



DRIVING FACTORS BEHIND M-COMMERCE ACCEPTANCE: THE MEDIATING ROLE OF INTENTION

Moussa Barry^{a,b*}, Ahasanul Haque^{a,c}, and Muhammad Tahir Jan^{a,d}

^aDepartment of Business Administration, International Islamic University Malaysia, 53100 Kuala Lumpur, Malaysia. (Email: ^bbarrymoussa4@gmail.com, ^cahasanul@iium.edu.my, ^dtahirjan@iium.edu.my)

ABSTRACT

In recent decades, there has been substantial progress in the evolution of mobile commerce. This study, which delves into the impact of performance expectancy, effort expectancy, and perceived trust on accepting mobile commerce through intention, has significant implications for mobile commerce providers and organizations in Malaysia. The findings, derived from a two-phase structural equation modelling process and a convenience sampling method involving 390 survey questionnaires, reveal that perceived trust, performance expectancy, and effort expectancy substantially influence the intention to use mobile commerce. Furthermore, perceived trust indirectly influences the acceptance of mobile commerce through intention. Additionally, the acceptance of mobile commerce is greatly influenced by intention. The findings also demonstrated that the intention to accept mobile commerce fully mediates the relationship between perceived trust and the acceptance of mobile commerce. Therefore, these valuable findings can guide mobile commerce providers and organizations in their efforts to enhance mobile commerce adoption in Malaysia. These findings will significantly benefit scholars, researchers, marketers, and other individuals involved in the mobile commerce industry.

JEL Classifications: M1, M150, M3

Keywords: M-Commerce, Intention, Acceptance, Trust, Malaysia

Submitted: 31/07/2024 Accepted: 31/12/2024 Published: 28/06/2026

1. INTRODUCTION

Global proliferation of mobile commerce is experiencing a tremendous surge, driven mainly by the younger age group and mobile technology developments. This trend is particularly pronounced in Malaysia, where adults below 50 are increasingly using their smartphones for online shopping (MCMC, 2021). This development is not just a fad but a significant shift in consumer behavior that mobile commerce providers and organizations must consider (Barry, Haque and Jan, 2024a; Chan et al., 2022). The consistent and substantial increase in smartphone utilization has significantly boosted the popularity and effectiveness of mobile commerce applications. Mobile commerce apps have become essential in our daily lives as they enable us to handle our purchasing schedules and other crucial requirements effortlessly (Barry, Haque and Jan, 2024b; Huang, 2023; Patel et al., 2020; Malaquias and Hwang, 2019). According to Forbes, smartphone use is expected to contribute to a significant increase in global mobile commerce sales, reaching an impressive \$710 billion by 2025.

Developing countries, however, are expected to account for more than 90% of the new smartphone connections (Barry, 2024a; Barry and Ahasanul, 2024; Barry, Haque and Jan, 2024d). This can be attributed to the rapid progress made in mobile services, as indicated by Ashraf et al. (2021) and Patil et al. (2020). Based on a 2023 survey conducted by the Malaysian Communications and Multimedia Commission (MCMC), most Malaysians prefer using their mobile phones for transactions. The rapid increase in mobile phone utilization demonstrates the importance and ability to bring about significant future changes in mobile commerce apps. Despite the expectation that people will use smartphones for internet shopping, current data suggests that mobile commerce has not been widely embraced in Malaysia (Barry, Haque and Jan, 2024c; Yahaya, Hamid, and Nafi, 2022).

Introducing user-friendly smartphone-compatible applications has sparked a worldwide transformation in business methods, enhancing the acceptance rate for mobile commerce transactions among mobile commerce users (Siyal et al., 2021). Scholars have expressed curiosity in studying the factors that impact customer intention to accept mobile commerce (Barry, 2024a; Barry and Ahasanul, 2024). Moreover, people are keen on discovering characteristics that can improve customer loyalty in mobile

commerce adoption (Siyal et al., 2024; Pallant et al., 2022). Therefore, this study examines the driving factors behind m-commerce acceptance in a developing country such as Malaysia.

2. LITERATURE REVIEW

2.1 MOBILE COMMERCE

Online shopping has transformed from a rudimentary activity to a worldwide phenomenon in civilizations that heavily rely on information, such as the United States and Canada. This shift can be attributed mainly to the groundbreaking initiatives undertaken by Amazon and Alibaba (Kao and L'Huilier, 2022). Mobile commerce is the next phase of online commerce (Lucas, Lunardi, and Dolci, 2023). Mobile commerce refers to doing business transactions in a wireless environment. In their study, Mollick et al. (2023) provided a precise definition of mobile commerce as the incorporation of all transactions conducted using mobile devices. Essentially, it utilizes the recently developed wireless method of doing transactions. According to the latest study report, m-commerce encompasses transactions involving exchanging goods or rights, which are conducted via mobile devices connected to a computer network (Barry et al., 2024b).

Barry et al. (2024b) defined mobile commerce as using mobile network connectivity through electronic devices to transfer ownership or rights to products and services. He underlined that mobile commerce involves using information and communication technologies to combine value chains and commercial activities and oversee company partnerships. Mehedintu and Soava (2022) define mobile commerce (m-commerce) as conducting online transactions through a portable wireless device, including purchasing and selling products and services. Additionally, mobile commerce refers to any transaction through a wireless telecommunication network, directly or indirectly (Barry, 2024c). Similarly, mobile commerce is an extension of electronic commerce that enables people to interact with one another or enterprises wirelessly, regardless of time or location (Barry and Jan, 2018). Mobile commerce refers to any transaction using a wireless telecommunication network, as defined by Jin and Youn (2022).

2.2 UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY (UTAUT)

Prior studies on consumer acceptance have primarily relied on established theories of technology acceptance, such as the Theory of Reasoned Action (TRA), Innovation Diffusion Theory (IDT), Technology Acceptance Model (TAM), and Theory of Planned Behavior (TPB). TAM is widely used to assess technology acceptance. Nevertheless, it has many disadvantages. A significant limitation is the absence of clear instructions on successfully utilizing and integrating mobile technologies (Barry et al., 2024a; 2024b). In 2003, Venkatesh et al. developed the Unified Theory of Acceptance and Use of Technology (UTAUT) theory by integrating eight well-established concepts from the existing literature. Thus, the researcher has chosen the individual variable and UTAUT (Venkatesh et al., 2003) model as the theoretical foundation of this study for the present research investigation because of its strong theoretical underpinning and because the UTAUT model has been applied in several studies involving mobile commerce and other technological research (Barry and Haque, 2024; Barry et al., 2024e; Hassaan and Yaseen, 2026).

