

Factors Influencing Malaysian University Students' Intention to Use Online Payment Systems: An Application of the Extended Perceived Value Theory

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Abstract. The current study aims to investigate the factors influencing the adoption of online payment systems among university students in Malaysia by extending the Perceived Value Theory (PVT). The research model incorporates perceived functional value, perceived social value, trust, and personal innovativeness as predictors of attitude, which in turn influences the intention to use online payment systems. A quantitative research design was employed, and data were collected from 395 university students in Malaysia using an online survey. The results, analyzed using PLS-SEM, revealed that perceived functional value, perceived social value, and trust significantly influence attitude, while personal innovativeness does not. Furthermore, attitude was found to be a significant predictor of the intention to use online payment systems. The findings provide valuable insights for online payment service providers and policymakers to promote the adoption of cashless payment methods among university students. However, the study has limitations, such as the cross-sectional design and the focus on a specific population, which future research should address.

Keywords: Attitude, intention to use, online payment systems, Perceived Value Theory, personal innovativeness, trust, Industry, innovation and infrastructure

1. Introduction

Due to the rapid development of Internet services, online payment has become more prevalent among people worldwide (Shihadeh, 2020; JosephNg et al., 2022). People are transforming their payment methods from cash-based payments into cashless transactions (Munikrishnan et al., 2024). Based on the report of eMarketer, the amount of global online payment users has reached 938 million. In recent years, there has been an increasing number of online payment users globally. This is driven by the growing penetration of smartphones and electronic commerce platforms (Yang et al., 2021). Malaysia is an emerging economy for the adoption of online payment systems among users due to its high penetration of the Internet and smartphones and the large population of youth (Abdul-Halim et al., 2022). As motivated by the Malaysian government, a variety of industries in Malaysia have started embracing and accepting online payment systems, including retailing, food and beverages, and electronic commerce companies (Sivathanu, 2019). For instance, the users of online payment systems in Malaysia were rewarded 30 MYR to improve their adoption across all ages, encouraging users to accept the Touch n' Go payment system (Sivathanu, 2019; Che Nawi et al., 2022).

Although the number of active users of online payment has been increasing, the use of cashless payment methods in Malaysia is still relatively low in comparison with other regions (Ebubedike et al., 2022). According to Munikrishnan et al. (2024), Malaysia has been a cash-based economy, with 72% of transactions processed in cash. Thus, it is important to determine what forms the low level of online payment services usage and identify the elements that trigger cashless payment. In addition, a result by Arrow Payments (n. d) stated that mobile/ online payment applications are favorites among college and university students (Gen Z). 93% of students said that they have used digital payments very often, where this has supported the study of Chelvarayan et al. (2022), where university students are highly aware of the mobile payment systems which justified to study of the group as a sample.

Although there are some researches employed the Perceived Value Theory (PVT) as the theoretical support, most of the studies discussed how product-related factors including perceived functional value and perceived social value impact the adoption of online payment (Wu & Huang, 2023; Zhang et al., 2024). However, perceived functional value and perceived social value are insufficient to explain the online payment adoption. Besides, whether product-related factors and personal-related factors can jointly affect the adoption of online payment technology is less well-known (Senali et al., 2023). As validated by the existing literature, trust, and personal innovativeness are significant influential factors affecting the adoption of online payment (Al-Sabaawi et al., 2023; Tikku & Singh 2023). For instance, Putri et al. (2023) highlighted the inclusion of trust as trust can form the decision of a user toward a technology. Besides, Rahi et al. (2023) emphasized the importance of including innovativeness as a driver of users' behavior, and individuals with high innovativeness are motivated to use new technology. In that, trust and personal innovativeness are integrated into PVT theory and we seek to investigate the predictive effects of perceived functional value, perceived social value, trust, and personal innovativeness as influential factors on attitude. Afterward, the attitude would predict the intention to use online payment systems among university students. As argued above, the research questions and objectives were formulated as below:

RQ1: What factors drive the attitude of university students to use online payment systems?

RQ2: Is there any effect of attitude on the usage intention of university students to use online payment systems?

RO1: To examine the predictive effects of perceived functional value, perceived social value, trust, and personal innovativeness on attitude.

RO2: To determine the effect of attitude and usage intention of online payment systems.