Understanding Customer Intention to Use E-Payment for Online Shopping

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Abstract: The emergence of e-commerce has sparked a huge change in consumer behavior, transforming how individuals purchase and conduct transactions. E-payment has become a pillar of this digital transition. However, some customers are still hesitant to adopt e-payment despite its advantages. This paper aims to unravel the factors influencing customer intentions to use e-payment for online shopping. Based on a review of existing literature on the Technology Acceptance Model (TAM Model) and additional external factors, a proposed model was developed to test consumer's intention to use e-payment for online shopping. The result of this study would be useful to understand consumers' behaviors in employing electronic transactions when making payments for online purchases. This paper also provides valuable insights for e-payment service providers and online retailers on how to promote sustainable online shopping in the future.

Keywords: *E-Payment, Customer Intention, Online shopping, Perceived Security and Social Influence.*

1. Introduction

Electronic payment (henceforth known as "e-payment") has become increasingly popular in recent years, with more and more customers opting for digital payment methods over traditional ones (Sahi, et al., 2021). It has become a global phenomenon and an important facet of consumerism as it allows for shopping to be carried out anywhere and anytime via online transactions. This payment tool can speed up the payment process and it is also much safer, all at a relatively lower cost compared to the anterior instruments of transaction such as credit or debit cards. According to Bank Negara Malaysia, e-payment services recorded an increase in usage by 30.2% to 7.2 billion transactions in 2021, up from 5.5 billion transactions in 2020 (13.5%).

Online shopping has become more popular in tandem with the growth of the purchasing power of millennials and more convenient because of how rapid technology, particularly in the field of information and communication, is developing. This has resulted in the expansion of the internet in recent years, from which e-commerce is benefiting the most (Bressolles et al., 2014; Faqih & Jaradat, 2015; Towers & Xu, 2016). Additionally, there is sufficient evidence to suggest that an increase in internet usage will positively affect online purchasing (Lee & Lin, 2005; Wong et al., 2014), hence the reason to highlight the significance of e-payment development in fulfilling the demands in this sector of the retail industry.

Nevertheless, there are still several concerns surrounding the use of e-payment. According to Drozdov (2019), even though enterprises in the market use a wide range of alternative payment methods, they still face serious issues such as long transaction times, lengthy payment processes, and costly and complex transactions. The major hurdle to using e-payment is security, with approximately 59% of customers believing that e-wallets can lead to credit and debit fraud (Tan, 2019). As a result, if the e-payment systems do not satisfy the safety criteria and customer expectations, customers will be discouraged from using e-payment. Therefore, research must be conducted to determine the elements that influence the use of e-payment among consumers. The findings from such research may help commercial organizations enhance or reinforce the elements that may influence and encourage customers to utilize e-payment.

Therefore, this study aims to investigate the determinants that influence consumers' adoption of online payment methods within the context of online purchasing. This study holds significance for major stakeholders in e-commerce as it enables them to gain awareness of and recognize the challenges encountered by customers when using e-payment, hence facilitating subsequent enhancements.

2. Literature Review

Intention to Use e-Payment: Intention is a motive that can affect a person in molding desired behaviors and can be used to determine how much of someone's wishes and efforts are expended to achieve the

behavior (Azjen, 1991). The customer intention research model was created to increase user acceptance of technological information. Davis et al. (1989) implemented the Technology Acceptance Model (TAM) to examine computer usage behavior. The model is a technology acceptance and utilization hypothesis, used to describe the application of technology that has been developed (Venkatesh et al., 2003).

According to the notion of technology adoption and usage, intention to utilize technology may be impacted by effort expectancy, expected success, and social impact. Consumers should determine the behavioral purposes and conditions that allow a technology to be used. In the case of e-payment, the perceived ease of use of such technology on e-commerce transactions can be defined as effort expectancy, which is also concerned with systems that are simple to comprehend and operate without requiring any specific abilities (Gholami et al., 2010). Performance expectancy refers to how customers perceive e-payment systems' capability to support and benefit online transactions, particularly within the context of security, speed, and convenience (Venkatesh et al., 2000). Additionally, Gholami et al. (2010) noted that social power is particularly important in encouraging people to adopt e-payment, and such influence is especially critical for families, couples, and organizations.

