

WHAT DRIVES FINTECH ADOPTION? EXAMINING KEY PREDICTORS AMONG MALAYSIAN USERS

Tilagawathy Supramaniam*, Nur Amalina Zulkefli, Shishi Kumar Piaralal, Santhi Raghavan, Rethinasamy Veretharajoo

Faculty of Business and Management, Open University Malaysia, Selangor, 47301, Malaysia.

*Corresponding author: tilagawathy.supramaniam@rhbgroup.com

Abstract

Understanding the behavioural drivers behind FinTech (Financial Technology) adoption is essential in accelerating digital financial inclusion, especially in emerging markets. This study examines the effects of perceived ease of use, perceived usefulness, brand image, financial literacy, financial health, user innovativeness, government support, and attitude on FinTech adoption in Malaysia. Drawing on the Technology Acceptance Model (TAM) as the theoretical foundation, data were collected from 203 experienced FinTech users and analysed using multiple regression techniques. The results show that all variables, except attitude, have a significant and positive influence on adoption, with user innovativeness identified as the strongest predictor. The insignificance of attitude challenges conventional assumptions within acceptance models, suggesting that practical considerations, personal capabilities, and structural enablers may have greater influence than emotional or attitudinal responses in this context. These findings extend current adoption frameworks by incorporating financial and contextual dimensions relevant to emerging markets. The study offers theoretical contributions by refining the understanding of user behaviour in digital finance and highlights the need for FinTech solutions that prioritise functionality, trust, and accessibility. Practically, the results provide actionable insights for FinTech developers, regulators, and policymakers to design targeted strategies that drive inclusive adoption and enhance financial empowerment across diverse user segments in Malaysia.

Keywords: FinTech adoption, user innovativeness, financial health, financial literacy, government support

Article History:- Received: 11 August 2025; Revised: 10 September 2025; Accepted: 11 September 2025; Published: 31 October 2025

© by Universiti Teknologi MARA, Cawangan Negeri Sembilan, 2025, e-ISSN: 2289-6368

DOI: 10.24191/joa.v13i2.8461

Introduction

Innovation and technological advancement have significantly reshaped various sectors, particularly the financial industry. Financial Technology (FinTech), a blend of finance and technology, has revolutionised how individuals and businesses perform financial transactions by offering faster, more accessible, and secure solutions (Ziegler et al., 2021). FinTech includes a range of services such as mobile payments, online banking, peer-to-peer lending, blockchain, and cryptocurrency (Gomber et al., 2017). These innovations not only facilitate financial operations more efficiently but also enable inclusive access to financial services across different segments of the population (Feyen et al., 2021; Ozili, 2018). In developing countries like Malaysia, FinTech offers significant potential to broaden financial inclusion, particularly among underserved and unbanked communities (Othman et al., 2024; Salmony, 2014). As Alt and Puschmann (2012) highlight, FinTech introduces incremental innovations that improve financial products, services, and processes, thereby fostering increased economic participation and digital financial literacy.

Despite its promising potential, FinTech adoption in Malaysia remains relatively limited and fragmented. While countries such as China, Korea, India, Finland, and the United Kingdom have widely embraced



FinTech solutions (Chua et al., 2019; Kim et al., 2015), the Malaysian market continues to fall behind (Chua et al., 2019). Although Malaysians generally show openness towards digital financial services, concerns about security, trust, and technological unfamiliarity hinder full-scale adoption (Cheah et al., 2011; Samarasekara et al., 2023). A study by Khraim et al. (2011) indicated rapid FinTech growth in Western markets; however, these advances have not been mirrored in Malaysia (The Malaysian Reserve, 2019). Slimani et al. (2024) suggest that low user familiarity with FinTech platforms limits acceptance and usage. Additionally, key behavioural and psychological factors, such as user attitude, financial literacy, and perceived usefulness, have not been thoroughly examined in the Malaysian context (Ghazali & Yasuoka, 2018; Chua et al., 2019). This lack of empirical understanding presents a challenge for policymakers and financial institutions seeking to expand the reach and effectiveness of FinTech solutions across the country.

In response to this gap, the current study aims to investigate the factors influencing users' intention to adopt FinTech in Malaysia. Drawing from the Technology Acceptance Model (TAM) (Davis, 1989) and Setiawan et al. (2021) framework, the study incorporates multiple constructs believed to significantly impact FinTech adoption, including perceived ease of use, perceived usefulness, brand image, user attitude, financial literacy, user innovativeness, financial health, and government support. These variables have been identified across past empirical studies as key determinants of technology adoption in emerging markets (Venkatesh & Bala, 2008; Setiawan et al., 2021). The intention to adopt FinTech reflects not only a functional response to technological utility but also a psychological readiness to embrace a shift in financial behaviour.

