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Factors Influencing Customers on the Use of E-Payment in Klang Valley

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Abstract: The adoption of electronic payment systems (e-payments) has gained significant traction worldwide. E-payment systems have become widely accepted and used in Malaysia's Klang Valley area. The purpose of this study is to investigate the elements that drive customer acceptance of e-payment systems in the Klang Valley, with emphasis on convenience, security, speed and social influence. Drawing upon existing literature, convenience emerges as a critical determinant of e-payment adoption. Security considerations also play a crucial role, as consumers prioritize platforms with robust security measures. Additionally, the speed of transactions is a significant factor influencing consumers' preferences with faster processing times. Furthermore, social influence, encompassing peer recommendations and societal norms, shapes consumers' attitudes and behaviors toward e-payment adoption. To empirically test these factors, a quantitative research methodology will be employed, with data collected through non-probability sampling techniques. The study will focus on people of the Klang Valley, especially Kuala Lumpur, who use electronic payment methods. The data will be analyzed and validated using descriptive analysis, reliability tests, Pearson correlation coefficient, and multiple regression analysis. This study's findings are likely to give useful insights for policymakers, industry stakeholders and researchers looking to encourage the acceptance and use of e-payment systems. Understanding the elements that influence customers' attitudes and behaviors toward e-payment adoption allows for the development of targeted strategies to improve the accessibility, security, and efficiency of digital payment systems. Finally, this study hopes to contribute to the promotion of financial inclusion and the growth of the digital economy.

Keywords: *E-payment method, Convenience, Security, Speed, Social Influence*

1. Introduction and Background

Electronic payment systems, or e-payments, have become a major component of contemporary financial operations, providing consumers and businesses with efficiency and convenience (Alam et al., 2021). Globally, the usage of electronic payment methods has increased in recent years as a result of changing consumer preferences and technological advancements. E-payment systems have been rather popular in Malaysia, especially in the Klang Valley area, where users are progressively using a variety of platforms and services (Karim et al., 2020).

Convenience is one of the most important elements in e-payment acceptance. One important aspect influencing consumers' decisions to use electronic payment systems is convenience (Karim et al., 2020). Digital payment methods are widely accepted due in large part to their accessibility and convenience of use (Razak et al., 2021). As a result, it is critical to understand how convenience influences e-payment system acceptance in the Klang Valley.

When it comes to using e-payment systems, users also need to take security into account. Customers are becoming more concerned about the security of their financial transactions due to the rise in fraud and cyber risks in the digital sphere (Batra & Kalra, 2016). According to research, better security measures will boost users' confidence and trust in e-payment systems, which will lead to higher usage (Barkhordari, 2016).

Additionally, important in influencing consumers' attitudes and actions regarding the adoption of e-payments is speed. When compared to traditional payment methods, digital payment systems' faster transaction times

are frequently seen as more practical and effective (Ruzman et al., 2023). Efficient and smooth transaction completion enhances customer satisfaction and experience overall, which impacts adoption rates (Dutot, 2015).

Furthermore, it becomes clear that social influence plays a significant role in influencing people's decisions to use electronic payment systems. The degree to which people are impacted by the beliefs and actions of others is referred to as social influence (Hassan et al., 2020). Social factors that affect people's attitudes and intentions toward utilizing digital payment methods in the context of e-payment adoption include peer recommendations, social norms, and perceived societal expectations (Barkhordari, 2016).

Although a great deal of progress has been made in understanding the global factors driving the adoption of e-payments, there is still a lack of information in the literature about the particular dynamics at work in Malaysia's Klang Valley. Though e-payment systems are becoming more and more common in this field, little research has been done to examine the particular factors that influence consumers' choices to accept and use digital payment methods. To better understand the dynamics of e-payment adoption in this area, this study's research challenge is to look at the elements influencing consumers' use of e-payment in the Klang Valley.

2. Literature Review

The literature surrounding e-payment adoption encompasses various factors influencing consumers' decisions and behaviors in adopting digital payment methods. Convenience stands out as a significant determinant of e-payment adoption, as indicated by studies such as Manikandan and Jayakodi (2017). Convenience, often measured by the ease of use and accessibility of e-payment systems, plays a crucial role in shaping consumers' attitudes and intentions toward adopting digital payment methods (Singh & Rana, 2017). This suggests that consumers are more likely to embrace e-payment systems that offer seamless and hassle-free transactions, thereby highlighting the importance of convenience in driving adoption rates.