Perceived Usefulness: Perceived usefulness pertains to the level of utility experienced by consumers when engaging in online buying transactions or their perception of the advantages and benefits associated with such transactions (Teck, 2002). The perceived utility of an online shopping platform is demonstrated by several means, such as providing a wide range of product options and expediting the buying process, hence enhancing convenience and reducing time expenditure for consumers. According to Islam and Daud (2011), consumers often find it convenient to spend less time shopping as that means they can allocate the time saved from one activity to engage in other pursuits. The issue of perceived usefulness holds significant importance, particularly within the context of luring online buyers by offering advantages over traditional shopping (Ramayah & Ignatius, 2005).

The decision of users to use e-payment was found to be impacted by its perceived utility, as indicated by a study conducted by Davis et al. (1989). According to Lin and Nguyen (2011), it is posited that the perceived utility of a specific system might enhance an individual's job performance by capitalizing on its associated advantages. The perceived utility of online purchasing is related to consumers' beliefs regarding their ability to engage in item inspection and comparison, access information, secure reduced costs, and accrue additional advantages throughout their online purchases (Broekhuizen & Huizingh, 2009).

Perceived Ease of Use: The aspect of perceived ease of use holds significant importance in the acceptability of information systems and technology as the adoption of technology by individuals is significantly influenced by their perception of simplicity of use. Therefore, it is crucial to consider the impact of perceived ease of use surrounding the context of online transactions' research and implementation. The examination of this perception of the simplicity of use should be undertaken through rigorous research investigations, and its implications should be considered during the development and implementation of online platforms about practical applications considering its crucial role in influencing individuals' desire to adopt a certain technology (Gong et al., 2013).

According to Gitau and Nzuki (2014), perceived ease of use refers to the extent to which consumers anticipate that a system or technology will be user-friendly. Likewise, Juniwati (2014) said that this concept is concerned with an individual's belief regarding the extent to which using a specific technology would be straightforward. According to a study by Gefen et al. (2003), perceived ease of use is a metric used to assess the cognitive effort needed to effectively utilize and navigate new information technology. Zhu et al. (2014) proposed that the likelihood of reaping benefits from a technology or a program is higher when it is user-friendly, and characterized by ease of use and implementation. The investigation also reported that there exists a significant relationship between the perceived ease of use and the desire to use a website for inquiries. However, this relationship does not extend to the intention to use the website for making purchases. Hence, organizations must ensure that their website exhibits clarity and precision and facilitates seamless execution of e-payment transactions. The perceived ease of use of e-payment may lead customers to presume its convenience, hence influencing their decision to utilize it. This statement is supported by Abrazhevich (2001), whose findings indicate that the user's perspective places great significance on the effective design of an e-payment system to encourage its adoption and usage.

Perceived Security: The issue of security is widely recognized as a significant obstacle to Internet commerce due to transparency being an intrinsic characteristic of the Web, as stated by Zorkadis and Karras (2000). The concept of perceived security refers to a customer's subjective evaluation of the level of protection provided by an e-payment system (Linck et al., 2006). According to Grandinetti (1996), perceived security refers to the actions of unauthorized individuals who unlawfully manipulate or damage data security without intention. Furthermore, Lim (2008) acknowledged that the adoption of e-payment systems might be influenced by security concerns. In other words, the level of security provided by the e-payment systems significantly influences the decision-making process of users when considering its implementation.