However, the unified theory of acceptance and use of technology presented four key concepts: performance expectancy, effort expectancy, social influence, and facilitating conditions (Venkatesh et al., 2003). The usage behavior impacts how consumers embrace information technology (IT). Performance expectancy is related to perceived usefulness from the technology acceptance model and relative advantage from the diffusion of innovation theory (Anwar et al., 2024; de Andrés-Sánchez and Gené-Albesa, 2023). This study, however, will not consider facilitating conditions and social influence as its main objective is to examine the relationship between effort expectancy, performance expectancy, perceived trust, intention, and acceptance of mobile commerce. Nevertheless, the primary emphasis of the present study is the level of acceptance of mobile commerce among consumers in Malaysia.

Previous studies on user acceptance and usage of mobile commerce have employed the UTAUT model, as demonstrated by Tannady, Dewi, and Gilbert (2024), Chand and Kumar (2024), and Dagnoush and Khalifa (2021).

After carefully reviewing previous literature, the researcher chooses this model as the foundation for the current study on the driving factors behind the acceptance of mobile commerce among

consumers in Malaysia. Additionally, UTAUT offers a comprehensive perspective on the factors affecting technology adoption such as mobile commerce, providing a comprehensive method for comprehending user behavior (Mensah, and Khan, 2024). Moreover, UTAUT is well-positioned to capture the different forces that drive customer decisions in Malaysia's mobile commerce industry because of the complex nature of mobile commerce, which includes both technological and social components (Barry et al., 2024e). Hence, numerous studies pertaining to technology adoption have shown the UTAUT model to have excellent predictive power (García de Blanes Sebastián et al., 2024; Barry et al., 2024e; Lai et al., 2024; Barry and Haque, 2024). Hence, this theory is extremely useful for strategic planning and policy formation in Malaysia's mobile commerce landscape because it allows researchers to not only investigate the factors influencing acceptance of mobile commerce but also forecast future trends and behaviors.

2.3 PERFORMANCE EXPECTANCY

According to Venkatesh et al. (2003), performance expectancy refers to the extent to which an individual believes using the system will improve their job performance. Performance expectancy has a vital role in shaping behavioral intention, as stated by Venkatesh, Thong, and Xu (2012). The term "performance expectancy" is used in m-commerce to refer to user performance (Dagnoush and Khalifa, 2021). Chand and Kumar (2024) discovered that performance expectancy significantly influences the intention of m-payment users in the Western area of Fiji. Their study uncovered that expectations of performance and the conditions that facilitate it substantially impacted on customer intention to use mobile payment services.

Additionally, Abdullah, Othman, and Urus (2024) revealed that performance expectancy has a significant and positive relationship with the intention to accept mobile payments among working-age users in an emerging market such as Malaysia. Komara and Utami (2024) also found a significant positive link between performance expectancy and mobile banking adoption interest. Allahham and Ahmad (2024), however, revealed that performance expectancy has a significant and positive connection with mobile payment services adoption in supply chain firms. Similarly, Kumar et al. (2023), Rahardja et al. (2023), Barry and Jan (2018; 2016), and Ankadhitra, Christiandy, and Tamara (2023) revealed similar results.

Thus, drawing from the existing literature, the researcher put forward the subsequent hypothesis:

H1: Performance expectancy has a positive impact on the intention to accept mobile commerce.

2.4 EFFORT EXPECTANCY

Effort expectation is the level of ease in using a system, as defined by Venkatesh et al. (2003). Venkatesh et al. (2012) assert that the expectation of effort plays a vital role in influencing one's will to perform. Effort expectancy pertains to mobile commerce's ease of use and user-friendliness (Barry and Jan, 2018). Furthermore, Tannady et al. (2024) defined effort expectancy as the degree to which users perceive the effectiveness of using mobile commerce. Chand and Kumar (2024) discovered that effort expectancy significantly influences the intention of m-payment users in the Western area of Fiji.

Many scholars found that effort expectancy significantly impacts the intention to use mobile commerce. For instance, Suyanto et al. (2024) found that effort expectancy significantly influences the behavior intention among Quick Response Code Indonesian Standard (QRIS) users of the small and medium enterprises sector in Indonesia. Komara and Utami (2024) also found a significant and positive link between effort expectancy and mobile banking adoption interest. Similarly, Abdullah et al. (2024), Ankadhitra et al. (2023), Lee, Lee, and Choi (2023), Kumar et al. (2023), and Purwanto et al. (2023) revealed similar results. Thus, drawing from existing research, the researcher puts forward the following hypothesis:

H2: Effort expectancy has a positive impact on the intention to accept mobile commerce.

2.5 PERCEIVED TRUST

Trust in technology refers to the extent to which a user is ready to depend on technology and its outcomes (Mayer, Davis, and Schoorman, 1995, 718). However, "trust," or "electronic trust," refers to the customer's legitimate reliance on information acquired from a website or application. As a result, the customer gains the confidence to participate in online commercial transactions. Basdekidou and Papapanagos (2024) argue that a reputable and

morally upright firm is distinguished by competence, integrity, equity, and accountability attributes. Trust is vital in mobile commerce since consumers are less likely to participate in transactions when they perceive significant risk and uncertainty (Liébana-Cabanillas et al., 2024). This study investigates the factors influencing acceptance of mobile commerce and how they impact customers' intentions to purchase. The aim is to gain a deeper understanding of how consumers assess mobile commerce reliability.

Many scholars have proven that perceived trust significantly predicts the intention and acceptance of mobile commerce. For instance, Barry et al. (2024b) found that perceived trust significantly influences intention to accept mobile commerce among Malaysian mobile commerce users. Similarly, Komara and Utami (2024), Sutrisno (2023), Fitriasaki et al. (2024), Sugijono and Pratomo (2024), Kumar et al. (2023), and Lee et al. (2023) revealed similar results. Therefore, the researcher proposes the following hypotheses:

H3: Perceived trust has a positive impact on intention.

H4: Perceived trust has a positive impact on acceptance.

