzen [65] stated that behavior intention is the key factor and indicator of how much a person is committed to performing a particular behavior. Attitudes toward normative belief, subjective belief, and perceived behavior control lead to the application of the Theory of Planned Behavior (TPB) in this research. In conclusion, adapting this theory in predicting the purchasing intention for this research is well supported by Gu and Wu [67].

2.7 Theoretical framework

Figure 1 shows the theoretical framework of the current study involving four (4) independent variables and one (1) dependent variable for factors influencing consumer intention to purchase via omni-channel fashion retail.

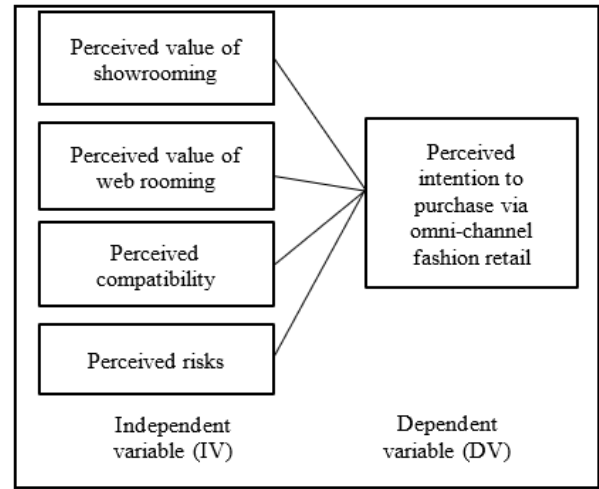


Figure 1. Theoretical framework for the factors influencing consumer intention to purchase via omni-channel fashion retail

2.8 Hypothesis development

The following hypotheses were derived:

H1: Perceived value of webrooming has a significantly positive relationship with purchasing intentions of omni-channel.

H2: Perceived value of showrooming has a significantly positive relationship with purchasing intentions of omni-channel.

H3: Perceived compatibility has a significantly positive relationship with purchasing intentions of omni-channel.

H4: Perceived risk has a negative relationship with the purchasing intentions of omni-channel.

3. METHODOLOGY

3.1 Research design

The current study uses a quantitative approach to understand factors influencing consumer intention to purchase via omni-channel fashion retail in Malaysia, as proposed by Kazancoglu and Aydin [10]. Furthermore, the hypothesis testing method tests the relationship between the perceived value of webrooming, perceived value of showrooming, perceived compatibility, and perceived risk towards purchasing intention of omni-channel retail services in Malaysia. The researcher adapted the questionnaire from Voss et al. [68] and Toijb and Tsarenko [69] for the perceived value of showrooming and webrooming. Meanwhile, perceived compatibility and perceived risk were adapted from Moore and Benbasat [70] and Van der Heijden et al. [71]. Finally, the purchasing intention of omni-channel was adapted from Wong Jeong et al. [72] and Shi et al. [57]. Due to the COVID-19 pandemic, the questionnaire was distributed using an online platform (Google). A survey questionnaire is used from the past journal. The targeted respondents in this research are the local adult population in Malaysia, aged between 18 and 60 years old, with experience in omni-channel fashion retailing. The data analysis is conducted using Statistical Package of Social Science (SPSS) version 26.0 to report the descriptive analysis, inferential analysis, and cross-sectional study.

3.2 Research sample

The study population comprised the consumers in Malaysia. Based on the Department of Statistics Malaysia (2019) data, there are 32,581,400 of Malaysia’s total population [11]. The Slovin formula is utilized to estimate the sampling size. According to Suliyanto (2009), this formula involves the margin of error and the population size, as seen in the first equation [73].

$$n = N / (1 + Ne^2) \tag{1}$$

n is the sample number, N is the population size, and e is the error margin determined by the researchers. Total samples can be obtained by utilizing a 5% error margin.

Calculation:

$$n = 32,581,400 / 1 + (32,581,400 \times 0.05^2)$$

$$n = 414.9999 \approx 415$$

Whereas:

n = no. of samples

N = total population

e = error margin/margin of error

3.3 Data collection

The survey is conducted to gather information about influencing factors towards the purchasing intention of the omni-channel fashion retailing sector in Malaysia. The questionnaire is distributed through online platforms using Google Docs. The nominal and interval scale questionnaires are distributed using convenient sampling of non-probability that contains a close-ended questionnaire. There are three sections of the questionnaire: the first is about demographics profile, the second is about independent variables, and the third is about dependent variables. Then, the researcher distributed questionnaires to 415 respondents through the online mode. Likewise, to measure their response, the researcher employed a 5-point Likert scale, where “1” means strongly agree, and “5” means strongly disagree, as shown in Table 1 [74].

Table 1. Five-point Likert scale

Strongly Agree	Agree	Normal	Disagree	Strongly Disagree
1	2	3	4	5

3.4 Data analysis technique

Neuman and Fawcett [75] mentioned that multiple data analysis was used to determine the relationship between all related variables. This research is conducted using statistical tools known as SPSS. Firstly, descriptive analysis is being tested to interpret, rearrange, put in order, and manipulate the data into descriptive information [76]. Furthermore, Sekaran and Bougie supported that descriptive analysis assembles and explains the attributes based on individuals, situations, and circumstances that provide more understanding of comprehensive data variables [77]. The reliability analysis is used in this study to investigate the reliability and validity of the questionnaire. As stated by Nunnally [78], the internal accuracy results of Cronbach's alpha must be higher than 0.7 for it to be considered a reliable score.

