INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

11, Issue 11, (2021) E-ISSN: 2222-6990

Factors Influencing the Intention to Use E-Wallet: An Extended Hedonic-Motivation System Adoption Model

Wong Quin Seng and Ong Choon Hee

Azman Hashim International Business School, Universiti Teknologi Malaysia, Johor Bahru, Johor, Malaysia

Email: qs.freedom@gmail.com, ongchoonhee@gmail.com

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v11-i11/11379 DOI:10.6007/IJARBSS/v11-i11/11379

Published Date: 20 November 2021

Abstract

Around the world, e-wallets have transformed the way people pay for goods and services. Moreover, the Malaysian e-wallet development scene has seen a convergence of a utilitarian payment service and hedonic elements, transforming the perception of consumers towards a typically mundane commerce transaction process. The e-wallet application is a model of contemporary information system that integrates design lessons from the gaming domain into a non-gaming domain in order to capture users' attention and evoke an affective response, that aims to drive e-wallet adoption. Despite e-wallet services receiving much publicity in Malaysia, bank transfer and card payments continue to dominate as e-wallet payment platform struggle attract consumers' adoption. This is an explanatory research underpinned by an extended Hedonic-Motivation System Adoption Model (HMSAM). Accordingly, this research addresses the limitation of the TAM model typically used in the Malaysian context by proposing an alternative approach that takes into account the utilitarian motivation of perceived ease of use and perceived usefulness; the intrinsic motivation of curiosity, joy, control and gadget love in explaining the intention to use e-wallet. This conceptualization has potential to make significant theoretical and practical contributions to the study of extrinsic and intrinsic motivation predictors and e-wallet use intention in Malaysia.

Keyword: Intention to Use E-Wallet, Hedonic-Motivation System Adoption Model, Gadget Love, Intrinsic Motivation

Introduction

E-wallet, also known as digital wallet or mobile wallet refers to a mobile payment platform that uses digital currency to facilitate payment between consumers and businesses, and even fund transfer between users without the exchange of physical monetary instrument such as cash, coins, cheques etc. (Lee and Khaw, 2018; Rao, 2020). The emergence of e-wallet services

is a notable alternative payment method advocated by the advancement of information technology and the widespread adoption of smart communication devices such as smartphones and tablets (Rao, 2020). The benefits of e-wallet adoption have the potential to spread across many stakeholders in the commerce ecosystem. The speed and convenience of e-wallet services is obvious to consumers; a quick scan of a quick-response (QR) code or a simple touch on the mobile device completes a payment instantaneously with zero service cost to the consumer (Lee and Khaw, 2018). Furthermore, e-wallet users also get to enjoy the value-added services such as transaction history monitoring and cashback incentives. To some extent, e-wallets are thought to provide a somewhat greater level of security against pickpockets and snatch theft because smartphone technology is often embedded with a user ID verification feature to prevent unauthorized access to e-wallet accounts (Rao, 2020). Furthermore, developing a cashless society has the potential to boost the country's annual gross domestic product (GDP) by accelerating the flow of payment value in the goods and services market, which encourages consumer consumption (Massi, Sullivan, Strauß, and Khan, 2019).

Globally, e-wallets are transforming the payment landscape by fast displacing cash as the preferred mode of transaction especially in the e-commence market. In 2019, consumers worldwide spent nearly $3.5 trillion online with e-wallet dominating e-commerce payment preferences, accounting for 42% of those spending, up from 36% since 2018 (Worldpay, 2020). E-wallets are also transforming the point-of-sale (POS) payment experience, providing speed, convenience and secure transaction to consumers and businesses around the world. Evidently, e-wallet spending in global POS spending grew from 16% in 2018 to 22% in 2019 (Worldpay, 2020). Despite the global growth, Malaysia's acceptance of e-wallet is still in its infancy stage, with relatively low e-wallet transactions compared to other countries such as China, India, the United Kingdom, and even neighboring ASEAN nations Thailand, Singapore and Indonesia (Worldpay, 2020). Referring to Malaysia’s statistics in the Worldpay’s (2020) Global Payments Report, e-wallet payment only represented 9% of all e-commerce transactions value, overshadowed by bank transfers that accounted for 46% of transactions. At the same time, cash payments have a gigantic dominance of 64% of POS transactions while e-wallet payment merely accounted for 4% of transactions.

With no fewer than 54 e-wallet service providers operating in Malaysia as of 2020, the e-wallet industry has seen a growing interest and investment, revealing an overcrowded mobile payment ecosystem that is driving intense competition to attract and retain customers (Bank Negara Malaysia, 2020). In addition, the Malaysian government has made considerable efforts to encourage the use of e-wallet to fulfill the country's goal of creating a cashless society, and is also leveraging e-wallet technology to revitalize the economy that has been disrupted by the COVID-19 pandemic (The World Bank, 2020). Developing a cashless society has the potential to provide a nation economic prosperity by improving revenue from boosting consumer spending and effective tax collection (Ali et al., 2019; Fong, 2020). Given the potential economic gains and other tangible benefits to a wide range of stakeholders, including the nation, retailers, banks, and consumers, there is compelling justification for information systems (IS) scholars to focus their efforts on understanding the determinants influencing e-wallet intention in Malaysia.

