

Unlocking E-Wallet Adoption: Exploring the Influence of Functional Barriers from A Generation X Perspective

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Abstract

Cashless systems play a crucial role in contemporary society as they facilitate the streamlining of financial transactions within the context of an increasingly interconnected world. In contemporary society, individuals tend to prefer utilizing cashless payment methods when doing their financial activities. The use of cellphones for conducting transactions gives a high level of convenience and requires minimal effort. Despite the emergence of Malaysia as a demonetizing economy, the adoption of e-wallets continues to face challenges, as there has been a limited reaction from customers. This study employed Innovation Resistance Theory, which encompasses the dimensions of usage, value, and risk, to investigate the factors that hinder the intention to use e-wallets among Generation X in Malaysia. Convenient sampling will be employed in this investigation, with the inclusion of screening components in the

instrument to ascertain suitable respondents. A total of 128 respondents will be involved in this study, utilizing both online surveys through Google Form and hardcopy surveys among individuals belonging to Generation X in the Klang Valley region. The intended results of this study are anticipated to offer valuable insights to multiple stakeholders, including e-wallet service providers, business professionals, government entities, and Bank Negara Malaysia. These findings will enhance their comprehension of the barriers that hinder consumers from utilizing e-wallets. Consequently, this knowledge will assist in mitigating the resistance factors associated with e-wallet adoption, thereby promoting its acceptance and usage to a more favorable extent. Hence, conducting a comprehensive inquiry on the barriers of resistance towards e-wallet adoption in Malaysia will be a compelling and valuable subject.

Keywords:

E-Wallet, Generation X, Functional Barriers, Incentives

1 Introduction

The utilization of technological innovations in the hospitality industry has been made possible by recent breakthroughs. These include the implementation of self-service kiosks (Rastegar et al., 2021), the integration of virtual and augmented reality (Israel et al., 2019), the utilization of chatbots (Pillai & Sivathanu, 2020), and the adoption of blockchain technology (Thees et al., 2020).

According to Belanche et al. (2020), robots have emerged as a prominent technological advancement in the hospitality industry, including many sectors such as restaurants (Berezina, 2019). The increasing number of smartphones has led to the development of several services aimed at enhancing daily activities, one of which is m-payment. This application has digitalized individuals' routine transactions (Wong et al., 2022). The emergence of the digital economy has facilitated the development of the e-payment system as a novel mode of payment (Flavian et al., 2020).

According to Karim et al. (2020), electronic wallets, also known as e-wallets, have become increasingly popular within the electronic payment system. These digital wallets allow individuals to link their bank cards, facilitating convenient financial transactions. The convenience, time-saving, and cost-saving attributes of electronic wallets have led to their widespread adoption by both consumers and businesses for routine financial transactions (Abbasi et al., 2022). According to a survey conducted by Oppotus (2021), Samsung Pay emerged as one of the pioneering mobile payment platforms in 2017. Subsequently, other prominent brands such as Alipay and BOOST also entered the market, and these platforms continue to enjoy widespread usage in the present day. On the other hand, previous study state the factors contributing to consumer resistance and the sluggish uptake of digital mobile payments can be attributed to various reasons, including concerns regarding security risks, insufficient confidence, limited availability of comprehensive features, inadequate awareness, and a lack of consumer familiarity with contactless transactions. Additionally, challenges related to infrastructure and consistency further contribute to this phenomenon (Jegerson & Hussain, 2022).

Previous research has demonstrated that the adoption of mobile commerce by individuals belonging to generation X is significantly influenced by many barriers, namely

use barrier (UB), value barrier (VB), risk barrier (RB), tradition barrier (TB), and image barrier (IB) (Krishna, 2017). Ram and Sheth (1989) classified these challenges as psychological and functional impediments. Consumer opposition to the adoption of mobile payment services in emerging nations can be attributed to several factors, including usage, value, risk, image, and tradition (Ghosh, 2022).