Perceived ease of use (PEU) is a fundamental element of the TAM, introduced by Davis (1989), who defined it as "the degree to which a person believes that using a particular system would be free of effort." PEU reflects users' cognitive assessment of how simple and intuitive a technology is to operate, which plays a crucial role in shaping both their attitude and behavioural intention towards adopting technology. Numerous studies have confirmed PEU as a key factor influencing technology use across various digital services, including mobile banking, e-learning platforms, and e-government systems (Wang et al., 2008; Cheng, 2012). Despite widespread validation of PEU in TAM research, Moon and Kim (2001) argue that limited work has been done to reconceptualise or extend the mechanisms through which PEU influences, especially in the context of emerging technologies such as FinTech. In Malaysia, where FinTech adoption is still developing, understanding the role of PEU is vital for improving platform design and enhancing user onboarding. Consequently, this study proposes:

H1: Perceived ease of use has a significant positive relationship with FinTech adoption in Malaysia.

Perceived usefulness (PU) refers to the degree to which a person believes that using a particular system will enhance their performance (Davis, 1989). This perception significantly influences users' intention to adopt new technologies, particularly when the technology offers clear advantages such as convenience, efficiency, and speed (Chau & Hu, 2002; Moon & Kim, 2001). In the FinTech context, PU is reflected in users' belief that digital financial services, such as mobile banking, online investments, or e-wallets, can simplify and enhance the efficiency of their financial transactions (Revathy & Balaji, 2020). The utility of these services becomes more apparent as users recognise their ability to access them securely and rapidly without physical interaction (Huei et al., 2018). Furthermore, PU has been recognised as a critical determinant of user satisfaction and continued usage, especially in the digital financial ecosystem where task efficiency and real-time access are paramount (Chen & Barnes, 2007; Singh & Sinha, 2020). Accordingly, the following hypothesis is formulated:

H2: Perceived usefulness has a significant positive relationship with FinTech adoption in Malaysia.

Brand image refers to the perceptions, associations, and beliefs that users form about a company or product, shaped by tangible and intangible assets that influence consumer decision-making (Pooventeran et al., 2025; Phuc et al., 2022). In the context of FinTech services, where quality and reliability may not be immediately verifiable, brand image becomes a critical cue that users rely on to evaluate trustworthiness and functionality (Winanti & Fernando, 2024). Especially in complex service environments like digital investments and financial platforms, consumers often form expectations based



on brand reputation, longevity, and perceived credibility (Khodabandeh & Lindh, 2020; Winanti & Fernando, 2024). A strong brand image fosters user confidence, particularly when personal data is required or when transactions are conducted in the absence of face-to-face interactions (Setiawan et al., 2021). Prior research suggests that reputable FinTech brands can significantly enhance consumer trust and facilitate adoption, with users favouring platforms they perceive as credible or familiar (Riyadh et al., 2010). Considering that brand image not only shapes user attitudes but can also serve as a strategic differentiator in highly competitive digital finance markets, the following hypothesis is proposed:

H3: Brand image has a significant positive relationship with FinTech adoption in Malaysia.

Attitude refers to an individual's overall evaluative judgment, either favourable or unfavourable, toward performing a specific behaviour, such as using a new technology (Ajzen, 1991). Within the TAM, attitude is considered a mediating factor influenced by both PU and PEU, which in turn affects behavioural intention (Davis et al., 1989). A positive attitude toward a technology suggests that users believe the system is beneficial, comfortable to use, and aligned with their preferences, thereby increasing the likelihood of adoption. In the context of FinTech, a favourable attitude is often reflected in users' perceptions that digital financial services are not only practical but also personally engaging and trustworthy. Prior studies have consistently demonstrated a significant positive correlation between attitude and technology acceptance, reinforcing the view that users' disposition plays a pivotal role in shaping their adoption behaviour (Venkatesh et al., 2003; Ramayah & Ignatius, 2005). Accordingly, this study assesses user attitudes toward FinTech by exploring their beliefs, comfort level, and interest in engaging with digital financial platforms. Therefore, the following hypothesis is proposed:

H4: Attitude has a significant positive relationship with FinTech adoption in Malaysia.

