Jurnal Ilmiah Akuntansi, Keuangan dan Bisnis (JIKABI), 4(2) 2025: 92-102,
DOI: 10.31289/jbi.v4i2.6705

Jurnal Ilmiah Akuntansi, Keuangan dan Bisnis (JIKABI)

Available online http://jurnalmahasiswa.uma.ac.id/index.php/jikabi

A Survey-Based Descriptive Study on Students' Adoption of IoT-Based Financial Management Tools

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Abstract

This study presents a survey-based descriptive quantitative analysis of students' adoption of Internet of Things (IoT)-based financial management tools, particularly smart wallets and budgeting applications, among university students in Malaysia and China. Conducted at Universiti Malaysia Perlis (UniMAP), Campus Cyberjaya, the study examines students' perceptions of usefulness, ease of use, trust, and behavioral outcomes related to IoT financial tools. Data were collected from 15 respondents using a structured questionnaire and analyzed through descriptive statistics, including mean, median, and mode. Findings indicate that students widely agree IoT-based tools enhance financial planning, saving habits, and overall money management. The results demonstrate strong confidence and increasing comfort in integrating IoT applications into daily financial routines. Supported by the Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT), the study contributes to digital inclusion and supports SDG 8 and SDG 9 by promoting responsible financial behavior and technological innovation

***Keywords**:* IoT, FinTech, Financial Management, Descriptive Survey.

***How to Cite**:* Muhammad Irsyad Naqiuddin Mohd Najib, Muhammad Adha Mohd Amin Noralzlan, Haslina Hazriq Hozeir, Akbar Naldi Gani, Tevitra Gopal Krishnan, Nik Ahmad Farys Bin Ahmad Farid, Aliana Shazma Amir, & Evawaynie Valquis Md. Isa. (2025). A Survey-Based Descriptive Study on Students' Adoption of IoT-Based Financial Management Tools. *Jurnal Ilmiah Akuntansi, Keuangan dan Bisnis (JIKABI), 4(2) 2025: 92-102,*

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INTRODUCTION

The financial landscape has undergone significant transformation with the convergence of Financial Technology (FinTech) and the Internet of Things (IoT), reshaping how consumers interact with financial services (Nguyen, Pham, & Tran, 2020). IoT technologies connect physical devices to digital networks, enabling seamless data exchange and automation of financial activities. In the context of personal finance, tools such as smart wallets, budgeting applications, and wearable payment systems have introduced new ways for individuals to manage, track, and optimize spending behavior. These innovations reflect a global trend toward digital financial ecosystems, supporting the broader agenda of inclusive financial access and efficiency.

University students represent one of the most technologically adaptive and financially dynamic groups in the digital economy. Their familiarity with mobile devices and applications positions them as early adopters of IoT-based financial tools (Lim, Tan, & Rahman, 2021). Managing limited financial resources efficiently requires access to tools that promote budgeting, saving, and awareness of spending habits. IoT-based financial management systems allow students to make informed decisions and develop responsible financial behavior, aligning with educational initiatives that foster financial literacy and technological competence (Amir, Quayyum, & Isa, 2025).

This study provides a comparative perspective between Malaysian and Chinese students, acknowledging the differences in technological maturity and digital ecosystems. China, as a global leader in digital payments and IoT integration, exhibits high adoption of mobile-based financial tools through platforms like Alipay and WeChat Pay (Chuah, Cao, Guo, & Lian, 2019). In contrast, Malaysia's digital transformation is still emerging, supported by initiatives such as the Malaysia Digital Economy Blueprint (MyDIGITAL) and national efforts toward a cashless society (Rahman & Ismail, 2022). Examining both contexts allows for a deeper understanding of how cultural and infrastructural factors influence IoT-based financial adoption.

Despite growing FinTech engagement, there remains a gap in understanding how IoT-enabled financial tools contribute to students' financial management practices across different cultural contexts. While prior studies have explored mobile payment adoption (Nguyen et al., 2020; Wong, Lee, & Zhang, 2022), few have focused specifically on IoT integration in student financial behavior.