The reliability analysis initially used 20 respondents for testing, which was not counted in other studies. The inferential analysis in this study used the Pearson correlation analysis and multiple linear regressions. Pearson correlation analysis measures the strength associated between two variables, as the correlation coefficient value varies between +1 and -1, and interpreting is done using Cohen's rule of thumb [79]. Then, multiple linear regression analysis demonstrates the independent variables linked with interdependent variables. The regression coefficient shows the relationship importance of each independent variable in the expectation of the dependent variable. Furthermore, variables are coded as significant if multiple linear regression values are lower than alpha 0.05.

4. RESULTS AND DISCUSSION

4.1 Descriptive statistics for demographic variables

Table 2 shows descriptive statistics for the demographic data for this study. Females indicated the highest value of 51.3%, while more than 90% were Malay compared to other races. Meanwhile, the personal income revealed 61.2% for the personal income per month RM1199 and below. The highest statistics for the omni-channel shopping frequency showed 64.8% once a month.

Table 2. Descriptive statistics for demographic variables

Characteristics Question	Observations	Frequency	%
Gender	Male	202	48.7
	Female	213	51.3
Age	18 years old - 22years old	124	29.9
	23 years old - 27 years old	236	56.9
	28 years old - 32 years old	11	2.7
	33 years old - 38 years old	12	2.9
	39 years old and above	32	7.7
Race	Malay	377	90.8
	Indian	11	2.7
	Chinese	16	3.9
	Other	11	2.7
Personal income per month	RM5,000 and above	31	7.5
	RM3,500 – RM4,999	25	6.0
	RM2,500 – RM3499	43	10.4
	RM1,200 – RM2,499	62	14.9
	RM1,199 and below	254	61.2
Omni-channel shopping frequency	Once a month	269	64.8
	Twice a month	73	17.6
	3-5 times a month	50	12.0

4.2 Reliability analysis

The reliability analysis in Table 3 is tested to ensure the questionnaire is accurate and reliable. Sekaran and Bougie [80]

mentioned that the internal accuracy of Cronbach's alpha could indicate how well the things in a questionnaire are positively linked to each other. Nunnally [78] proposed that the internal accuracy results must be higher than 0.7 to be considered an appropriate reliable score, while below 0.6 is considered a small reliable score, as in Table 4.

Table 3. Reliability analysis

Correlations (N=415)					
(DV)	(DV)	(IV1)	(IV2)	(IV3)	(IV4)
	1	0.505	0.478	0.737	-0.712
		0.000	0.000	0.000	0.000

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

Table 4. Cronbach's alpha analysis

Value	Cronbach's Alpha	N of Items
The perceived value of webrooming	0.783	5
The perceived value of showrooming	0.879	5
Perceived compatibility	0.918	5
Perceived risk	0.884	6
Purchasing intention of Omni-channel	0.732	6

Cronbach's alpha for all variables is higher than 0.7, indicating their reliability and can be used to measure the inferential analysis.

4.3 Pearson correlation analysis

Table 5. Pearson correlation analysis

Value	Cronbach's Alpha	N of Items
The perceived value of webrooming	0.783	5
The perceived value of showrooming	0.879	5
Perceived compatibility	0.918	5
Perceived risk	0.884	6
Purchasing intention of omni-channel	0.732	6

Notes: *p< 0.05

Based on the Pearson correlation analysis, all four independent variables are significant (p<0.05), as in Table 5. This analysis measures the level of correlation between independent and dependent variables. According to Cohen's rule of thumb, the level of correlation varies between the three [81, 82]. Weak correlation ranges from 0.1 to 0.29, moderate correlation ranges from 0.3 to 0.49, and strong correlation ranges from 0.5 to 0.99. Based on the results of Pearson's correlation, IV1 strongly positively correlates with the dependent variable by 0.505, IV2 moderately positively correlates by 0.478, IV3 strongly positively correlates with the dependent variable by 0.737, and IV4 strongly negatively correlates with dependent variables by -0.712. In conclusion, IV2 has a moderate positive correlation, while IV1 and IV3 strongly affect the relationship between dependent variables. Perceived risk is negatively correlated with the dependent variables as it is between -0.5 and -0.99.

4.4 Multiple linear regressions

According to the model summary, the multiple linear regression analysis resulted in an R square value of 0.65, indicating independent variables (perceived value of webrooming, perceived value of showrooming, perceived compatibility, and perceived risk) occupied 65% influences on the perception of the dependent variable (purchasing intention of omni-channel). However, R square, which is 65%, is moderately strong as it is higher than 50 percent, indicating that the independent variable is in good strength to predict the dependent variable value. Based on the coefficient table, four of the IVs are significant (p<0.05). The significance of the IVs shows that all IVs can accurately measure the dependent variables, as in Table 6.