Financial literacy refers to an individual's ability to comprehend and apply basic financial concepts such as budgeting, interest calculation, inflation, and risk diversification in decision-making (Lusardi & Mitchell, 2014). It plays a critical role in shaping how individuals engage with increasingly complex digital financial platforms. In the context of FinTech, financially literate users are more confident in navigating digital services such as mobile banking, e-wallets, and investment applications, thereby enhancing the likelihood of adoption. Prior studies have demonstrated a significant positive relationship between financial literacy and FinTech usage, indicating that financially informed individuals are more inclined to explore and integrate digital financial tools into their daily lives (Morgan & Trinh, 2019). Moreover, Liu et al. (2020) suggest that financial literacy is not only linked to adoption but also correlates with consumer innovativeness, further promoting FinTech engagement. Based on these, the following hypothesis is proposed:

H5: Financial literacy has a significant positive relationship with FinTech adoption in Malaysia.

User innovativeness refers to the degree to which an individual is willing to experiment with and adopt new technologies, often seen as a personality trait reflecting openness to novel ideas (Lu et al., 2005; Balcázar & Rivas, 2021). In the context of FinTech adoption, it denotes the proactive tendency of users to explore, engage with, and experiment with emerging financial technologies. Innovative users tend to perceive new digital tools as beneficial and are more receptive to technological advancement, even in uncertain or high-risk environments (Thakur & Srivastava, 2015). Hu et al. (2019) define user innovation as a personal willingness to embrace novel financial services, technologies, or platforms, reflecting an intrinsic motivation to lead rather than follow trends. Prior research has confirmed a positive relationship between user innovativeness and technology adoption across various digital platforms (Zhang et al., 2018). Drawing from these insights, the following hypothesis is suggested:

H6: User innovativeness has a significant positive relationship with FinTech adoption in Malaysia.

Financial health refers to an individual's ability to manage day-to-day finances, withstand financial shocks, maintain minimal debt, and pursue financial goals such as saving or wealth accumulation (Netemeyer et al., 2018). It encompasses both objective behaviours, such as budgeting, saving, and managing cash flow, and subjective perceptions like feeling in control of one's finances (Consumer Financial Protection Bureau [CFPB], 2015). In the context of FinTech, individuals with strong financial health are more likely to recognise the value of digital tools that enhance financial management



efficiency and accessibility (Netemeyer et al., 2018; Center for Financial Services Innovation [CFSI], 2015). Conversely, low financial resilience may inhibit technology adoption due to perceived risks, lack of digital literacy, or mistrust in financial innovation (Despard et al., 2020). Therefore, financial health can play a pivotal role in shaping consumers' openness to FinTech platforms, influencing their likelihood to adopt and continue using such services. Based on these considerations, the following hypothesis is proposed:

H7: Financial health has a significant positive relationship with FinTech adoption in Malaysia.

Government support refers to deliberate efforts by public authorities to provide enabling infrastructure, policies, and regulatory frameworks that facilitate the adoption and diffusion of emerging technologies in the market (Balcázar & Rivas, 2021). In the context of FinTech, government involvement is crucial for ensuring regulatory clarity, technological infrastructure, and market confidence. By actively fostering a supportive ecosystem, governments can reduce uncertainty and encourage innovation, which in turn enhances the overall growth and adoption of FinTech services (Goo & Heo, 2020). Prior studies have highlighted a positive correlation between government support and technology implementation, emphasising the importance of policies, incentives, and digital infrastructure (Marakarkandy et al., 2017; Setiawan et al., 2021). Moreover, investments in broadband networks, cybersecurity frameworks, and financial regulations can help bridge the digital divide and promote trust among users (Zaiton et al., 2021). Based on these findings, the following hypothesis is proposed:

H8. There is a positive relationship between government support and FinTech adoption in Malaysia.

The conceptual framework of this study, as illustrated in Figure 1, examines the relationship between eight independent variables, perceived ease of use, perceived usefulness, brand image, attitude, financial literacy, user innovativeness, financial health, and government support, and the dependent variable, FinTech adoption.

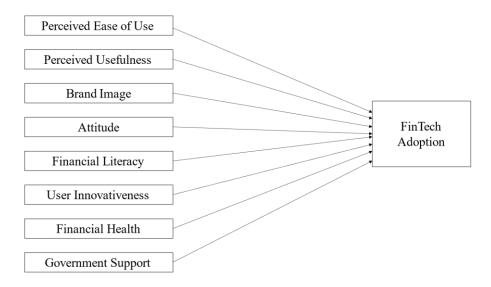


Figure 1. Conceptual Framework

Methods and Materials

Procedures and Participants

This study employed a quantitative, cross-sectional research design to examine the determinants influencing users' adoption of financial technology (FinTech). The target population consisted of individuals with prior experience using FinTech services, such as mobile payments, e-wallets, or online banking. A total of 203 valid responses were obtained through purposive sampling, with data collected via a structured, self-administered online questionnaire distributed through WhatsApp and email. To verify that the distribution method did not introduce systematic bias, an independent samples t-test was conducted to compare responses from both channels, revealing no significant differences and



confirming consistency across groups. The sample size of 203 met statistical adequacy requirements, exceeding the minimum recommended by Hair et al. (2019) of 10 respondents per estimated parameter and satisfying Cohen's (1992) power analysis for medium effect sizes ($f^2 = 0.15$) at 0.80 power, ensuring sufficient robustness for hypothesis testing. Participation was voluntary, anonymity was preserved, and informed consent was obtained in accordance with ethical research practices. This design provided a rigorous basis for testing the hypothesised relationships between eight independent variables and FinTech adoption.

Measures and Measurement

The primary data collection tool was a structured questionnaire designed to capture respondents' demographic characteristics, behavioural intentions, and perceptions regarding FinTech adoption. The instrument comprised 55 items across three sections: demographic information, eight independent variables and one dependent variable (FinTech adoption). The measurement scales for the independent variables were adapted from validated instruments in existing literature, particularly from Setiawan et al. (2021). Each construct was measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), following standard practices in behavioural and social sciences. To ensure content validity and clarity, a pilot test was conducted with 15 participants. Based on expert feedback and pilot responses, minor revisions were made to the wording and sequence of questions, thereby improving the instrument's reliability and internal consistency.

Results and Discussion

This study employed a systematic data analysis approach to examine the relationships between the proposed constructs and FinTech adoption. The analysis was conducted using IBM SPSS Statistics version 26. Reliability analysis was first performed to assess the internal consistency of the measurement scales. This was followed by Pearson correlation analysis to evaluate the strength and direction of associations between the variables. Finally, multiple linear regression was used to test the structural model and the hypothesised relationships between the eight independent variables and the dependent variable, FinTech adoption. All statistical procedures were executed with appropriate rigor to ensure the validity and reliability of the findings, which are presented in the subsequent sections.

Reliability Analysis

The reliability analysis of each construct used in this study demonstrates a high level of internal consistency, as reflected in the Cronbach's alpha values summarised in Table 1. Cronbach's alpha values for all constructs exceeded the minimum acceptable threshold of 0.70, as recommended by Nunnally and Bernstein (1994), indicating strong internal consistency and reliability of the measurement items. Specifically, Government Support recorded the highest reliability with an alpha of 0.905, followed by Attitude ($\alpha = 0.878$), Brand Image ($\alpha = 0.874$), and Financial Health ($\alpha = 0.864$). Other constructs such as Perceived Ease of Use ($\alpha = 0.861$), Perceived Usefulness ($\alpha = 0.851$), Financial Literacy ($\alpha = 0.827$), and User Innovativeness ($\alpha = 0.834$) also demonstrated acceptable reliability.

Construct **Number of Items** Cronbach's Alpha (a) Perceived Ease of Use 5 0.861 4 Perceived Usefulness 0.851 5 **Brand Image** 0.874 5 Attitude 0.878 5 5 Financial Literacy 0.827 User Innovativeness 0.834 5 Financial Health 0.864 5 0.905 Government Support 7 FinTech Adoption 0.678

Table 1. Reliability Analysis of Constructs

Note. All α values \geq 0.70 indicate acceptable reliability (Nunnally & Bernstein, 1994).



Although the Cronbach's alpha for FinTech Adoption was slightly below the conventional threshold at 0.678, it remains acceptable for exploratory behavioural research, particularly when the construct consists of diverse items, as values of 0.60 and above are considered adequate in such contexts (Hair et al., 2003). These results confirm the reliability and appropriateness of the measurement items for further analysis.

Correlation Analysis

The correlation analysis results, as displayed in Table 2, reveal statistically significant and positive relationships among all constructs. FinTech Adoption (FA) was found to have the strongest correlation with User Innovativeness (UI) (r = .598, p < .01), suggesting that individuals who are more inclined to explore and adopt new technologies are more likely to adopt FinTech services. Financial Health (FH) (r = .553, p < .01) and Perceived Ease of Use (PEU) (r = .518, p < .01) also demonstrated substantial positive associations with FA, indicating that users who perceive FinTech as easy to use and those who manage their finances effectively are more inclined to adopt such services. Other significant correlations with FA include Perceived Usefulness (PU) (r = .512, p < .01), Financial Literacy (FL) (r = .476, p < .01), Brand Image (BI) (r = .465, p < .01), Attitude (AT) (r = .460, p < .01), and Government Support (GS) (r = .415, p < .01). Although some inter-construct correlations were relatively high (e.g., PU–PEU r = .790, BI–PU r = .757), they remained below the commonly accepted multicollinearity threshold of .80, indicating no serious multicollinearity concerns (Hair et al., 2019). These findings imply that each independent variable is meaningfully related to FinTech adoption, supporting the theoretical relationships proposed in the study.

2 3 4 7 9 1 5 6 8 1. FA 2. PEU .518** 1 .512** .790** 3. PU .757** 4. BI .465** .776** 5. AT .460** .700** .784** .751** 1 .476** .722** .702** .729** .782** 6. FL .757** .784** .598** .707** .689** .709** 7. UI 1 .721** .679** .639** .553** .608** .745** .645** 8. FH 1 .446** .415** .441** 519** .530** .450** .600** 9. GS .478**

Table 2. Correlation Matrix (N = 203)

Note. **Correlation is significant at the 0.01 level (2-tailed).

Structural Model and Hypothesis Test

The structural model results confirm that seven out of eight hypothesised relationships were statistically significant (Table 3). Specifically, User Innovativeness (H6) emerged as the strongest predictor of FinTech adoption (β = 0.437, p < 0.001), followed by Perceived Ease of Use (H1; β = 0.176, p = 0.007), Financial Health (H7; β = 0.171, p = 0.004), and Brand Image (H3; β = 0.167, p = 0.001). Other significant predictors included Perceived Usefulness (H2; β = 0.151, p = 0.005), Government Support (H8; β = 0.147, p = 0.040), and Financial Literacy (H5; β = 0.129, p < 0.001). These findings underscore the relevance of both personal attributes (such as innovativeness and financial competence) and external enablers (such as usability and institutional support) in influencing FinTech adoption. However, attitude did not significantly predict adoption behaviour (β = -0.051, p = 0.639), suggesting that attitude alone may not sufficiently motivate behavioural intention in the FinTech context. The results affirm that a combination of technological perceptions, individual characteristics, and environmental support mechanisms drives FinTech adoption.



Hypothesis	Path	Beta	<i>t</i> -value	<i>p</i> -value	Decision
H1	$PEU \rightarrow FA$	0.176	4.718	0.007	Supported
H2	$PU \rightarrow FA$	0.151	3.394	0.005	Supported
H3	$BI \rightarrow FA$	0.167	5.518	0.001	Supported
H4	$AT \rightarrow FA$	-0.051	-0.470	0.639	Not Supported
H5	$FL \rightarrow FA$	0.129	4.222	0.000	Supported
Н6	$UI \rightarrow FA$	0.437	4.063	0.000	Supported
H7	$FH \rightarrow FA$	0.171	2.739	0.004	Supported
H8	$GS \rightarrow FA$	0.147	2.066	0.040	Supported

Table 3. Path Coefficient and Hypothesis

The findings of this study reinforce the growing body of literature that emphasises the significant influence of technological, psychological, and financial factors on FinTech adoption. Notably, seven out of eight hypothesised constructs (perceived ease of use, perceived usefulness, brand image, financial literacy, user innovativeness, financial health, and government support) exhibited significant positive relationships with adoption behaviour. These results validate previous research by Othman et al. (2024) and Sentosa et al. (2011), confirming that ease of use and usefulness remain fundamental determinants of digital technology acceptance. Moreover, the role of brand image highlights the importance of organisational trust and consumer perceptions in technology-based service contexts, aligning with Aghekyan-Simonian et al. (2012), who argue that strong brand identity can enhance consumer confidence and reduce perceived risks. The significance of financial literacy and financial health further supports Lusardi and Mitchell's (2014) framework, illustrating that individuals who are better informed and financially stable are more empowered to explore and adopt digital financial solutions. The prominence of user innovativeness as the strongest predictor reflects the influence of proactive consumer traits in accelerating the diffusion of FinTech, echoing the assertions of Agarwal and Prasad (1998). Furthermore, the positive impact of government support underscores the critical role of institutional infrastructure and regulatory facilitation, consistent with the work of Mehrtens et al. (2001) on the diffusion of technological innovations in developing markets.

Conversely, the non-significance of user attitude marks a notable deviation from traditional assumptions of the TAM, particularly the notion that attitude serves as a central mediator of behavioural intention (Venkatesh & Davis, 2000). This divergence may reflect a shift in user behaviour within maturing digital ecosystems, where consumers increasingly prioritise functional benefits, trust, and systemic support over subjective evaluations. In the Malaysian context, cultural factors such as a collectivist orientation and reliance on institutional assurances may reduce the influence of individual attitude on technology adoption decisions. As Oliveira et al. (2014) suggest, in such contexts, rational considerations and perceived institutional reliability may outweigh affective attitudes in shaping technology use decisions. This insight extends the applicability of TAM by demonstrating how contextual and socio-economic variables can alter the explanatory power of traditional constructs.

This study strengthens understanding of FinTech adoption by confirming the core TAM elements, PEU and PU, while adding the underexplored role of user innovativeness, showing that more innovative individuals are likelier to adopt new technologies. The finding that attitude is not significant suggests adoption may depend more on practical benefits, personal financial capability, and government support than on personal evaluations, indicating a need for broader models that include psychological and environmental factors. Managerially, the results guide FinTech firms, digital payment providers, and policymakers to target tech-savvy users with campaigns highlighting novelty and innovation, improve usability and usefulness, build trust through branding, enhance financial literacy through partnerships, and work with regulators to create supportive environments.

Limitations and Future Research

While this study offers valuable insights into FinTech adoption in Malaysia, certain methodological and contextual boundaries should be acknowledged. The sample size (N = 203) and the purposive selection of active FinTech users provide a focused view of adoption drivers, but may not fully capture the perspectives of non-users or hesitant adopters across Malaysia's diverse demographic landscape. Self-



reported online surveys, although efficient, may be subject to social desirability and common method bias. Moreover, the use of multiple regression analysis via SPSS successfully identified key predictors; yet, more sophisticated techniques, such as Structural Equation Modeling (SEM), could further reveal underlying mediation and moderation effects. Future studies may build on these findings by employing probability sampling for broader generalisability, incorporating both users and non-users to better understand adoption barriers, and applying SEM-based approaches (e.g., SmartPLS, AMOS) to test complex relationships, such as whether financial literacy influences adoption through innovativeness or whether government support strengthens brand image effects. Further exploration of demographic subgroups (e.g., age, income, education, and urban—rural differences) and contextual factors (e.g., cultural orientation, regulatory environment, and generational preferences) could clarify why certain predictors, such as attitude, show a weaker influence. Finally, integrating constructs related to trust and cybersecurity would enrich the understanding of persistent challenges in Malaysia's FinTech landscape.

Conclusion

This study advances the understanding of FinTech adoption by identifying and ranking the key factors that shape user intentions in the Malaysian context. The results demonstrate that user innovativeness, financial health, brand image, perceived ease of use, perceived usefulness, financial literacy, and government support are significant determinants of FinTech adoption, whereas user attitude does not exert a meaningful influence. The prominence of user innovativeness as the strongest predictor underscores the importance of proactive, forward-looking behaviour in embracing digital financial solutions. Importantly, the study challenges conventional assumptions embedded in established acceptance models by revealing the limited role of attitude, thereby refining theoretical perspectives on user behaviour in emerging digital finance ecosystems. Beyond its theoretical contributions, the study offers critical insights for FinTech providers and policymakers aiming to foster inclusive, innovation-driven strategies that promote sustainable adoption and enhance digital financial participation across diverse user segments.

Acknowledgement/Funding

The authors received no financial support for the research

Author Contribution

T Supramaniam - Data curation, investigation, methodology - writing and original draft, NA Zulkefli - Visualisation, Writing - review & editing, SK Piaralal - Conceptualisation, Formal analysis, Resources, Supervision, S Raghavan - Project administration, Supervision, V Rethinasamy - Project administration.

Conflict of Interest

Authors declare no conflict of interest

Declaration on the Use of Generative AI

ChatGPT, Grammarly, Quillbot are used only for language enhancement and do not compromise the originality, intellectual contribution, or scientific integrity of the work.

References

Agarwal, R., & Prasad, J. (1998). A conceptual and operational definition of personal innovativeness in the domain of information technology. *Information Systems Research*, 9(2), 204–215.

Aghekyan-Simonian, M., Forsythe, S., Kwon, W.-S., & Chattaraman, V. (2012). The role of product brand image and online store image on perceived risks and online purchase intentions for apparel. *Journal of Retailing and Consumer Services*, 19(3), 325–331.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.

Alt, R., & Puschmann, T. (2012). The rise of customer-oriented banking: electronic markets are paving the way for change in the financial industry. *Electronic Markets*, 22, 203–215.



Balcázar, J. M., & Rivas, P. L. (2021). Government influence on FinTech growth: A conceptual review. *Journal of Technology Management & Innovation*, 16(2), 83–94.

Center for Financial Services Innovation (CFSI). (2015). *Understanding and improving consumer financial health in America*. https://finhealthnetwork.org/research

Chau, P. Y. K., & Hu, P. J. H. (2002). Investigating healthcare professionals' decisions to accept telemedicine technology: A test of competing models. *Information & Management*, 39(4), 297–311.