2.6 INTENTION

Successful technology adoption depends on the users' intention and actual utilization. Although there is a general intention to use technology, several reasons, such as inadequate resources (financial, time-related, and technical expertise) and negative past experiences, can impede individuals. Behavioral intention is a reliable indicator of customer behavior and acceptance of new technology (Zhang et al., 2012). The concept of behavioral intention is a crucial element in the theories of the Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT), as proposed by Davis (1989) and Venkatesh et al. (2003). Barry et al. (2024c) defined behavioral intention as a consumer's view of the possibility of participating in mobile commerce. The notion of mobile commerce has experienced significant progress in recent decades. Unlike prior research that mainly examined individuals' intentions to utilize mobile commerce, the present study examines customers' acceptance of mobile commerce. However, many scholars found that the intention to accept mobile commerce strongly predicts the acceptance of mobile commerce (Barry et al., 2024a; Nandru and Senthilkumar, 2024; Zaheer, Kashif, and Kropivnik, 2024; Zainab,

Sarwar, and Usop, 2024; Nani and Lina, 2022; Vărzaru et al., 2021; Barry and Jan, 2018; Barry, 2016). Therefore, based on these studies, the following hypothesis is proposed.

H5: Intention has a positive impact on the acceptance of mobile commerce.

2.7 MEDIATION EFFECT OF INTENTION

Several scholars have examined the role of intention in mediating the relationship between trust and the acceptance of mobile commerce. For instance, Barry et al. (2024b) demonstrated that consumer intention acts as a full mediator in the relationship between trust and the acceptance of mobile commerce among Malaysian consumers. This finding indicates that trust alone does not directly influence mobile commerce adoption; instead, trust shapes consumer intention, which in turn drives their acceptance of mobile commerce activities. Nguyen and Ha (2021) discovered that consumer intention plays a critical role in shaping the relationship between trust and the user acceptance of mobile commerce. Their findings suggest that trust exerts its influence on mobile commerce adoption indirectly, with intention serving as a significant intervening variable that translates trust into actual acceptance and usage behavior.

Additionally, Sutrisno (2023) identified that intention serves as a mediating factor in the relationship between trust and the acceptance of mobile commerce. This suggests that trust does not directly lead to mobile commerce acceptance; rather, it influences consumers' intentions, which subsequently drive their willingness to adopt and engage with mobile commerce activities. Sehat et al. (2024) further revealed that consumer intention serves as a full mediator in the relationship between trust and the acceptance of mobile commerce. This means that trust alone does not directly lead to mobile commerce adoption; instead, trust influences the formation of consumer intention, which then becomes the determining factor driving the acceptance and use of mobile commerce activities. Fati (2024) also revealed that consumer intention acts as a full mediator in the relationship between trust and the acceptance of mobile commerce. This finding suggests that trust does not have a direct influence on the acceptance of mobile commerce; rather, it shapes consumer intentions, which, in turn, play a crucial role in determining whether consumers are willing to adopt and use mobile commerce platforms. These studies highlight the significant

influence of intention in mediating the connection between perceived trust and the acceptance of mobile commerce. Therefore, based on these studies, the researcher proposes the following hypothesis:

H6: Intention mediates the relationship between perceived trust and acceptance.

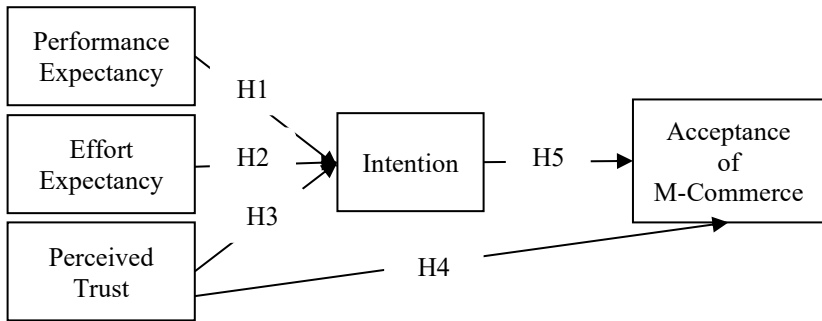


FIGURE 1
Conceptual Framework

Figure 1 shows the conceptual framework of the study. The independent variables namely performance expectancy, effort expectancy, and perceived trust are positively relate to the mediating variable namely intention and the dependent variable namely the acceptance of m-commerce in Malaysia.

3. RESEARCH METHODOLOGY

The study utilized convenience sampling by delivering 400 survey questionnaires to customers who use smartphones and engage in mobile commerce within the Klang Valley area in Malaysia. The questionnaire items were rated on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Based on the study conducted by Hair et al. (2010a), the researcher determined that among the 400 questionnaires distributed to consumers only 385 were adequate for data analysis. All data screening methods were rigorously followed before conducting the primary analysis in this study. Following the data screening procedure, we employed the Statistical Packages for the Social Sciences (SPSS) application to perform a thorough analysis, which included reliability analysis, descriptive analysis, factor analysis, and structural equation

modelling. Using the AMOS software for structural analysis, the measurement model was assessed for goodness-of-fit, convergent and discriminant validity. The structural model was then used to validate the model and confirm the investigation's hypotheses.

4. DATA ANALYSIS AND RESULTS

The study employed the Analysis of Moment Structure (AMOS-SEM) and Statistical Packages for the Social Sciences (SPSS) software to analyze the data (Hair et al., 2010a). Furthermore, the study encompassed factors, descriptive, and reliability analyses. To establish the study's measurement and structural model, a two-stage structural equation modelling technique is employed. The study's hypotheses were ultimately formulated. The investigation employed Cronbach's alpha coefficient to assess the reliability values for the constructs: PT = 0.765, PE = 0.818, EE = 0.908, INT = 0.925, and AMC = 0.902. Furthermore, the overall dependability was satisfactory, as indicated by Cronbach's α coefficient of 0.945. Therefore, the following Table 1 illustrates the results of the reliability analysis.

TABLE 1
Reliability Statistics

Constructs	Cronbach's α	No. items
Perceived Trust	0.765	5
Performance Expectancy	0.818	5
Effort Expectancy	0.908	5
Intention	0.925	5
Acceptance of M-Commerce	0.902	5

Source: Authors' Computation

4.1 DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Some 390 questionnaires were collected from smartphone users in Malaysia conducting mobile commerce, who were 18 years and above. The collected data resulted in 385 valid responses, consisting of 211 (54.8%) females and 174 (45.2%) males. Most participants, precisely 135 respondents (35.1%), were aged 18-27, while 130 consumers (33.8%) were 28-37, and 73 consumers (18.9%) were 38-47. Among all the consumers, only 47 (12.2%) were aged 41 and above. Among the responses, just 45 consumers (11.7%) were

married, while the majority, 340 consumers (88.3%), were single. The participants comprised 350 (90.9%) consumers from Malaysia, and only 35 (9.1%) consumers were Foreigners (Non-Malaysian). Regarding their educational background, 175 consumers (45.4%) graduated with a bachelor's degree, followed by 95 consumers (24.7%) with a master's degree and 58 consumers (15.1%) with a Diploma. Some 42 consumers possessed doctoral degrees, representing 10.9% of the total respondents. Table 2 illustrates the respondents' demographic characteristics.