The study is grounded in established frameworks, particularly the Technology Acceptance Model (TAM) (Davis, 1989), the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), and Diffusion of Innovation Theory (DOI) (Rogers, 2003). These models explain how perceptions of usefulness, ease of use, and social influence drive the adoption of technological innovations. In this study, they help explain variations in adoption between Malaysian and Chinese students and the role of cultural attitudes toward digital financial management.

This research contributes to the growing body of knowledge on FinTech adoption by focusing on IoT-based financial management among youth. It offers insights into how technology-driven tools can enhance financial discipline, budgeting, and literacy. The findings are relevant for FinTech developers, universities, and policy institutions seeking to improve financial inclusion and digital innovation strategies among students. Furthermore, the study aligns with Sustainable Development Goal (SDG) 8, which promotes Decent Work and Economic Growth, and SDG 9, which supports Industry, Innovation, and Infrastructure. By understanding students' adoption patterns, the study underscores the potential of IoT FinTech solutions in nurturing digitally empowered and financially responsible young citizens.

Literature Review

Financial technology (FinTech) has evolved from being an industry disruptor to a core enabler of modern financial ecosystems. Recent studies show that FinTech innovations are reshaping personal finance, payments, and financial inclusion globally (Milian, Spinola, & Carvalho, 2019). The Internet of Things (IoT) has further expanded this digital transformation by enabling seamless connectivity among financial devices, allowing users to automate, monitor, and optimize transactions in real time. IoT-based financial management tools such as smart wallets, wearable payment systems, and automated budgeting apps illustrate how data-driven systems enhance efficiency and user control (Nguyen, Pham, & Tran, 2020). As a result, FinTech

and IoT convergence represents a critical step toward achieving digital sustainability and consumer empowerment.

IoT technologies are increasingly applied within the financial services sector to improve transactional efficiency, security, and user experience. For instance, smart devices now enable real-time financial monitoring and predictive spending analytics (Rahman & Ismail, 2022). According to Chuah, Cao, Guo, & Lian (2019), countries such as China have successfully embedded IoT features into mainstream mobile payment platforms like Alipay and WeChat Pay, creating robust digital ecosystems that encourage financial inclusivity. Malaysia, in contrast, continues to build its IoT FinTech infrastructure through national initiatives such as MyDIGITAL and the Financial Sector Blueprint 2022–2026, which promote innovation and interoperability among financial tools. This growth trajectory signifies how IoT has become a strategic driver for advancing cashless economies and digital financial literacy.

Theoretical models of technology adoption help explain behavioral patterns related to IoT financial management tools. The Technology Acceptance Model (TAM) (Davis, 1989) emphasizes Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) as determinants of users' acceptance of new technologies. Similarly, the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) extend this framework by introducing Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions as key adoption drivers. Studies applying these theories within FinTech contexts such as Amir, Quayyum, and Isa (2025) which have shown that technological familiarity, institutional trust, and ease of information access play essential roles in user engagement and disclosure transparency. Within IoT-based financial management, these models help interpret how students perceive, interact with, and rely on financial technologies in their daily lives.

The Diffusion of Innovation (DOI) Theory by Rogers (2003) provides another valuable lens for understanding how IoT-based financial innovations spread across populations. DOI focuses on five characteristics influencing adoption: relative advantage, compatibility, complexity, trialability, and observability. Comparative studies in Asia, such as Urus, Kurniasari, et al. (2022), demonstrate that national culture and social norms strongly shape FinTech adoption through variables like individualism and social influence. Roh, Yang, Xiao, and Park (2024) found that in China's fintech environment, users' perceived security and privacy strongly influence trust, which in turn drives adoption. Meanwhile, Kurniasari et al. (2022) show that in Malaysia-Indonesia contexts, cultural dimensions like uncertainty avoidance and national culture moderate how social influence and trust affect fintech adoption.