The Malaysian e-wallet development scene has seen a convergence of a utilitarian payment service and gamification elements, transforming the attitude and perception of consumers towards a typically mundane commerce transaction process (Tan, 2019; Yapp, 2018). The e-wallet application represents a model of contemporary IS that incorporates design lesson

from the gaming domain into a non-gaming domain with the goal of attracting more interest from users and creating an emotional connection with the user, thus driving the use of e-wallets (Seranmadevi and Felisiya, 2019). As such, e-wallet IS acceptance research grounded on a broader spectrum of intrinsic motivation theory deserve due attention as intrinsic motivation has been argued to be a stronger predictor of human behavior compared to extrinsic motivation (Lowry, Gaskin, Twyman, Hammer, and Roberts, 2013). This study introduces a conceptual framework to examine the effects of an extended hedonic-motivation system adoption model (HMSAM) on the participant's intention to use e-wallet. Building on an extensive literature review, no prior study has yet investigated the effects of HMSAM constructs on intention to use e-wallet. This research leads to the continued advancement of the original HMSAM from a theoretical point of view by including gadget love as an antecedent to intention to use. This synergy of well-established constructs is aligned with findings of Reith et al. (2020) that validated that gadget love has a significant positive impact on behavioral intention to use mobile payment services.

Literature Review

Intention to use e-wallet

Intention to use is based on Fishbein & Ajzen's (1975, p. 288) definition of behavioral intention, which describes it as "a person's subjective probability that he will perform the behavior in question". It represents the prerequisite belief that acts as a motivator for a person to voluntarily engaged in the related behavior (Fishbein and Ajzen, 1975). The importance of studying intention to use stems from Fishbein and Ajzen's (1975) Theory of Reasoned Action argument that behavior intention is the closest variable leading to actual behavior and that individuals typically do what they intend to do. The formation of behavioral intention creates a sense of commitment to the behavior as a part of the response to the intention (Ajzen, Czasch, and Flood, 2009). Hence, a strong intention to use can be an indication of an increase likelihood of the intended behavior being performed. Previous studies of intention to use e-wallet in the Malaysia context were predominantly focused on extrinsic motivation such as the perceived utilitarian benefits and features of the application (Abdullah, Redzuan, and Daud, 2020; Karim, Haque, Ulfy, and Anis, 2020; Leong, Tan, Puah, and Chong, 2020). There is scarcity of research that address the influence of intrinsic motivations on intention to use e-wallet. Intrinsic motivation refers to circumstances in which an individual performs an activity for the satisfaction it provides, and it is seen to be a stronger predictor of human behavior than extrinsic motivation (Lowry et al., 2013). In addition to the extrinsic motivation of perceived ease of use and perceived usefulness, this study examines the intrinsic motivations of gadget love, curiosity, joy, control, and immersion to be important factors of consumer's intention to use an e-wallet.

Perceived Ease of Use

Perceived ease of use is defined as "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320). It is human nature for people to want technology to be simple to use (Davis, 1989). Even though a technology is designed to be useful, if it is difficult to use, it will likely result in user fatigue and eventually drive the user to quit interacting with it (Lowry et al., 2013). If the user does not interact with the technology, it is hard to expect them to form any other subjective opinion about its extrinsic benefits, intrinsic value or develop an intention to use. Hence, this study examines perceived ease of use as an antecedent to perceived usefulness, curiosity, joy, control and gadget love.

Davis's (1989) made and validated the assertion that perceived ease of use is an antecedent to perceived usefulness, rather than a parallel and direct determinant of behavioral intention. With all else being equal, a system that is easier to operate will consume less effort, allowing the user to focus his/her energy and effort to other activities contributing to external outcome expectancy. This assertion by Davis is consistent and empirically validated by recent studies in the domain of e-wallet use intention (Karim et al., 2020; Latupeirissa, Gorda, and Subanda, 2020). Therefore, the following hypothesis is proposed:

H1a: Perceived ease of use positively influences perceived usefulness.

Lowry et al. (2013) posited and empirically tested that an increase in perceived ease of use would increase curiosity while developing the HMSAM. An easy-to-use system would lay a strong foundation for the user experience by minimizing / removing operational barrier to using the system, allowing the user to explore and be excited about the potential possibilities of the user interaction. Otherwise, if a system is low in perceived ease of use, the user is more likely to become apathetic and stop devoting time to use the system, thereby undermining curiosity and resulting in boredom (Lowry et al., 2013). The positive correlation between perceived ease of use and curiosity was also empirically supported by Oluwajana *et al.* (2019) and Huda *et al* (2020). Thus, the following is hypothesized:

H1b: Perceived ease of use positively influences curiosity.

Using Heijden's (2004) research model as the foundation for developing the HMSAM, Lowry et al. (2013) maintained and validated the positive influence of perceived ease of use on joy. When people find an information system easy to use, they are more likely to have an enjoyable experience (Chang and Chen, 2021). In contract, if the user of an information system cannot easily use the system, the user cannot enjoy his or her interactions, eventually leading to a loss of intrinsic motivation to use the system. Although the relationship of perceived ease of use and joy was not part of Heijden's (2004) theoretical research hypotheses, a positive correlation between the two constructs was established from the results of the research model assessment. This is further supported by recent research by Chang and Chen (2021). Thus, the following hypothesis is proposed:

H1c: Perceived ease of use positively influences joy.