Security emerges as another pivotal factor influencing consumers' decisions regarding e-payment adoption. With the increasing prevalence of cyber threats and online fraud, consumers are becoming increasingly concerned about the security of their financial transactions (Batra & Kalra, 2016). Studies by Junadi (2015), and Taheam et al. (2016) underscore the significance of security in enhancing consumers' trust and confidence in e-payment systems. Enhanced security measures are thus essential for fostering greater acceptance and utilization of digital payment platforms.

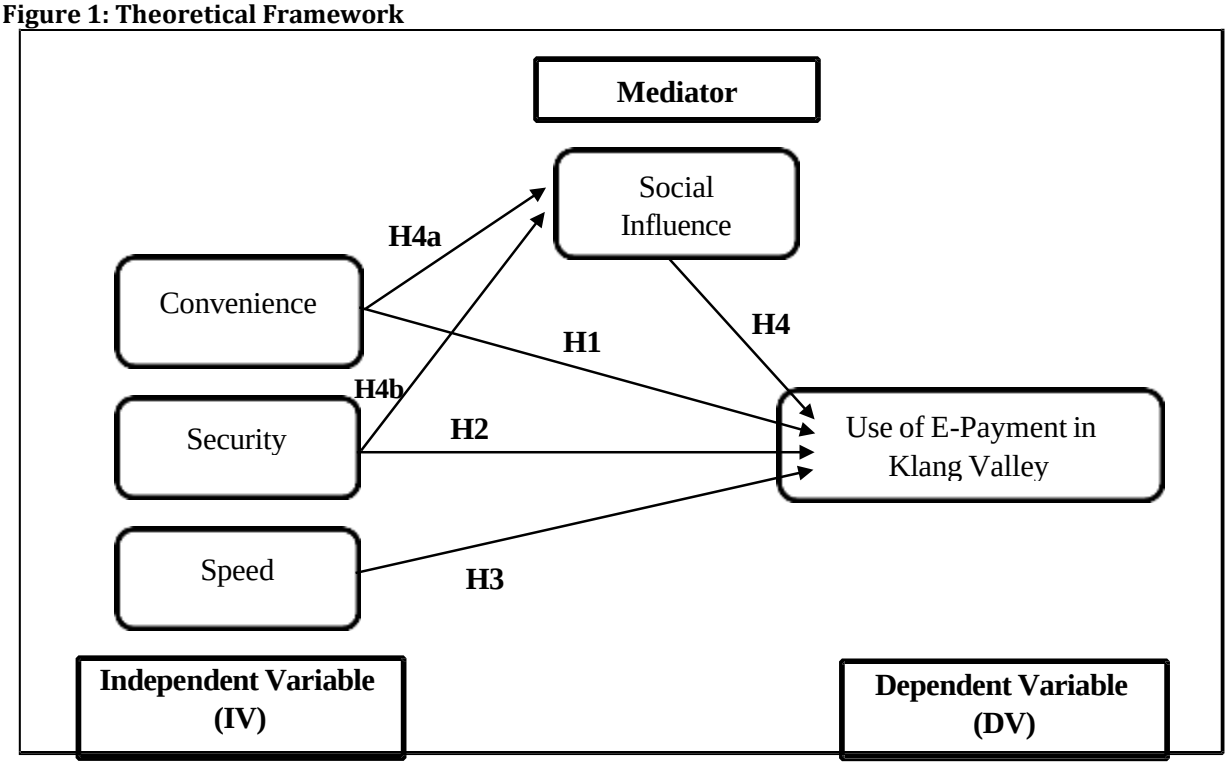
Speed also plays a crucial role in influencing consumers' perceptions and behaviors toward e-payment adoption. Faster transaction speeds offered by digital payment systems are often perceived as more convenient and efficient compared to traditional payment methods (Chen & Nath, 2008). Research by Tella and Olasina (2014) highlights the positive relationship between transaction speed and consumers' intentions to continue using digital payment methods. This suggests that the ability to complete transactions quickly and seamlessly is a key driver of e-payment adoption among consumers.

Moreover, social influence emerges as a significant determinant of e-payment adoption, particularly in the context of peer recommendations and societal norms (Venkatesh et al., 2003). Studies by Yang et al. (2012) and Taheam et al. (2016) emphasize the role of social factors in shaping individuals' attitudes and intentions towards using digital payment methods. Social influence can significantly impact consumers' perceptions of e-payment systems, as individuals may be influenced by the opinions and behaviors of their social network in deciding whether to adopt digital payment platforms.