Table 6. Multiple linear regression analysis

Model	R	R Square	Adjusted R Square	Std. the Error of the Estimate	
1	0.807	0.650	0.647	0.42779	

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	139.62	4	34.905	190.73	0.00
Residual	75.032	410	0.183		
Total	214.65	414			

Coefficient Table					
Constant	0.429	0.142		3.01	0.003
The perceived value of webrooming	0.085	0.036	0.083	2.35	0.019
The perceived value of showrooming	0.064	0.025	0.088	2.56	0.011
Perceived compatibility	0.400	0.038	0.425	10.4	0.000
Perceived risk	0.341	0.039	0.356	8.76	0.000

Notes: *p< 0.05

4.5 Hypothesis analysis

In these parts, the hypothesis has been tested between the dependent variable (purchasing intention of omni-channel) and independent variables (perceived value of webrooming, perceived value of showrooming, perceived compatibility, and perceived risk). The result is shown in Table 7.

Table 7. The result of the hypothesis based on findings

No.	Hypothesis	Decision
1	H1: Perceived value of webrooming has a significantly positive relationship with the purchasing intention of omni-channel.	Accept H1
2	H2: Perceived value of showrooming has a significantly positive relationship with the purchasing intention of omni-channel.	Accept H2
3	H3: Perceived compatibility has a significantly positive relationship with the purchasing intention of omni-channel.	Accept H3
4	H4: Perceived risk has a significantly negative relationship with the purchasing intention of omni-channel.	Accept H4

4.6 Discussion of research question

RQ1: Is the perceived value of webrooming one of the factors influencing the purchasing intention of the omni-channel fashion retailing sector in Malaysia?

Pearson's correlation analysis has established a positively strong correlation between the perceived value of webrooming and the purchasing intention of omni-channel ($p=0.000$, $r=0.505$), which is also significant ($p<0.05$). Based on the coefficient table adopted using the multiple linear regression analysis, the perceived value of webrooming ($p=0.019<\alpha$) was significant in explaining the purchasing intention of omni-channel. The result is also supported by Kang [83]. Furthermore, Kwon and Jain [84] stated that high levels of information-seeking were likely to be practicable compared to other shopping channels. The higher value of customers perceived using webrooming is emphasized in the outstanding characteristics of omni-channel shoppers in the fashion retailing sector. Therefore, the perceived value of webrooming is one of the factors influencing the purchasing intention of the omni-channel fashion retailing sector in Malaysia.

RQ2: Is the perceived value of showrooming one of the factors influencing the purchasing intention of the omni-channel fashion retailing sector in Malaysia?

The second research objective aims to determine the perceived value of showrooming as a factor influencing the purchasing intention of omni-channel. The results of Pearson's correlation analysis show a positively moderate correlation between the perceived value of showrooming and the purchasing intention of omni-channel ($p=0.000$, $r=0.478$), which is significant ($p<0.05$). From the coefficient table, the perceived value of showrooming ($p=0.011<\alpha$) was significant in explaining the omni-channel purchasing intention. The perceived value of showrooming contradicts the practicality of the perceived value of webrooming, as supported by Kang [83]. Moreover, this finding also agrees with Nistor and Nyer [85], who mentioned that the perceived value of showrooming could lean out the supply chain and lead to having a positive relationship with the purchasing intentions of omni-channel. The perceived value of showrooming is one of the factors influencing the purchasing intention of the omni-channel fashion retailing sector in Malaysia.

RQ3: Is perceived compatibility one of the factors influencing the purchasing intention of the omni-channel fashion retailing sector in Malaysia?

The result obtained from Pearson correlation analysis shows a significant relationship between perceived compatibility and the purchasing intention of omni-channel. Table 5 shows a strong correlation ($p=0.000$, $r=0.737$) between the omni-channel perceived compatibility and purchasing intention. According to Cohen's rule of thumb, the strength of correlation varies between weak (0.1 – 0.29), moderate (0.3 – 0.49), and strong (0.5 – 0.99) [38]. Therefore, perceived compatibility has a strong relationship with the purchasing intentions of omni-channel. Based on Table 6 and the coefficient table, there is a significance between perceived compatibility and the purchasing intention of omni-channel ($p=0.000$, $p<0.05$). Perceived compatibility is positively correlated with the purchasing intention using omni-channel, as supported by Shi et al. [57]. Perceived compatibility appears when implementing innovations that move customers from the offline channel using integrated channels. This type of customer most probably depends on their experience when shopping. Thus, perceived compatibility is one of the factors influencing the purchasing intention of the omni-channel fashion retailing sector in Malaysia.

RQ4: Is perceived risk one of the factors influencing the purchasing intention of the omni-channel fashion retailing sector in Malaysia?

Perceived risk is an influencing factor towards the purchasing intention of omni-channel. The results of Pearson's correlation analysis show a positively strong correlation between perceived risk and the purchasing intention of omni-channel ($p=0.000$, $r=-0.712$), which is significant ($p<0.05$). From the coefficient table, perceived risk ($p=0.00<\alpha$) was found to be significant in explaining the purchasing intention of omni-channel, as supported by Shi et al. [57]. Moreover, the results are also comparable with previous studies. Customers are aware of the risks associated with the journey of purchasing: pre-purchase, during, and post-purchase transactions. Perceived risks are one of the factors influencing the purchasing intention of the omni-channel fashion retailing sector in Malaysia.