TABLE 2
Demographic Characteristics of the Respondents

Demographic variables		Research Sample (n = 385)	
		Frequency	Percentage (%)
Gender	Male	174	45.2
	Female	211	54.8
Age	18 – 27	135	35.1
	28 – 37	130	33.8
	38 – 47	73	18.9
	48 – Above	47	12.2
Nationality	Malaysian	350	90.9
	Non-Malaysian	35	9.1
Marital Status	Single	340	88.3
	Married	45	11.7
Level of Education	High School	15	3.9
	Diploma	58	15.1
	Bachelor	175	45.4
	Master	95	24.7
	PhD	42	10.9

Source: Author's Computation

4.2 KMO AND BARTLETT'S TEST OF SPHERICITY

The unidimensionality of the scales was evaluated using the KMO and Bartlett's Tests (Table 3). The p-values for the five sample groups in the sphericity tests were less than 0.001. Furthermore, a confirmation with a coefficient of 0.910 was achieved, showing the suitability of the samples.

TABLE 3
KMO and Bartlett's Tests

KMO Sampling Adequacy Measurement		0.910
Sphericity Test	Approx. Chi-Square	8225.246
	Degree of Freedom	375
	Significance	0.000

Source: Author's Computation

4.3 EXPLORATORY FACTOR ANALYSIS

The factor loadings obtained from the factor analysis outcome (Table 4) were utilized to validate the accurate assignment of each survey item to its respective component. The results indicate that seven factors accounted for 77.163% of the variation in the survey items. Items such as AMC5, INT5, PE5, PT4, and PT5 were having factor loadings less than 0.5 and hence were not included in the data analysis as advised by Hair et al. (2010b) that any items with factor loadings below the threshold of 0.5, should be excluded in the data analysis otherwise it will affect the outcome of the analysis. Furthermore, based on exploratory factor analysis (EFA), Cronbach's alpha for each component exceeds the recommended minimum value of 0.7, as Hair et al. (2010b) suggested.

TABLE 4
Loadings and Reliability of Scale

Item	EE	AMC	INT	PE	PT
EE1	0.727				
EE2	0.784				
EE3	0.804				
EE4	0.766				
EE5	0.711				
AMC1		0.777			
AMC2		0.807			
AMC3		0.855			
AMC4		0.840			
INT1			0.728		
INT2			0.661		
INT3			0.736		
INT4			0.755		

TABLE 4 (continued)

Item	EE	AMC	INT	PE	PT
PE1				0.817	
PE2				0.812	
PE3				0.642	
PE4				0.584	
PT1					0.831
PT2					0.751
PT3					0.883
Mean	4.084	3.977	4.027	3.747	2.814
SD	1.023	1.110	1.033	1.117	1.208
Cronbach's α	0.908	0.905	0.932	0.823	0.770
CR	0.910	0.903	0.933	0.820	0.779
AVE	0.669	0.702	0.778	0.537	0.543

Source: Authors' computation

4.4 CONVERGENT AND DISCRIMINANT VALIDITY

The researcher calculated each construct's average variance extracted (AVE) to evaluate convergent validity. They verified that each construct's average variance extracted (AVE) value was more significant than 0.5, as shown in Table 3 (Cheung et al., 2023). To assess the discriminant validity, the square root of the average variance extracted (AVE) was computed and subsequently compared to the inter-construct correlations. The results in Table 5 provide evidence of discriminant validity, as demonstrated by the square root of the Average Variance Extracted (AVE) for each construct being more significant than the correlations between each construct and other components (Cheung et al., 2023).

TABLE 5
Construct Validity and Reliability

	CR	AVE	MSV	ASV	1	2	3	4	5
PE	0.820	0.537	0.476	0.266	0.732				
EE	0.910	0.669	0.542	0.317	0.637	0.818			
PT	0.779	0.543	0.030	0.007	-0.020	0.075	0.737		
INT	0.933	0.778	0.542	0.344	0.690	0.736	0.172	0.882	
ACC	0.903	0.702	0.361	0.202	0.371	0.601	0.091	0.569	0.838

Source: Author's computation

4.5 CONFIRMATORY FACTOR ANALYSIS

The confirmatory factor analysis results indicate that the RMSEA index is 0.064, which is lower than the criterion of 0.08. The degrees of freedom (DF) were 329, the Chi-square (χ^2) value is 842.396, and the Normed Chi-square (χ^2/DF) value is 2.560, which is lower than the criterion of 5.0. The CFI, GFI, TLI, and IFI values are above the criterion of 0.90, with respective values of 0.937, 0.932, 0.927, and 0.937. The results of this study align with the conclusions of earlier research conducted by Barry et al. (2024b) and Hu and Bentler (1999). This evidence suggests that it is necessary to evaluate the appropriateness of the structural model.

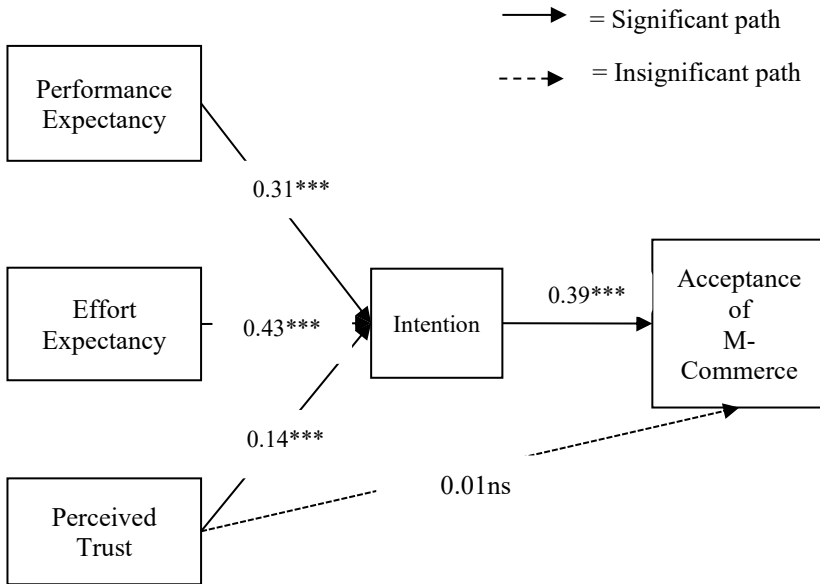


FIGURE 2
 Driving Factors Behind M-Commerce Acceptance

Figure 2 demonstrates the driving factors behind the acceptance of m-commerce in Malaysia. Thus, performance expectancy, effort expectancy, and perceived trust are positively related to intention to accept m-commerce in Malaysia. Intention is positively related to the acceptance of m-commerce in Malaysia while playing a full mediating role between perceived trust and the acceptance of m-commerce. In contrast, perceived trust does not predict the acceptance of mobile commerce in Malaysia.