Agarwal and Karahanna (2000); Venkatesh (2000) posit a close relationship between control and perceived ease of use, with a sense of control over a software interaction contributing to a lower perceived difficulty in performing a task. During the development of the HMSAM, Lowry et al (2013) reverses the direction of the relationship by hypothesizing that perceived ease of use is an inherent determinant of perceived control. Lowry et al (2013) and Silic and Lowry (2020) provided empirical evidence to support the concept that when a particular system is easy to use, an user is more likely to feel a sense of being in charge of the system interaction and use experience. Therefore, the following is hypothesized:

H1d: Perceived ease of use positively influences control.

This research aims to investigate the novel relationship between perceived ease of use and gadget love. While McCluhan (1964) coined the term gadget lover decades ago, it was Bruner and Kumar (2007) who presented the first explicit research that conceptually defined a gadget lover as "a consumer with high intrinsic motivation to adopt and use a variety of leading-edge, technology-based goods, as well as the services that complement them" (Bruner and Kumar, 2007, p. 330); and furthermore generated the measurement scale to quantify the construct. While there are a few pockets of literature available on gadget lovers, there is no prior research examining the relationship between perceived ease of use and gadget love. Drawing upon Sternberg's (1986) triangular theory of love, the concept of interpersonal love has been used to explain human relationships with non-human entities, such as a person's love feelings toward a brand (Khan, Pelet, and Zamani, 2021), technology (Hernandez-Ortega and Ferreira, 2021) and musical instrument (Sternberg, 2020). This study postulated that e-wallet users with a high level of perceived ease of use will more likely form a greater level of gadget love towards the use of e-wallet. As such, the following hypothesis is proposed:

H1e: Perceived ease of use positive influences gadget love.

Perceived Usefulness

Perceived usefulness is described as a form of extrinsic motivation (Davis, Bagozzi, and Warshaw, 1992). People that are extrinsically motivated will undertake a task in the hopes of gaining extrinsic benefits in terms of tangible benefits such as increased productivity, money, or a prize; or intangible benefits such as praise, fame, or recognition (Davis et al., 1992; Lowry et al., 2013). As part of the development of Technology Acceptance Model (TAM) to explain IS acceptance within an organization context, Davis (1985) introduce the construct of perceived usefulness to describe a person's expectation that using an IS will deliver the utilitarian benefit of enhanced job performance. Consequently, perceived usefulness is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989, p. 320). Accordingly, e-wallet payment solution will only be used if potential users believe it delivers benefits and advantages over established payment solutions such as cash, credit/debit card and online banking. In Malaysia, the findings from Lew et al. (2020), Karim et al. (2020) and Leong et al. (2020) shows that perceived usefulness is positively related to intention to use e-wallet. In line with the literature, this study proposes the following hypothesis:

H2: Perceived usefulness positively influences intention to use e-wallet.

Curiosity

Curiosity, in a nutshell, is the "desire for the new" (Berlyne, 1960, p. 205). Recognizing curiosity as an intrinsic motivator, Malone (1981) provides a theoretical view on the different facets of curiosity, which are divided into sensory and cognitive components. Sensory curiosity stimulation can take the form of a variety of attention-getting stimuli, including changes in smell, taste, sight, touch, and sound, all of which can lead to sensory exploration activity (Malone, 1981). Meanwhile, cognitive curiosity describes the human intrinsic motivation to explore and gain competency, knowledge, or information, and it has been proposed that cognitive curiosity can be arouse by convincing people that their knowledge structures are incomplete or inconsistent, prompting them to learn more to improve their knowledge structure (Malone, 1981). When developing the HMSAM, Lowry et al. (2013, p.

10) describe curiosity as "the extent the experience arouses an individual's sensory and cognitive curiosity". When the interaction with an information system is able to arouse one's curiosity, the user is more likely to develop a sense of excitement about the current experience and future use possibilities; leading the user to have the desire to repeat that excitement through further engagement (Agarwal and Karahanna, 2000; Lowry et al., 2013). Empirical study by Israel, Buchweitz, Tscheulin, Zerres, and Korn (2020) have demonstrated the significant relationship between curiosity and intention to use. As such, the following hypothesis is proposed:

H3: Curiosity positively influences intention to use e-wallet.