4.7 Research implications

4.7.1 Research shopping behavior

Based on this study, the research shopping behavior is built on two items: the perceived value of webrooming and the perceived value of showrooming. Based on the analysis, both are positively correlated with the dependent variables. It can be concluded that a higher research shopping behavior attempt increased the purchasing intention of omni-channel. The implication is that technological advancement increases in the retail sector [2]. Contradictorily, previous research mentioned that the research shopping behavior potentially impacts the profitability of online and offline shops [18, 86]. According to Flavián et al. [87], online retailers may struggle to retain customers due to difficulties in providing cross-channel information.

4.7.2 Perceived compatibility

According to Al-jabri and Sohail [54], perceived compatibility refers to the level of degree matching with the exact values, habits, beliefs, and past experiences in using objects and services offered. Based on the result of this study, perceived compatibility is positively correlated with the purchasing intention of omni-channel. Omni-channel needs to offer equal or more during the journey of purchasing by the customer.

4.7.3 Perceived risks

Based on the results, perceived risk is negatively correlated with the purchasing intention of omni-channel. Wei et al. [88] referred to perceived risk as the cost associated with the customers' purchasing behavior as uncertainty occurs in the future. This uncertainty affects their customer purchasing intention directly. The perceived risk in omni-channel is a loss for consumers during the journey of purchasing. Since omni-channel is a new strategy adopted in the retail industry, trust is the determinant of purchasing [89].

5. CONCLUSIONS

The summary of findings of this research study is concluded as shown in Table 8.

Table 8. Summary of findings

Research Question	Result	Justification of Findings
Relationship between the perceived value of webrooming and purchasing intention of omni-channel	Positively significant	The positive significance of the perceived value of webrooming indicates the validity of the current study, which is also supported by Kang [83]. Furthermore, Kwon and Jain [84] claimed high information-seeking levels were most probably practicable compared to other shopping channels. The higher value of customers perceived using webrooming and showrooming is an outstanding characteristic for omni-channel shoppers in the fashion retailing sector.
Relationship between the perceived value of showrooming and purchasing intention	Positively significant	Showrooming is an idea practiced during the acceptance of technology that provides generous information to the customer regarding the products and services that will be purchased. Omni-channel retailing integrates multiple channels that adopt the growth of technology and the empowerment of customers. They can find the product information themselves by visiting brick-and-mortar stores before buying it online. The results of the current study are supported by Viejo-Fernández et al. [90], who mentioned that the perceived value of showrooming affects the emotions and attitudes of individuals during the purchasing journey.
Relationship between perceived compatibility and purchasing intention	Positively significant	Perceived compatibility is positively associated with the purchasing intention using omni-channel, which agrees with Shi et al. [57]. Perceived compatibility appears when innovation is implemented that moves customers from the offline channel using integrated channels. This type of customer heavily depends on their experience when shopping.
Relationship between perceived risks and purchasing intention	Negatively significant	Perceived risk is negatively significant to the purchasing intention of omni-channel, as supported by Truong [51], Shi et al. [57], and Pelaez et al. [91].

5.1 Limitations and recommendations for further studies

The current study was limited since the concept of omni-channel is still new in Malaysia. The data obtained may be less accurate since the respondents answered the questionnaire based on their limited knowledge. Therefore, the results presented are only valid for the relevant fashion retailing, specifically those with experience in omni-channel fashion retailing, and cannot be generalized yet. However, these findings are usable for further research and enriched through other variables. Future researchers are recommended to conduct this survey by interviewing respondents to improve data accuracy, given the newness of omni-channel retailing in Malaysia with a larger sample. Secondly, the current data were mostly collected from one geographical location. Collecting data from multiple locations in the future would be beneficial in improving generalizability. In this context, examining the role of culture would benefit future researchers significantly. Finally, this research did not mention cultural differences in predicting customer behavior. Thus, it is suggested to examine the role of culture and demographic variables like gender and generation that would provide valuable new insights in an omni-channel context.

Customers need to embrace the technology and change of strategy in the retail sector. Omni-channel is a developing strategy to facilitate and ease the journey of customers in purchasing a product or service based on customer focus and the empowerment of customers. This study provides a new landscape and understanding regarding the practices to the customer to adopt new practices and technology. The practical recommendations for customers to embrace new technology are sensible.

The current study discusses the influencing factors on the purchasing intention of omni-channel retail services in Malaysia that deepen the understanding of consumer behavior to purchase from fashion retailers using the omni-channel strategy. There are several inquiries on using the variables in the same country as the researchers since other researchers are using the variables to test the European market omni-channel retail strategy. Nevertheless, the omni-channel retail strategy is still new or at the entrant level in Malaysia.