4.6 HYPOTHESES TESTING

The hypotheses were confirmed using the AMOS software. The results show that the RMSEA index is below the cutoff of 0.08 (0.065), the DF is 332, the Chi-square (χ^2) is 869.720, the Normed Chi-square (χ^2/DF) is below the cutoff of 5.0 (2.620), and the CFI, GFI, TLI, and IFI have values of 0.934, 0.928, 0.924, and 0.934, respectively, all surpassing the cutoff of 0.90. According to the structural model results, the predicted model performs better regarding fit indices and factor loadings. The outcome of the hypothesis test for the structural model is considered satisfactory. The outcome of the hypothesis is displayed in the following Table 6.

TABLE 6
Hypotheses Testing

Hypotheses	Paths	Coeff (β)	<i>t-value</i>	<i>p-value</i>	Decision
H1	PE ----> INT	0.310	4.765	***	Supported
H2	EE ----> INT	0.431	7.216	***	Supported
H3	PT---->INT	0.139	3.736	***	Supported
H4	PT---->AMC	0.012	0.305	0.760	Not Support
H5	INT ---->AMC	0.386	7.341	***	Supported

Note: *** indicates significance level < 0.001

Source: Authors' computation

The data presented in Table 6 indicates that the impact of performance expectancy on intention is 0.31. Using a significance threshold of 0.05, the results showed a statistically significant relationship ($\beta = 0.31$, $p < 0.001$). Therefore, the degree of performance expectancy significantly impacts the intention to accept mobile commerce. Therefore, H1 is supported.

Regarding H2, the data in Table 6 demonstrates that the amount of effort expectancy exerts a substantial impact of 0.43 on the intention. This result is significant. Using a significant level of 0.05, the results showed a statistically significant relationship ($\beta = 0.43$, $p < 0.001$). Therefore, the degree of effort expectancy significantly impacts the intention to accept mobile commerce. As a result, H2 is supported.

The correlation coefficient between perceived trust and intention is 0.14, as stated in Table 6. The results were statistically significant, meeting the significance criterion 0.05 ($\beta = 0.14$, $p < 0.001$). Therefore, how trust is perceived significantly impacts the

intention to accept mobile commerce. Consequently, H3 is subsequently supported.

Concerning H4, according to Table 6, the relationship between perceived trust and the acceptance of mobile commerce has a coefficient of 0.01. With a significant level of 0.05, the results showed insufficient evidence to support a statistically significant relationship ($\beta = 0.01, p < 0.076$). Therefore, the perception of trust does not significantly influence the acceptance of mobile commerce. Thus, H4 is not supported.

Table 6 shows that the impact of intention on the acceptance of mobile commerce is 0.4, which is consistent with hypothesis H5. Using a significance level of 0.05, the results showed statistical significance ($\beta = 0.4, p < 0.001$). Therefore, the intention to accept mobile commerce significantly influences the acceptance of mobile commerce. As a result, H5 is supported.

Table 7 illustrates the role of intention in mediating the relationship between perceived trust and the acceptance of mobile commerce. The indirect impact analysis reveals that intention is a full mediator ($\beta = 0.053, p < 0.001$). Thus, H6 is supported.

4.7 MEDIATION

This study investigated the mediating role of intention in the relationship between perceived trust and the acceptance of mobile commerce. The findings from a study including 2000 samples using bootstrapping and 95% confidence interval analysis suggest that intention plays a complete mediating role in the connection between perceived trust and acceptance of mobile commerce. The value of β is 0.053, and p-value is less than 0.001. Therefore, the result of the mediation is presented in the following Table 7.

TABLE 7
Mediation Effect of Intention

Hypothesis	Path	Total Effect	Direct Effect	Indirect Effect	Result
H6	PT ---> INT ---> AMC	0.542***	0.012	0.53***	Full Mediation

Note: *** indicates significance level < 0.001

Source: Authors' computation

5. DISCUSSION AND CONCLUSION

5.1 DISCUSSION

This study investigated the driving factors behind mobile commerce acceptance in Malaysia, employing the Unified Theory of Acceptance and Use of Technology (UTAUT) as a theoretical underpinning. The findings demonstrated that customers both endorsed and acknowledged the potential of mobile commerce.

The researcher investigates the mediating effect of customers' intention in the relationship between perceived trust and their acceptance of mobile commerce (H6), which revealed full mediation. The result supports hypothesis H5, which suggests that customers' intention impacts their acceptance of mobile commerce. By understanding this concept, mobile commerce providers can modify their experiences and actions to meet consumer needs, hence enhancing their effectiveness in conducting mobile commerce transactions.

Another significant finding confirms the impact of performance expectancy (H1), effort expectancy (H2), and perceived trust (H3) on customers' intention to accept mobile commerce. These findings offer valuable insights into the correlation between consumers' perception of mobile commerce and their acceptance intention, enabling us to enhance our comprehension of this subject.

Consumers' intention to accept mobile commerce will increase if mobile commerce providers improve their technology, such as websites or applications, to be reliable, advantageous, and user-friendly. The significant relationship between perceived trust, performance expectancy, and effort expectancy significantly impacts the intention to accept mobile commerce. Hence, mobile commerce providers must utilize intelligent marketing choices and integration techniques to increase consumer acceptance of mobile commerce.

