

Digital Payment Adoption and Satisfaction: A Comparative Study of UPI and E-Wallets in India and Malaysia

Haslindar Ibrahim¹, Shivaprasad S², Ainul Kamilah binti Zolkiffly^{1*}, Aina Afrina binti Azhar¹, Ainul Mardhiah binti Zolkiffly¹, Ainur Shazmiera binti Ahmad Shabani¹, Dundesh Kotagi², Valibhasha N², Daisy Mui Hung Kee¹

¹Universiti Sains Malaysia, Jalan Sg Dua, 11800 Minden, Pulau Pinang, Malaysia

²Presidency University, University House 8/1, Bengaluru 560025, India

*Corresponding Email: ainultwink@student.usm.my

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ABSTRACT

Digital payment systems have expanded rapidly in India and Malaysia, with UPI in India and DuitNow QR and e-wallet platforms such as MAE and Touch 'n Go eWallet in Malaysia becoming increasingly integrated into everyday transactions. The current study aims to analyze the key determinants of digital payment adoption in two prominent Asian nations, namely, India and Malaysia. Utilizing the Technology Acceptance Model (TAM), this comparative study examines the impact of adoption of online payment platforms, perceived usefulness, perceived ease of use, perceived trust, social influence, and system quality on customer satisfaction. A quantitative methodology was employed using a 5-point Likert-scale questionnaire from 159 respondents across both regions, and the data were analyzed using SPSS. The findings show that system quality had the strongest positive effect on customer satisfaction in Malaysia ($b = 0.415$, $p < 0.05$), followed by perceived usefulness ($b = 0.256$, $p < 0.05$), while in India, social influence ($b = 0.549$, $p < 0.05$) and system quality ($b = 0.437$, $p < 0.05$) were the strongest positive predictors. This research provides strategic insights for financial institutions and policymakers in emerging markets.

Keywords: Adoption; Comparative Analysis; Digital Payment Systems; E-Wallets; Perceived Security; Unified Payments Interface

JEL Classification: D12; G21; O33

INTRODUCTION

Digital technology has fundamentally reshaped how consumers manage money in their daily lives, yet a critical gap remains in understanding the specific behavioral factors that sustain long-term use of these systems. While the infrastructure for digital payments is growing, major obstacles like cybersecurity threats, inconsistent digital literacy, and technical fragmentation continue to slow down the move toward a fully cashless society in regions like Southeast Asia and South Asia. Therefore, the aim of this study is to analyze and compare the adoption patterns of e-wallets and mobile payment apps in Malaysia and India while looking closely at how national systems like Malaysia's DuitNow QR and India's UPI give impact to consumer trust and loyalty.

E-wallets in Malaysia really took off once smartphones became so common and the government got behind the idea. Touch 'n Go eWallet, GrabPay, and MAE have become increasingly visible in everyday transactions in Malaysia. When DuitNow QR showed up, it changed everything. Instead of using different codes for each app or bank, consumers can now use a single QR code for a wide range of transactions. Shopping got a lot easier for everyone. India's on a similar path with its UPI system, and people there can send money instantly through mobile apps. The Digital India campaign and that big demonetization move in 2016 pushed folks toward cashless payments fast. Malaysia and India have also continued to strengthen their digital payment connectivity, with recent initiatives supporting greater interoperability between DuitNow QR and UPI-based payment systems (PayNet, 2026). Along with Governmental intervention, strong technology integration is also a key factor for the successful penetration of digital payment systems in India.

From a human perspective, the success of these apps comes down to whether people find them easy to use and genuinely helpful in their daily lives. According to the research of Karim et al. (2020), which utilizes the Technology Acceptance Model, these factors are the primary drivers of digital adoption. Consumers are more likely to adopt digital payment systems when they perceive them as useful and practical for their everyday transactions (Edeh et al., 2021; Li et al., 2024). However, for people to actually stick with these apps, they need to feel that their money is safe and secure. If a system feels glitchy or if someone is worried about being hacked, they will quickly go back to using physical cash.

Despite this progress, significant challenges persist that threaten the stability of the digital economy. Rising cybersecurity concerns, including phishing and unauthorized transactions, have made users cautious, particularly among the elderly and those with lower digital literacy. There is also a digital divide where people in village areas or older generations might struggle because they do not have stable internet or the technical skills to use these apps confidently. Qi et al. (2025) point out that for digital transformation to benefit everyone, greater attention should be given to stronger consumer protection and education on the safe use of digital technologies. Ultimately, while Malaysia and India have successfully built the digital rails for a cashless future, the focus must now shift towards building systemic trust and ensuring that no segment of the population is left behind in the transition.

Accordingly, this study aims to analyze and compare the determinants of customer satisfaction with digital payment systems in India and Malaysia by examining adoption of online payment platforms, perceived usefulness, perceived ease of use, perceived trust, social influence, and system quality. The study is significant because understanding these factors can help digital payment providers identify the technological and behavioral conditions that encourage positive user experiences across different

national settings. Its novelty lies in comparing the relative importance of these determinants across two distinct digital payment ecosystems, namely India's UPI environment and Malaysia's e-wallet and DuitNow QR ecosystem. The findings are expected to contribute to the literature on technology acceptance and digital payment behavior while providing practical insights for payment providers and policymakers seeking to improve system performance, usability, security, and user satisfaction.