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REFERENCES

- [1] Kamaljeet, S., Gudmundur, G., Jon Hjaltalin, M., Geir Martin, H., Gudrun, S. (2023). Performance evaluation of low-temperature KF-NaF-AlF₃ electrolytes for aluminum electrolysis using vertical inert Cu-Ni-Fe alloy anodes. *Journal of The Electrochemical Society*, 170: 113507. <http://doi.org/10.1149/1945-7111/ad0bae>
- [2] Verhoef, P.C., Kannan, P.K., and Inman, J.J. (2015). From multi-channel retailing to omnichannel retailing: Introduction to the special issue on multi-channel retailing. *Journal of Retailing*, 91(2): 174-181. <http://doi.org/10.1016/j.jretai.2015.02.005>
- [3] Rudrabasavaraj, M. (2010). *Dynamic Global Retailing Management* (1st ed.). Himalaya Publishing House.
- [4] Kotler, P., Armstrong, G. (2012). *Principles of Marketing* (14th Ed.). UK: Pearson Prentice Hall.
- [5] Piotrowicz, W., Cuthbertson, R. (2014). Introduction to the special issue information technology in retail: Toward omnichannel retailing. *International Journal of Electronic Commerce*, 18(4): 5-16. <https://doi.org/10.2753/JEC1086-4415180400>
- [6] Picot-Coupey, Karine, Hure, E., Piveteau, L. (2016). Channel design to enrich customers' shopping experiences-synchronizing clicks with bricks in an omni-channel perspective-the direct optic case. *International Journal of Retail and Distribution Management*, 44(3): 336-68. <http://doi.org/10.1108/IJRDM-04-2015-0056>
- [7] Yurova, Y., Rippé, C.B., Weisfeld-Spolter, S., Sussan, F., Arndt, A. (2017). Not all adaptive selling to omni-consumers is influential: The moderating effect of

- product type. *Journal of Retailing and Consumer Services*, 34: 271-277. <http://doi.org/10.1016/j.jretconser.2016.01.009>
- [8] Neslin, S.A., Jerath, K., Bodapati, A., Bradlow, E.T., Deighton, J., Gensler, S., (2014). The interrelationships between brand and channel choice. *Marketing Letters*, 25: 319-330. <http://doi.org/10.1007/s11002-014-9305-2>
- [9] SMEBIZ (2018). Create omni-channel experience for retail growth. *The Star Online*. Retrieved at <https://www.thestar.com.my/business/smebiz/2018/10/15/create-omnichannel-experience-for-retail-growth/>.
- [10] Kazancoglu, I., Aydin, H. (2018). An investigation of consumers' purchase intentions towards omni-channel shopping. *International Journal of Retail and Distribution Management*, 46(10): 959-976. <https://doi.org/10.1108/IJRDM-04-2018-0074>
- [11] The Star (2020). Malaysia's online retail sales up 28.9% in April. *The Star Online*. Retrieved at <https://www.thestar.com.my/business/business-news/2020/06/11/malaysia039s-online-retail-sales-up-289--in-april>.
- [12] World Bank, 2021. Overview. [online] World Bank. Available at: <https://www.worldbank.org/en/country/malaysia/overview#:~:text=As%20an%20upper%20middle%20income,income%20and%20developed%20nation%20status>.
- [13] McCormick, H., Cartwright, J., Perry, P., Barnes, L., Lynch, S., Ball, G. (2014). Fashion retailing-past, present and future. *Textile Progress*, 46(3): 227-321. <https://doi.org/10.1080/00405167.2014.973247>
- [14] Kaur, K., Bakar, E. A., Singh, J. (2020). Theoretical framework development on user's adoption of omni-channel retailing of fashion apparels based on UTAUT2 and the role of personal innovativeness, brand image and fashion involvement. In *Proceedings in 20th Kuala Lumpur International Business, Economics and Law Conference*, pp. 67-81.
- [15] Mahusni, M., Ghafar, M. (2018). Adaptation of malaysian retail design towards omni-channel and contextual retail concept. *Malaysian Journal of Sustainable Environment (MySE)*, 4(1): 95-112. <https://doi.org/10.24191/myse.v4i1.5609>
- [16] McKnight, D.H., Choudhury, V., Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research*, 13(3): 334-359. <http://doi.org/10.1287/isre.13.3.334.81>
- [17] Forsythe, S., Liu, C.L., Shannon, D., Gardner, L.C. (2006). Development of a scale to measure the perceived benefits and risks of online shopping. *Journal of Interactive Marketing*, 20(2): 55-75. <https://doi.org/10.1002/dir.20061>
