

The Influence of Online Shopping Adoption Determinants on Customer Satisfaction in China: A Technology Acceptance Model (TAM) Approach

Ye Zihan^{*a}, Chee Wei Ming^b

^aCity University, Malaysia,

^bCity University, Malaysia

^{*}Corresponding author

ABSTRACT

The rapid expansion of technologies leads to new ways of business being conducted. E-commerce is the platform used by business organizations to sell their products to customers. Today, we can see the increasing readiness to shop online. This research studies the factors that lead to the consumers' satisfaction to shop online. Online shopping applications raise issues such as breach of information, late delivery, poor good quality, inefficient logistics services, and unfair return policy due to poor e-commerce conduct. The significance of this study is to increase the quality of e-commerce delivered by business organizations, especially the Small Medium Enterprise (SMEs) to increase the customers' satisfaction. According to this research study, the factors that influence the customers' satisfaction to shop online are security, information availability, shipping, quality, pricing, and time. The data collected through the development of questionnaires distributed using Google Forms. The results gathered will be analysed by using the Statistical Package for Social Sciences (SPSS 26.0) and SmartPLS.

Keywords: online shopping, customer satisfaction, security, information availability, shipping, quality, pricing, time.

I. INTRODUCTION

Nowadays, the adaptations of e-commerce in a business environment is important. According to Tan S. W., et al. (2020) stated that the applications of e-commerce started to gaining attention among the communities in the East Asian Region. The uses of e-commerce had been early and increasingly used in the countries such as China, South Korea, and Taiwan. In terms of Southeast Asian, countries such as Malaysia, Indonesia, Vietnam, and Thailand, they are still new to the e-commerce. According to The Star, 2017 (as cited in Tan S. W., et al., 2020) stated that the online transactions activities increased from 14.6 million in 2014 to 38.2 million in 2015 which recorded about 161 percent increased. This can be seen as a good opportunity for SMEs to expand their business

through an e-commerce platform. According to the News Strait Times, 2018 (as cited in Tan S. W., et al., 2020) mentioned that the increase of GDP Growth which is 5.9 percent in 2015 to 6.1 percent in 2016 contributed by e-commerce activities. In this case, we can see that there are a lot of initiatives introduced by the government to encourage the public to utilize the technologies to expand the business border outside the country.

According to The Edge Market, 2017 (mention by Tan S. W., et al., 2020) mentioned that there is an increase in mobile shopping transactions from 2015, about 3.7 million to 9.3 million in 2016. This is because online shopping provides a lot of benefits to the users compared to traditional shopping such as saves time, cost-saving, convenient website, improved privacy and security of payment systems. Due to the Covid-19 pandemic, the new norms are applicable which are social distancing and no physical contact. Therefore, government also had encouraged the community to shop online to reduce the risk of having an infection and spread the virus. In this case, the SMEs should use these opportunities by the adoption of e-commerce usage in their business models. Therefore, we can see a lot of new rise businesses started to use the e-commerce platform such as Lazada, Shopee, and social media platform such as Facebook, Instagram, Twitter, and more to market their products. However, to provide benefits to the users, business owners need to evaluate the factors that contribute to the customers' satisfaction.

There are two research gaps in this study. Firstly, this research study evaluates the behaviour of the respondents from the different generations which are from generation X until generation Z. This means that most of generation X also use the internet in their daily life. Second, for this research, we use the concept of the Theory of Planned Behaviour (TPB) and Technology Acceptance Model (TAM). The theory is applied for evaluating the factors that influenced the shopping determinants among customers.

According to Tan S. W., et al. (2020), stated that a survey conducted by PayPal find out that about 58 percent of the respondents are concerned with the security of the information required for them to be exposed during online transactions. Besides, according to The Star, 2014 (mention by Tan S. W., et al., 2020) stated that credit card fraud is one of the payment gateway systems that can expose consumers to cybercrime attacks. In this case, the payment security needs to be develop more to make the users feel safe doing online transactions. The purpose of this research is to study the level of each of the key factors which are security, information availability, shipping, quality, pricing, and time and their influence on the customer satisfaction. This research is to find out the role play by each of the factors and its relationship to customer satisfaction when shopping online.

The benefits of this study are to identify the online shopping users' behaviours that consist from the young consumers until to the senior citizen. Besides, we want to evaluate how far the influence of the factors such as security, information availability, shipping, quality, pricing, and time on customers' satisfaction. This can help the business organization especially the SMEs to improve better for their e-commerce services. As this improvement is made, it can help the SMEs to improve their sales, profits, increased customers' loyalty, create job opportunities, create brand names, and expand the business across the country border. This can give benefit to the government for the increase of the GDP Growth.