LITERATURE REVIEW

Theoretical framework: The Integrated TAM Model

The underlying theory for this research is based on the Theory of Technology Acceptance Model (TAM) by Davis (1989). While TAM highlights the psychological factors driving adoption, this research has adapted the model to reflect the needs of both India and Malaysia by incorporating System Quality as an additional technological construct. This helps in ensuring that psychological constructs such as Perceived Usefulness, Perceived Ease of Use, Perceived Trust, and Social Influence are directly linked to technical performance.

Hypotheses Development

Adoption of Online Payment Platform

Adoption is defined as the first-time decision made by users to adopt digital means as compared to other conventional modes of making payments. Adoption of online payment platforms is important for understanding consumer behavior toward emerging fintech technologies such as UPI and e-wallets (Davis, 1989; Edeh et al., 2021; Oliveira et al., 2016). Here, adoption is considered not a one-off activity but rather as the main factor behind the performance of System Quality. With an increase in the number of adopting users, there is a need for the system's technical capability to become better in order to fulfill users' needs.

H1: Adoption of Online Payment Platform positively impacts Customer Satisfaction.

Perceived Usefulness

Perceived Usefulness (PU) represents the extent to which a particular system is believed to improve transaction efficacy due to benefits such as speed and reward. There would be higher chances of adoption of electronic payment systems by individuals, if such systems were offering benefits such as convenience and usability (Venkatesh & Davis, 2000; Yew et al., 2025). For the purposes of conducting this comparative analysis, PU represents the unique benefits offered by the UPI payment system of India and the e-wallet of Malaysia. This particular construct provides an essential input for measuring System Quality. The concept of quality is judged based on the usefulness of a particular system.

H2: Perceived Usefulness positively impacts Customer Satisfaction.

Perceived Ease of Use

Perceived Ease of Use (PEU) refers to the perceived effortlessness of navigating the payment interface from the user's perspective. PEU is one of the critical elements necessary for the effective deployment of digital technologies. As noted by Gupta et al. (2024), ease of use was a motivating factor for Indian consumers, whereas according to Teoh et al. (2025), it was the key to a positive experience of using digital products in Malaysia. This relates to the concept of System Quality, as the quality of a good system is understood to be its lack of technological difficulties (Abbad, 2021).

H3: Perceived Ease of Use positively impacts Customer Satisfaction.

Perceived Trust

Perceived Trust serves as the psychological underpinning of e-money usage, focusing on aspects of security and trust. Trust is essential for the proper functioning of both the UPI system and e-wallets because security perceptions directly influence how satisfied users are (Gupta et al., 2024). In Malaysia, perceived ease of use is also important in shaping users' experiences with e-wallets, particularly because usability and convenience influence how users evaluate digital payment services (Teoh et al., 2025). For this research, Trust is a precondition for System Quality. Reliable and secure payment services are important for reducing users' concerns and strengthening trust in mobile payment systems (Tan et al., 2024). This means that trust must come before users perceive any quality in the technology. Relating to mobile-based e-financial systems, trust is a mechanism for lowering risks that makes a person become a satisfied consumer.

H4: Perceived Trust positively impacts Customer Satisfaction.

Social Influence

Social Influence (SI) refers to the impact that results from the influence of the social network around a user, including families and friends, on the use of technology. Social influence can play an important role in e-wallet acceptance, as users may be affected by the behaviors and expectations of people within their social environment (Abdullah et al., 2020). Peer activities help overcome cognitive barriers and improve usage rates (Natarajan et al., 2017). SI can also shape users' evaluations of digital payment systems, as recommendations and usage patterns among others may reinforce their willingness to adopt and continue using the technology (Fitrianingsih & Fianto, 2022). Users perceive the system to be of high quality when they see other people benefiting from it.

H5: Social Influence positively impacts Customer Satisfaction.

System Quality and Customer Satisfaction

System Quality is the technical performance of a system and is evaluated based on factors such as ease-of-use, functionality, reliability, flexibility, data quality, portability, integration, and importance. These factors are important, especially in the digital payment ecosystems of India and Malaysia, as reliability determines the success of UPI and e-wallet platforms in daily transactions (Ayinaddis et al., 2023). In the Malaysian context, Moksin et al. (2024) highlight that the quality of e-wallet services plays an important role in order to build trust and satisfaction, where strong technical stability is essential for digital payment adoption. This relationship is further supported in developing countries, where recent research states that high-quality features also serve as essential elements in building user trust, which results in enhancing customer satisfaction (Oscar, 2026). This also aligns with evidence from India's UPI landscape, where high-performance system quality is required to handle many real-time transactions. Specifically, studies on user perceptions of online retail payment systems in India show that main system quality components like security therefore play a significant role in increasing overall customer satisfaction.