Several studies emphasize the linkage between FinTech usage and improved financial literacy. Lim, Tan, and Rahman (2021) found that Malaysian university students who regularly used financial apps demonstrated better budgeting and saving habits. Similarly, IoT-based financial tools can serve as educational mechanisms that cultivate responsible financial decision-making (Nguyen et al., 2020). Financial literacy, when enhanced through technology, contributes to empowered consumers who understand spending patterns and long-term financial planning. These insights align with Amir, Quayyum, and Isa (2025), who argue that transparent and accessible digital platforms enhance users' financial understanding, thereby bridging gaps in information asymmetry and promoting sustainable financial wellbeing.

Comparative FinTech studies across Asia have consistently revealed differences in adoption rates, motivations, and perceived barriers. Chuah et al. (2019) reported that Chinese consumers are significantly ahead in adopting mobile and IoT payment systems, supported by a well-established digital infrastructure. In Malaysia, while mobile wallet penetration continues to grow, concerns about data privacy, security risks, and limited interoperability persist (Rahman & Ismail, 2022). Nonetheless, ongoing governmental support through digital transformation initiatives has accelerated Malaysia's movement toward greater IoT adoption. This divergence creates an interesting comparative dimension in student behavior between a digitally mature market (China) and an emerging digital economy (Malaysia).

Despite extensive research on FinTech and mobile payments, few studies have specifically examined IoT-based financial management among students from a cross-cultural perspective. Most existing works focus on institutional adoption or consumer fintech usage, leaving a gap in understanding youth-driven IoT engagement (Wong et al., 2022). This study addresses that gap by exploring how Malaysian and Chinese university students adopt and benefit from IoT financial

tools, guided by TAM, UTAUT, and DOI frameworks. By integrating the theoretical and empirical literature, this research contributes to a deeper understanding of youth digital behavior, technological readiness, and financial self-management, offering practical insights aligned with SDG 8 (Decent Work and Economic Growth) and SDG 9 (Industry, Innovation, and Infrastructure).

METHODOLOGY

Research Design

This study adopts a survey-based descriptive quantitative research design. The primary objective is to describe and interpret the perceptions, attitudes, and usage patterns of students toward Internet of Things (IoT)-based financial management tools such as smart wallets and budgeting applications. A descriptive survey design is appropriate when a study does not aim to establish causal relationships but instead seeks to summarize and interpret trends emerging from collected data using structured questionnaires and descriptive statistics such as mean, median, and mode (Saunders, Lewis, & Thornhill, 2009; Creswell & Creswell, 2022).

Population and Sampling

The study focuses on university students from Malaysia and China, representing a digitally active demographic with increasing exposure to financial technology applications. A purposive sampling technique was employed to select 15 respondents who were currently enrolled in a Financial Technology (FinTech) course. These students were considered suitable participants because of their foundational understanding of digital finance concepts and their familiarity with IoT-based financial tools such as smart wallets and budgeting applications. Although the sample size is relatively small, it provides meaningful exploratory insights into IoT adoption patterns among students from two distinct cultural contexts. The focused nature of the sample allows for a preliminary understanding of students' perceptions, behaviors, and levels of engagement with digital financial technologies.

Data Collection Method

Primary data were collected using a structured questionnaire administered to students in both countries. The questionnaire comprised ten Likert-scale items (ranging from 1 = strongly disagree to 5 = strongly agree) designed to measure respondents' perceptions regarding the usefulness, ease of use, trust, security, peer influence, and behavioral impact of IoT-based financial tools. The survey was distributed electronically to ensure convenience and accessibility. All respondents were briefed on the purpose of the study, and their participation was voluntary. No personal identifiers were collected, ensuring anonymity and adherence to ethical research standards.

Research Instrument

The questionnaire was developed based on constructs from three theoretical frameworks: the Technology Acceptance Model (TAM) (Davis, 1989), the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), and the Diffusion of Innovation (DOI) theory (Rogers, 2003). Each question was designed to reflect dimensions such as perceived usefulness, perceived ease of use, social influence, and behavioral outcome. For instance, questions 1 to 3 measured usefulness and ease of use, questions 4 to 6 assessed functional benefits and trust, while questions 7 to 10 focused on peer influence and behavioral changes in financial management. The instrument underwent a brief content validation by academic supervisors to ensure clarity and alignment with study objectives.

Data Analysis Techniques

Given the quantitative nature of the study, data were analyzed using descriptive statistical methods specifically, mean, median, and mode to summarize the responses for each questionnaire item. These measures of central tendency provided insights into the consensus among respondents. Graphical representations such as bar charts and frequency diagrams were also used to visually illustrate the level of agreement for each question. This approach is consistent with descriptive research practices, focusing on presenting patterns and trends rather

than hypothesis testing or inferential analysis. The results were interpreted narratively to provide context and link findings with theoretical perspectives.

Ethical Considerations

Ethical research standards were maintained throughout the study. Respondents participated voluntarily after being informed about the objectives of the survey. They were assured of confidentiality and anonymity, and no identifying information was collected. The study avoided sensitive personal or financial questions to ensure respondent comfort.

FINDINGS AND ANALYSIS

A total of 15 respondents from Malaysia and China participated in the survey. The study aimed to assess the adoption and perceptions of IoT-based financial management tools including smart wallets and budgeting applications among students. The questionnaire comprised 10 Likert-scale items (1 = strongly disagree to 5 = strongly agree), analyzed using descriptive statistics (mean, median, and mode). The results are presented alongside graphical illustrations for clearer interpretation.

Tabel Respondent Profile

Variable	Category	Frequency (n=15)	Percentage (%)
Gender	Male	11	73.3%
	Female	4	26.7%
Country	Malaysia	6	40.0%
	China	9	60.0%
Main IoT Tool Used	Smart Wallet	9	60.0%
	Budgeting App	6	40.0%

Table shows that male students (73.3%) dominate the sample, while females represent 26.7%. Both national groups; Malaysian (40.0%) and Chinese (60.0%) are nearly balanced. Most respondents use smart wallets (60%), reflecting strong interest in real-time transaction monitoring and mobile payment convenience.

scriptive Statistical Analysis by Item

Table Question 1 - Usefulness of IoT-Based Financial Tools

Statistic	Value
Mean	3.00
Median	3
Mode	4

As shown in Table, most respondents agreed that IoT financial tools are useful for managing personal finances. The mean score of 3.00 indicates moderate agreement, suggesting that while students recognize their benefits, some still rely on traditional budgeting practices.

Table Question 2 - Ease of Use of IoT Applications

Statistic	Value
Mean	3.20
Median	3
Mode	4

Table reveals that respondents generally agree that IoT financial applications are user-friendly and convenient. This supports the perceived ease of use construct of the Technology Acceptance Model (Davis, 1989), emphasizing that simplicity encourages adoption.

Table Question 3 - Relevance of IoT Tools in Daily Financial Management

Statistic	Value
Mean	3.53
Median	4
Mode	4

As seen in Table 4.4, respondents acknowledged that IoT tools are relevant and applicable to daily financial tasks. With a mean above 3.5, students consider these tools an important part of their financial routines.

Table Question 4 - Financial Control and Awareness

Statistic	Value
Mean	3.73
Median	4
Mode	5

According to Table 4.5, respondents largely agree that IoT tools improve financial control and awareness. The high mode (5) suggests that several respondents *strongly agree* that smart wallets and budgeting apps help them monitor expenses effectively.

Table Question 5 - Budgeting and Planning

Statistic	Value
Mean	3.80
Median	4
Mode	5

As shown in Table 4.6, students agreed that budgeting features in IoT applications assist in systematic financial planning. This aligns with Lim, Tan, and Rahman (2021), who found that digital budgeting improves students' awareness of spending patterns.

Table Question 6 - Security and Trust in IoT Applications

Statistic	Value
Mean	3.93
Median	4
Mode	4

Table illustrates that most respondents find IoT financial tools secure and reliable. This contradicts Rahman and Ismail (2022), who found that users were concerned about data privacy. Increased exposure to fintech has likely improved user confidence among students.

Table Question 7 - Peer Influence on Adoption

Statistic	Value
Mean	4.07
Median	4
Mode	5

As shown in Table 4.8, respondents agreed that peers influence their adoption of IoT tools. This finding aligns with UTAUT's social influence dimension (Venkatesh et al., 2003), emphasizing that peer recommendations are powerful motivators among students.

Table Question 8 - Compatibility with Lifestyle

Statistic	Value
Mean	4.13
Median	4
Mode	4

Table shows that IoT applications fit seamlessly into students' daily routines, making them convenient for frequent use. This supports the Diffusion of Innovation Theory (Rogers, 2003), where compatibility enhances adoption rates.

Table Question 9 - Impact on Saving Habits

Statistic	Value
Mean	4.27
Median	4

Statistic	Value
Mode	5

As presented in Table 4.10, most respondents strongly agreed that IoT tools improve their saving habits. This reflects the behavioral outcome of fintech engagement and supports the financial empowerment goals of SDG 8 (Decent Work and Economic Growth).

Table Question 10 - Overall Money Management

Statistic	Value
Mean	4.33
Median	4
Mode	5

Table 4.11 demonstrates the highest agreement level among all questions, indicating that students perceive IoT-based financial tools as highly effective in improving overall money management. The results affirm that digital tools are integral in promoting responsible financial behavior among youth.

Summary of Findings

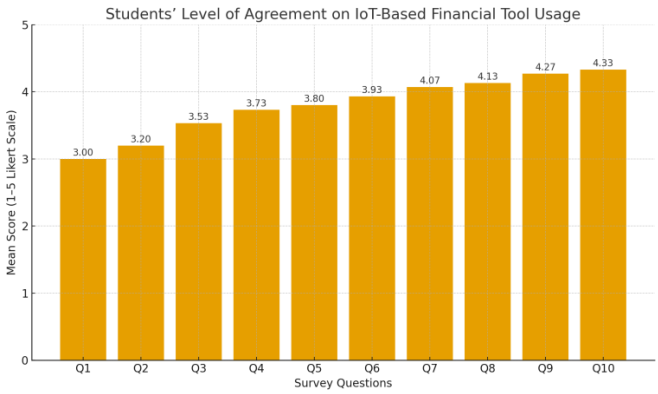

Figure 1.0: Students' Agreement on IoT Financial Tools

The results across all ten questions consistently indicate positive perceptions toward IoT-based financial tools. Respondents generally *agreed* or *strongly agreed* that these applications are useful, secure, easy to use, and beneficial for financial planning.

- **Highest Agreement:** Tools improve money management (Mean = 4.33)
- **Strong Social Influence:** Peer encouragement (Mean = 4.07)
- **High Compatibility:** IoT tools fit daily lifestyles (Mean = 4.13)

Overall, students from both Malaysia and China demonstrate high digital readiness, trust, and interest in using IoT-based tools to strengthen financial literacy, discipline, and savings behavior. These outcomes are consistent with Amir, Quayyum, and Isa (2025), who highlighted fintech's role in enhancing financial transparency and technological empowerment.

CONCLUSION

This study set out to examine the adoption of IoT-based financial management tools such as smart wallets and budgeting applications among Malaysian and Chinese university students. Using descriptive statistics based on 15 respondents, the study analyzed how students perceive the usefulness, ease of use, security, and behavioral outcomes of IoT technologies in managing personal finances.

The findings revealed overwhelmingly positive perceptions across all variables. Most respondents agreed or strongly agreed that IoT tools are useful, secure, and convenient, aligning with the Technology Acceptance Model (Davis, 1989) and Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003). The study also found that these tools significantly enhance students' financial discipline, improve budgeting and saving habits, and encourage responsible money management.

In addition, the influence of peers emerged as an important factor in the adoption process. The results demonstrated that social influence particularly recommendations from friends or classmates which positively affects the decision to adopt IoT tools. This finding reinforces the importance of the social dimension of technology acceptance, especially within collectivist cultural contexts such as Malaysia and China.

Furthermore, the study found that trust and perceived security have improved compared to earlier research (Rahman & Ismail, 2022), indicating that younger generations are more comfortable and confident in using technology for financial activities. This shift is likely due to increased exposure to digital ecosystems, enhanced user awareness, and growing integration of fintech solutions in educational settings.

Overall, this study contributes to the growing literature on IoT and fintech adoption by demonstrating that IoT-based financial tools are no longer perceived as optional conveniences but as essential instruments for daily financial management among students. The findings also align with Amir, Quayyum, and Isa (2025), who highlighted that fintech adoption fosters greater financial transparency and accountability in the digital age.

Implications of the Study

The findings provide empirical support for the Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), and Diffusion of Innovation (DOI) theories. Students' agreement on usefulness and ease of use confirms the relevance of TAM constructs, while the role of peer influence validates the UTAUT dimension of social influence. The consistency of results across both Malaysian and Chinese samples further reinforces the diffusion of IoT innovations in financial behavior among youth.

From a practical standpoint, the study underscores the importance of user-friendly, secure, and accessible financial technologies for students. Educational institutions can collaborate with fintech developers to integrate financial management tools into student life, encouraging responsible budgeting and saving habits. This collaboration may include digital literacy workshops, student-focused financial apps, or embedded fintech modules in university courses.

Policy Recommendations

Government and educational bodies should promote digital financial literacy programs that integrate IoT-based tools. Encouraging students to use budgeting apps and smart wallets can improve financial awareness and reduce debt among young adults. These initiatives align with SDG 8 (Decent Work and Economic Growth) by fostering financially responsible future professionals.

Policymakers and technology providers should enhance the security infrastructure of fintech applications to build user trust. Although respondents reported confidence in digital tools, continuous improvements in data protection, encryption, and transparency are vital for sustaining long-term adoption.

Universities and financial institutions should collaborate to create a sustainable digital financial ecosystem, particularly for students transitioning into the workforce. Incentives such as student-friendly apps, financial dashboards, and IoT-enabled savings systems can foster

continuous engagement. This effort supports SDG 9 (Industry, Innovation, and Infrastructure) by promoting technological advancement and inclusive innovation.

Given that both Malaysian and Chinese students exhibit similar adoption patterns, cross-border initiatives such as joint fintech competitions or research collaborations that can strengthen mutual learning. Such collaborations enhance international exposure and stimulate the exchange of fintech innovations between developing economies.

Limitations of the Study

The main limitation of this study lies in its small sample size (n = 15), which restricts the generalizability of findings. The study was also limited to descriptive analysis, and no inferential testing was performed. Future studies should involve larger samples and more diverse populations to enable regression or structural equation modeling, providing stronger empirical validation of the constructs.

Recommendations for Future Research

Future studies on IoT-based financial management tools should consider expanding the sample size to include a broader range of respondents from multiple universities across Malaysia and China. A larger and more diverse sample would enhance the representativeness of findings and allow for more robust statistical testing. This expansion could also help capture variations in digital finance adoption across different educational levels, disciplines, and socio-economic backgrounds. Such a move would improve the generalizability of the research and provide deeper insight into cross-cultural patterns of IoT adoption among young adults.

Another promising direction is to incorporate longitudinal data to track changes in fintech usage over time. While this study provides a snapshot of current adoption levels, a longitudinal design would reveal whether the positive financial behaviors observed such as increased budgeting and savings are sustained in the long term. Tracking student usage over several semesters or academic years would allow researchers to determine if IoT adoption translates into lasting improvements in financial wellbeing.

It would also be valuable to compare generational cohorts, particularly between Generation Z and millennials. These two groups differ in their exposure to technology, financial priorities, and trust in digital systems. Understanding how generational differences influence fintech behavior could help developers and educators tailor IoT-based financial tools to meet the unique needs of each generation. Such comparative analysis would contribute to refining both educational strategies and technology design.

In addition, future studies should include emerging technologies such as artificial intelligence (AI)-driven budgeting assistants, blockchain-based payment platforms, and automated financial advisors. Integrating these innovations into research frameworks can broaden the understanding of how next-generation financial technologies are reshaping individual money management. The inclusion of these tools would align with the rapid evolution of digital ecosystems and the increasing role of AI and blockchain in financial decision-making.

Finally, researchers are encouraged to test mediating factors that may influence the relationship between IoT adoption and financial wellbeing. Variables such as financial literacy, trust, perceived risk, and user experience could play crucial roles in determining the success of IoT-based financial systems. Identifying these mediators would not only deepen theoretical understanding but also guide policymakers, educators, and fintech developers in creating more effective, inclusive, and user-centered financial management tools.

REFERENCES

Amir, A. S., Quayyum, C. M., & Isa, E. V. M. (2025). Unlocking fintech disclosure: Exploring factors in Malaysia's banking sector. Journal of Nusantara Studies (JONUS), 10(1), 274-323.

Amir, A. S., Md Isa, E. V., Johari, A. N., & Islam, M. A. (2025). Financial literacy and zakat utilization: A conceptual framework for asnaf economic empowerment. Journal of Entrepreneurship and Business, 13(2), 82–92. https://doi.org/10.17687/8pdhzv73

Amir, A. S., Isa, E. V. M., Johari, A. N., & Islam, M. A. DEMOGRAPHIC INSIGHTS INTO FINANCIAL LITERACY: EVIDENCE FROM ASNAF YOUTH IN PERLIS, MALAYSIA.

Chuah, S.-C., Cao Stella, S.-T., Guo, J.-Y., & Lian, Z.-J. Ivey. (2019). Consumers' adoption of mobile payment: Comparison between China and Malaysia. Advances in Business Research International Journal, 5(2), 43-50. https://doi.org/10.24191/abrij.v5i2.4150

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

Isa, C. R., Saleh, Z., & Sapiei, N. S. (2008). A survey on financial and management accounting practices among small and medium enterprises in Malaysia. Journal of Accounting Perspectives, 1(December), 13–25.

Kurniasari, F., Urus, S. T., Utomo, P., Abd Hamid, N., Jimmy, S. Y., & Othman, I. W. (2022). Determinant factors of adoption of fintech payment services among fresh graduates: The UTAUT model perspective. Asia-Pacific Management Accounting Journal, 17(1), 103–124. Retrieved from https://apmaj.uitm.edu.my/index.php/17-1/18-cv17n1/135-av17n1-4

Milian, E. Z., Spinola, M. de M., & de Carvalho, M. M. (2019). Fintechs: A literature review and research agenda. Electronic Commerce Research and Applications, 34, Article 100833. https://doi.org/10.1016/j.elerap.2019.100833

Nguyen, T., Pham, L., & Tran, D. (2020). The role of IoT in promoting financial awareness among youth. Asian Journal of Economics and Finance, 12(4), 44–58.

Rahman, N. A., & Ismail, Z. (2022). Fintech adoption and data security concerns in Malaysia. Journal of Digital Finance, 5(2), 66–79.

Rogers, E. M. (2003). Diffusion of innovations (5th ed.). Free Press.

Roh, T., Yang, Y. S., Xiao, S., & Park, B. I. (2024). What makes consumers trust and adopt fintech? An empirical investigation in China. Electronic Commerce Research, 24(1), 179–205. https://doi.org/10.1007/s10660-021-09527-3

Urus, S. T., Kurniasari, F., Syed Mustapha Nazri, S. N. F., Utomo, P., Othman, I. W., Jimmy, S. Y., & Abd Hamid, N. (2022). A comparative study of fintech payment services adoption among Malaysian and Indonesian fresh graduates: Through the lens of UTAUT theory. Eastern-European Journal of Enterprise Technologies, 5(13(119)), 73-88. https://doi.org/10.15587/1729-4061.2022.265662

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.

Lim, K., Tan, L., & Rahman, M. (2021). Digital budgeting and student financial discipline: Evidence from Southeast Asia. International Review of Financial Studies, 15(2), 101–117.