II. THEORETICAL BACKGROUND

Various studies have used some known theories to explain the influence of online shopping determinants on customer satisfaction which are Theory of Planned Behaviour (TPB) and Technology Acceptance Model (TAM). However, both theories have used extensively to explain the consumer acceptance behaviour of online shoppers. According to Vijayasathy (2004) explains that the established Augmented TAM is to predict the consumer intentions to use online shopping (as cited in Kiran & Sah, 2017). According to Smith et.al. (2011), stated that to examine the role of culture in influencing online shopping by adopting TAM. Furthermore, although the majority of researchers have validated new TAM dimensions, they have not gone into greater depth with the constructs. In order to develop a holistic model, this research looks at customer satisfaction and protection, as well as details on availability information, shipping, pricing, time, and quality. In addition, the Theory of Planned Behaviour (TPB) is a theory that used to predict and understand behaviours.

On the other hand, there are two factors which are attitude towards the behaviour and subjective norm. According to Ajzen (1991, p. 188), an attitude refers to the “the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behaviour in question” (as cited in Tan S. W., et al., 2020). Meanwhile, the person's normative conviction that the behaviour is recognized and supported by the circle of influence influences the subjective norm. When it comes to online shopping, a person's belief that his or her family, friends, and co-workers have a positive attitude toward certain online behaviours can influence that person to shop online.

Customer satisfaction occurs when goods and services meet customers' expectations. Therefore, customer satisfaction is determined by matching expectations to experience or in other words, the customer is satisfied when the delivery meets or exceeds their expectations. Consumer satisfaction with the goods and services offered by a website is critical since happy customers are more likely to be loyal and make repeat purchases, increasing the profitability of the e-commerce business. The primary elements deciding the performance of the business concept implementation are satisfaction and loyalty. Customers who are satisfied will buy again if the service provider meets or exceeds their requirements. Identification of customer satisfaction variable is critical because they serve as a market measure and a roadmap for potential changes. In this research, there are six determinants identified as important for customer satisfaction which are shipping, pricing, quality, security, time, and information availability.

Security refers to the protection of online shopping in order to protect consumer's personal information from unauthorized disclosure. Consumers who make purchases online regard security as an essential factor in online shopping. However, security and privacy are important factors in establishing confidence in online transactions. Most online purchases are made with a debit or credit card, customers can look for information about the retailer to protect themselves. Consumer faith in providing personal information and making credit card payments is directly linked to their ability to visit online stores and make purchases there.

Eventually, consumers are likely to purchase a product from a well-known brand. Trust is one of the most important factors in determining whether or not an Internet retailer succeeds. Consumers are afraid of being tricked by vendors who would manipulate their personal information, especially their credit card data, so security is a major issue that keeps them from shopping online. Besides, security is classified into two areas which are data and transaction security, the other one is concerned with customer authenticity. The problems of privacy and protection are receiving a lot of attention. According to Vasic, Kilibarda & Kaurin (2019), there is sixty-one percent of survey respondents said they would like to use the Internet if their privacy and personal data were to be protected. As a result, all of the above highlights the importance of protection in online shopping as one of the most important considerations that customers consider when determining whether or not to buy a product online. Therefore, websites that provide protection have dependable and happy customers.

Customers expect online retailers to include all relevant and correct product details. According to Bigne-Alcañiz & colleagues (2008), stated that they found that information availability improves customer's perceptions about online Web sites. However, online shoppers do not always have the ability to touch and feel the items before making a buying decision, online retailers must include this information. Consumers value the knowledge that satisfies their needs. Several scholars agree that the quantity and credibility of knowledge are important factors in ensuring the quality of e-shopping service. The ability to access sufficient information during online shopping, such as price comparison, is referred to as a quantity of information, while the degree of customer trust in information given by online vendors is referred to as reputation. Providing relevant information may aid online retailers in assuaging customers' worries and fears about a specific product or online shopping. For instance, interactive online platforms for product and service comparison are widely regarded as the most important means of collecting information that will aid in the decision-making process when purchasing online. Also, it will increase customer satisfaction. The components of e-satisfaction are defined in product information in terms of abundance and consistency.