Functional barriers encompass the concepts of uncertainty avoidance (UB), value belief (VB), and risk belief (RB), while psychological barriers encompass the concepts of trust belief (TB) and information belief (IB) (Ram & Sheth, 1989). The psychological resistance of consumers may be triggered when their pre-existing assumptions are questioned (Ram & Sheth, 1989). Functional obstacles arise when customers undergo substantial changes due to the adoption of a novel technology (Ram & Sheth, 1989). E-wallet companies have used promotional strategies, typically in the form of cashback incentives, with the aim of enticing prospective clients and augmenting the count of engaged users (Putra, 2020).

Furthermore, as indicated by the Fintech Malaysia (2021) study, GrabPay provides appealing incentives to its users, including promotional offers, rebates, and bonuses. This is of significant value as it has the potential to foster competition and thereby reduce consumer expenses. Given the availability of cash back rebates and incentives at various retailers, it is common for individuals to utilize digital wallets primarily for transactions related to food and beverage services, bill payments, grocery purchases, convenience store transactions, and mobile reloads. As a result, an increasing number of the hotel industry's businesses are using or considering implementing this technology in order to better serve their consumers (Ozturk, 2016). Thus, this could enhance the usage of e-wallet among users in Malaysia.

1.1 Problem statement

The projected surge in smartphone demand and its increasing ubiquity are anticipated to result in a substantial upswing in the global user base, with projections indicating a total of six billion users by the year 2020 (Statistica, 2022). Notably, the Malaysian smartphone user population has witnessed a marked 38% surge since 2015, according to Statistica (2022). In tandem with this technological expansion, the year 2020 witnessed a strong alignment between prevailing fashion trends and the extent of information exchange and transmission. A staggering 98.7% of individuals who possessed domestic smartphones were subscribed to broadband Internet services for internet access (Malaysian Communications and Multimedia Commission, 2020).

Kaur et al. (2020) delved into transactional data pertinent to e-wallet usage, emphasizing the pivotal role played by early adopters, predominantly the millennial demographic, in driving the growth and evolution of this technology. The notable reason behind this impetus was the limited adoption of e-wallets by other demographic segments at that juncture.

Surprisingly, despite witnessing an escalation in financial affluence and purchasing power, Generation X found itself in the third position regarding e-wallet usage. Cheng et al. (2018) asserted that researchers should redirect their focus toward examining e-wallet adoption issues, particularly within the Generation X and Baby Boomer demographics. Arora and Yadav (2018) highlighted the complexity inherent in digitizing financial activities for savers hailing from Generation Y and Generation X. Millennials may perceive this transition as effortless, akin to engaging in a video game, while older individuals, especially those less tech-savvy, might grapple with challenges. The adoption of electronic payment methods, such as e-wallets, may prove especially challenging for Generations X and Y, given their predilection for traditional cash transactions when procuring goods and services.

Hanson (2010) expounded upon the tendencies of older generations, characterizing them by a greater inclination toward conservatism, skepticism, caution, risk aversion, conformity, and wariness toward technology. This disposition of older individuals, particularly those aged 60 and above, towards technology warrants a deeper understanding to surmount the impediments hindering its adoption. As indicated by Hsu and Lin (2016) and Matemba et al. (2018), the level of reliance on cash significantly influences the embrace of innovation, and such an affinity for cash transactions may present distinct challenges for Generation X.

2 Literature Review

2.1 Technology in Hospitality Industry

The utilization of technology has become an imperative in the hotel and tourist sector, as there is a growing consumer need and dependence on it, leading to an enhanced customer experience (Mitel, 2019). The adoption of technology in guest-facing sectors of the hotel and tourist industry has been a proactive response to customer demand and a means of enhancing the overall consumer experience, hence transforming the industry's consumer landscape (Law et al., 2009; Shin et al., 2021). The significance of technology in the hotel and tourism industry lies in its service-oriented nature and emphasis on experiential offerings. Consequently, it is crucial to give prompt and distinct consideration to the utilization of technology in this sector, particularly with regards to how customers engage with technology-based services (Kim et al., 2016). Within the realm of the hospitality and tourist sector, the customer experience typically emerges as a consequence of both direct and indirect engagements between patrons and service providers.