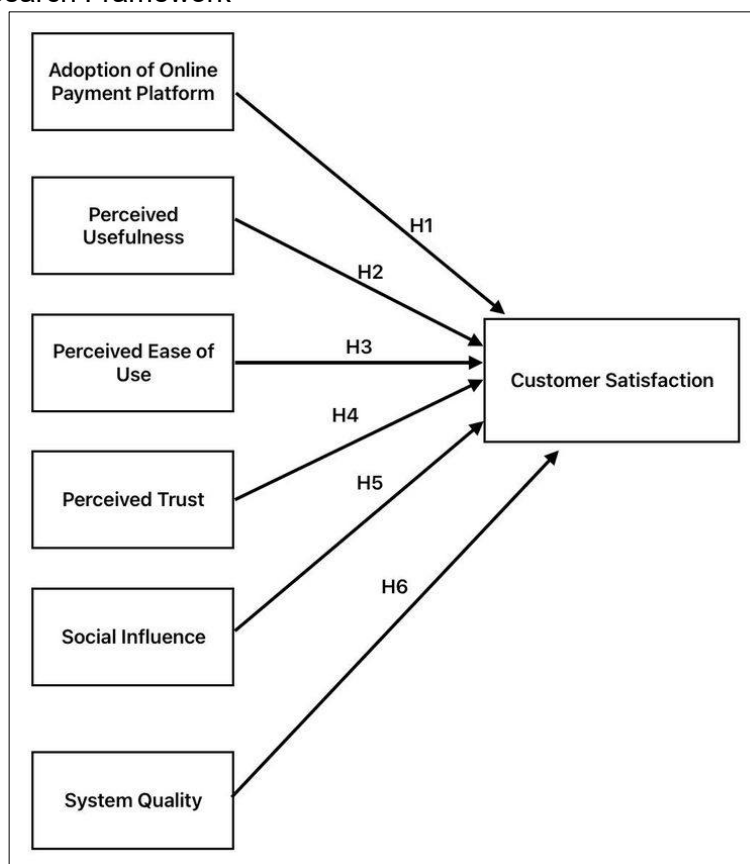
H6: System Quality has a positive influence on Customer Satisfaction.

Conceptual Framework

The conceptual framework integrates the TAM with additional technological and behavioral factors relevant to digital payment systems. It proposes that adoption of online payment platforms, perceived usefulness, perceived ease of use, perceived trust, and social influence influence customer satisfaction, while system quality represents the

technical dimension of the payment experience. The study framework model is depicted in Figure 1.

Figure 1. Research Framework



RESEARCH METHOD

Research Design

This study adopted a cross-sectional quantitative research design to examine the factors associated with customer satisfaction toward digital payment systems in India and Malaysia. The quantitative approach was selected because the study aimed to test the hypothesized relationships among adoption of online payment platforms, perceived usefulness, perceived ease of use, perceived trust, social influence, system quality, and customer satisfaction. The comparative design further enabled the researchers to examine whether the relative influence of these factors differed between the Malaysian and Indian contexts.

Sample and Procedures

This study employed a survey method to collect data from UPI and e-wallet users, aiming to explore customer experience and satisfaction with online payment services. The survey was administered through Google Forms. The study included 159 respondents who had experience using digital payment systems, with responses obtained from users in Malaysia and India. The collected data were analyzed using SPSS software.

Measures

All the variables considered in this study, such as the adoption of online payment platforms, perceived usefulness, perceived ease of use, perceived trust, social influence, system quality, customer satisfaction, and non-adoption of e-wallets, will be operationalized using a 5-point Likert scale where 1 denotes (Strongly Disagree) and 5

indicates (Strongly Agree) (see Appendix 1). Such a format facilitates the respondents' ability to rate their agreement or disagreement with each statement based on their perceptions and attitudes. The items have been pre-tested for validity in the Malaysian digital payments environment.

Adoption of Online Payment Platform

Three questions measure their present usage and future intentions related to the digital wallets. For instance, one question might be: "I plan to switch my payment-related work to E-Wallet apps."

Perceived Usefulness (PU)

Three questions assess the impact of digital payment solutions on consumer efficiency and efficiency in daily life. One of the questions is "E-Wallet is useful for me."

Perceived Ease of Use (PEU)

Three questions are designed to assess ease of use when operating the electronic wallet systems. One sample question from this section is: "Overall, I find E-Wallet is simple and easy to use."

Perceived Trust (PT)

Three statements reflect the users' trust in the service providers and also their data privacy. An example statement is: "I feel my personal data is secure and not being compromised."

Social Influence

Three questions measure the influence of outside influences like peer groups and national trends on the use of electronic wallets. One question is as follows: "Most people in my social circle use E-Wallet."

System Quality

The following three elements evaluate the technical efficiency and reliability of the payment system. Examples include: "The E-Wallet system is highly reliable and rarely crashes."

Customer Satisfaction

Three questions assess the global cognitive and affective assessment of the user experience. An example question is: "On the whole, I am satisfied with the E-Wallet payment system."

Reasons for Not Using E-Wallets

Six areas that pinpoint issues or barriers that could be hindering implementation include security threats, technological problems, and a desire to use cash. Some of these areas include: "I am concerned about the safety of my bank account and potential scams" and "I prefer using physical cash because it helps me manage my budget better."