- [18] Leung, A.K., Chiu, C.Y., Hong, Y.Y. (2011). Cultural processes: An overview. *Cultural Processes: A Social Psychological Perspective*, 3-22. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511779374>
- [19] McKnight, D.H., Kacmar, C.J., Choudhury, V. (2004). Shifting factors and the ineffectiveness of third party assurance seals: A two stage model of initial trust in a web business. *Electronic Markets*, 14(3): 252-266. <https://doi.org/10.1080/1019678042000245263>
- [20] Rapp, A., Baker, T.L., Bachrach, D.G., Ogilvie, J., Beitelbacher, L.S. (2015). Perceived customer showrooming behavior and the effect on retail salesperson self-efficacy and performance. *Journal of Retailing*, 91(2): 358-369. <http://doi.org/10.1016/j.jretai.2014.12.007>
- [21] Yurova, Y.V., Rippe, C.B., Weisfeld-Spolter, S., Hale, D., Sussan, F. (2016). Guiding when the consumer is in control: The moderating effect of adaptive selling on the purchase intention of the multichannel consumer. *Journal of Consumer Marketing*, 33(6): 469-478. <https://doi.org/10.1108/JCM-09-2015-1546>
- [22] Rogers, E.M. (2010) *Diffusion of Innovations*. 4th Edition, Simon and Schuster, New York.
- [23] Lai, C.S., Chiu, C.J., Yang, C.F. (2010). The effects of corporate social responsibility on brand performance: The mediating effect of industrial brand equity and corporate reputation. *Journal of Business Ethics*, 95: 457-469. <https://doi.org/10.1007/s10551-010-0433-1>
- [24] Dwivedi, Y.K., Rana, N.P., Jeyaraj, A. (2019). Re-examining the unified theory of acceptance and use of technology (UTAUT): Towards a revised theoretical model. *Information Systems Frontiers*, 21: 719-734. <https://doi.org/10.1007/s10796-017-9774-y>
- [25] Silva, S.C.e, Martins, C. Martins, J.M.de.A. (2019). Omnichannel approach: Factors affecting consumer acceptance. *Journal of Marketing Channels*, 25(1-2): 73-84. <http://doi.org/10.1080/1046669X.2019.1647910>
- [26] Lee, W.-J. (2020). Unravelling consumer responses to omni-channel approach, *Journal of Theoretical and Applied Electronic Commerce Research*, 15(3): 37-49. <https://doi.org/10.4067/S0718-18762020000300104>
- [27] Harba, J-N. (2019). New approaches to customer experience: where disruptive technological innovation meets luxury fashion. In *Proceedings of the 13th International Conference on Business Excellence*, pp. 740-758.
- [28] De Kerviler, G. Demoulin, N.T.M. Zidda, P. (2016). Adoption of in-store mobile payment: Are perceived risk and convenience the only drivers? *Journal of Retailing and Consumer Services*, 31: 334-344. <https://doi.org/10.1016/j.jretconser.2016.04.011>
- [29] Alalwan, A.A., Dwivedi, Y.K. Rana, N. Algharabat, R.S. (2018). Examining factors influencing Jordanian customers' intentions and adoption of internet banking: Extending UTAUT2 with risk. *Journal of Retailing and Consumer Services*, 49(10), 124-138. <https://doi.org/10.1016/j.jretconser.2017.08.026>
- [30] Tseng, S-Y., Wang, C-N. (2016). Perceived risk influence on dual-route information adoption processes on travel websites. *Journal of Business Research*, 69(6). 2289-2296. <https://doi.org/10.1016/j.jbusres.2015.12.044>
- [31] Rajeev, P. N. Joy, S. (2023). *Being an Impact Champion: Enacting Corporate Social Consciousness*. Penguin Random House India Private Limited.
- [32] Guha, A., Grewal, D., Kopalle, P.K., Haenlein, M., Schneider, M.J., Jung, H., Moustafa, R., Hegde, D.R., Hawkins, G. (2021). How artificial intelligence will affect the future of retailing. *Journal of Retailing*, 97(1): 28-41. <https://doi.org/10.1016/j.jretai.2021.01.005>
- [33] Cocco, H., Demoulin, N.T. (2022). Designing a seamless shopping journey through omnichannel retailer integration. *Journal of Business Research*, 150: 461-475. <https://doi.org/10.1016/j.jbusres.2022.06.031>
- [34] Melacini, M., Perotti, S. Rasini, M. Tappia, E. (2018). E-