However, the implementation of guest-facing technologies has transformed a crucial aspect of the sector, namely, human relationships, into interactions that involve both individuals and technology. According to Shin et al. (2021), hotel patrons have a favorable disposition towards engaging with technological advancements such as AI chatbots or service delivery robots. The integration of various technologies in the provision of hospitality and tourism products and services has resulted in technology

assuming a significant role in shaping the consumer experience. The mobile payment sector, often known as m-payment, has gained prominence in tandem with the growth of e-commerce (Morosan & Bowen, 2018; Morosan & DeFranco, 2019). Over the past decade, there has been a noticeable shift in client preferences for retail payments, specifically within the hotel industry, towards the adoption of mobile-based payment gateways (Sun et al., 2020). In order to improve their services, service providers in this region must utilize technological improvements (Morosan & DeFranco, 2018). Furthermore, the hospitality industry has witnessed a surge in the adoption of mobile payment services (MPS) (Liu & Mattila, 2019).

2.2 E-wallet

Shin et al. (2009) and Nizam et al. (2018) claim that the e-wallet represents a pioneering and creative payment modality that has the potential to supplant conventional payment mechanisms. According to Nizam et al. (2018), there is a belief that e-wallet payment systems has significant potential to revolutionize Malaysia's payment infrastructure, leading to the establishment of a cashless society prior to the projected year of 2050. The utilization of e-wallets for payment has gained significant popularity as a transaction mechanism due to the several benefits it offers, including ease, flexibility, and enhanced security (Uddin & Akhi, 2014).

The increasing prevalence of e-payment systems has led to a surge in the popularity of e-wallets, which provide a diverse array of services in sectors such as transportation, food delivery, and bill payments (Rosnidah et al., 2019). Furthermore, it is noteworthy that the Central Bank of Malaysia has issued over thirty licenses for e-wallets, a development that suggests the possibility of Malaysia transitioning into a cashless society by the year 2050. According to Oppotus, a market research firm (2021), the electronic wallet has gained significant popularity in the F&B business primarily owing to the wide range of discounts and perks it offers. Regardless of the specific time period under examination, the utilization rate within the food and beverage business remains continuously elevated, approximately reaching a level of 60 percent.

The COVID-19 pandemic has led to an increased adoption of electronic wallets as a means of payment for various goods and services, including grocery, food delivery, convenience stores, and mobile reloads. However, the adoption of electronic wallets for bill payments has experienced a decline in prevalence compared to the pre-COVID-19 era. The outbreak of COVID-19 in Malaysia resulted in a significant increase in the number of users of the Touch 'n Go e-wallet. The company's e-Tunai campaigns played a crucial role in promoting the widespread adoption of the e-wallet, ultimately leading to its attainment of the top position in terms of popularity. During the COVID-19 pandemic, Malaysia witnessed advancements in the adoption of contactless payment methods, which corresponded with the increasing popularity of banks' QRPay platforms.

2.3 Intention To Use

Several significant findings have been made by researchers regarding the response of hospitality customers towards mobile payment (m-payment). These findings include the determination of customers' intention to use, reuse, or adopt m-payment (Kang & Namkung, 2019; Mallat & Tuunainen, 2008), the influence of attitude on customer behavior (Gu, 2018), the impact of customer satisfaction on m-payment usage (He et al., 2019; Palumbo & Dominici, 2015), and the assessment of customer satisfaction with actual m-payment usage (Park & Tussyadiah, 2016; Wang & Wang, 2010).

According to Lim (2008), service providers, financial institutions, and trusted third parties can leverage their knowledge of usage intention and the factors that drive it in order to gain a competitive edge. Conditions that make a person want to adopt can be either external or internal. Intrinsic motivations encompass various factors such as hedonic personal delight, perceived compatibility with one's lifestyle, emotional connection, and the need for social contacts (Law et al., 2018). In contrast, extrinsic motives pertain to the utilitarian assessment of m-payment quality, encompassing factors such as utility, convenience, ease of use/complexity, perceived personalisation, perceived obstacles, security, and behavioral control (Kim et al., 2016).

2.4 Incentives

Numerous credit card issuers offer incentive programs with the aim of attracting new cardholders and increasing card utilization (Ching & Hayashi, 2010). Credit card reward programs encompass many benefits such as cash back, airline miles, hotel points, and gifts (Ching & Hayashi, 2008; Liu & Brock, 2009). Arango (2015) conducted a study that aimed to address the issue of diverse incentive schemes and reward systems. In order to achieve this, the researcher converted non-monetary rewards such as miles, points, and gifts into their equivalent cash back percentages.

The researchers found that the provision of cash back incentives resulted in a significant rise in both the utilization and spending patterns of credit card holders. This conclusion was drawn from an analysis of a representative sample of 12,000 credit card accounts obtained from a major financial institution in the United States. Mobile payment companies also employ cash back incentives as a means to promote the adoption of NFC mobile payment transactions. Discover company has partnered with Apple Pay and Android Pay for incentives. Consumers might obtain a 10% cash back incentive until 2015 on all in-store Apple Pay transactions with their Discover credit card (Luthi, 2015).

2.5 Generation X

According to Erik Erikson's (1976) theoretical framework on human development, the stage of young adulthood encompasses those who fall within the age range of 19 to 39. Conversely, the stage of teenagers, also referred to as the teenage years, encompasses individuals between the ages of 13 and 18. The demographic group consisting of young people is comprised of two distinct generations, namely the Millennials (individuals born between 1981 and 1997) and Generation Z (individuals

born from 1997 onwards). These cohorts were born during a time characterized by significant advancements in technology (Turner, 2015). Cobanoglu et al. (2015) assert that the current generation has experienced a significant degree of technical advancements, and the process of globalization has influenced their perspectives and behaviors in distinct ways compared to preceding generations.

The term "iGeneration" is used to refer to Generation Z, a cohort that came of age in a society characterized by pervasive technology and internet usage (Mohammed, 2018). Due to their extensive exposure to smart technology, the younger generations exhibit a notable inclination to engage in the exploration of novel applications and to familiarize themselves with the user-friendliness, privacy, and security aspects associated with such technologies (Wood, 2013).

According to Alsop (2008), while millennials are often seen as the demographic group most inclined to adopt new technologies, there has been an increasing trend of Generation X individuals embracing and utilizing these technologies in recent years. According to the research findings, a significant proportion of electronic payments in the Philippines are conducted by individuals belonging to the Generation X demographic. Felix and Wella (2019) state that Generation X exhibits a lack of concern towards transaction speed and convenience when engaging in buying activities at businesses that offer OVO and GO-PAY as payment options within the Indonesian context.

Generation X primarily prioritizes the efficient completion of transactions, with a particular focus on obtaining rebates or discounts. Furthermore, while it is acknowledged that a minority of individuals from Generation X may not prioritize performance expectancy, it is noteworthy that the majority of participants from this generation in the present study hold a similar perception regarding performance expectancy.

2.6 Innovation Resistance Theory (IRT)

The research applied the Innovation Resistance Theory (IRT), developed by Ram and Sheth (1989), as the conceptual framework for this study. The concept of "innovation resistance" pertains to the hesitancy exhibited by consumers towards embracing novel products or services. This reluctance is sometimes attributed to perceived deficiencies in the existing state of affairs or inconsistencies with their individual perspectives and principles. Due to the prevalence of a substantial rate of new product failure within many firms, it is imperative to do an investigation into the various elements that contribute to the resistance towards innovation. Ram and Sheth (1989) have so created this theoretical framework to elucidate the reasons behind customers' reluctance towards adopting novel technologies.

Ram and Sheth (1989) categorised these conflicts as psychological and functional. Psychological barriers are traditional barrier and image barrier, whereas functional barriers include usage barrier, value barrier and risk barrier (Ram & Sheth, 1989). Consumers' prior beliefs cause psychological barriers (Ram & Sheth, 1989).

2.6.1 Functional Barriers

Researchers have investigated functional barriers by categorising them into one of three categories: (a) usage, (b) value, and (c) risk.

2.6.1.1 Usage Barrier

Similar to the concept of 'perceived ease-of-use' from TAM, a usage barrier is observed when an innovation conflicts with consumers' existing work flows and habits (Kaur et al., 2020; Kaur et al., 2020; Ram & Sheth, 1989). This aspect is also directly connected to the concept of "complexity," which refers to the consumer's perception of how difficult it is to comprehend and make use of the invention (Rogers, 1962). In addition, usage barrier is the most important variable, and it has a negative correlation with adoption among customers of Generation X in Malaysia who use PayPal's mobile payment service (Low, 2016). Furthermore, usage barrier has a big and unfavourable impact on people's attitudes of utilising e-wallets (Trivedi, 2016).