Shipping is a component of the supply chain that has a direct impact on the customer and influences their satisfaction. Shipping is an important part of any process, particularly when it comes to online shopping. Customer satisfaction is contingent on product delivery service. Besides, customers will get their ordered product in good condition with the right quantity, high quality, and specifications matching the order along with the specified delivery time and location. The consumer anticipates that the supplier will produce the promised commodity in a reliable and timely manner. The delivery service is the most important element in meeting the e-needs customers and satisfaction. The simple and important aim for online shoppers is to receive a reliable, clean, and timely delivery. Other than that, customers are more likely to purchase a product from the comfort of their own homes, necessitating a safe, dependable, and fast shipment of the desired product. Through the online services, timely and dependable delivery is critical to meeting customers' needs and ensuring their satisfaction. The customer may become disappointed as a result of the late delivery. New online purchases are encouraged by timely and efficient product delivery. The consistency of the delivery service has an effect on online shopping trust. Consumers can quickly move from one website to another with a single click if they are unhappy with late

deliveries. As a result, it is important that the distribution be carried out in compliance with the needs of the customers.

Customers' willingness to form deep and committed relationships with online retailers is determined by the quality of service provided. Customers' needs are met and their satisfaction is increased when online retailers provide excellent service quality. Customers are more likely to visit an online store that offers a wide range of high-quality goods. However, customers are more likely to consider the online shop useful and return if the product quality meets their expectations. When it comes to buying goods and services, product consistency is a critical consideration to remember. To summarise, product quality refers to the features of a product that contribute to its ability to meet consumer needs.

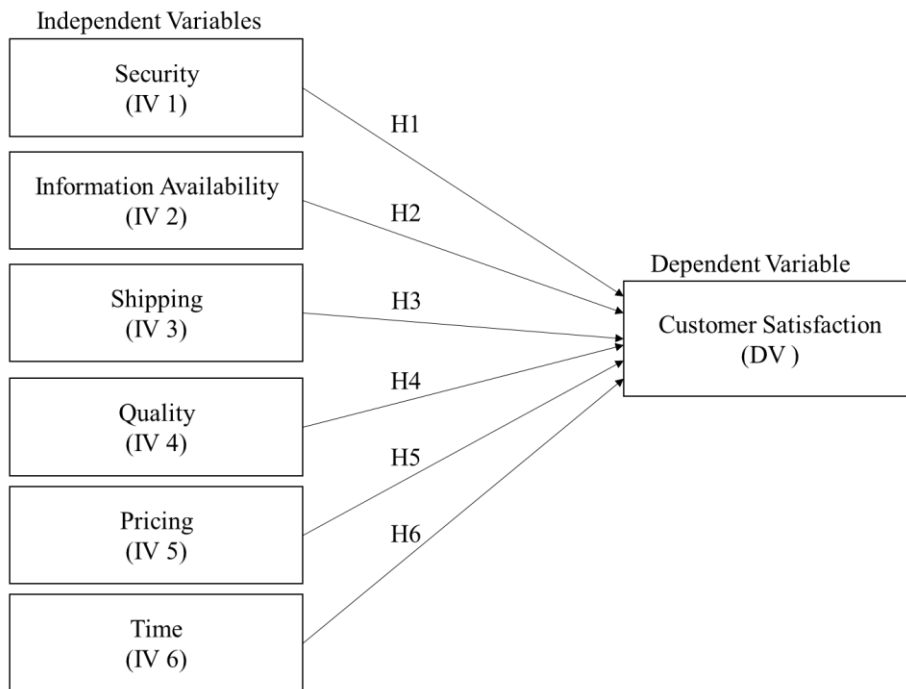
Pricing is defined as an important factor in customer satisfaction in professional literature since customers often consider pricing when evaluating the value of a product or service. Pricing has significant impact on the perceived value and usability of a transaction, as well as customer satisfaction. At some situation, consumers use the Internet to purchase the same commodity at a cheaper price than they would in a supermarket due to improved purchasing conditions. Many consumers anticipate that online retailers can sell their goods and services at a lower cost than conventional stores. Discounts and promotions while purchasing influence consumers to believe in prices, and ultimately, they affect their satisfaction.

Time is considered as one of the most important factors for online customer, since people do not have enough time to shop. When consumers shop online or in brick-and-mortar shops, they spend the majority of their time. According to Rohm and Swaminathan (2004), one possible explanation that online shopping saves time during the purchasing of goods and it can eliminate the traveling time required to go to the traditional store. Furthermore, there is a distinction between online and offline users. Consumers on the internet are concerned about purchasing benefits, time savings, and preference, while offline customers are concerned about protection, privacy, and timely delivery. The benefit of online commerce, according to consumer experience, is linked to the ease of buying and the reduction of shopping time. Since online shopping can be done anywhere and at any time, it is significant simplify the lives of its users, by customers escape traffic queues, do not have to look for a parking spot, and do not have to wait or be a member of the crowd in the store when they shop online. By online shopping, people can save time and effort.