This study asserts that an increase in curiosity will increase immersion. Curiosity is synonymous with a person's interest and is described as positive motivational-emotional state associated with desire to explore (Kashdan and Silvia, 2009), whereas immersion is a state of undivided concentration and involvement in which a person ignores all other attentional demands while interacting with a stimulus or performing a task (Lowry et al., 2013). The more curiosity a person has in a given set of stimuli, the more time and effort he or she is ready to devote to pursuing that curiosity; immersing themselves in exploratory behavior to satisfy that curiosity (Lowry et al., 2013). As a result, an increase in curiosity is more likely to result in an increase in immersion (Lowry et al., 2013). Empirical study by Silic and Lowry (2020) have demonstrated the significant relationship between curiosity and immersion in the context of gamified security training systems. When a user's interaction with an information system evokes curiosity, the user is more likely to feel excited about the current experience and want it to last as long as possible, leading to a state of focused attention and not allowing himself or herself to be easily distracted by surrounding events (Lowry et al., 2013). Thus, this study hypothesizes:

H4: Curiosity positively influences immersion

Joy

Joy is a prevalent intrinsic motivation construct widely used in IS research related to the acceptance and use of technology (Agarwal and Karahanna, 2000; Davis et al., 1992; Viswanath Venkatesh, Thong, and Xu, 2012). According to Lowry et al.'s (2013), joy is defined as "the pleasurable aspects of the interaction described as being fun and enjoyable rather than boring" (Lowry et al., 2013, p. 10). If people find pleasure in carrying out a task in a particular system, they are more likely to regularly interact with that system (Thomas, 2006). Whether it is involving a utilitarian or hedonic IS, the construct of joy has a role to play in explaining the significant variance in usage intentions as joy complements perceived usefulness in forging a favorable user perception about the user experience being enjoyable and productive (Davis et al., 1992). In a study comparing conventional training methods versus game-based training, Venkatesh and Speier (2000) found that people who received game-based training indicated higher levels of joy, which lead to an increased in intention to use technology. There is a wealth of literature have examined and tested the positive relationship between joy and intention to use e-wallet (Lew et al., 2020; Tan et al., 2020; Widyanto, Kusumawardani, and Septyawanda, 2020). In accordance with the literature, the following hypothesis is proposed:

H5: Joy positively influences intention to use e-wallet.

This study asserts that an increase in joy will increase immersion. Joy occurs when a person attained something that goes above and beyond predetermined goals to achieve something positive and unexpected (Csikszentmihalyi, 1990). Furthermore, joy occurs when a person's accomplishment is accompanied by a sense of novelty and amazement (Csikszentmihalyi, 1990). Csikszentmihalyi (1990) goes on to say that when a person is experiencing joy in a task or activity, the experience becomes to a large extent autotelic, in which the person becomes highly immersed in the said activity. When it comes to information system use, the more enjoyable one's interaction with a system is, the more likely one is to devote time and attention to the stimuli provided by that interaction (Lowry et al., 2013). Accordingly, recent research by Oluwajana et al. (2019), and Silic and Lowry (2020) revealed a positive relationship between joy and immersion. The greater a person's joy, the greater the likelihood of achieving a state of immersion. Therefore, the following hypothesis is proposed:

H6: Joy positively influences immersion.

Control

According to Lowry et al. (2013), human beings have an inherent desire for a sense of autonomy and control, and this can be described as the need to be able to make their own choices and decisions in the context of information system use experience. Therefore, control is an intrinsic motivation that is defined as "the user's perception of being in charge of the interaction" (Lowry et al., 2013, p. 10). Modern IS system are capable to offer this feeling of control, by providing a dynamic user interface where explicit instructions and input from the user are received and translated into utilitarian or hedonic outputs that are meaningful to the user (Webster, Trevino, and Ryan, 1993). Thomas (2006) asserted that the more control a person exercises over a technology, the more likely they are to use it. If the technology does not do what the user wants, when he or she wants it, the user's intention to use it will be diminished. The construct of control have been used to predict the behavioral intention as either an antecedent (Hsia, Chang, and Tseng, 2014; Silic and Lowry, 2020); or a dimension of flow (Ozkara, Ozmen, and Kim, 2017; Webster et al., 1993) or cognitive absorption (Agarwal and Karahanna, 2000). Given the findings in the literature, this study proposes the following hypothesis:

H7: Control positively influences intention to use e-wallet.

This study asserts that an increase in joy control increase immersion. Csikszentmihalyi (1975) defined a person in a state of immersion/flow as being in control of his or her actions as well as the environment with which he or she is interacting. A person in a state of immersion is not being concerned by the possibility of lack of control, where the feeling of control comes both from one's own ability and performance in meeting environmental demands (Csikszentmihalyi, 1975). Hence, control is an important predictor of immersion because active engagement in a task or activity is more likely to occur when a person believes he or she has control over the experience's outcome (Lowry et al., 2013). A lack of control in the use of any information system is likely to undermine a person's desire and ability to immerse themselves in the interaction. Consistent with the arguments above, Oluwajana et al. (2019)

and Silic and Lowry (2020) found a positive relationship between control and immersion. Hence, this study hypothesizes:

H8: Control positively influences immersion.

Gadget Love

Intrinsic motivation to use technology is likely to lead to more lasting engagement with the technology than external factors (Bruner and Kumar, 2007). The close association of intrinsic motivation and technology adoption is reflected in the argument that gadget loving consumers are passionate about owning and using technology innovation and tend to adopt them relatively early (Bruner and Kumar, 2007). On a similar note, Reith et al. (2020) claimed that gadget loving is an important personality trait in the adoption of technology as consumers must first have an intrinsic willingness to take part in exploring the uncertain benefits of the technology. This research proposes that gadget love is operationalized as an intrinsic motivation that arises from the affective experience during the interaction with a particular technology. From the literature, the role of gadget love as an intrinsic motivation that determines the intention to use technology has not been investigated. Against the concept that consumers with high level of gadget love as reflected by elevated levels of intimacy, passion and commitment, are more likely form the intention to accept a particular technology, this study proposes:

H9: Gadget love positively influences intention to use e-wallet.

Immersion

The literature suggests the states of immersion, flow, cognitive absorption and focused attention are conceptual similar, in which a person is entirely absorbed in an activity or stimuli while other attentional demands are largely neglected (Agarwal and Karahanna, 2000; Csikszentmihalyi, 1990; Israel et al., 2020; Lowry et al., 2013). In human–computer interactions, immersion represents computer users' perceptions and affective responses to the use and/or anticipated use of the computer system (Pelet, Ettis, and Cowart, 2017). Users' who experience high level of immersion are willing to interact with the system's environment for an extended amount of time for hedonic and/or utilitarian reasons (Pelet et al., 2017; Silic and Lowry, 2020). In contrast, if a user has a low level of immersion, it is likely that he or she will be readily distracted by external factors, diverting his or her time and effort elsewhere, and therefore losing intention to use the system. Prior studies have indicated that immersion can positively affect the behavior intention to use of the internet (Agarwal and Karahanna, 2000), mobile devices (Wakefield and Whitten, 2006), social media (Pelet et al., 2017) and virtual reality (Israel et al., 2020). This study, therefore hypothesize:

H10: Immersion positively influences intention to use e-wallet.

Conceptual Framework

This study focuses on extending the HMSAM because there is a significant opportunity to make new theoretical contributions to information systems (IS) acceptance by addressing the scarcity of research on the role of intrinsic motivation on behavioral intention to use an e-wallet. The HMSAM is a native information systems (IS) theory developed to explain a breath of user's intrinsic motivators that influences the behavioral intention to use a hedonic IS,

consequently addressing the research gap within the field of IS acceptance that have been predominantly centered around utilitarian IS (Lowry et al., 2013). Within the context of a utilitarian biased information system such as e-wallet, the user does not merely use the technology due to task based efficiency gains, or some other extrinsic benefit as the technology not only serve user's needs to complete task related to payment or the movement of funds, but the nature of e-wallet use experience has been expanded to encapsulate gamification elements to induce compelling intrinsic incentives for users to favor e-wallet payment over other conventional payment methods such as cash, credit/debit card and online banking (Seranmadevi and Felisiya, 2019). This paper extends the HMSAM by including the construct of gadget love as an additional intrinsic motivation. The conceptual framework of this study is presented in Figure 1.

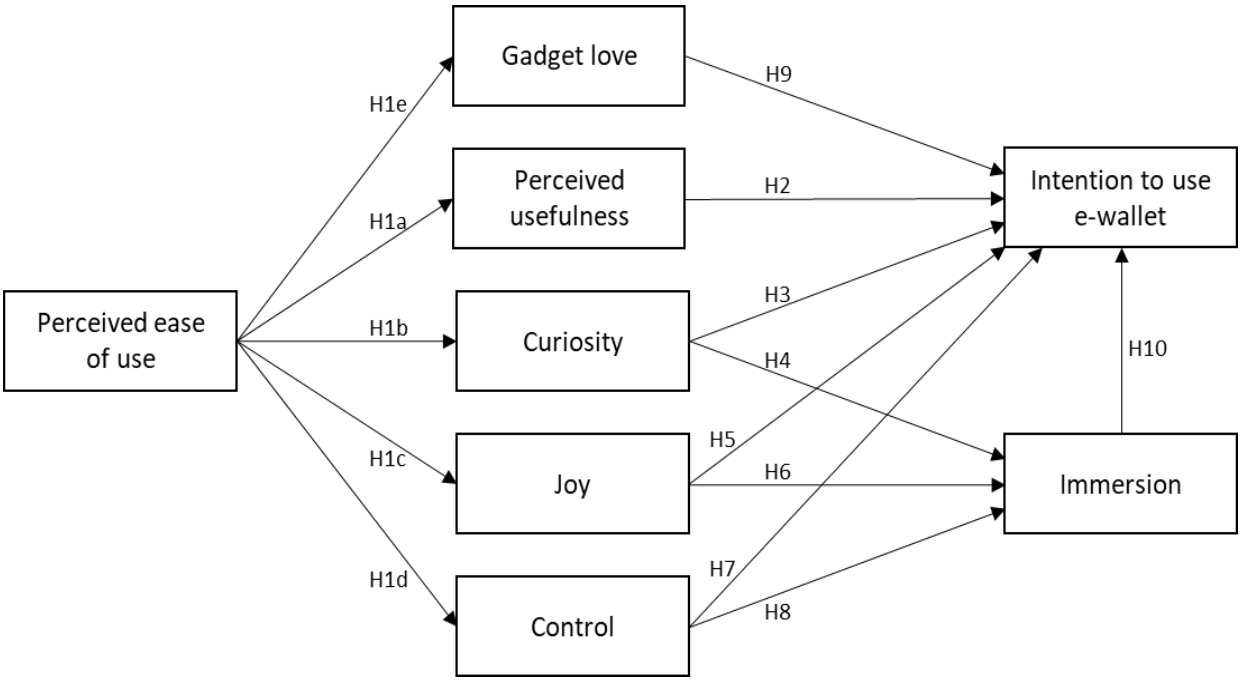

Figure 1: Conceptual Framework

Research Implication

The main theoretical contribution of this research is the development of a theoretical model based on an extended version of the HMSAM that helps explain predictors of an individual's intention to use e-wallet payment technology. Furthermore, this study seeks to enrich the theoretical understanding in consumer behavioral intention to use e-wallet and contribute to the body of knowledge regarding individual acceptance and use of information and communication technologies (ICTs) in general. This research argues that the perceived ease of use and perceived usefulness constructs within the TAM does not adequately explain the behavioral intention of consumers to embrace the use of e-wallet service as there is a need to give worthy consideration to the consumer's reaction to both the utilitarian and hedonic facets of this revolutionary Fintech. This study aims to also contribute empirical evidence to justify the expanded use case of the HMSAM and gadget love constructs in a utilitarian information system research context, given that e-wallets have assimilated gamification elements into their user experience. The practical contribution can be divided into two parts: the impact to the nation and the benefits to e-wallet businesses. This study seeks to provide new insights to support Malaysian government's aspiration to cultivate mobile payment

literacy to curb corruption and improve tax revenue, as well as for e-wallet service providers to develop effective strategy against other conventional payment methods.

Conclusion

Overall, this study has discussed the constructs that make up the hedonic-motivation system adoption model (HMSAM) developed by Lowry *et al.* (2013), as well as the incorporated intrinsic motivation of gadget love. Gadget love is argued to be an intrinsic motivation that gives a person a sense of connection with a particular information system technology, invoking an invisible force that draws a person towards the technology. Motivational scholars have long held that a person willingness to engage in performing an activity can be divided into two high-level classifications: extrinsic motivation and intrinsic motivation (Csikszentmihalyi, 1975; Davis et al., 1992). This study aims to fill a research gap in the field of e-wallet IS acceptance that has predominantly focused on extrinsic motivation, by better understanding the predictors of behavioral intention governed by the consumer's intrinsic motivations and subsequent affective reaction to the use of e-wallet technology. As a result, the HMSAM is proposed to better understand the extrinsic and, more importantly, the intrinsic motivational factors that influence e-wallet intention to use. The main challenge for Malaysian e-wallet service providers is to attract and establish a sense of intention among consumers to utilise e-wallet payment technology over other conventional payment methods such as cash, credit/debit card, and internet banking. Moreover, Malaysia's mobile payment environment is highly competitive because of overcrowding of e-wallet service providers. Accordingly, the findings of this study may be beneficial in fulfilling the Malaysian government's goal to develop mobile payment literacy and use among Malaysians in order to fulfill the nation's aspiration of establishing a cashless society, as well as in helping e-wallet service providers build an effective marketing and application development strategy to expand their user base and promote frequent application transactions.

References

Abdullah, N., Redzuan, F., & Daud, N. A. (2020). E-wallet: Factors influencing user acceptance towards cashless society in Malaysia among public universities. *Indonesian Journal of Electrical Engineering and Computer Science*, *20*(1), 67–74. https://doi.org/10.11591/ijeecs.v20.i1.pp67-74

Agarwal, R., & Karahanna, E. (2000). Time flies when you're having fun: Cognitive absorption and beliefs about information technology usage. *MIS Quarterly: Management Information Systems*, *24*(4), 665–694. https://doi.org/10.2307/3250951

Ajzen, I., Czasch, C., & Flood, M. G. (2009). From Intentions to Behavior : Implementation Intention. *Journal of Applied Psychology*, *39*(6), 1356–1372.

Ali, M. F., Harum, N., Abu, N. A., Talib, M. S., Doheir, M., & Al-Mhiqani, M. N. (2019). Impact of cashless society on the economic growth in Malaysia. *Religacion-Revista De Ciencias Sociales Y Humanidades*, *4*(17), 769–777.

Bank Negara Malaysia. (2020). List of Regulatees - Bank Negara Malaysia. Retrieved October 25, 2020, from https://www.bnm.gov.my/list-of-regulatees

Berlyne, D. E. (1960). Conflict, arousal, and curiosity. In *Conflict, arousal, and curiosity.* McGraw-Hill Book Company. https://doi.org/10.1037/11164-000

Bruner, G. C., & Kumar, A. (2007). Gadget lovers. *Journal of the Academy of Marketing Science*, *35*(3), 329–339. https://doi.org/10.1007/s11747-007-0051-3

Chang, Y. W., and Chen, J. (2021). What motivates customers to shop in smart shops? The

impacts of smart technology and technology readiness. *Journal of Retailing and Consumer Services*, *58*(September 2020), 102325. https://doi.org/10.1016/j.jretconser.2020.102325

Csikszentmihalyi, M. (1975). Play and Intrinsic Rewards. *Journal of Humanistic Psychology*, *15*(3), 41–63.

Csikszentmihalyi, M. (1990). Flow : The Psychology of Optimal Experience. In *HarperCollins Publishers*. https://doi.org/10.1080/00222216.1992.11969867

Davis, F. D. (1985). *A technology acceptance model for empirically testing new end-user information systems: Theory and results* (Massachusetts Institute of Technology). Massachusetts Institute of Technology. https://doi.org/oclc/56932490

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, *13*(3), 319–339. https://doi.org/10.2307/249008

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and Intrinsic Motivation to Use Computers in the Workplace. *Journal of Applied Social Psychology*, *22*(14), 1111–1132. https://doi.org/10.1111/j.1559-1816.1992.tb00945.x

Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. In *Addison-Wesley Publishing Company*. Retrieved from https://people.umass.edu/aizen/f&a1975.html

Fong, V. (2020). Malaysia to Spend RM 1.2 Billion Promoting E-Wallets in 2020 - Fintech News Malaysia. Retrieved August 27, 2020, from https://fintechnews.my/23971/e-wallets-malaysia/e-wallet-malaysia-pejana/

Heijden, H. van der. (2004). User Acceptance of Hedonic Information Systems. *MIS Quarterly: Management Information Systems*, *47*(11), 79–84.

Hernandez-Ortega, B., & Ferreira, I. (2021). How smart experiences build service loyalty: The importance of consumer love for smart voice assistants. *Psychology and Marketing*, *38*(7), 1122–1139. https://doi.org/10.1002/mar.21497

Hsia, J. W., Chang, C. C., & Tseng, A. H. (2014). Effects of individuals' locus of control and computer self-efficacy on their e-learning acceptance in high-tech companies. *Behaviour and Information Technology*, *33*(1), 51–64. https://doi.org/10.1080/0144929X.2012.702284

Huda, M. Q., Hidayah, N. A., Hersyaf, T. N. H., Sujoko, I., & Asmawi. (2020). Analysis of Continuance Use of Video On Demand Applications by Using The Hedonic Motivation System Adoption Model. *Paper Presented at the 2020 8th International Conference on Cyber and IT Service Management, CITSM 2020*. https://doi.org/10.1109/CITSM50537.2020.9268910

Israel, K., Buchweitz, L., Tscheulin, D. K., Zerres, C., & Korn, O. (2020). Captivating product experiences: How virtual reality creates flow and thereby optimize product presentations. *Lecture Notes in Computer Science*, 354–368. https://doi.org/10.1007/978-3-030-50341-3_28

Karim, W., Haque, A., Ulfy, M. A., & Anis, Z. (2020). Factors Influencing the Use of E-wallet as a Payment Method among Malaysian Young Adults. *International Journal of Business and Management*, *3*(2), 1–11. https://doi.org/10.37227/jibm-2020-2-21

Kashdan, T. B., & Silvia, P. J. (2009). Curiosity and Interest: The Benefits of Thriving on Novelty and Challenge. *The Oxford Handbook of Positive Psychology, (2 Ed.)*. https://doi.org/10.1093/oxfordhb/9780195187243.013.0034

Khan, J., Pelet, J. E., & Zamani, S. (2021). Tickle me on WeChat Moments: the role of brand

love. *Journal of Product and Brand Management*, (May 2020). https://doi.org/10.1108/JPBM-10-2019-2597

Latupeirissa, J. J. P., Gorda, A. A. N. O. S., & Subanda, I. N. (2020). Antecedents of intention to use e-wallet: The development of acceptance model with pls-sem approach. *Journal of Advanced Research in Dynamical and Control Systems*, *12*(7 Special Issue), 1416–1429. https://doi.org/10.5373/JARDCS/V12SP7/20202244

Lee, Z. W., & Khaw, D. P. T. (2018). Transforming Mobile Phones into E-Wallets in Malaysia. *Bank Negara Malaysia*, 36–43. Retrieved from https://www.bnm.gov.my/documents/20124/767010/p7.pdf

Leong, C. M., Tan, K. L., Puah, C. H., & Chong, S. M. (2020). Predicting mobile network operators users m-payment intention. *European Business Review*. https://doi.org/10.1108/EBR-10-2019-0263

Lew, S., Tan, G. W.-H., Loh, X.-M., Hew, J.-J., & Ooi, K.-B. (2020). The disruptive mobile wallet in the hospitality industry: An extended mobile technology acceptance model. *Technology in Society*, *63*(July), 101430. https://doi.org/10.1016/j.techsoc.2020.101430

Lowry, P. B., Gaskin, J. E., Twyman, N. W., Hammer, B., & Roberts, T. L. (2013). Taking "fun and games" seriously: Proposing the hedonic-motivation system adoption model (HMSAM). *Journal of the Association for Information Systems*, *14*(11), 617–671. https://doi.org/10.17705/1jais.00347

Malone, T. W. (1981). Toward a theory of intrinsically motivating instruction. *Cognitive Science*, *5*(4), 333–369. https://doi.org/10.1016/S0364-0213(81)80017-1

Massi, M., Sullivan, G., Strauß, M., & Khan, M. (2019). How Cashless Payments Help Economies Grow. Retrieved April 12, 2020, from https://www.bcg.com/publications/2019/cashless-payments-help-economies-grow.aspx

McCluhan, M. (1964). Understanding Media: The Extention of Man. In *Physics of life reviews*.