RESULTS

Respondents' Demographic Profile

Table 1. Summary of Respondents' Demographics (N=159)

Variable	Category	Frequency (n)	Percentage (%)
Age	Under 21	19	11.95
	21-30	109	68.55
	31-40	16	10.06
	41+	15	9.43
Gender	Male	48	30.19
	Female	110	69.18
	Prefer not to say	1	0.63
Race	Malay	50	31.45
	Chinese	12	7.55
	Indian	6	3.77
	Indian (International)	60	37.74
Highest Education Level	Secondary School (SPM/STPM)	10	6.3
	Diploma	9	5.66
	Bachelor's Degree	75	47.17
	Postgraduate (Master/PHD)	12	7.55
Occupation	Student	120	75.47
	Employed	24	15.09
	Self-Employed	15	9.43
	Unemployed	0	0
Monthly Income	No income	57	35.85
	Below RM2,000	14	9.81
	RM2,501 – RM4,850	20	12.58
	RM4,851 – RM7,100	10	6.3
	RM7,101 – RM10,960	7	4.4
	Above RM10,960	4	2.52
Primary App Used	TnG eWallet	47	29.56
	GrabPay	0	0
	ShopeePay	2	1.26
	MAE	29	18.24
	BIMB	14	8.81
	I do not use E-Wallet	5	3.14
	CIMB clicks	1	0.63
	RHB	1	0.63
	PhonePe	31	19.5
	Google Pay (Gpay)	15	9.43
	Paytm	2	1.26
	Amazon Pay	7	4.4
	BHIM	0	0
	I do not use UPI	4	2.52
	ApplePay	1	0.63

Table 1 shows the demographic profile of respondents (N=159). The majority of respondents (N=109, 68.55%) are aged between 21 and 30 years, with the fewest respondents from the age group of 41 years and above. In terms of gender, most respondents are female (N=110, 69.18%), while males make up a smaller proportion (N=48, 30.19%). Regarding educational qualifications, the largest group of respondents holds a bachelor's degree (N=75, 47.17%), followed by those with a master's degree (N=12, 7.55%). The occupation data reflects that most respondents are students (N=120,

75.47%), while a smaller number are employed (N=24, 15.09%) and self-employed (N=15, 9.43%). Similarly, the monthly income data aligns with the occupation trends, where the majority (N=57, 35.85%) have no income, followed by income from RM2,501 - RM4,850.

In terms of the most commonly used digital payment apps among the respondents, 47 respondents (29.56%) used TnG eWallet, while 31 respondents (19.50%) used PhonePe. A total of 29 respondents (18.24%) reported using MAE, followed by Google Pay (GPay) with 15 respondents (9.43%). Moreover, 12 respondents (7.55%) reported using Paytm, while Amazon Pay was used by 7 respondents (4.40%). ShopeePay was used by 2 respondents (1.26%), while ApplePay was used by 1 respondent (0.63%). No respondents reported using GrabPay or BHIM, while 4 respondents (2.52%) indicated that they did not use UPI. Overall, TnG eWallet and PhonePe were the most commonly used digital payment applications among the respondents.

Descriptive Statistics, Reliability, and Correlation Analysis - Malaysia

Table 2. Descriptive Statistics, Cronbach's Coefficient Alpha, and Zero-order Correlations for All Study Variables

Variable	1	2	3	4	5	6	7	8
1 Adoption of Online Payment Platform	0.726							
2 Perceived Usefulness	0.548**	0.793						
3 Perceived Ease of Use	0.667**	0.853**	0.925					
4 Perceived Trust	0.378**	0.712**	0.705**	0.722				
5 Social Influence	0.249*	0.466**	0.457**	0.456**	0.729			
6 System Quality	0.611**	0.643**	0.706**	0.641**	0.498**	0.883		
7 Reasons for Not Using E-Wallet	0.095	-0.067	-0.083	0.002	0.262**	-0.080	0.760	
8 Customer Satisfaction	0.618**	0.733**	0.785**	0.640**	0.516**	0.808**	-0.047	0.863
Number of Items	2	3	3	3	3	3	6	3
Mean	6.40	10.48	10.45	10.27	9.57	9.87	17.63	10.20
Standard Deviation	1.22	1.34	1.55	1.46	1.84	1.71	4.39	1.49

Note: N=99; *p < .05, **p < .01, ***p < .001

Table 2 presents descriptive statistics, measures of reliability, and zero-order correlations among the study variables. All tested variables demonstrate high levels of reliability, with Cronbach's alpha coefficients ranging from 0.760 to 0.863.

Regression Analysis and Hypothesis Testing - Malaysia

Table 3. Regression Analysis

Variable	Customer Satisfaction
1 Adoption of Online Payment Platform	0.069
2 Perceived Usefulness	0.256
3 Perceived Ease of Use	0.113
4 Perceived Trust	0.039
5 Social Influence	0.104
6 System Quality	0.415
7 Reasons for Not Using E-Wallet	0.023
R ²	0.686
F Value	27.807

