



# Towards Indonesia's Future: Embracing Mobile Money Distribution with the Technology Acceptance Model Approach

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## Abstract

**Purpose:** The primary purpose of this study is to examine the influence of the Technology Acceptance Model (TAM) on the use of mobile money in Indonesia. The acceptance of technology has brought changes to society where the application of technology is aimed at getting the best way out of the various existing alternatives. There are two categories of electronic money: chip-based and server-based electronic money. Server-based electronic money is found on mobile phones. The Indonesian government has encouraged the use of electronic money and launched Less Cash Society to create a secure, efficient, and smooth payment system. **Research design, data, and methodology:** This study focuses on server-based electronic money users to collect quantitative data. The tools that will be used are surveys conducted according to the sample size and processed using SEM LISREL 8.70. **Results:** Based on these data, the results show that each of the TAM's fundamental elements has a significant impact. Perceived Ease of Use and Perceived Usefulness are able to encourage Attitude Toward Using and Behavioral Intention to Use towards Actual Use. **Conclusions:** The distribution of mobile money has a positive impact on society. Hence, mobile money providers must continue to simplify access—recommendations made to strengthen the acceptance of mobile money via Perceived Ease of Use and Perceived Usefulness.

**Keywords:** Technology Acceptance Model, Perceived Ease of Use, Perceived Usefulness, Actual Use, Mobile Money.

**JEL Classification Code :** E42, O31, O32, O33

## 1. Introduction

When payments are made using Internet of Things (IoT)-enabled devices, like smartphones, smartwatches, smart cards, toll payment devices, and voice-activated items, mobile money is created (Jakhiya et al., 2020).

Globally, mobile money network systems have evolved in almost every country and has the potential to reduce the occurrence of cash transactions, including in Indonesia. Bank Indonesia officially established the GNTT or Less

Cash Society. Telecommunications infrastructure and microfinance are merging to create mobile money (Nan et al., 2021). The total transaction value in the digital payments market is projected to reach US\$82.56 billion in 2023. From the government's perspective, the distribution of mobile money is important.

Mobile money has several advantages, such as service's convenience, accessibility, security, and ease of use. Additionally, users can quickly initiate and complete mobile money transactions, providing a higher level of transaction

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security compared to more conventional means of money transfer (Mugambi et al., 2014). In the ecosystem, mobile money can interact with banking accounts so that transactions can be made between banking accounts and mobile money accounts. In its development, mobile money can also be used by illiterate users (Mesfin et al., 2015).

Mobile money was designed by innovation makers to extend the functionality of mobile phones as a means of payment. Cellular phones are considered suitable as a means of payment because they are always carried anywhere, technologically have the ability to store personal data, and can support lifestyle. In the future, digital or electronic money is anticipated to displace traditional forms of currency (Bukari & Koomson, 2020; Gichuki & Mulu-Mutuku, 2018).

People generally have the choice to use technology or reject it. However, there is also the presence of technology, which is a must, so people need to adapt to technology. On the other hand, there is a voluntary acceptance of technology where individuals are free to make choices about whether to use or reject the presence of technology (Momani & Jamous, 2017). Even though cell phones are widely used in the society and have many benefits, people are still discussing whether to accept or reject mobile money. The distribution of mobile money can be considered as an indicator of the financial institution's performance (Mahmoud, 2019; Tengeh & Gahapa Talom, 2020).

The public's voluntary adoption of technology for mobile money is facilitated by this research. TAM research measurements look at aspects of intention, ability to explain intentions to behavior, subjective norms, feeling useful, and feeling easy to use. Davis, through TAM, explained that the process of accepting a technology is influenced by psychological factors with the purpose of using technology (Davis, 1989; Davis et al., 1989). TAM is used in various research fields such as e-procurement, health, education, mobile payments, technology, and various other fields (Alfadda & Mahdi, 2021; Baganzi & Lau, 2017; Granić & Marangunić, 2019; Kwon et al., 2015; Nugraheni et al., 2020; Rahimi et al., 2018; Salloum et al., 2019; Santoso et al., 2020)

## 2. Technology Acceptance Model

The Theory of Reasoned Actions (TRA) served as the basis for the TAM model, built by Ajzen and Fishbein (Ajzen & Fishbein, 1980). Then TRA was developed again into the Theory of Planned Behavior (TPB) by Ajzen (Ajzen, 1991). Initially, TAM from Davis was a theory developed from psychological theories, explaining computer user behavior based on belief, attitude, intention, and relationship with user behavior. TAM's primary goal is to offer a

foundation for tracking how outside influences affect the attitudes, beliefs, and goals of technology adoption. TAM basically focuses on and discusses the Attitude of using technology (Davis et al., 1989).

TAM is one of the most frequently used and influential models in information system-related research (Davis & Venkatesh, 1996; Mathieson, 1991). Perceived Ease of Use and Perceived Usefulness are two critical factors in TAM. Perceived Ease of Use describes the degree to which potential users expect a system that is hassle-free in use, while Perceived Usefulness refers to the perspective of users who can subjectively use the system and are able to improve its performance in an organizational context.

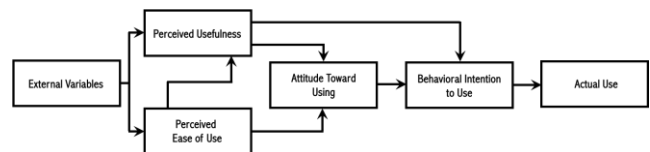


Figure 1: Technology Acceptance Model

TAM construct consists of Perceived Ease of Use, Perceived Usefulness, Attitude Toward Using, Behavioral Intention to Use, and Actual Use. TAM suggests that individual perceptions of Perceived Ease of Use and Perceived Usefulness of information systems are critical predictors of a person's interest in using the system. When a potential user believes that utilizing a certain application system will improve their capacity to perform their job in an organizational setting, this is known as Perceived Usefulness. How much a potential user anticipates the target system to require little physical or mental work is known as Perceived Ease of Use (Davis, 1989).

The construct of Attitude Toward Using TAM is defined as a person's positive or negative feelings when they have to take action. Some studies show that Attitude (Attitude Toward Using) positively affects behavioral interest (Behavioral Intention to Use). While Behavioral Intention to Use is defined as a desire to do a certain behavior. The intention of use arises as a result of the formation of attitudes with the process of previous conditions. The results showed that behavioral interest is the best predictor of technology use by system. Actual System Use is a real condition of the use of technology (Davis et al., 1989).

Davis explained that TAM has variables that will affect the acceptance of technology users. The hypothesis is that the attitudes of users of new technologies will be confronted with various factors that will determine whether the new technology will be used or rejected. Adopting a technology is said to be mostly determined by cognitive processes, with the goal of either maximizing the technology's usefulness or

satisfying the user (Davis, 1989).

### 3. Research Methods

Finding out how TAM becomes a deciding factor in adopting mobile money is the goal of the research. To gather information for the research model's testing, this study employs a purposive sampling survey approach samples through mobile money users. In this study, a quantitative approach with a survey method was employed. Survey research is conducted by sampling a population to examine phenomena within a specific group or individual behavior (Creswell & Creswell, 2017).

Structural Equation Modeling (SEM) is employed in this study to explore the implications of a causal relationship between the dependent and independent variables. The relationship between the variables in the study is depicted in the conceptual model, which is often created inside the research framework utilizing the scientific method. This study processes data using SEM with LISREL 8.70

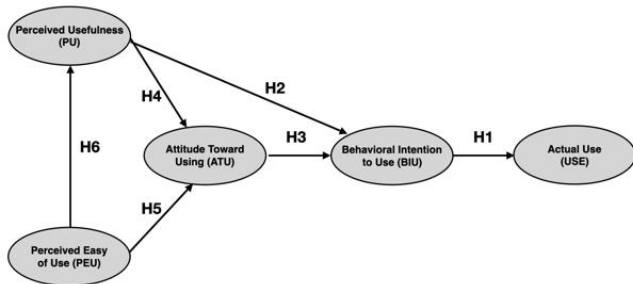


Figure 2: Research Model

Behaviors that indicate intent or motive for use are essential factors and have a positive influence in explaining technology adoption (Davis, 1989; Venkatesh et al., 2003). According to Davis, there is a causal relationship between belief, attitude, intention, and conduct that may be used to lessen and clarify the technology acceptance. Beliefs can also influence how technology is employed in behavior. Based on the research's findings, the following are the hypothesis:

**H1:** Behavioral Intention to Use has a significant influence on the Actual Use of mobile money.

TAM is built from human-computer interaction and believes that Behavioral Intention to Use is determined by two key variables: Perceived Usefulness and Attitude Toward Using. Perceived usefulness is people's assessment of a system's ability to improve their performance. What is perceived as beneficial to the individual will have an

influence on the intention to use a system. Hence, the following hypothesis is formulated.

**H2:** Perceived Usefulness has a significant influence on the Behavioral Intention to Use mobile money.

Davis explained that, as well as other variables that influence the formation of intention behavior using a system, namely Attitude Toward Using. Attitude Toward Using is believed to have a positive influence on intentions in the use of specific systems. Based on this research, the hypothesis of this study is:

**H3:** Attitude Toward Using has a significant influence on the Behavioral Intention to Use mobile money.

TAM explains that Attitude Toward Using is directly influenced by two beliefs: Perceived Usefulness and Perceived Ease of Use. A system that has a high Perceived Usefulness classification will produce relationships in the formation of behaviors that indicate the intention or motive of using. The study's hypothesis based on the research is as follows:

**H4:** Perceived Usefulness has a significant influence on Attitude Toward Using mobile money.

TAM shows that the use of a particular system that is free from effort will exert influence and lead to attitudes forming the behavior of intent using a system of a new technology by individuals. The study's hypothesis, derived from the findings, is:

**H5:** Perceived Ease of Use has a significant influence on the Attitude Toward Using mobile money.

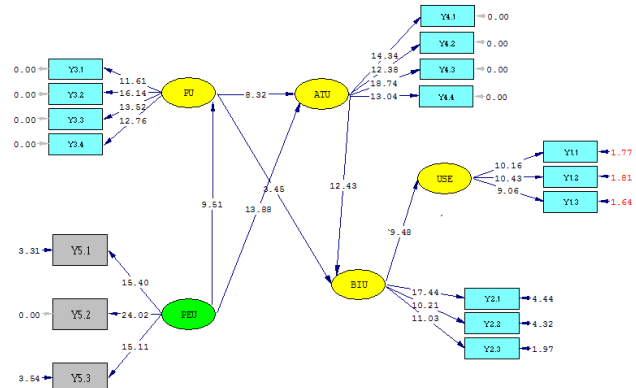
TAM describes the extent to which consumers believe that the technology they use will be able to increase performance. It is directly influenced by Perceived Ease of Use. The use of certain systems that are free from effort will have an influence on individual convenience. Based on this research, the hypothesis of this study is:

**H6:** Perceived Ease of Use has a significant influence on the Perceived Usefulness of mobile money.

Table 1: Summary of Questionnaire Design

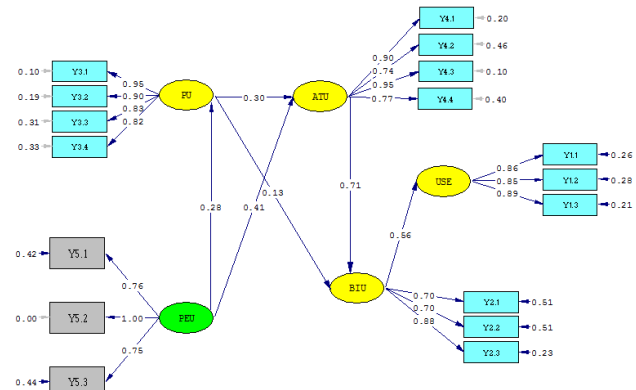
Variables	Questions Design
Actual Use (Ajzen & Fishbein, 1980; Davis et al., 1989; Kleijnen et al., 2004)	I have frequently used services of mobile money.
	I use mobile money services regularly.
	I always top up my mobile money
Behavioral Intention to Use (Ajzen & Fishbein, 1980; Chen et al., 2002)	I intend to use mobile money services.
	I want to try the mobile money service.
	I will continue to use the mobile money service
Perceived Usefulness (Chen et al., 2002; Davis et al., 1989; Koenig-Lewis et al., 2010; Taylor & Todd, 1995)	Using mobile money makes my payment transactions easier.
	Using mobile money makes it easier for me to make purchases.
	The benefit of using mobile money is to get all transaction information directly on the mobile screen.
	Using mobile money is faster

Variables	Questions Design
	compared to other payment methods. Such as cash or credit card
Attitude Toward Using (Chen et al., 2002; Davis et al., 1989)	I love using mobile money services.
	Using a mobile money service is a good idea.
	I feel comfortable using mobile money services.
Perceived Ease of Use (Chen et al., 2002; Davis et al., 1989; Taylor & Todd, 1995)	In general, I have a favorable view of mobile money services
	Easy for me to learn mobile money
	How to use mobile money is straightforward to understand
	I believe in getting the convenience of mobile money services.



### 4. Results and Discussion

Total 200 respondents consist of two profiles, gender and age. The majority of the respondents age 17-36 years with a percentage of 93.5 percent. 53 respondents, or 26.5 percent, are men, and most respondents, 147, are women (73.5%). Data from the regulator Bank Indonesia shows that as of mid-2023, there were 640.5 million server-based e-money units and 90.1 million chip-based e-money units in Indonesia. Since the probability technique could not be used, purposive sampling was used in this investigation. It is feasible to draw generalizations since the data in Bank Indonesia contains user data from e-money servers across all operators that have uniform features. The purposive sampling method was chosen due to the impossibility of using random sampling techniques. This type of research has also been used in studies on the acceptance of mobile applications in the United States (Yang, 2013).



**Table 2:** Respondent Demographic

	Profile	Frequency	Percentage
Gender	Man	53	26.5%
	Woman	147	73.5%
Age	≤ 16 years	6	3.0%
	17-36 years	187	93.5%
	>36 years	7	3.5%

According to this study, Perceived Ease of Use, Perceived Usefulness, Attitude Toward Using, and Behavioral Intention to Use significantly influence the Actual Use of mobile money. The statistical hypothesis testing results are as follows:

**Table 3:** Statistical Hypothesis

Hypothesis	Parameter	Statistical Hypothesis		SLF	T-Statistic	Result
		H <sub>0</sub>	H <sub>1</sub>			
1	β <sub>1</sub>	β <sub>1</sub> =0 Behavioral Intention to Use does not have a positive influence on the Actual Use Mobile money	β <sub>1</sub> >0 Behavioral Intention to Use has a positive influence on the Actual Use mobile money	0.56	9.48	Significant

Hypothesis	Parameter	Statistical Hypothesis		SLF	T-Stat	Result
		H <sub>0</sub>	H <sub>1</sub>			
2	$\beta_2$	$\beta_2=0$ Perceived Usefulness does not have a positive influence on the Behavioral Intention to Use mobile money	$\beta_2>0$ Perceived Usefulness has a positive influence on the Behavioral Intention to Use mobile money	0.13	3.45	Significant
3	$\beta_3$	$\beta_3=0$ Attitude Toward Using does not have a positive influence on the Behavioral Intention to Use mobile money	$\beta_3>0$ Attitude Toward Using has a positive influence on the Behavioral Intention to Use mobile money	0.71	12.43	Significant
4	$\beta_4$	$\beta_4=0$ Perceived Usefulness does not have a positive influence on Attitude Toward Using mobile money	$\beta_4>0$ Perceived Usefulness has a positive influence on Attitude Toward Using mobile money	0.30	8.32	Significant
5	$\beta_5$	$\beta_5=0$ Perceived Easy of Use does not have a positive influence on Attitude Toward Using mobile money	$\beta_5>0$ Perceived Easy of Use has a positive influence on Attitude Toward Using mobile money	0.41	13.88	Significant
6	$\gamma_1$	$\beta_4=0$ Perceived Easy of Use does not have a positive influence on the Perceived Usefulness mobile money	$\beta_4>0$ Perceived Easy of Use has a positive influence on the Perceived Usefulness mobile money	0.28	9.51	Significant

All Goodness of Fit Index (GOFI) values in the table below show a good fit, so it can be concluded that the fit of the data and model is good.

**Table 4: Goodness of Fit Index**

GOFI	Calculated Result Value	Standard Values	Conclusion
RMSEA	0.000	$\leq 0.08$	Good match
NFI	0.98	$\geq 0.90$	Good match
NNFI	1.00	$\geq 0.90$	Good match
CFI	1.00	$\geq 0.90$	Good match
IFI	1.00	$\geq 0.90$	Good match
Std. RMR	0.031	$\leq 0.05$	Good match
GFI	0.98	$\geq 0.90$	Good match
AGFI	0.98	$\geq 0.90$	Good match

Effect of Behavioral Intention to Use on Actual Use. The findings in the table for the hypothesis test indicate a loading value of 0.56 and a t-stat of 9.48. The t-stat value is greater than 5% alpha t-table, which is 1.96, meaning that Behavioral Intention to Use has a significant influence on the Actual Use of mobile money. Due to its many advantages over other electronic payment methods and its own set of benefits, mobile money has grown in popularity among users. These findings are consistent with studies on how businesses actually use e-commerce (Sin et al., 2016), big data adoption (Alhassan et al., 2020), and WeChat Pay as electronic money (Mombeuil & Uhde, 2021).

Effect of Perceived Usefulness on Behavioral Intention to Use. Loading value of 0.13 and a t-stat of 3.45 are the results in the hypothesis test table. The t-stat value is greater than 5% alpha t-table, which is 1.96, meaning that Perceived Usefulness significantly influences the Behavioral Intention to Use mobile money. Additional studies demonstrate that the real use of mobile applications depends critically on perceived usefulness (Min et al., 2019) and the adoption of management accounting innovation (Ax & Greve, 2017).

Effect Attitude Toward Using on the Behavioral Intention to Use. The hypothesis test table's findings indicate a loading value of 0.71 and a t-stat of 12.43. The t-stat value is greater than 5% alpha t-table, which is 1.96, meaning that Attitude Toward Using has a significant influence on the Behavioral Intention to Use mobile money. Further investigation has shown that Behavioral Intention to Use for accepting mobile payments on virtual social networks is significantly influenced by Attitude Toward Using (Liébana-Cabanillas et al., 2014), consumer acceptance of quick response codes for food systems (Cocosila & Trabelsi, 2016), use of mobile banking applications in Spain (Muñoz-Leiva et al., 2017); and research on the use of e-money banking in Indonesia (Khatimah & Halim, 2016).

Perceived Usefulness on the Attitude Toward Using. Findings from the hypothesis test table show a loading value of 0.30 and a t-stat of 8.32. The t-stat value is greater than



5% alpha t-table, which is 1.96, meaning that Perceived Usefulness significantly influences the Attitude Toward Using mobile money. Other studies have found that Perceived Usefulness has a significant influence on attitudes toward consumer acceptance of quick response codes (Cocosila & Trabelsi, 2016), as well as mobile banking application research (Muñoz-Leiva et al., 2017), and usage of smartphones (Kasilingam, 2020).

Perceived Ease of Use on the Attitude Toward Using. The findings in the table of the hypothesis test show a loading value of 0.41 and a t-stat of 13.88. The t-stat value is greater than 5% alpha t-table, which is 1.96, meaning that Perceived Ease of Use significantly influences the Attitude Toward Using mobile money. Other studies also show the same results, such as mobile money services for financial inclusion (Gbongli et al., 2019) and continuance of mobile money (Alhassan et al., 2020).

Perceived Ease of Use on the Perceived Usefulness. The hypothesis test table's findings indicate loading value of 0.41 and a t-stat of 13.88. The t-stat value is greater than 5% alpha t-table, which is 1.96, meaning that Perceived Ease of Use significantly influences the Perceived Usefulness of mobile money. The results of other studies showed similar results on consumer acceptance of quick response codes (Cocosila & Trabelsi, 2016), the use of electronic medical records (Noh et al., 2016), the use of mobile banking applications in Spain (Muñoz-Leiva et al., 2017), and the use of mobile learning (Sánchez-Prieto et al., 2017).

## 5. Conclusions

The study's findings demonstrate that every TAM variable significantly affects Actual Use. It is important for mobile money institutions to consistently improve campaigns that concern the Perceived Ease of Use and Perceived Usefulness of Using mobile money. In addition, these two variables have also been shown to encourage Attitude Toward Using and Behavioral Intention to Use, which leads to Actual Use.

Mobile money is perceived as easy to learn, clear, and easy to understand. Users believe they get the convenience on services for mobile money. Meanwhile, the advantages of mobile money are that it makes transactions easier and transaction information is directly shown on the mobile screen. It is also quicker than using credit cards or cash as payment methods. The Indonesian government has encouraged the use of electronic money and launched the Less Cash Society to create a secure, efficient, and smooth payment system.

Mobile money in Indonesia is acceptable to users because it's free of physical and mental effort. Users believe the technology will be able to improve performance. The

benefits of mobile money distribution services include point-of-sale transactions, utility bill payments, and the availability and affordability of financial and payment services for previously unbanked (Adaba et al., 2019; Lashitew et al., 2019; Opare, 2018; Talom & Tengeh, 2020).

According to Bank Indonesia, electronic money is anticipated to facilitate payments for large-scale, quick, and microeconomic operations as an inventive and useful kind of payment. It's great to hear that the Indonesian government is taking steps towards promoting the use of electronic money. Launching Less Cash Society is a positive move towards creating a more secure, efficient, and smoother payment system. It's exciting to see countries adopting new technologies to improve their financial systems.

Further research can be explored by integrating TAM with Innovation Diffusion Theory (IDT). Rogers explained that the technology adoption process is a communication process related to innovation characteristics. The attributes of innovation comprise of Trialability, Observability, Complexity, Relative Advantage, and Compatibility (Rogers, 2003).

The TAM constructs will have opportunity to add characteristics of innovation through external variables (Davis, 1989; Davis et al., 1989). The unification between TAM and characteristics of innovation will create a new research model. In addition, other elements related to the mobile money ecosystem can also include in the model (Senyo et al., 2022).

## References

- