Factors Affecting E-Wallet Adoption For Cashless Society In Malaysia: A **Conceptual Paper**

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ABSTRACT

In today's fast-paced technological landscape, e-wallet services are experiencing rapid growth globally, with Malaysia making significant strides towards a cashless society. This conceptual paper aims to contribute to existing knowledge and industry practices by investigating the factors influencing adoption, using Unified Theory of Acceptance and Use of Technology (UTAUT2) Model as a theoretical framework. The study seeks to address gaps in understanding consumers' adoption towards e-wallets in Malaysia, which have not been extensively explored in previous research. The research will examine three key variables namely trust, rewards, and digital literacy that influence e-wallet adoption. The study will employ quantitative research design with non-probability sampling using the purposive sampling method for data collection purposes. The findings are expected to provide insights into important consumer-related issues surrounding ewallet adoption. The research also seeks to enhance comprehension of the factors influencing the adoption of new technologies from a consumer perspective. In terms of practical implications, ewallet service providers should emphasize the rewards offered to consumers, as higher perceived value is associated with greater adoption intention. This suggests that the decision to adopt ewallets is influenced not only by the users' confidence in utilizing them, but also the external advantages they offer. Therefore, market practitioners should regularly conduct market research to identify and address consumer needs, thereby enhancing their products and services to meet consumer expectations.

Keywords: e-Wallet, trust, reward, digital literacy, cashless society.

I. INTRODUCTION

The rise of digital technology has revolutionized the way financial transactions are conducted, making it easier and more convenient to make payments without the need for physical cash. Malaysia has recognized the potential of digital payments and has taken significant steps towards promoting cashless transactions and creating a cashless society. The government's active efforts to promote cashless transactions in Malaysia are a testament to the country's commitment to embracing the digital age and reaping the benefits that come with it. One of the most notable developments in this regard is the emergence of e-wallets, which have become increasingly popular in recent years.

E-wallet constitutes one of the key elements contributing to the escalation of digital transactions in the contemporary digital age. An e-wallet can be defined as an electronic or online device that allows transactions to be made via a computer or smartphone, eliminating the necessity for physical cash (Kasirye et al., 2021). E-wallets have been introduced to replace cash and credit cards, turning people into a smart, digital, and cashless community (Yaakub et

al., 2022.). Touch 'n Go eWallet, Boost, and GrabPay are the major e-wallet players in Malaysia today (Mustafa et al., 2022).

By embracing e-wallets and other digital payment methods, Malaysia is paving the way for a more efficient and secure financial system that benefits both consumers and businesses. Developing a cashless society has the potential to boost the country's annual domestic product (GDP) accelerating the flow of payment value in the goods and services market, which encourages consumption consumer (Srivastava Srivastava, 2022). In Malaysia's Financial Blueprint (2020-2026), Malaysia's long-term goal is to establish an inclusive digital society and establish a secure and ethical digital environment (Bank Negara Malaysia, 2022) reveals that Malaysia is prepared for development in a cashless society.

Despite the many efforts done by the government, the adoption of e-wallet has been slow in Malaysia. According to Mustafa et. al (2022) recent studies, the adoption of ewallets in Malaysia has been steadily increasing, but growth is still slow. As of 2020, the estimated number of e-wallet users in Malaysia was approximately 15.7 million, which is about 48% of the country's population of 32.6 million (Mustafa et al., 2022). The COVID-19 crisis has recently led to a growing trend in e-wallet use, and it is expected that the intention to use e-wallets in Malaysia will increase in the future (Mustafa et al., 2022). However, only 67% of Malaysian individuals choose to use cashless payments over cash payments (Mustafa et al., 2022). Despite this, the migration of Malaysia to e-payments could theoretically save the country 1% of its Gross Domestic Product (GDP), which is around RM13 billion (Mustafa et al., 2022). The adoption of e-wallets has been influenced by various ease factors such as trust. of use. security/privacy, perceived utility, and perceived ease of use (Janteng & Dino, 2022; Jia et. al., 2023).

This is a concern that is in line with Malaysia's Financial Blueprint (2020-2026), which aims to support digital payment adoption in the country. To address this issue, this conceptual paper aims to explore the factors that are affecting the adoption of ewallets in Malaysia. By examining the various factors that influence e-wallet adoption, this paper seeks to provide insights that can help to promote the wider use of ewallets in Malaysia. To achieve this goal, we have adopted the Unified Theory of Acceptance and Use of **Technology** (UTAUT2) model as a theoretical foundation, which has been found to be an effective tool predicting adoption behavior behavioral intention (Tarhini et al., 2016). Specifically, we will focus on two factors from UTAUT2, namely trust and reward, to conduct our study. Additionally, digital literacy has been identified as a significant factor inhibiting the adoption of e-wallets (Qadri, n.d.). Therefore, we have extended the framework by adding digital literacy as one of the independent variables, even though it is not included in UTAUT2. By examining these factors, we hope to provide insights that can help to promote the wider adoption of ewallets in Malaysia and support the country's efforts to create a cashless society.

II. LITERATURE REVIEW

The adoption of e-wallets has gained considerable attention worldwide, especially in Malaysia, where the transition toward a cashless society is underway. Despite the numerous efforts by the government and advantages offered by e-wallets, penetration remains comparatively sluggish due to multiple factors. This section presents a comprehensive literature review focused on the determinants of e-wallet adoption in Malaysia, specifically exploring trust, reward, and digital literacy.

E-wallets are the short term for electronic wallets or digital wallets. An e-wallet can be defined as an electronic or online device that allows transactions to be made via a computer or smartphone, eliminating the necessity for physical cash (Kasirye et al., 2021). E-wallets have been introduced to replace cash and credit cards, turning people into a smart, digital, and cashless community (Yaakub et al., 2022). E-Wallet can carry out personal electronic transactions, including online shopping or physical store transactions (Hassan et al., 2021; Muhtasim et al., 2022).

E-wallet adoption serves as the primary dependent variable in this context, representing the extent to which Malaysian citizens utilize electronic wallet services. The adoption of e-wallet has now developed extremely popular and drawn much attention from scholars and researchers. The adoption of e-wallets is specified as the application of mobile payment system by consumers through with e-wallets (Muñoz-Leiva et al., 2017). Researchers found that the use of electronic wallets is favored by many people because of its flexibility and ease of use (Osakwe & Okeke, 2016; Osman et al., 2021). Therefore, the e-wallet adoption benefits both buyers and sellers due to its effective service delivery and shortest time. It also provides users the convenience and fast payment transactions where there is no physical cash or card required.

As Malaysia strives to embrace a economy, e-wallet adoption cashless continues to face challenges. One of the main reasons is there are concerns about security and privacy, as well as a lack of trust in the technology (Janteng & Dino, 2022; Jia et al., 2023). Trust mentioned here refers to the level of assurance users hold concerning the safety and dependability of e-wallet systems. Another study found that reward has a direct effect on the intention to use e-wallets (Malik & Annuar, 2021). Reward encompasses the tangible benefits derived from utilizing e-

wallets, such as discounts, loyalty points, and enhanced convenience. Additionally, the lack of understanding of e-wallets among the population (Janteng & Dino, 2022; Jia et. al., 2023). Researchers believe digital literacy affects the adoption of e-wallets since it represents the degree of proficiency and competence individuals possess interacting with digital devices and online platforms. Many people are still not familiar with the concept of e-wallets and how they work.

In this study, researchers will focus to investigate trust effects on e-wallet adoption towards cashless society. Trust has emerged as a critical factor in determining whether individuals adopt e-wallets. Users often express concerns about the security and reliability of e-wallets, leading them to hesitate before adopting new technologies. According to (Muhtasim et al., 2022) consumers view user authentication as an essential component that discourages con artists and improves the digital wallet's overall security, which in turn leads to increased customer trust.

Numerous studies have highlighted trust as a vital component driving e-wallet adoption decisions. According to (Mainul Hossain et al., 2022) secure and wellmaintained personal information and privacy will heighten tendency to place trust in electronic transaction by user. Tarhini et. al. (2016) revealed that trust plays a substantial role in shaping e-wallet adoption behaviors and intentions. Another element of trust is particularly regarding the security measures implemented to safeguard users' sensitive information. Cyber threats and incidents of card fraud during financial transactions have eroded public faith in e-wallets' ability to protect personal data. Similar mistrust has been observed in Jordan, where individuals exhibit reservations about using conventional cash rather than e-wallet because of security concerns (Momani, 2020). Once users opt for

e-wallets, private details such as names, phone numbers, credit card numbers, and more become exposed online, rendering them prone to unlawful access by malicious actors who may misuse this information for nefarious objectives.

Among other factors. reward mechanisms also have garnered increased attention due to their potential to drive consumer engagement and behavior. Several studies have highlighted the importance of reward systems in driving e-wallet adoption. A systematic literature review of mobile payment and e-wallet adoption in emerging economies found that rewards play a crucial role in maximizing the rewards of an action, with the ultimate aim of maximizing the adoption of e-wallets (Ramli & Hamzah, 2021). Rewards have also been identified as a significant factor in promoting e-wallet adoption. Users are more likely to adopt ewallets if they perceive a tangible benefit or incentive. Studies have shown that discounts, loyalty programs, and convenience features can significantly impact e-wallet adoption rates. For instance, a study by Chang et al., (2016) found that rewards played a crucial role in encouraging e-wallet adoption in Taiwan.

Monetary rewards of e-wallet services such as cashback incentives is obvious to consumers. This study will also investigate the impact of offers and incentives provided by developers on the progression towards a cashless society. Leong et al., (2020) proves that it is a good way to promote this cashless society by continuously giving consumers some benefits, such as monetary rewards to let consumers slowly accept and change their payment methods. Previous studies have explored the efficacy of reward mechanisms in encouraging e-wallet adoption. example, Aydin and Burnaz (2016) examined the drivers and barriers associated with mobile payments, highlighting significance of reward schemes in facilitating consumer acceptance. In addition to increase motivation and promote cashless transactions in Malaysia, the service provider implements a rewards system.

Despite the apparent success of reward mechanisms in promoting e-wallet adoption, several limitations warrant further consideration. For instance, some researchers argue that reward systems may lead to shortterm increases in consumer engagement but fail to generate long-lasting changes in behavior (Ng et al., 2012). Moreover, excessive dependence on reward systems may result in diminishing returns, consumers grow accustomed to receiving incentives and lose intrinsic motivation to engage with e-wallets (Deci & Ryan, 2000). However, Touch n Go, GrabPay and Boost, three prominent e-wallet providers in exemplify successful reward Malaysia, strategies. Those companies offer point-based reward systems, allowing users to accumulate points upon completing transactions, which can subsequently be converted into e-cash, vouchers, or discounts. For example, Touch 'n Go ("TNG") Group via Touch 'n Go eWallet, together with Payment Network Malaysia had organize the "Mai Kita Cashless" campaign aims to expeditiously fulfil the goal of transforming rural villages into a cashless society. E-wallet users also get to enjoy cashback incentives of a RM5 cashback for every transaction, with a minimum transaction sum of RM10 (TNG Digital, 2022). Such initiatives have contributed to heightened consumer interest in e-wallets, as evidenced by the growing popularity of e-wallet adoption throughout Malaysia.

Apart from trust and reward, digital literacy represents another essential element in comprehending e-wallet adoption patterns. The adoption of mobile payments is also highly influenced by the extent technological infrastructure and digital literacy within a given country (Oadri, 2023).

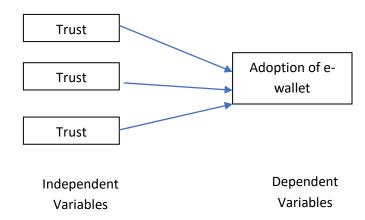
Conversely, Qadri (2023) demonstrated that insufficient levels of digital negatively affect e-wallet adoption, implying that enhancing user confidence through education and training might stimulate broader utilization.

Previous studies have identified digital literacy as a significant factor inhibiting adoption e-wallets the of (Purbondaru et al., 2023; Qadri, 2023.). Digital literacy refers to the degree of proficiency and competence individuals possess when interacting with digital devices and online platforms. Purbondaru et al., (2023) discovered that digital literacy exerts a detrimental effect on e-wallet adoption in Indonesia. The researcher also found that insufficient levels of digital literacy affect e-wallet adoption, negatively suggesting that enhancing user confidence through education and training might stimulate broader utilization. On the contrary, Chang et al., (2016) observed that digital positively literacy influences e-wallet adoption in China. Similarly, Qadri (2023) highlighted the importance of digital literacy in promoting e-wallet adoption, emphasizing the need for educational initiatives to improve user confidence and competence.

To overcome the limitations of approaches, education-based alternative strategies for enhancing digital literacy and promoting e-wallet adoption have been proposed. For example, (Hammouri et al., 2023) suggested that policymakers and industry stakeholders should focus developing user-friendly e-wallet interfaces require minimal digital literacy. that Additionally, of gamification the use techniques and social recognition strategies a means been proposed as incentivizing e-wallet adoption among users with varying levels of digital literacy (Ng et al., 2012). For example, in year 2023 the government granting RM100 in e-cash credit as part of the government's efforts to educate

the public with a cashless and digital economy (Ministry Of Finance Malaysia, 2023). However, educating the community is a time-consuming endeavor that requires consistent implementation and systematic enhance awareness effort and comprehension regarding the adoption of ewallets.

Proposed conceptual framework:



Based on the literature review, the following conceptual framework is proposed to explore the factors affecting e-wallet adoption for a cashless society in Malaysia.

III. METHODOLOGY

This study employs a cross-sectional research design, which involves collecting data from a given population at a single time or over a short period. The study will utilize a quantitative research design, questionnaire serving as the primary source of data collection. The questionnaire allows for a large sample size and produces data that can be analyzed using Statistical Package for the Social Sciences (SPSS) version 29.

The questionnaire will be structured to capture data about the independent and dependent variables of the research. The questionnaire will consist of two sections. A and B. Section A will use a 5-point Likert scale anchored by "strongly disagree" (1) to

"strongly agree" (5) to capture responses for all key variables. Section B will collect sociodemographic data, such as gender, age group, education level, vocation, monthly income, and the frequency of using e-wallets. In summary, this study aims to investigate the affecting e-wallet adoption Malaysia using a cross-sectional research design and a quantitative research approach. The study will use a questionnaire to collect data from mobile phone users, with the questionnaire consisting of two sections to capture data about the independent and dependent variables of the research.

IV. RECOMMENDATIONS

Future research should investigate alternative approaches to incentivizing ewallet adoption, including gamification techniques and social recognition strategies. understanding Ultimately, the nuanced relationship between reward systems and ewallet adoption will enable policy-makers and industry stakeholders to develop targeted interventions aimed at fostering sustainable adoption rates in Malaysia.

Future research should investigate alternative approaches to enhancing digital literacy, including the use of gamification techniques and social recognition strategies. Ultimately, understanding the nuanced relationship between digital literacy and e-wallet adoption will enable policymakers and industry stakeholders to develop targeted interventions aimed at fostering sustainable adoption rates in Malaysia.

V. CONCLUSION

This research aims to explore important factors that affect the adoption of e-wallets in Malaysia, which haven't been thoroughly studied before. Specifically, researchers want to understand how adoption of e-wallets is influenced by certain factors. One key focus is on how consumers perceive the value of using e-wallets, a concept relevant across

different industries. Despite the extensive discussions in various publications about this topic, our research brings valuable insights beyond borders, that go covering international markets and economies. The findings of this study can greatly benefit organizations by helping them develop innovative business strategies and maintain their competitiveness.

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