Durbin- Watson Statistic	1.874
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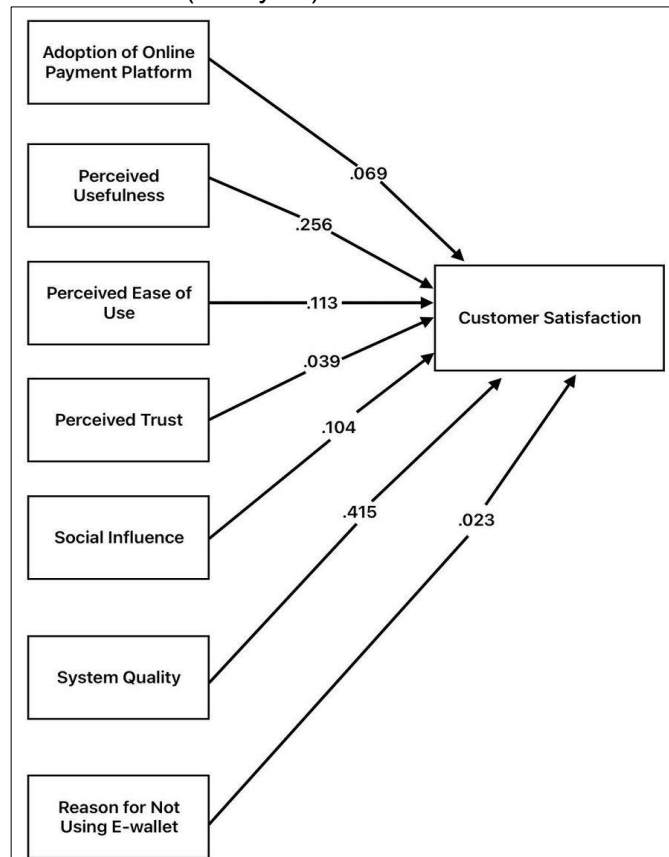
The regression analysis results are shown in Table 3 below, where the dependent variable is Customer Satisfaction and the independent variables are: Adoption of Online Payment Platform, Perceived Usefulness, Perceived Ease of Use, Perceived Trust, Social Influence, System Quality, and Reasons for Not Using E-Wallet. The result shows that the highest impact of the independent variables on Customer Satisfaction is System Quality. This can be seen from the R^2 value of 0.686, which means that 68.6% of Customer Satisfaction variance is explained by the independent variables.

System quality has the most impact on customer satisfaction (0.415), while perceived usefulness has a significant impact on customer satisfaction (0.256). Perceived ease of use (0.113) and social influence (0.104) also have moderate impacts on driving customer satisfaction. However, adoption of an online payment platform has a lower impact on customer satisfaction (.069).

Moreover, Perceived Trust and Reasons for Non-Use of E-Wallet have very little effect on Customer Satisfaction, as is evident from their close proximity to zero (0.039 and 0.023, respectively).

In summary, the model underscores the importance of System Quality and Perceived Usefulness in achieving Customer Satisfaction, although the model recognizes that the other variables make a relatively smaller contribution. The model's results are presented in Figure 2.

Figure 2. Hypothesized Model (Malaysia)



Descriptive Statistics, Reliability, and Correlation Analysis - India

Table 4. Descriptive Statistics, Cronbach's Coefficient Alpha, and Zero-order Correlations for All Study Variables

Variable		1	2	3	4	5	6	7	8
1	Adoption of Online Payment Platform	0.911							
2	Perceived Usefulness	0.790**	0.961						
3	Perceived Ease of Use	0.797**	0.902**	0.961					
4	Perceived Trust	0.776**	0.880**	0.918**	0.965				
5	Social Influence	0.704**	0.785**	0.863**	0.878**	0.926			
6	System Quality	0.691**	0.713**	0.827**	0.858**	0.883**	0.945		
7	Reasons for Not Using E-Wallet	-0.125	0.053	0.094	0.046	0.154	0.018	0.953	
8	Customer Satisfaction	0.627**	0.715**	0.793**	0.795**	0.887**	0.865**	0.122	0.904
Number of Items		3	3	3	3	3	3	6	3
Mean		9.04	9.56	9.57	9.44	9.43	9.31	16.37	9.62
Standard Deviation		2.47	2.47	2.27	2.29	2.14	2.16	4.94	2.28

Note: N=60; *p < .05, **p < .01, ***p < .001

Table 4 presents descriptive statistics, measures of reliability, and zero-order correlations among the study variables. All tested variables demonstrate high levels of reliability, with Cronbach's alpha coefficients ranging from 0.953 to 0.904.

Regression Analysis and Hypothesis Testing - India

Table 5. Regression Analysis

Variable		Customer Satisfaction
1	Adoption of Online Payment Platform	-0.077
2	Perceived Usefulness	0.138
3	Perceived Ease of Use	0.041
4	Perceived Trust	-0.176
5	Social Influence	0.549
6	System Quality	0.437
7	Reasons for Not Using UPI	0.017
R ²		0.786
F Value		26.829
Durbin- Watson Statistic		2.005

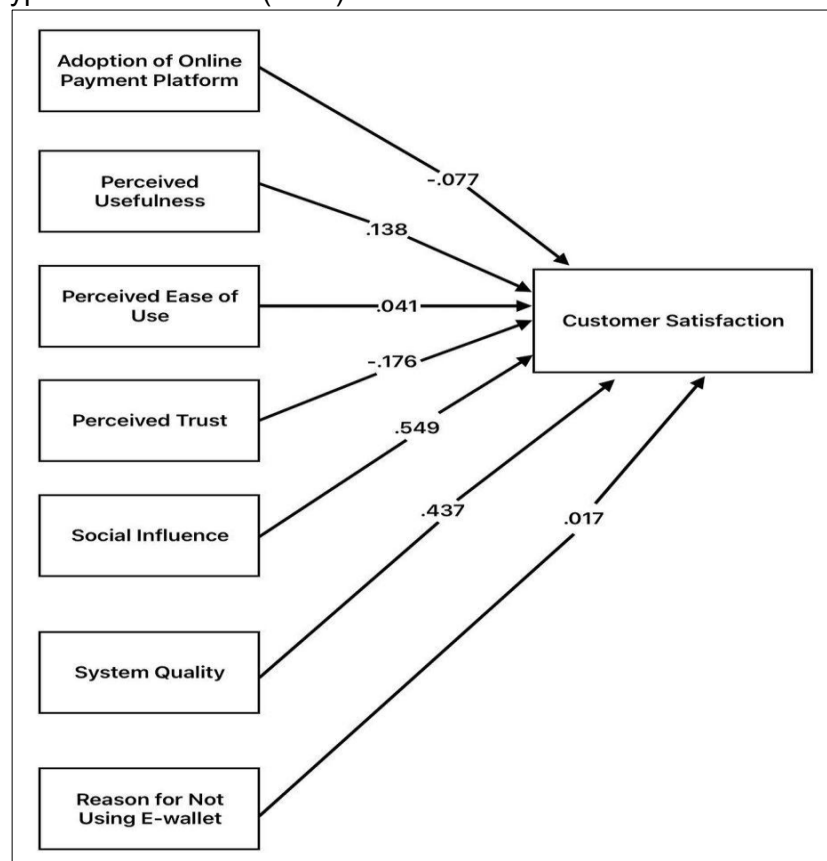
The outcomes of the regression analysis are illustrated in Table 5, which investigates the association between Customer Satisfaction and various independent variables such as Adoption of Online Payment Platform, Perceived Usefulness, Perceived Ease of Use, Perceived Trust, Social Influence, System Quality, and Reasons for Non-use of UPI. It is observed that Social Influence is the most influential variable with respect to Customer Satisfaction. In addition, an R² of 0.786 indicates that 78.6% of the variation in Customer Satisfaction is accounted for by the independent variables.

The highest impact is observed between Social Influence and Customer Satisfaction (0.549), with System Quality showing a highly significant positive correlation (0.437). Other predictors that exhibit a significant impact in driving customer satisfaction include Perceived Usefulness (0.138) and Perceived Ease of Use (0.041). On the other hand, Reasons for Not Using UPI shows only a highly insignificant correlation (0.017).

Furthermore, Adoption of Online Payment Platform and Trustworthiness have shown negative impacts on Customer Satisfaction since their beta values are less than zero (-0.077 and -0.176, respectively).

In general, the model emphasizes the important role played by Social Influence and System Quality in determining Customer Satisfaction, with other factors having less importance or being negatively contributing. The output of the hypothesized model is shown in Figure 3 below.

Figure 3. Hypothesized Model (India)



DISCUSSION

This study aimed to examine the factors influencing customer adoption and satisfaction toward digital payment systems in Malaysia and India by applying the TAM. Using a quantitative research method, data were collected from 159 respondents through a structured questionnaire distributed via Google Forms. The findings demonstrate that digital payment adoption in both countries is strongly influenced by factors related to system performance, usability, and social behavior, although the dominant influencing factors differ between Malaysia and India.

Malaysian Digital Payment Satisfaction System Quality and Perceived Usefulness

The results for Malaysia indicate that System Quality has the strongest positive influence on customer satisfaction, followed by Perceived Usefulness. This finding supports H6 and H2, which proposed that System Quality and Perceived Usefulness positively affect customer satisfaction. Malaysian users appear to place strong importance on smooth transaction performance, reliability, and convenience when using e-wallet services such

as TnG eWallet and MAE. This is consistent with the findings of Moxsin et al. (2024), who highlighted that service quality and technical stability are essential in increasing satisfaction with e-wallet applications in Malaysia. In addition, the strong effect of Perceived Usefulness suggests that Malaysian consumers are more satisfied when digital payment systems help improve efficiency and simplify daily transactions. This finding is also aligned with Davis (1989), which explains that users are more likely to accept technology when they perceive it as beneficial and useful.

Perceived Ease of Use and Social Influence

Perceived Ease of Use and Social Influence also showed moderate positive effects on customer satisfaction in Malaysia. Therefore, H3 and H5 are supported. The findings indicate that users are more likely to feel satisfied when e-wallet applications are simple to operate and widely accepted among peers and society. The increasing use of DuitNow QR and smartphone-based payments in Malaysia has made digital transactions easier and more socially accepted. These results are consistent with previous evidence showing that perceived ease of use and social influence can contribute to consumers' acceptance and continued use of e-wallet services (Abdullah et al., 2020; Teoh et al., 2025).

Perceived Trust and Platform Adoption

However, Perceived Trust and Adoption of Online Payment Platforms showed relatively weak impacts on customer satisfaction in Malaysia. Although H1 and H4 proposed positive relationships, the findings suggest that trust and adoption alone may not be sufficient to enhance satisfaction levels. One possible explanation is that Malaysian users already consider security features as standard expectations in digital payment systems. Therefore, trust may no longer act as a major differentiating factor unless a security issue occurs. Similarly, users may adopt e-wallets mainly because digital payments are already integrated into everyday activities, not necessarily because they are highly satisfied with the system itself.

Indian Digital Payment Satisfaction

Social Influence and System Quality

In contrast, the findings for India reveal that Social Influence is the strongest factor affecting customer satisfaction, followed by System Quality. This supports H5 and H6. The strong role of Social Influence suggests that Indian consumers are highly influenced by family members, friends, and social trends when deciding to use UPI platforms such as PhonePe, Google Pay, and Paytm. The popularity of UPI systems and the widespread use of cashless payments after the Digital India initiative and demonetization policy may have strengthened social acceptance toward digital transactions. These findings support the study by Natarajan et al. (2017), which explained that peer behavior and social validation play important roles in encouraging technology adoption. Furthermore, Sawhney (2025) highlighted that UPI's rapid uptake in India was closely tied to social normalization of digital payments following government-led financial inclusion efforts.