To improve the acceptance of mobile commerce, providers of mobile commerce applications or websites should organize seminars or training sessions to familiarize consumers with the features and procedures of mobile commerce. This is significant because acceptance intention plays a crucial role in determining mobile commerce's acceptance level. Furthermore, developing a robust support system is crucial to handle any problems or questions consumers may have when using mobile commerce. Mobile commerce providers should prioritize optimizing their websites or application interfaces to ensure they are user-friendly and functional,

enabling efficient consumer interaction with technology. In addition, they must interact with consumers, addressing any concerns related to confidentiality and data protection and reinforcing the security and privacy standards in place while using mobile commerce. They must protect consumers' financial information when participating in mobile commerce. As a result, this will encourage customers to engage in mobile commerce and stimulate mobile commerce industry expansion in Malaysia, ultimately creating a significant impact on the Malaysian economy.

The Malaysian Communications and Multimedia Commission (MCMC) and other policymakers in Malaysia should implement robust policies to guarantee superior internet connectivity in the communications sector. This will enable mobile commerce providers to offer exceptional services, encouraging consumers to participate in mobile commerce activities. To promote mobile commerce among customers in Malaysia, mobile commerce providers need to establish robust partnerships with website and app designers, smartphone manufacturers, and telecommunication companies.

5.2 CONCLUSION

This study explains to what extent Malaysian customers have embraced mobile commerce. Nevertheless, consumer intention to use mobile commerce is the main factor determining its acceptability. Consumers' intention to accept mobile commerce, however, is influenced by performance expectancy, effort expectancy, and perceived trust. This study discovered that perceived trust, performance expectancy, and effort expectancy significantly impacted the intention to accept mobile commerce. Our research demonstrates that the relationship between perceived trust and acceptance of mobile commerce is fully mediated by acceptance intention. More precisely, the influence of the intention to accept mobile commerce serves as a full mediator in the connection between perceived trust and the acceptance of mobile commerce.

Before recommending suggestions for future research, we acknowledge the limitations of this study. Like any other study, this research is constrained by its implementation and content limitations, primarily because of persons, materials, and time constraints. The core foundation of this research is the model itself, or the extension developed from the model. Consequently, the current factors include performance expectancy, effort expectancy, perceived trust, and

intention. All the elements are one-dimensional, and the outcomes are primarily conceptual. Performance expectancy can be classified into four categories: work performance, convenience, and entertainment value. This will facilitate the development of more comprehensive acceptance models and provide specific recommendations regarding the acceptability of mobile commerce among customers.

Subsequent future studies might investigate many determinants that impact the intention of consumers to accept mobile commerce. This study focuses exclusively on consumers 18 years and above who own smartphones and participate in mobile commerce. This study investigates the behavior of smartphone users by analyzing the acceptance of mobile commerce, performance expectancy, effort expectancy, perceived trust, and acceptance intention. Future studies could integrate methodologies considering social influence, facilitating conditions, perceived cost, individual creativity, privacy, and security. Future researchers may also conduct cross-national comparisons of consumers to assess their acceptance of mobile commerce. Further investigation could examine the methodology utilized in this study in a different context to determine the degree to which consumers accept new technology, such as e-commerce, e-payment, or social commerce.

A critical limitation of this study is its failure to incorporate facilitating conditions and social influence into the current investigation. Therefore, future research could include these two variables to examine the driving factors behind mobile commerce acceptance in Malaysia. Due to mobile commerce's novelty, additional study is required to demonstrate its impact on the scope of the educational process. Further investigation is necessary to determine mobile commerce effectiveness and acceptance among customers and gain valuable knowledge to improve its acceptance among consumers in Malaysia.

REFERENCES

- Abdullah, N.J., I.W. Othman, and S.T. Urus. "Modeling Mobile Payment Acceptance Among Working-Age Users in the Emerging Market." *Corporate and Business Strategy Review* 5, no. 1 (2024): 137-47.
- Allahham, M., and A. Ahmad. "AI-induced Anxiety in the Assessment of Factors Influencing the Adoption of Mobile Payment Services in Supply Chain Firms: A Mental

- Accounting Perspective.” *International Journal of Data and Network Science* 8 no. 1 (2024): 505-14.
- Ankadhitra, A., C. Christiandy, and D. Tamara. “Usage Analysis of Mobile Payment System to Consumer Continuance Intention in Jabodetabek.” *Indonesian Journal of Multidisciplinary Science* 2 no. 12 (2023): 4244-254.
- Anwar, R.N., V. Gaffar, D. Disman, and C. Furqan. “Mobile Payment Adoption: Systematic Literature Review.” *Migration Letters* 21, no. 4 (2024): 975-84.
- Barry, M. “Factors Affecting the Use of Mobile Commerce (m-commerce) among Young Consumers: An Empirical Study in Malaysia.” Master’s Dissertation. Malaysia: International Islamic University Malaysia, 2016.
- _____. “The Integration of Technology Acceptance Model and Theory of Planned Behaviour to Determine Consumers’ Intention to Use Mobile Commerce in Malaysia.” *Scope* 14 no. 3 (224a): 681–708.
- _____. “What Drives Smartphone Users to Conduct Mobile Commerce Transactions in Malaysia?” In *International Research Conference on Education and Multidisciplinary Studies (IRCEMS) 2024, Harvard Club of Boston*, Boston, Massachusetts, U.S.A. (2024b): 11 <https://londoninstitutesd.co.uk/aricstem-boston-2024/>
- _____. “What drives University Students’ Intention to Use Mobile Commerce: A Structural Equation Modelling Approach.” In the *4th International Postgraduate Research Conference 2024, Universiti Sultan Zainal Abidin (UniSZA), Kuala Terengganu*. (2024c): 65. <https://www.unisza.edu.my/iprc2024/>
- _____, and M.T. Jan. “What Drives Social Networking Users to Use Mobile Commerce.” *American Journal of Social Sciences* 1 (2016): B6-B16. <http://www.ASRAresearch.org/ajss-vol-1-no-1-2016/>.
- _____, and M.T. Jan. “Factors Influencing the Use of M-Commerce: An Extended Technology Acceptance Model Perspective.” *International Journal of Economics, Management and Accounting* 26 no. 1 (2018): 157-83.
- _____, A.A. Haque. “Examining the Determinants of Mobile Commerce Adoption through UTAUT: A Structural Equation Modelling.” *Scope* 14, no. 2 (2024): 1603 – 619.