Furthermore, the research has looked at the function of social influence as a mediator in the link between convenience and e-payment acceptance. According to Oliveira et al. (2016), social impact can have both direct and indirect effects on electronic payment uptake. Similarly, Yang et al. (2012) discovered that social effects increased e-payment acceptance rates by impacting perceived security. These findings underline the need to take into account social aspects when assessing consumer adoption of e-payment systems, as well as the need to investigate the mediating function of social influence in determining adoption behaviors.

The figure below displays the study's theoretical framework, in which convenience was discovered to be one of the most important elements driving E-payment system adoption. Aside from that, E-payment uptake will be influenced by security and speed. Consumers are more inclined to accept and utilize an application if they feel it is in line with their current behavior. As a consequence, marketing professionals may focus on the creation and implementation of marketing communication, as well as the application's compatibility, security, and speed with use cases and advantages for a variety of lifestyles among the target demographic. This study projected that social impact will improve the links between convenience, security, and E-payment adoption speed. Previous study, on the other hand, refutes the notion that social influence has a substantial impact on e-payment uptake. Alam et al. (2021), Dutot (2015), and Razak et al. (2021). As a result of the previous debate, a number of variables have been gathered. The study's factors were convenience (CV), security (SC), speed (SP), social influence (SI), and e-payment adoption. (epD). The theoretical basis for this investigation is described below.

Figure 1: Theoretical Framework



3. Hypothesis Development

Convenience: The first hypothesis proposes that there is a strong positive association between convenience and the use of e-payment in Klang Valley. This hypothesis is supported by prior research indicating that the ease of use and accessibility of e-payment systems positively influence consumers' adoption and utilization of digital payment methods (Alam et al., 2021; Singh & Rana, 2017). Consumers tend to prefer e-payment platforms that offer seamless transactions and convenient features, which in turn, drive higher adoption rates within the Klang Valley region. Therefore, the hypothesis was:
H1: There is a significant positive relationship between convenience and the use of e-payment in Klang Valley

Security: The second hypothesis proposes that there is a substantial positive association between security and the use of e-payment in Klang Valley. Previous studies have shown that consumers' perceptions of security significantly impact their willingness to adopt e-payment systems (Gargaro, 2023; Karim et al., 2020). Enhanced security measures instill trust and confidence in consumers, encouraging greater utilization of digital payment platforms within the Klang Valley area. Therefore, the hypothesis was:
H2: There is a significant positive relationship between security and the use of e-payment in Klang Valley

Speed: The third hypothesis claims that there is a significant positive association between speed and e-payment usage in Klang Valley. Research indicates that faster transaction speeds offered by e-payment systems contribute to consumers' preferences for digital payment methods (Dutot, 2015; Razak et al., 2021). Efficient transaction processing enhances user experience, driving higher adoption rates of e-payment systems within the Klang Valley region. Therefore, the hypothesis was:
H3: There is a significant positive relationship between speed and the use of e-payment in Klang Valley.

Social Influence: The fourth hypothesis states that there exists a significant relationship between social influence and the use of e-payment in Klang Valley. Previous studies have highlighted the impact of social factors, such as peer recommendations and societal norms, on consumers' adoption of digital payment methods (Alam et al., 2021; Dutot, 2015). Social influence plays a crucial role in shaping consumers' attitudes and behaviors toward e-payment adoption within the Klang Valley area. Accordingly, the following hypotheses were proposed:
H4: There is a significant relationship between social influence and the use of e-payment in Klang Valley

Social Influence as a Mediator: According to Barkhordari (2016), social influence has a direct or indirect effect on the adoption of electronic payments. Dutot (2015) discovered that social impact influenced E-payment adoption rates via influencing security. They discovered that social impact was significant for individuals who had direct effects as well as those who could become potential users. Gargaro (2023) discovered a link between social influence and an individual's intention and attitude toward new technologies. The hypothesis was, therefore:

The fifth hypothesis suggests that social influence mediates the relationship between convenience and the use of e-payment in Klang Valley. Prior research has shown that social factors mediate the influence of convenience on consumers' adoption decisions (Hassan et al., 2020; Karim et al., 2020). Peer recommendations and social norms influence consumers' perceptions of convenience, thereby impacting their adoption and utilization of e-payment systems within the Klang Valley region.
H4a: Social influence mediates the relationship between convenience and the use of e-payment in Klang Valley