2.6.1.2 Value Barrier

A value barrier emerges in the meanwhile when customers have the perception that innovation is unable to supply superior functionality than alternative solutions while using the same number of economic resources (Kaur et al., 2020, Kaur et al., 2020; Ram & Sheth, 1989). Yu & Chantatub (2016) also found that value barrier makes people in Thailand and Taiwan less reluctant to use mobile banking. Findings showed that banks need to come up with ways to make mobile banking more valuable to customers than other banking options to get people to use it more (Yu & Chantatub, 2016). Also, Lian & Yen (2014) came to the conclusion that value barrier makes older adults in Taiwan less likely to want to shop online.

2.6.1.3 Risk Barrier

The introduction of innovations to consumers entails both benefits and risks, as new products or services often involve several uncertainties (Ram & Sheth, 1989). According to Ram and Sheth (1989), the risk barrier can be categorized into four distinct forms of risk. One primary concern pertains to physical risk, whereby the introduction of a novel concept possesses the potential to cause harm to individuals or inflict damage upon objects (Ram & Sheth, 1989). Furthermore, there exists a correlation between economic risks and the cost associated with the acquisition of a novel product or service, whereby the price escalates in tandem with the increase in price (Ram & Sheth, 1989). The subsequent category of risk pertains to functional risk, denoting the apprehension surrounding the operational efficacy of innovations due to their novelty (Ram & Sheth, 1989). Finally, social risks pertain to the apprehension that individuals may face scrutiny and evaluation from others due to their adoption of a novel product or service (Ram & Sheth, 1989).

2.7 Hypothesis Development

2.7.1 *Relationship between Usage Barrier and Intention to Use of E-wallet among generation X in Malaysia*

Usage barrier is a significant factor that hinders the adoption of m-commerce among generation X in Malaysia (Moorthy et al., 2017; Chan et al., 2015). In addition, usage barrier is a prominent characteristic adversely connected with generation X consumers' usage of PayPal mobile payment in Malaysia (Low, 2016). In contrast, generation X customers in Malaysia are hesitant to accept usage barrier's mobile PayPal payment option. Usage barrier is one of the most significant factors influencing customer aversion to mobile banking (Yu & Chantatub, 2016). Consumers must have access to mobile banking websites that are intuitive and simple to use in order to overcome usage barrier (Yu & Chantatub, 2016). This demonstrates that customer opposition to mobile banking may be overcome by removing the usage barrier need for its adoption (Yu & Chantatub, 2016).

H1a: There is relationship between usage barrier and intention to use of E-wallet among generation X in Malaysia

2.7.2 *Relationship between Value Barrier and Intention to Use of E-wallet among generation X in Malaysia*

When customers do not view E-wallet to be better to traditional payment systems, the value barrier arises. As determined by market research institutes (Deloitte, 2016) and the interviewed experts, the question of the added value that m-payment provides over existing payment methods is one of the most pressing issues. In adoption study, the similar factors of perceived usefulness and relative benefit provide evidence of the significance of the value component (Daştan & Gürler 2016). This is particularly true for NFC payments in shops, where customers merely need to wave their smartphones, which has been shown to be 10-15 seconds quicker than traditional payment methods. Prior research on innovation resistance reveals that the value barrier is one of the most important barriers in intention to use (Antioco & Kleijnen, 2010), particularly with regard to online and mobile banking (Laukkanen et al., 2007; Laukkanen et al., 2008).

H1b: There is relationship between value barrier and intention to use of E-wallet among generation X in Malaysia

2.7.3 *Relationship between Risk Barrier and Intention to Use of E-wallet among generation X in Malaysia*

The research that was carried out by Liébana-Cabanillas (2014) investigates the factors that led to the widespread use of new mobile payment methods. The findings indicated that a negative relationship existed between the perceived risk and the adoption intention. Another quantitative research on the topic was carried out in Malaysia by Munusamy et al. (2012). The result was acquired by the use of a

questionnaire-based survey of those chosen banks in Malaysia, in addition to the application of multiple regression analysis. It was found that the perceived risk of using online banking has a negative impact on adoption of online banking in Malaysia as a consequence of the findings.

H1c: There is relationship between risk barrier and intention to use of E-wallet among generation X in Malaysia

2.7.4 Relationship of Incentive as Moderator between Functional Barrier and Intention to Use of E-wallet among generation X in Malaysia

According to Malik et al. (2019), an incentive can be defined as a form of compensation provided to clients as an encouragement to utilize a company's electronic wallet services. In light of the research conducted by Madan and Yadav (2016), it has been shown that incentives represent a novel aspect that warrants exploration in the context of mobile wallet and electronic wallet adoption. Consequently, incentives possess the capacity to exert a substantial influence on consumer behavior, specifically in terms of encouraging the utilization of e-wallets.

H2: There is relationship of Incentives as moderator between Functional Barrier and Intention to Use of E-wallet among generation X in Malaysia

2.8 Proposed Theoretical Framework

The present research framework aims to delve into the intricate dynamics that underlie the adoption of e-wallets, particularly among Generation X, and the role that functional barriers and incentives play in shaping their intention to use these digital financial tools. Generation X, often referred to as the "sandwich generation," represents a cohort born between 1965 and 1980, and is positioned at the crossroads of analog and digital financial landscapes. Consequently, understanding the factors affecting their e-wallet adoption is of paramount significance, as their behaviors and preferences carry substantial weight in the digital financial ecosystem.

This research focuses on three key functional barriers, namely the Usage Barrier, Value Barrier, and Risk Barrier, which are identified as potential impediments to the widespread adoption of e-wallets. Usage Barrier encompasses issues related to ease of use, familiarity, and perceived complexity. The Value Barrier explores the perceived value that Generation X ascribes to e-wallets, including their effectiveness in enhancing financial control and convenience. The Risk Barrier considers security concerns, data privacy, and potential risks associated with e-wallet usage. In addition to these barriers, the moderating role of incentives will be examined, as they are instrumental in encouraging adoption and mitigating the impact of barriers.

By investigating these factors in tandem, this research framework aims to provide a comprehensive understanding of the complex interplay between functional barriers and incentives in shaping Generation X's intention to use e-wallets.

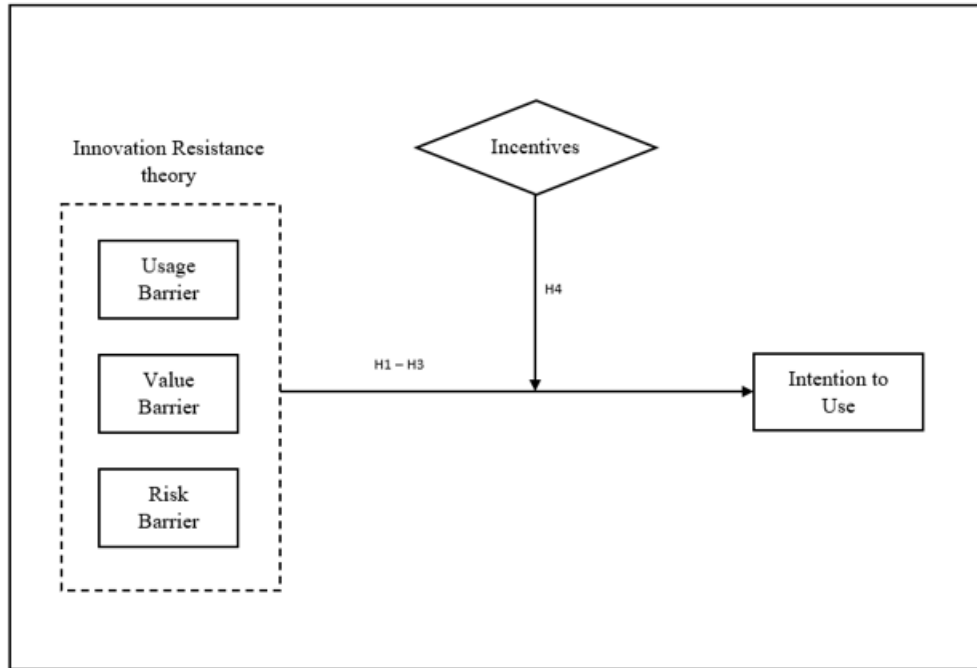


Figure 1: Innovation Resistance Theory adapted from Ram and Sheth (1989)
 Source: Ram and Sheth (1989), Malik et al. (2019)

3 Methodology

3.1 Research design

The objective of this study is to examine the functional barriers that influence the intention to use e-wallets among Generation X individuals in Malaysia. The data that has been gathered is categorized into primary data and secondary data.

This research will use quantitative methodologies to assess theoretical frameworks and draw generalizable conclusions (Wright et al., 2016). Quantitative approaches are employed for the purpose of quantitatively and mathematically analyzing relationships between variables. Charts, tables, and graphs are frequently employed by researchers due to their ability to effectively present data.

3.2 Sampling and Population

This research focuses on a specific demographic in Malaysia, individuals belonging to Generation X, distinguishing them between e-wallet users and non-e-wallet users. The widespread adoption of e-commerce in Malaysia can be attributed to the ubiquity of mobile devices and internet accessibility. Data from the Malaysian Communications and Multimedia Commission (MCMC) in 2020 reveals that internet user penetration was 54.3% among males and 45.7% among females, showcasing the extensive reach of the digital landscape.

Commission Factory's (2020) findings indicate that out of the total Malaysian population of 32.98 million, a staggering 29.55 million were active internet users. Notably, a substantial 55.9% of eCommerce transactions in Malaysia were conducted using smartphones, underscoring the increasing prevalence of these devices among the population. This trend strongly implies that a growing number of individuals will opt for cashless payment methods.

To delve into the factors influencing e-wallet adoption within Generation X, this study employs a convenient sampling method and incorporates screening components in the survey instrument to ensure the selection of suitable respondents. A total of 128 participants will be engaged in the study, utilizing a combination of online surveys via Google Forms and hardcopy surveys. The research will be conducted among Generation X individuals in the Klang Valley region, shedding light on their attitudes and barriers regarding e-wallet adoption within the Malaysian context.

3.3 Research Instruments

The survey instrument will commence with an initial screening question designed to ensure the selection of suitable respondents willing to participate in the research, thereby guaranteeing the acquisition of pertinent data. Subsequent sections of the survey will concentrate on investigating the independent variables, specifically delving into the topics associated with Usage Barrier, Value Barrier, and Risk Barrier. Additionally, the study will scrutinize the moderating variables, with a specific focus on Incentives. The final section of the survey will pertain to the collection of demographic information, encompassing inquiries regarding basic personal details to facilitate categorization. This information will include gender, age, race, occupation, and nationality of the participants. To gain more profound insights into e-wallet usage patterns among Generation X, the age variable will be stratified into three distinct groups: individuals aged 43-48 years, 49-53 years, and 54-58 years.

3.4 Plan for Data Collection Method

In this study, primary data will be gathered using self-administered questionnaires as the primary data collection method. The distribution of these questionnaires to the study's participants will be carried out directly by the research team, obviating the necessity for an interviewer during this phase of the research. As advocated by Alasuutari et al. (2008), all participants will receive identical sets of questions and will have the opportunity to seek clarification or address any queries or concerns with the research team. Employing surveys for data collection from a substantial sample size, as suggested by Bell et al. (2015), has the potential to expedite the data collection and questionnaire administration process.

3.5 Plan for Data Analysis

In this research, data analysis will be conducted utilizing two distinct software applications: the Statistical Package for Social Science (SPSS) and the PROCESS MACRO, a tool developed by Hayes. To evaluate the influence of functional barriers on the adoption of e-wallets among individuals from Generation X, the study will employ multiple linear regression analysis, leveraging the capabilities of the Statistical Package for the Social Sciences (SPSS). The inclusion of Hayes's PROCESS MACRO is aimed at investigating the moderating influence of incentives on the relationship between functional impediments and the adoption intentions of Generation X individuals regarding e-wallets. The Multiple Linear Regression technique will be instrumental in examining the interplay between multiple independent variables and the dependent variable of interest.

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