Therefore, through the implementation of improved and more robust security protocols inside network infrastructures, customers will be more inclined to adopt and utilize e-payment. Nevertheless, the link between perceived security and use was found to be unfavorable because of varying expectations among individuals, leading to uncertainty, especially among novice users (Liébana-Cabanillas et al., 2014). The concerns surrounding consumer privacy and security have long been a topic of interest, as individuals have consistently expressed apprehension regarding the potential utilization of their obtained data by various organizations across multiple platforms. The reluctance of customers to engage in Internet commerce might be attributed to privacy and security concerns, as noted by Udo (2001) and Grandinetti (1996). Privacy refers to the deliberate choice made by a firm to utilize consumer data in various manners. The primary concern within the realm of security is the apprehension experienced by customers regarding potential unauthorized access to their personal information and data by external entities, such as hackers or identity thieves. This is exacerbated by the fact that it has been determined through subsequent observations that hackers may not necessarily require physical access to an organization to carry out their activities. This phenomenon might be attributed to the likelihood that a portion of the hackers are situated in undisclosed areas external to the organization (Saleem & Naveed, 2020).

Social Influence: For organizations to remain competitive in the contemporary business landscape, they must also take into account the factor of social influence in adopting and updating new technologies. Scholars are generally in agreement that the incorporation and utilization of digital technology into daily operations are subject to social influence (Venkattesh et al., 2003; Lee & Lin. 2005; Venkatesh & Davis, 2000).

Subjective norms are seen as fundamental components of social influence within the framework of social pressure (Albarracin, 2001). This concept refers to an individual's perception of societal acceptance or disapproval of certain behaviors (Fishbein & Azjen, 2005) and the collective motivation of individuals to conform to and comply with the opinions and moral values of reference groups (Neighbors et al., 2007).

3. Conceptual Framework

Figure 1 depicts the conceptualization framework developed for this study. The framework comprises the factors that are believed to be related to customer intention to use e-payment for online shopping, based on the components adapted from the TAM model and additional external factors from Deka (2020): perceived usefulness, perceived ease of use, perceived security, social influence, promotion.

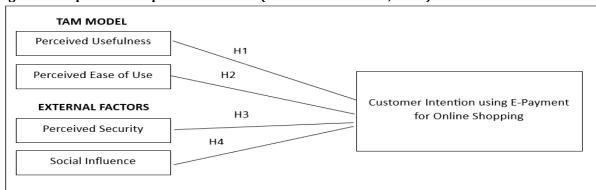


Figure 1: Proposed Conceptual Framework (modified from Deka, 2020)

4. Hypotheses and Future Direction

The research aims to identify the relationship among perceived usefulness, perceived ease of use, perceived security, social influence, and customer intention to use e-payment for online shopping.

- **H1:** Perceived usefulness has a positive relationship to customer intention to use e-payment for online shopping.
- **H2:** Perceived ease of use has a positive relationship to customer intention to use e-payment for online shopping.
- **H3:** Perceived security has a positive relationship to customer intention to use e-payment for online shopping.
- **H4:** Social influence has a positive relationship to customer intention to use e-payment for online shopping.

These independent variables lead to customer intention as an intervening variable and actual use as a dependent variable. Based on these variables, the hypotheses H1, H2, H3, and H4 will be tested to determine whether there is a positive relationship between these variables and customer intention to use e-payment for online shopping. The proposed model is expected to determine the extent to which the use of e-payment is adopted and subsequently, it will also lead us to understand the degree of support provided to cashless customers as they conduct online shopping in Malaysia.

Direction for the Future Research: Our future research will be concerned with implementing the factors influencing customers' intention to use e-payment for online shopping. Research may be conducted using the qualitative approach of data collection to gain a deeper knowledge of every element considered to influence customer intention to use e-payment. The Statistical Package for Social Sciences (SPSS) method will be used to analyze the data gathered as part of the research's quantitative analysis. Further studies also may be done to find out how customer intention, which is impacted by factors influences, might become real behavior.

5. Conclusion

The proposed model in this study will be used to examine consumer intention to use e-payment for online shopping in Malaysia. The hypotheses of this study are based on the TAM model and three additional external factors to investigate customer intention to use e-payment for online shopping. Then, to prove these hypotheses, several measures have been proposed to support a model of factors influencing customer intention to use e-payment for online shopping and to provide an overview of future research. It is hoped that the findings based on the proposed model will be useful for upcoming researchers, business operators, and the government, having cast light on the subject of customer intention in using e-payment.

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