- _____, A.A. Haque, and M.T. Jan. "Mobile Commerce Adoption in Malaysia: A Conceptual Framework." *Open Journal of Economics and Commerce* 5 no. 1 (2024a): 4 - 12.
- _____, Haque, A.A., and M.T. Jan. "Factors Affecting the Intention to Use Mobile Commerce in Malaysia: An Integration of TAM And IS success model." *International Journal of Academic Research in Business and Social Sciences* 14, no. 3 (2024b): 726-53.
- _____, A.A. Haque, and M.T. Jan. "An Analysis of the Factors Affecting University Students' Intention to Use Mobile Commerce: An Extended TPM." *International Journal of Academic Research in Economics and Management Sciences* 13, no. 2 (2024c): 89 - 107.
- _____, A.A. Haque, and M.T. Jan. "From Expectancy to Acceptance: Modelling the Impact of Performance and Effort Expectations on Mobile Commerce Intentions." *Sriwijaya International Journal of Dynamic Economics and Business* 8 no. 1 (2024e): 65 – 86.
- _____, A. Haque, and M.T. Jan. "Factors Influencing the Intention to Use M-Commerce in Malaysia: An extended IS success model." *International Journal of Advances in Applied Sciences* 13, no. 4 (2024d): 957 – 69.
- Basdekidou, V.A., and H. Papanagos. "The Mediating Role of the Corporate Culture in the Relationship between Blockchain Adoption and ESG Performance." *SSRN 4636791* (2024).
- Chan, X.Y., M.K. Rahman, A.A Mamun, A. Salameh, W.M.H. Wan Hussain, and S.S. Alam. "Predicting the Intention and Adoption of Mobile Shopping During the COVID-19 Lockdown in Malaysia." *Sage Open* 12, no. 2 (2022): 1-17.
- Chand, S.S., and B.A. Kumar. "Applying the UTAUT Model to Understand M-Payment Adoption: A Case Study of Western Part of Fiji." *Journal of the Knowledge Economy* (2024): 1–27.
- Cheung, G.W., H.D. Cooper-Thomas, R.S. Lau, and L.C. Wang. "Reporting Reliability, Convergent and Discriminant Validity with Structural Equation Modeling: A Review and Best-practice Recommendations." *Asia Pacific Journal of Management*, (2023): 1-39.
- Dagnoush, S.M., and G.S. Khalifa. "The Relationship Between Users' Performance Expectancy and Users' Behavioral Intentions to Use Mobile Commerce Transactions in the

- Libya Context.” *Asia-Pacific Journal of Management and Technology (AJMT)* 2, no. 2 (2021): 22-9.
- Davis, F.D. “Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology.” *MIS Quarterly*, 13, no. 3 (1989): 319–40.
- de Andrés-Sánchez, J., and J. Gené-Albesa. “Explaining Policyholders’ Chatbot Acceptance With an Unified Technology Acceptance and Use of Technology-Based Model.” *Journal of Theoretical and Applied Electronic Commerce Research* 18, no. 3 (2023): 1217-237.
- Fitriasari, F., N.A. Auzairy, R.A. Rahim, and H.O. Zaki. “A Systematic Review of the Behavior Intention on Mobile Banking and Stock Trading.” *Multidisciplinary Reviews* 7, no. 6 (2024): e2024112.
- García de Blanes Sebastián, M., J.R. Sarmiento Guede, A. Azuara Grande, and A.F. Filipe. “UTAUT-2 Predictors and Satisfaction: Implications for Mobile-learning Adoption among University Students.” *Education and Information Technologies* (2024): 1-37.
- Hair, J.F., W.C. Black, B.J. Babin, and R.E. Anderson. *Advanced Diagnostics for Multiple Regression: A Supplement to Multivariate Data Analysis*. Pearson Prentice Hall Publishing, 2010a.
- _____, W.C Black, B.J. Babin, R.E. Anderson, and R.L. Tatham. *Multivariate Data Analysis*. Prentice Hall, 816, 2010b.
- Hassaan, M., and A. Yaseen. “Factors Influencing Customers’ Adoption of Mobile Payment in Pakistan: Application of the Extended Meta-UTAUT Model.” *Journal of Science and Technology Policy Management* 17, no. 3 (2026): 687-709.
- Hu, L.T., and P.M. Bentler. “Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives.” *Structural Equation Modeling: A Multidisciplinary Journal* 6 (1999): 1–55.
- Huang, Y.C. “Integrated Concepts of the UTAUT and TPB in Virtual Reality Behavioral Intention.” *Journal of Retailing and Consumer Services* 70 (2023): 103127.
- Jin, S.V., and S. Youn. “They Bought It, Therefore I Will Buy It: The Effects of Peer Users' Conversion as Sales Performance and Entrepreneurial Sellers' Number of Followers as Relationship Performance in Mobile Social Commerce.” *Computers in Human Behavior* 131 (2022): 107212.

- Kao, W.K., and E.A. L'Huillier. "The Moderating Role of Social Distancing in Mobile Commerce Adoption." *Electronic Commerce Research and Applications* 52 (2022): 101116.
- Komara, E., and D.T. Utami. "The Effect of Customer Satisfaction, E-Word of Mouth, and Initial Trust on Livin's Mobile Banking Adoption Interest." *Jurnal Manajemen (Edisi Elektronik)* 15, no. 1 (2024): 194-203.
- Kumar, R., R. Singh, K. Kumar, S. Khan, and V. Corvello. "How Does Perceived Risk and Trust Affect Mobile Banking Adoption? Empirical Evidence from India." *Sustainability* 15, no. 5 (2023): 4053.
- Lai, C.Y., K.Y. Cheung, C.S. Chan, and K.K. Law. "Integrating the Adapted UTAUT Model with Moral Obligation, Trust and Perceived Risk to Predict ChatGPT Adoption for Assessment Support: A Survey with Students." *Computers and Education: Artificial Intelligence* 6 (2024): 100246.
- Lee, C.H., H.N. Lee, and J.I. Choi. "The Influence of Characteristics of Mobile Live Commerce on Purchase Intention." *Sustainability* 15, no. 7 (2023): 5757.
- Liébana-Cabanillas, F., Z. Kalinic, F. Muñoz-Leiva, and E. Higuera-Castillo. "Biometric M-payment Systems: A Multi-Analytical Approach to Determining Use Intention." *Information & Management* 61, no. 2 (2024): 103907.
- Lucas, G.A., G.L. Lunardi, and D.B. Dolci. "From E-Commerce to M-Commerce: An Analysis of the User's Experience with Different Access Platforms." *Electronic Commerce Research and Applications* 58 (2023): 101240.
- Malaquias, R.F., and Y. Hwang. "Mobile Banking Use: A Comparative Study with Brazilian and US Participants." *International Journal of Information Management* 44 (2019): 132-40.
- Mayer, R.C., J.H. Davis, and F.D. Schoorman. "An Integrative Model of Organizational Trust." *Academy of Management Review* 20 no. 3 (1995): 709-34.
- MCMC. "Hand Phone Users Survey Report. 2021." (2021). <https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/2/FULL-REPORT-HPUS-2021.pdf>
- MCMC. "Communication and Multimedia Fact and Figures." (2023). https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/2/CM-3Q-2023_BI.pdf.

- Mehedintu, A., and G. Soava. "A Hybrid SEM-neural Network Modeling of Quality of M-Commerce Services under the Impact of the COVID-19 Pandemic." *Electronics* 11, no. 16 (2022): 2499.
- Mensah, I.K., and M.K. Khan. "Unified Theory of Acceptance and Use of Technology (UTAUT) Model: Factors Influencing Mobile Banking Services' Adoption in China." *SAGE Open* 14, no. 1 (2024): 1-18.
- Mollick, J., Cutshall, R., Changchit, C., and Pham, L. "Contemporary Mobile Commerce: Determinants of Its Adoption." *Journal of Theoretical and Applied Electronic Commerce Research*, 18 no. 1 (2023): 501-23.
- Nandru, P., and S.A. Senthilkumar. "Exploring the Factors Affecting Mobile Payment Adoption Intention Among Women Street Vendors in India." *SDMIMD Journal of Management* 15, no. 1 (2024): 41–52.
- Nani, D.A., and L.F. Lina. "Determinants of Continuance Intention to Use Mobile Commerce During the Emergence of COVID-19 in Indonesia: DeLone and McLean Perspective." *Sriwijaya International Journal of Dynamic Economics and Business* 5, no. 3, (2022): 261 - 72.
- Nguyen, G., and M.T. Ha. "The Role of User Adaptation and Trust in Understanding Continuance Intention Towards Mobile Shopping: An Extended Expectation-Confirmation Model." *Cogent Business & Management* 8 (2021): 1980248.
- Pallant, J.I., J.L. Pallant, S.J. Sands, C.R. Ferraro, and E. Afifi. "When and How Consumers Are Willing to Exchange Data with Retailers: An Exploratory Segmentation." *Journal of Retailing and Consumer Services* 64 (2022): 102774.
- Patel, V., K. Das, R. Chatterjee, and Y. Shukla. "Does the Interface Quality of Mobile Shopping Apps Affect Purchase Intention? An Empirical Study." *Australasian Marketing Journal (AMJ)* 28, no. 4 (2020): 300 - 09.
- Purwanto, E., R. Sjarief, A. Dawan, S. Kurniawan, N. Pertiwi, and N. Zahra. "The Acceptance of Electronic Payment Among Urban People: An Empirical Study of the C-UTAUT-IRT Model." *Journal of Law and Sustainable Development* 11, no. 2 (2023): e559.
- Rahardja, U., C.T. Sigalingging, P.O.H. Putra, A. Nizar Hidayanto, and K. Phusavat. "The Impact of Mobile Payment Application Design and Performance Attributes on

- Consumer Emotions and Continuance Intention.” *Sage Open* 13, no. 1 (2023): 1-18.
- Sehat, N.S., S.R. Daud, K.S. Ahmad, I.L. Suhaime, and J. Jogeran. “Acceptance Factors Affecting the Intention to Use Mobile Payments: QR Code Applications.” *Information Management and Business Review* 16, no. 1 (2024): 287 - 304.
- Siyal, A.W., H. Chen, S.J. Shah, F. Shahzad, and S. Bano. “Customization at a Glance: Investigating Consumer Experiences in Mobile Commerce Applications.” *Journal of Retailing and Consumer Services* 76 (2024): 103602.
- Siyal, S., C. Xin, W.A. Umrani, S. Fatima, and D. Pal. “How Do Leaders Influence Innovation and Creativity in Employees? The Mediating Role of Intrinsic Motivation.” *Administration & Society* 53, no. 9 (2021): 1337-361.
- Sugijono, V.M., and L.A. Pratomo. “The influence of hedonic motivation, perception of online prices, access to information, and online trust towards attitude and purchase intention on e-commerce platform.” *Devotion: Journal of Research and Community Service* 5, no. 1 (2024): 88-100.
- Sutrisno, S. “Analysis of Factor Leading to Mobile Commerce Adoption in Semarang City.” *JURNAL IPTEKKOM Jurnal Ilmu Pengetahuan & Teknologi Informasi* 25, no. 2 (2023): 205-24.
- Suyanto, M.A., L.K.C. Dewi, D. Dharmawan, D. Suhardi, and S. Ekasari. “Analysis of the Influence of Behavior Intention, Technology Effort Expectancy, and Digitalization Performance Expectancy on Behavior to Use of QRIS Users in Small Medium Enterprises Sector.” *Jurnal Informasi dan Teknologi*, (2024): 57-63.
- Tannady, H., Dewi, C.S., and Gilbert. “Exploring Role of Technology Performance Expectancy, Application Effort Expectancy, Perceived Risk, and Perceived Cost on Digital Behavioral Intention of GoFood Users.” *Jurnal Informasi dan Teknologi* 6, no. 1 (2024): 80-5.
- Vărzaru, A.A., C.G. Bocean, C.C. Rotea, and A.F. Budică-Iacob. Assessing Antecedents of Behavioral Intention to Use Mobile Technologies in E-Commerce. *Electronics* 10, no. 18 (2021): 2231.
- Venkatesh, V., M.G. Morris, G.B. Davis, and F.D. Davis. “User Acceptance of Information Technology: Toward a Unified View.” *MIS Quarterly* (2003): 425-78.

- _____, J.Y. Thong, and X. Xu. "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology." *MIS Quarterly* 36, no. 1 (2012): 157–78.
- Yahaya, S., S.N.A. Hamid, and S.N.M. Nafi. "Determinants for m-Commerce Adoption in Malaysian SMEs: A Conceptual Framework." *International Journal of Business and Economy* 4, no. 1 (2022): 138-49.
- Zaheer, N., M. Kashif, and S. Kropivnik. "Exploring Factors Affecting Pakistani Students' Intentions to Accept and Use Mobile Advertising: A UTAUT2 Perspective." *Teorija in Praksa* (2024): 93 – 114.
- Zainab, S., M.A. Sarwar, and R. Usop. "Factors Influencing Intentions to Use Mobile Payments: An Entrepreneurial Perspective." *Journal of Entrepreneurship and Business Venturing* 4, no. 1 (2024): 152-72.