System Quality also significantly influenced customer satisfaction in India. Indian users value systems that can process transactions quickly, reliably, and without technical disruptions. Since UPI handles a large volume of real-time transactions daily, users expect strong technical performance from payment platforms. This finding aligns with Ayinaddis et al. (2023), who emphasized that system reliability is essential in increasing satisfaction and loyalty in electronic banking services. Similarly, Oscar (2026) demonstrated that high-quality system features serve as essential elements in building user trust, ultimately enhancing customer satisfaction in developing economies.

Perceived Trust and Platform Adoption

Interestingly, Perceived Trust showed a negative relationship with customer satisfaction in India. This result does not support H4 and may indicate that users remain cautious about privacy risks, scams, and fraud despite the rapid growth of UPI services. Concerns regarding phishing attacks and cybersecurity threats may reduce users' confidence in digital payment systems, as noted by [Gupta et al. \(2024\)](#), who found that security perceptions directly influence user satisfaction with UPI and e-wallet platforms. Another possible explanation is that Indian consumers may continue using UPI systems because of convenience and social pressure rather than because they fully trust the platforms. Similarly, Adoption of Online Payment Platforms also showed a small negative relationship with customer satisfaction, suggesting that frequent usage does not automatically guarantee a positive experience. This aligns with [Bansal \(2026\)](#), who found that demographic and psychological factors, including lingering security concerns, continue to shape digital payment adoption outcomes in India.

Comparative Insights

Overall, the comparative findings reveal clear differences between Malaysia and India in the factors driving customer satisfaction toward digital payment systems. Malaysian users prioritize technical efficiency and usefulness, while Indian users are more influenced by social acceptance and collective behavioral trends. Nevertheless, System Quality remains an important factor in both countries, indicating that reliable and seamless transaction experiences are essential for maintaining customer satisfaction across digital payment ecosystems. This finding is consistent with [Oliveira et al. \(2016\)](#), who argued that both functional and social dimensions of mobile payment systems jointly determine user acceptance and satisfaction.

Managerial and Policy Implications

From a managerial perspective, the findings suggest that digital payment providers and policymakers should focus on different strategic priorities based on national contexts. In Malaysia, service providers should continue improving transaction speed, application usability, and integrated payment infrastructure to maintain user satisfaction. The growing integration of DuitNow QR across merchants reflects this direction, as noted by [Kee et al. \(2022\)](#), who found that platform interoperability is a key driver of e-wallet adoption in Malaysia. In India, policymakers and payment providers should strengthen cybersecurity measures and public awareness campaigns to improve trust while also leveraging social influence strategies to encourage wider adoption, particularly among users in rural and underserved communities ([Rai, 2025](#)).

This study also has several limitations. First, the sample size was relatively small and mainly consisted of students and young adults, which may limit the generalizability of the findings to the wider population. Second, the study used a cross-sectional design, meaning user perceptions may change over time as digital payment technologies continue to evolve. Future research could involve larger and more diverse samples across multiple regions and income groups, as recommended by [Gan et al. \(2025\)](#), who emphasized the importance of including diverse generational cohorts when studying e-wallet adoption in Malaysia. Researchers may also explore additional variables such as perceived risk, government support, and digital literacy to provide a deeper understanding of customer satisfaction and long-term adoption behavior in digital payment systems ([Gefen et al., 2003](#); [Venkatesh & Davis, 2000](#)).

CONCLUSION

This study compares the factors that influence customer adoption and satisfaction with digital payment systems in Malaysia and India. By extending the TAM with additional technological factors, the findings show that although both countries are moving toward

a cashless society, the drivers behind customer satisfaction differ according to their social and economic environment. In Malaysia, this transition is supported by government initiatives such as the MyDigital project, which targeted 100% cashless payments by 2022, and government initiatives that allocated RM750 million to promote e-wallet adoption (Gan et al., 2025).

In Malaysia, technological performance and functional efficiency remain paramount. Many customers' satisfaction in Malaysia is mainly influenced by System Quality and Perceived Usefulness, meaning that consumers value digital payment platforms that are reliable, efficient, and capable of making everyday transactions easier. For Millennials and Generation Z, who are considered digital natives, perceived usefulness plays an important role in e-wallet usage, as they view e-wallets as a convenient tool that saves time and enhances productivity (Gan et al., 2025). Moreover, customer satisfaction with e-wallets provided by banks is largely influenced by key E-SERVQUAL factors such as efficiency, ease of use, reliability, and responsiveness (Moksin et al., 2024). Applications such as TnG eWallet and MAE are evaluated based on how smoothly and effectively they perform.

In contrast, digital payment adoption in India is strongly influenced by social and cultural factors. Driven by national initiatives like the Digital India campaign and government efforts to promote digital payments, Indian users place significant importance on social influence when adopting digital payment platforms. As a result, Social Influence plays an important role in user acceptance, with individuals often relying on recommendations and approval from family members, friends, and peers when choosing platforms such as PhonePe and GooglePay.

Despite these differences, System Quality remains an important factor in both countries. This suggests that regardless of culture or adoption patterns, users expect digital payments to be fast, reliable, and easy to use in order to maintain long-term satisfaction. In a highly competitive market with more than 40-licensed providers, e-wallet service providers in Malaysia should focus on building strong customer relationships and maintaining a positive brand image to encourage customer loyalty (Komba & Razak, 2021). Thus, service providers in Malaysia should continue improving system usability while stakeholders in India should focus on strengthening cybersecurity measures to improve user trust and confidence.

LIMITATION

Although this study provides valuable insight into the factors influencing customer adoption and satisfaction with digital payment systems in Malaysia and India, several limitations should be considered. First, the study was based on a relatively small sample of 159 respondents, mainly students and young adults, which may not fully represent the broader population. Additionally, the cross-sectional nature of the study captures respondents' perceptions at a single point in time and may not reflect changes in technology, regulations, and consumer preferences over time.

To address these limitations, future research could involve a larger and more diverse sample, including participants from diverse age groups, income levels, and geographical locations. Greater attention should also be given to differences between urban and rural communities, especially in terms of internet access, digital infrastructure, and digital literacy. Furthermore, incorporating factors like government support, digital literacy, and consumer protection could provide a more comprehensive understanding of the factors influencing trust, satisfaction, and long-term usage of digital payment systems.

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ABOUT THE AUTHOR(S)

1st Author

Haslindar Ibrahim is currently an associate professor in finance at School of Management, Universiti Sains Malaysia and she earned her Ph.D from University of Malaya in 2009. Her current research interests include ownership concentration (family ownership), corporate governance, capital structure, green finance, digital finance and Islamic finance. Her publications appeared in, among others, Pacific-Basin Finance Journal, Corporate Social Responsibility and Environmental Management, Resource Policy, Transnational Corporations Review, and Journal of Multinational Financial Management and many more. She has also presented her research works in various conferences locally and internationally. She is also supervising Ph.D and master students and currently conducting a research in corporate governance, financial literacy among young and ageing society, and green and digital finance related field.

Email: haslindar@usm.my

ORCID ID: <https://orcid.org/0000-0002-0134-1486>

2nd Author

Prof. Shivaprasad S is a Professor of Practice in the School of Management at Presidency University, Bangalore. He holds a Mechanical Engineering Degree with Post Graduation in Operations Management. His area of expertise is in Supply Chain management, Project Management, Operational Excellence and Manufacturing Operations Management.

Email: shivaprasad.s@presidencyuniversity.in

3rd Author

Ainul Kamilah binti Zolkiffly is currently pursuing a Bachelor of Accounting (Honours) at the School of Management, Universiti Sains Malaysia (USM). She is currently conducting research primarily on management accounting, business analytics, and the socio-technical issues related to user acceptance and satisfaction with today's electronic transactional systems.

Email: ainultwink@student.usm.my

ORCID ID: <https://orcid.org/0009-0003-3985-9947>

4th Author

Aina Afrina binti Azhar is an undergraduate student in the School of Management at Universiti Sains Malaysia (USM). She is currently pursuing her Bachelor of Accounting (Honours), where her academic interests primarily focus on taxation and auditing. In her current position within the institution, she acts as an undergraduate researcher and academic group leader.

Email: ainaazhery@student.usm.my

5th Author

Ainul Mardhiah binti Zolkiffly is an undergraduate university student enrolled at School of Management, Universiti Sains Malaysia, pursuing her studies in the Bachelor of Accounting with Honours. At the moment, she is working in academic research in areas

such as digital payment system, customers' adoption and consumers' behavior, especially the comparison of digital payments.

Email: ainultwinm@student.usm.my

6th Author

Ainur Shazmiera binti Ahmad Shabani is an undergraduate student currently taking Bachelor of Accounting with Honours degree under School of Management at Universiti Sains Malaysia (USM). Her academic journey began with a focus on Accounting in secondary school, which she has further expanded through her current studies. At USM, she is actively involved in USM Accounting Society, academic projects, and university activities, which helped her develop leadership, teamwork, communication, problem-solving, and analytical skills.

Email: ainurshazmiera@student.usm.my

7th Author

Dundesh Kotagi is a dedicated MBA student with a strong academic interest in finance, operations, and supply chain management at Presidency University Bangalore. He possesses analytical, research, and problem-solving skills with practical exposure to business operations and financial concepts. He aims to contribute innovative ideas and practical solutions to modern business and management challenges through effective research and strategic thinking.

Email: dundeshmkotagi2004@gmail.com

8th Author

Valibhasha N is affiliated with Presidency University, India, in the field of Business and Management studies. He holds an academic background in management with a specialization in Finance and Supply Chain Management. Currently, he is actively involved in academic research focusing on digital payment systems, financial technology and customer behavior analysis. His research interests include digital finance, supply chain analytics, technology adoption models and emerging trends in fintech ecosystems. He has contributed to collaborative research projects that examine customer satisfaction and adoption of digital payment platforms in developing economies.

Email: vali71942@gmail.com

9th Author

Dr. Daisy Mui Hung Kee is an Associate Professor at the School of Management, Universiti Sains Malaysia (USM). She earned her Ph.D. from the University of South Australia and an MBA from USM. She has authored 90 Web of Science-indexed publications. Dr. Kee serves as the Country Director for the Association of International Business and Professional Management (AIBPM) and the STAR Scholars Network.

Email: daisy@usm.my

ORCID ID: <https://orcid.org/0000-0002-7748-8230>