The sixth hypothesis proposes that social influence mediates the relationship between security and the use of e-payment in Klang Valley. Studies have indicated that social factors mediate the influence of security perceptions on consumers' adoption behaviors (Razak et al., 2021; Wong & Mohamed, 2021). Peer recommendations and societal norms shape consumers' trust and confidence in the security of e-payment systems, influencing their adoption and utilization within the Klang Valley area.
H4b: Social influence mediates the relationship between security and the use of e-payment in Klang Valley

4. Research Methodology

The data for this research proposal will be gathered using a quantitative approach. The researcher's quantitative research attempts to persuade Malaysian individuals in the Klang Valley area to adopt e-payment systems by collecting numerical data or data that may be turned into usable statistics. This proposal employed the non-probability sampling approach. Convenience sampling was the most acceptable approach due to the study's time and money restrictions, as well as the study's high sample size, and it allows the researcher to conveniently acquire information about respondents. The study's target respondents were Klang Valley residents, notably those from Kuala Lumpur, who used an e-payment method. Kuala Lumpur's population in 2023 is predicted to be 8,621,724. The sample size for this study was estimated using a sample size calculator, which calculated the required minimum sample size. The G-power program was used to calculate the minimum sample size required for this study, which was 384 for populations greater than 1,000,000 in the Klang Valley.

This study was carried out with quantitative approaches. The purpose of this study was to quantify the elements that impact Malaysian individuals' adoption of e-payment systems by creating numerical data or data that may be converted into usable statistics. Descriptive analysis is an essential initial step in doing statistical studies. Descriptive analysis is the statistical description, grouping, and presentation of constructs of interest, as well as their associations. It is summarized using descriptive statistics based on the mean. The questionnaire findings will be evaluated for clarity. The Reliability Analysis procedure calculates a number of regularly used

scale reliability metrics, as well as information on scale item relationships. Cronbach's alpha tests are used to determine the reliability of multiple-question surveys, such as Likert Scales. Pearson Correlation Coefficient is commonly used to investigate the existence of a link between quantitative data and two variables, and multiple regression analysis provides an objective method for examining the degree and nature of the link between the independent variable and the dependent variable.

5. Managerial Implications and Recommendations

Subsequent investigators seeking to investigate the variables impacting consumers' utilization of electronic payment systems may build on the current theoretical models by comparing developing and developed nations, such as Singapore and Malaysia. This method makes it possible to comprehend how comparable elements could affect the uptake of e-payment systems in various socioeconomic settings on a deeper level. Through a comparative analysis of the adoption patterns and behaviors of residents in these two nations, researchers can discern any notable distinctions or resemblances in the factors that impact the adoption of electronic payment systems.

Researchers can collect standardized data by using the same questionnaire in both nations, which makes it easier to compare the two populations directly. This comparative study can clarify whether consumer attitudes and behaviors about the adoption of e-payments are influenced by cultural, economic, or regulatory disparities between emerging and industrialized nations. Convenience and security, for example, may become the common elements propelling the adoption of e-payments, but their relative importance and the particular issues surrounding them may differ throughout nations.

Furthermore, to gather more detailed insights into the experiences and difficulties that particular population segments, like enterprises or consumers, have with e-payment systems, future studies may focus on these areas. Policymakers and industry stakeholders can customize interventions and activities to target the specific needs of the demographic groups or industries that are having trouble adopting e-payment systems. This focused strategy helps to strengthen e-payment systems generally and maximizes the effectiveness of initiatives, which in turn encourages more citizen acceptance and utilization.

Conclusion: The study closes by recommending a detailed investigation of the elements influencing consumer adoption of electronic payment systems in the Klang Valley region. Through the establishment of hypotheses, the study hopes to evaluate the importance of speed, convenience, security, and social influence in influencing customers' attitudes and behaviors toward digital payment systems. The project's quantitative research strategy seeks to collect empirical data to validate proposed hypotheses and get a better understanding of the dynamics of e-payment acceptance in the Klang Valley. Furthermore, the study offers managerial implications and recommendations for further research, such as targeted investigations into certain demographic groups and comparative studies of industrialized and developing countries. Finally, the study seeks to provide insights that will help lead the development of effective initiatives to stimulate the acceptance and use of e-payment systems, therefore boosting financial inclusion and the growth of the digital economy in the Klang Valley and beyond. This will be performed by addressing the research question and analyzing the hypotheses that have been proposed.

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