Oluwajana, D., Idowu, A., Nat, M., Vanduhe, V., & Fadiya, S. (2019). The adoption of students' hedonic motivation system model to gamified learning environment. *Journal of Theoretical and Applied Electronic Commerce Research*, *14*(3), 156–167. https://doi.org/10.4067/S0718-18762019000300109

Ozkara, B. Y., Ozmen, M., & Kim, J. W. (2017). Examining the effect of flow experience on online purchase: A novel approach to the flow theory based on hedonic and utilitarian value. *Journal of Retailing and Consumer Services*, *37*(April), 119–131. https://doi.org/10.1016/j.jretconser.2017.04.001

Pelet, J. É., Ettis, S., & Cowart, K. (2017). Optimal experience of flow enhanced by telepresence: Evidence from social media use. *Information and Management*, *54*(1), 115–128. https://doi.org/10.1016/j.im.2016.05.001

Rao, S. V. R. (2020). *E- WALLET – A ' PAY ' VOLUTION*. (October 2015).

Reith, R., Buck, C., Walther, D., Lis, B., & Eymann, T. (2020). How privacy affects the acceptance of mobile payment solutions. *27th European Conference on Information Systems - Information Systems for a Sharing Society, ECIS 2019*, (September).

Seranmadevi, R., and Felisiya, M. (2019). Traffic Creation for E-Wallet through Gamification Strategy. *International Journal of Engineering and Advanced Technology*, *9*(2), 1621–1625. https://doi.org/10.35940/ijeat.b3454.129219

Silic, M., & Lowry, P. B. (2020). Using Design-Science Based Gamification to Improve Organizational Security Training and Compliance. *Journal of Management Information Systems*, *37*(1), 129–161. https://doi.org/10.1080/07421222.2019.1705512

Sternberg, R. J. (1986). A triangular theory of love. *Close Relationships: Key Readings*, *93*(2), 119–135. https://doi.org/10.4324/9780203311851

Sternberg, R. J. (2020). Toward a triangular theory of love for one's musical instrument. *Psychology of Music*. https://doi.org/10.1177/0305735620961143

Tan, J. (2019). BoostUP Is Now Available For Boost Users - Here's How It Works. *RinggitPlus*. Retrieved from https://ringgitplus.com/en/blog/e-wallet/boostup-is-now-available-for-boost-users-heres-how-it-works.html

Tan, O. K., Aziz, F. A., Ong, C. H., Goh, C. F., Lim, K. Y., Saadon, M. S. I., & Choi, S. L. (2020). E-Wallet Acceptance among Undergraduates in Malaysia. *Test Engineering and Management*, *83*(June), 12990–12998.

The World Bank. (2020). *Malaysia Economic Monitor, Surviving the Storm*.

Thomas, P. (2006). Cognitive Absorption: Its antecedents and effect on user intentions to use technology. *Association for Information Systems - 12th Americas Conference On Information Systems, AMCIS 2006*, *2*, 1082–1091.

Venkatesh, Visawanath, & Speier, C. (2000). Creating an effective training environment for enhancing telework. *International Journal of Human Computer Studies*, *52*(6), 991–1005. https://doi.org/10.1006/ijhc.1999.0367

Venkatesh, Viswanath. (2000). Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation, and Emotion into the Technology Acceptance Model. *Information Systems Research*, *11*(4), 342–365. https://doi.org/10.1287/isre.11.4.342.11872

Wakefield, R. L., & Whitten, D. (2006). Mobile computing: A user study on hedonic/utilitarian mobile device usage. *European Journal of Information Systems*, *15*(3), 292–300. https://doi.org/10.1057/palgrave.ejis.3000619

Webster, J., Trevino, L. K., & Ryan, L. (1993). The dimensionality and correlates of flow in human-computer interactions. *Computers in Human Behavior*, *9*(4), 411–426. https://doi.org/10.1016/0747-5632(93)90032-N

Widyanto, H. A., Kusumawardani, K. A., & Septyawanda, A. (2020). Encouraging Behavioral Intention To Use Mobile Payment: an Extension of Utaut2. *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, *4*(1), 87. https://doi.org/10.24912/jmieb.v4i1.7584

Worldpay. (2020). *Global Payments Report*. 133. Retrieved from http://offers.worldpayglobal.com/rs/850-JOA-856/images/GPR-2020.pdf?mkt_tok=eyJpIjoiWXpVd1pUY3dOelUwTlRRMSIsInQiOiIwYUEzaU5SbzBaSEtwamRcL1ZtMklzVGQySGNnMGxvZFFsOWh1bXhIK3pFeG5wWGFKbWRhZE83TjEzNER2SFJ0cHluUU02amlVR3I1Q0tnMmFMV1RXV3QweWZSRGQzd0xlKytBNXU4Z0N

Yapp, E. (2018). A year on, Axiata Digital tags on mobile wallet to Boost app | Digital News Asia. *Digital News Asia*. Retrieved from https://www.digitalnewsasia.com/business/year-axiata-digital-tags-mobile-wallet-boost-app