- fulfilment and distribution in omni-channel retailing: A systematic literature review. *International Journal of Physical Distribution & Logistics Management*, 48(4). 391-414. <https://doi.org/10.1108/IJPDLM-02-2017-0101>
- [35] Mishra, R., Singh, R.K., Koles, B. (2021). Consumer decision-making in omnichannel retailing: Literature review and future research agenda. *International Journal of Consumer Studies*, 45(2). 147-174. <https://doi.org/10.1111/ijcs.12617>
- [36] Beck, N., Rygl, D. (2015). Categorization of multiple channel retailing in multi-, cross-, and omni - channel retailing for retailers and retailing. *Journal of Retailing and Consumer Services*, 27: 170-178
- [37] Islam, Md.R., Monjur, Md. E. I. Akon, T. (2023). Supply chain management and logistics: How important interconnection is for business success. *Open Journal of Business and Management*, 11. 2505-2524. <https://doi.org/10.4236/ojbm.2023.115139>
- [38] Shetty, K., Fitzsimmons, J. (2021). The effect of brand personality congruence, brand attachment and brand love on loyalty among henry's in the luxury branding sector. *Journal of Fashion Marketing and Management*. 26: 21-35.
- [39] Madhu, S., Soundararajan, V., Parayitam, S. (2022). Online promotions and hedonic motives as moderators in the relationship between e-impulsive buying tendency and customer satisfaction: Evidence from India. *Internet Commerce*, 22(3): 395-431. <https://doi.org/10.1080/15332861.2022.2088035>
- [40] Lim, Y.M., Cheng, B.L., Cham, T.H., Ng, C.K.Y., Tan, J.X. (2019). Gender differences in perceptions and attitudes toward online shopping: A study of Malaysian consumers. *Journal of Marketing Advances and Practices*, 1(2): 11-24.
- [41] Sopadjeva, E., Dholakia, U.M., Benjamin, B. (2017), A study of 46,000 shoppers shows that omnichannel retailing works, *Harvard Business Review*. Available at: hbr.org/2017/01/a-study-of-46000-shoppers-shows-that-omnichannel-retailing-works, accessed on 2 February 2023.
- [42] Schiffman, L., Kanuk, L. (2007). *Purchasing Behavior*, Pearson Prentice Hall, Upper Saddle River, NJ.
- [43] Lu, B. Fan, W. Zhou, M. (2016). Social presence, trust, and social commerce purchase intention: An empirical research. *Computers in Human Behavior*, 56. 225-237. <https://doi.org/10.1016/j.chb.2015.11.057>
- [44] Fishbein, M., Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA.
- [45] Weng, J.T., de Run, E.C. (2013). Consumers' personal values and sales promotion preferences effect on behavioral intention and purchase satisfaction for consumer product. *Asia Pacific Journal of Marketing and Logistics*, 25(1): 70-101. <https://doi.org/10.1108/13555851311290948>
- [46] Rana, J., Paul, J. (2017). Consumer behavior and purchase intention for organic food: A review and research agenda. *Journal of Retailing and Consumer Services*, 38. 157-165. <https://doi.org/10.1016/j.jretconser.2017.06.004>
- [47] Wu, J.H.-C., Lin, Y.-C., Hsu, F.-S. (2011). An empirical analysis of synthesizing the effects of service quality, perceived value, corporate image and customer satisfaction on behavioral intentions in the transport industry: A case of Taiwan high-speed rail. *Innovative Marketing*, 7(3). 83-100.
- [48] Rajaguru, R. (2014). Motion picture-induced visual, vocal and celebrity effects on tourism motivation: Stimulus organism response model. *Asia Pacific Journal of Tourism Research*, 19(4): 375-388. <http://doi.org/10.1080/10941665.2013.764337>
- [49] Chiang, K.-P., Dholakia, R.R. (2003). Factors driving consumer intention to shop online: An empirical investigation. *Journal of Consumer Psychology*, 13(1): 177-183. http://doi.org/10.1207/S15327663JCP13-1&2_16
- [50] Thaichon, P., Phau, I., Weaven, S. (2022). Moving from multi-channel to omni-channel retailing: Special issue introduction. *Journal of retailing and consumer services*, 65: 102311. <https://doi.org/10.1016/j.jretconser.2020.102311>
- [51] Truong, T.H.H. (2021). The drivers of omni-channel shopping intention: A case study for fashion retailing sector in Danang, Vietnam. *Journal of Asian Business and Economic Studies*, 28(2): 143-159. <https://doi.org/10.1108/JABES-05-2020-0053>
- [52] Bressolles, G., Lang, G. (2020). KPIs for performance measurement of e-fulfillment systems in multi-channel retailing: An exploratory study. *International Journal of Retail & Distribution Management*, 48(1): 35-52. <https://doi.org/10.1108/IJRDM-10-2017-0259>
- [53] Chiou, J.-S. Wu, L.-Y. Chou, S.-Y. (2012). You do the service but they take the order. *Journal of Business Research*, 65(7). 883-889. <https://doi.org/10.1016/j.jbusres.2011.06.035>
- [54] Al-Jabri, I., Sohail, M. (2012). Mobile banking adoption: Application of diffusion of innovation theory. *Journal of Electronic Commerce Research*, 13(4): 379-391.
- [55] Rogers, E.M. (2003). *Diffusion of Innovations* (5th ed.). New York: Free Press
- [56] Kim, E., Park, M.C., Lee, J. (2017). Determinants of the intention to use buy-online, pickup in-store (BOPS): The moderating effects of situational factors and product type. *Telematics and Informatics*, 34(8): 1721-1735. <https://doi.org/10.1016/j.tele.2017.08.006>
- [57] Shi, S., Wang, Y., Chen, X., Zhang, Q. (2020). Conceptualization of omnichannel customer experience and its impact on shopping intention: A mixed-method approach. *International Journal of Information Management*, 50: 325-336. <https://doi.org/10.1016/j.ijinfomgt.2019.09.001>
- [58] Carroll, D., Guzmán, I. (2015). The new omni-channel approach to serving customers, Accenture Consulting, available at https://www.accenture.com/be-en/~media/Accenture/ConversionAssets/DotCom/Documents/Global/PDF/Industries_2/accenture-new-omni-channel-approach-serving-customers.pdf.
- [59] Guru, S., Nenavani, J., Patel, V., Bhatt, N. (2020). Ranking of perceived risks in online shopping. *Decision*, 47: 137-152. <https://doi.org/10.1007/s40622-020-00241-x>
- [60] Liebermann, Y. Stashevsky, S. (2002). Perceived risk as barriers to Internet and ecommerce usage. *Qualitative Market Research*, 5(4): 291.
- [61] Stern, D.E., Lamb, C.W., MacLachlan, D.L. (1977). Perceived risk: A synthesis. *European Journal of Marketing*, 11(4): 312-319.