Cheah, C. M., Teo, A. C., Sim, J. J., Oon, K. H., & Tan, B. I. (2011). Factors affecting Malaysian mobile banking adoption: An empirical analysis. *International Journal of Network and Mobile Technologies*, 2(3), 149–160.

Chen, L. D., & Barnes, S. (2007). Initial trust and online buyer behaviour. *Industrial Management & Data Systems*, 107(1), 21–36.

Cheng, Y. M. (2012). Effects of quality antecedents on e-learning acceptance. *Internet Research*, 22(3), 361–390.

Chua, C. C., Lim, C. S., & Khin, A. A. (2019). Factors affecting the consumer acceptance towards FinTech products and services in Malaysia. *International Journal of Asian Social Science*, 9(1), 59–65.

Cohen, J. (1992). A power primer. Psychological Bulletin, 112(1), 155–159.

Consumer Financial Protection Bureau (CFPB). (2015). *Measuring financial well-being: A guide to using the CFPB financial well-being scale*. https://files.consumerfinance.gov/f/201512_cfpb_financial-well-being-user-guide.pdf

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–340.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982–1003.

Despard, M. R., Friedline, T., & Martin-West, S. (2020). Why do households lack emergency savings? The role of financial capability. *Journal of Family and Economic Issues*, 41(3), 542–557.

Feyen, E., Frost, J., Gambacorta, L., Natarajan, H., & Saal, M. (2021). Fintech and the digital transformation of financial services: Implications for market structure and public policy. Bank for International Settlements.

Ghazali, N. H., & Yasuoka, T. (2018). Awareness and perception analysis of small & medium enterprises and start-up towards FinTech instruments: Crowdfunding and peer-to-peer lending in Malaysia. *International Journal of Finance and Banking Research*, 4(1), 13–24.

Gomber, P., Koch, J.-A., & Siering, M. (2017). Digital finance and FinTech: Current research and future research directions. *Journal of Business Economics*, 87(5), 537–580.

Goo, J., & Heo, J. (2020). The impact of government policy on technology adoption in FinTech. *Technological Forecasting and Social Change*, *158*, 120132.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.

Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2003). Essentials of business research methods. John Wiley & Sons.

Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S. (2019). Adoption intention of FinTech services for bank users: An empirical examination with an extended Technology Acceptance Model. *Symmetry*, 11(3), 340.



Huei, C. S., Cheng, C. H., Seong, Y. H., Khin, E. P., & Bin, M. (2018). Preliminary study on FinTech adoption in Malaysia: Impacts of perceived usefulness and perceived ease of use. *Scientific Annals of Economics and Business*, 64(3), 321–340.

Khodabandeh, S., & Lindh, M. (2020). The importance of brands, commitment, and influencers on purchase intent in the context of online relationships. *Australasian Marketing Journal*, 28(2), 103–112.

Khraim, H. S., Al Shoubaki, Y. E., & Khraim, A. S. (2011). Factors affecting Jordanian consumers' adoption of mobile banking services. *International Journal of Business and Social Science*, 2(20), 186–196.

Kim, Y., Park, Y.-J., Choi, J., & Yeon, J. (2015). An empirical study on the adoption of "FinTech" service: Focused on mobile payment services [Conference paper]. *Advanced Science and Technology Letters*, 114, 136–140.

Liu, B., Wang, J., Chan, K. C., & Fung, A. (2020). The impact of entrepreneurs' financial literacy on innovation within small and medium-sized enterprises. *International Small Business Journal: Researching Entrepreneurship*, 39(6), 700–722.

Lu, J., Yao, J. E., & Yu, C. S. (2005). Personal innovativeness, social influences and adoption of wireless Internet services via mobile technology. *Journal of Strategic Information Systems*, 14(3), 245–268.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44.

Marakarkandy, B., Yajnik, N., & Dasgupta, C. (2017). Enabling internet banking adoption: An empirical examination with an augmented technology acceptance model (TAM). *Journal of Enterprise Information Management*, 30(2), 263–294.

Mehrtens, J., Cragg, P.B., & Mills, A.M. (2001). A model of Internet adoption by SMEs. *Information & Management*, 39(3), 165–176.

Moon, J. W., & Kim, Y. G. (2001). Extending the TAM for a World-Wide-Web context. *Information & Management*, 38(4), 217–230.

Morgan, P. J., & Trinh, Q. Long. (2019). Fintech and financial literacy in the Lao PDR. ADBI Working Paper 933. *Asian Development Bank Institute*. Retrieved from https://ideas.repec.org/p/ris/adbiwp/0933.html

Netemeyer, R. G., Warmath, D., Fernandes, D., & Lynch, J. G. (2018). How am I doing? Perceived financial wellbeing, its potential antecedents, and its relation to overall well-being. *Journal of Consumer Research*, 45(1), 68–89.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.