III. RESEARCH METHODOLOGY

The purpose of the study is to analyze the research on the Malaysian market to determine the connection between customer satisfaction and other determinants of online shopping. This study significantly using quantitative and qualitative method for the collection of data. According to Barngetuny & Kimutai (2015) stated that the qualitative data were analyzed through content analysis meanwhile for quantitative data was analyzed through the use of frequency distribution which shows the mean scores and standard deviations. On the other hand, this research study will use a descriptive approach to collect coherent and reliable data. Besides,

the key measuring instrument variables and items such as security, availability information, shipping, quality, pricing, time, and customer satisfaction. Therefore, the framework model is depicted in Figure 1:



Sources: Nebojša Vasić et al. (2019)

Figure 1. Research Framework

In this paper, there are six hypotheses developed by the researcher of the journal. The hypothesis related to each of the online shopping determinants influence on customer satisfaction. As we can observe, the pathway of the hypothesis is direct. The relationship between the independent variable and dependent variable seems to be direct based on the research framework above. This means all the key factors which are the independent variables give the direct impact towards the dependent variable.

According to Oliver (2006), “defines research design as all pragmatic aspects of the way the research will be carried out” (as cited in Barngetuny & Kimutai, 2015, p. 111). According to Kothari (2008), (mention by Barngetuny & Kimutai, 2015) stated that the research design is conceptual structure within the research is conducted and it constitutes the blue print for collection, measurement and collection of data. A research design was a strategy that outlined how data would be gathered for evaluation. To collect quantitative and qualitative data about the relationship between the online shopping determinants and customer satisfaction, the study used a descriptive research design. As a result, this research study will use a descriptive approach to collect coherent and reliable data.

A survey was performed through the distribution and compilation of individual questionnaires as part of the study methodology. For attracting respondents, we established the questionnaires and distributed in the Google Form as implementation to the new norm due to Covid-19 pandemic. The respondents in the survey were all

people who bought things online on a daily basis or occasionally. To evaluate the demographic data, eight variables related to the sample were described and used. These variables ensured that the layout of the survey respondents corresponded to the layout of the basic community of customers who did online shopping. A total of 150 requests were submitted, with respondents being asked to take part in the study and complete the survey.

IV. FINDINGS

The analysis incorporated both primary and secondary data. The questionnaire was used as a primary data collection tool in the study. After that, secondary data was gathered from related literature such as journals, the books and internet. According to Bell (1993) stated that the use of questionnaires was preferred as they were to maintained confidentiality, saved time and were simple to administer (as cited in Barngetuny & Kimutai, 2015). Other than that, the questionnaire was good because it allowed the researcher to collect data from a larger group of people. It also provided a greater sense of anonymity, which encouraged open responses to sensitive questions. It was also allowing for the collection of accurate and valid data.

However, the questionnaires were structured which means it is based on closed ended and unstructured is an open ended in order to elicit the detailed responses for quantitative and qualitative study. For instance, there is a closed-ended questions that demanded a five-point Likert scale answer which is indicating the impact of each of the factor influences on customer satisfaction. In addition, there were 7 parts of the questionnaire. The first segment of the questionnaire dealt with demographic information such as the gender, ages, income earns, education background, the duration browsing the internet per day, maximum amount for spending per transactions, type of delivery expenses that willing to pay, and maximum shipping time. The other questions for the variables were included in the other sections.

V. CONCLUSION

Based on the statistical analysis, the questionnaires will be edited first, then it will be coded. Both qualitative and quantitative data will be obtained. Content analysis was used to examine qualitative results. The frequency distribution, mean ratings, and standard deviations will be used to interpret quantitative data. On the other hand, there is analyses that have been used to address the research objectives. Also, Statistical Package for Social Science (SPSS) Version 26 and SmartPLS was used. The results were described in form of frequency distribution tables, bar charts and pie charts. The information was then summarized in accordance with the study's objectives. The Chi-Square test was also used to evaluate the degree of significance between the independent variables and the dependent variable. According to Hinkelmann, Klaus & Kempthome (2008) stated that the Chi-Square test is a data analysis procedure that determines whether two or more groups or samples vary significantly at a given probability level (as cited in Barngetuny & Kimutai, 2015).

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