- <https://doi.org/10.1108/EUM000000005017>
- [62] Herhausen, D., Binder, J., Schoegel, M., Herrmann, A. (2015). Integrating bricks with clicks: Retailer-level and channel-level outcomes of online-offline channel integration. *Journal of Retailing*, 91(2): 309-325. <https://doi.org/10.1016/j.jretai.2014.12.009>
- [63] Vasiliev S.A., Serov, E.R. (2019). Omnichannel banking economy. *Risks*, 7(4): 115. <https://doi.org/10.3390/risks7040115>
- [64] Kazancoglu, I., Aydin, H. (2018). An investigation of consumers' purchase intentions towards omni-channel shopping: A qualitative exploratory study. *International Journal of Retail & Distribution Management*, 46(10): 959-976. <https://doi.org/10.1108/IJRDM-04-2018-0074>
- [65] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Process*, 50: 171-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- [66] Ajzen I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychol Health*, 26: 1113-1127. <http://doi.org/10.1080/08870446.2011.613995>
- [67] Gu, S., Wu, Y. (2019). Using the theory of planned behaviour to explain customers' online purchase intention. *World Scientific Research Journal*, 5(9): 226-249. [https://doi.org/10.6911/WSRJ.201909_5\(9\).0026](https://doi.org/10.6911/WSRJ.201909_5(9).0026)
- [68] Voss, K.E., Spangenberg, E.R., Grohmann, B. (2003). Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of Marketing Research*, 40(3): 310-320. <https://psycnet.apa.org/doi/10.1509/jmkr.40.3.310.19238>
- [69] Tojib, D. Tsarenko, Y. (2012), Post-adoption modeling of advanced mobile service use, *Journal of Business Research*, 65(7): 922-928.
- [70] Moore, G.C., Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2(3): 192-222. <https://doi.org/10.1287/isre.2.3.192>
- [71] Van der Heijden, H., Verhagen, T., Creemers, M. (2003). Understanding online purchase intentions: Contributions from technology and trust perspectives. *European Journal of Information Systems*, 12(1): 41-48. <https://doi.org/10.1057/palgrave.ejis.3000445>
- [72] Won Jeong, S., Fiore, A., Niehm, L. Lorenz, F. (2009), The role of experiential value in online shopping, *Internet Research*, 19(1): 105-124.
- [73] Suliyanto, S. (2009). *Business research methods*. Yogyakarta: ANDI.
- [74] Sugiyono, S. (2019). *The method of quantitative and qualitative studies and research & development (2nd ed.)*. Bandung: Alfabeta.
- [75] Neuman, B., Fawcett, J. (2002). *The Neuman Systems Model (4th ed)*. Upper Saddle River, New Jersey, Prentice Hall.
- [76] Zikmund, W.G. (2003). *Business research methods (7th Eds)*. Mason, OH: SouthWestern/Thomson.
- [77] Sekaran, U., Bougie, R. (2016). *Research Methods for Business: A Skill Building Approach*. John Wiley & Sons.
- [78] Nunnally, J.C. (1978). *Psychometric Theory (2nd ed.)*. New York: McGraw-Hill.
- [79] Cohen, J. (1988) *Statistical Power Analysis for the Behavioral Sciences*, (2nd ed). Hillsdale, NJ: Erlbaum.
- [80] Sekaran, U., Bougie, R. (2013). *Research Methods for Business*. (6th ed.).
- [81] Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences (2nd ed.)*. Hillside, NJ: Lawrence Erlbaum Associates.
- [82] Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112: 15-159. <https://doi:10.1037/0033-2909.112.1.155>
- [83] Kang, J. (2019). What drives omnichannel shopping behaviors? Fashion lifestyle of social-local-mobile consumers. *Journal of Fashion Marketing and Management*, 23(2): 1361-2026. <https://doi.org/10.1108/JFMM-07-2018-0088>
- [84] Kwon, J.K., Jain, D. (2009). Multichannel shopping through nontraditional retail formats: Variety-seeking behavior with hedonic and utilitarian motivations. *Journal of Marketing Channels*, 16(2): 149-168. <https://doi.org/10.1080/10466690802477418>
- [85] Nistor, C., Nyer, P. (2018). The case for showrooming. *American Journal of Industrial and Business Management*, 8: 1684-1692. <https://doi.org/10.4236/ajibm.2018.87112>
- [86] Arora, S., Sahney, S. (2017). Webrooming behaviour: A conceptual framework. *International Journal of Retail and Distribution Management*, 45(7/8): 762-781. <https://doi.org/10.1108/IJRDM-09-2016-0158>
- [87] Flavián, C., Gurrea, R., Orús, C. (2016). Choice confidence in the webrooming purchase process: The impact of online positive reviews and the motivation to touch. *Journal of Consumer Behaviour*, 15(5): 459-476. <https://doi.org/10.1002/cb.1585>
- [88] Wei, Y., Wang, C., Zhu, S., Xue, H., Chen, F. (2018). Online purchase intention of fruits: Antecedents in an integrated model based on technology acceptance model and perceived risk theory. *Frontiers in Psychology*, 9: 1521. <https://doi.org/10.3389/fpsyg.2018.01521>
- [89] Shiau, W.L., Yan, C.M., Lin, B.W. (2019). Exploration into the intellectual structure of mobile information systems. *International Journal of Information Management*, 47: 241-251. <https://doi.org/10.1016/j.ijinfomgt.2018.10.025>
- [90] Viejo-Fernández, N., Sanzo-Pérez, M., Vázquez-Casielles, R. (2018). Different kinds of research shoppers, different cognitive-affective consequences. *Spanish Journal of Marketing*, 27(1): 45-68. <http://doi.org/10.1108/SJME-09-2018-0040>
- [91] Pelaez, A., Chen, C., Chen, Y. (2019). Effects of perceived risk on intention to purchase: A meta-analysis. *Journal of Computer Information System*, 59: 73-84. <http://doi.org/10.1080/08874417.2017.1300514>