Oliveira, T., Faria, M., Thomas, M. A., & Popovič, A. (2014). Extending the understanding of mobile banking adoption: When UTAUT meets TTF and ITM. *International Journal of Information Management*, 34(5), 689–703.

Othman, W. N., Piaralal, S. K., Singh, H. K. D., Mahmood, N. M., & Saidon, N. A. (2024). Unlocking digital wallet adoption through UTAUT model: Unveiling the factors shaping consumer decisions. In *Current and future trends on intelligent technology adoption: Volume 2* (pp. 59–78). Springer Nature Switzerland.

Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329–340.



Phuc, L. V., Do, S. H., & Nguyen, H. N. (2022). A study on the factors affecting intention of using online banking services in Vietnam. In *Proceedings of the International Conference on E-Business and Telecommunication Networks*, 1, 179–198.

Pooventeran, A., Piaralal, S. K., Zulkefli, N. A., Raghavan, S., & Koval, G. Y. (2025). Social media content, brand image and customer behaviour: Evidence from Malaysia's container food courts. *A Journal of Management & Humanities*, 8(1), Article 004.

Ramayah, T., & Ignatius, J. (2005). Impact of perceived usefulness, perceived ease of use and perceived enjoyment on intention to shop online. *ICFAI Journal of Systems Management*, 3(3), 36–51.

Revathy, C., & Balaji, P. (2020). Predictors of mobile wallet adoption intention: Evidence from emerging market. *International Journal of Management*, 11(6), 1–18.

Riyadh, A. N., Bunker, D., & Rabhi, F. (2010). Barriers to e-finance adoption in small and medium sized enterprises (SMEs) in Bangladesh. SSRN Electronic Journal.

Salmony, M. (2014). Access to accounts: why banks should embrace an open future. *Journal of Payments Strategy & Systems*, 8(2), 169–170.

Samarasekara, L., Tanaraj, K., Rajespari, K., Sundarasen, S., & Rajagopalan, U. (2023). Unlocking the key drivers of FinTech adoption: The mediating role of trust among Malaysians. *Migration Letters*, 20(3), 505–521.

Singh, N., & Sinha, N. (2020). How perceived trust mediates merchant's intention to use a mobile wallet technology. *Journal of Retailing and Consumer Services*, 52, Article 101894.

Slimani, I., Touil, B. E., & Sari, A. (2024). The evolution of Islamic Fintech in Malaysia. *International Journal of Economic Perspectives*, 18(2), 401–416. Retrieved from https://ijeponline.org/index.php/journal/article/view/567

Sentosa, I., Nejatian, H., Piaralal, S. K., & Faisal, A. (2011). Empirical study of internet adoption among small and medium entrepreneurs (SMEs) in Malaysia: A structural equation modeling approach. In *Proceedings of the 2nd International Conference on Business and Economic Research* (2nd ICBER 2011), 1067–1082.

Setiawan, B., Nugraha, D. P., Irawan, A., Nathan, R. J., & Zoltan, Z. (2021). User Innovativeness and Fintech Adoption in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 188.

Thakur, R., & Srivastava, M. (2014). Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India. *Internet Research*, 24(3), 369–392.

The Malaysian Reserve. (2019, July 16). *Malaysia's position in the FinTech race*. https://themalaysianreserve.com/2019/07/16/malaysias-position-in-the-fintech-race/

Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a research agenda on interventions. *Decision Sciences*, 39(2), 273–315.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.

Venkatesh, V., & Davis, F.D. (2000). A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science*, 46(2), 186–204.

Wang, Y. S., Wu, M. C., & Wang, H. Y. (2008). Investigating the determinants and age and gender differences in the acceptance of mobile learning. *British Journal of Educational Technology*, 40(1), 92–118.



Winanti, & Fernando, E. (2024). The role of brand image and trust in the adoption of FinTech digital payment for online transportation. *Journal of Information Systems Engineering and Business Intelligence*, 10(1), 126–138.

Zaiton, S., Izyanti, A., & Phang, P. (2021). A study on the effectiveness of government support in Malaysia's FinTech ecosystem. *International Journal of Economics and Management*, 15(1), 121–137.

Zhang, T., Lu, C., & Kizildag, M. (2018). Banking "on-the-go": Examining consumers' adoption of mobile banking services. *International Journal of Quality and Service Sciences*, 10(3), 279–295.

Ziegler, T., Shneor, R., & Wenzlaff, K. (2021). *The 2nd Global Alternative Finance Market Benchmarking Report*. Cambridge Centre for Alternative Finance.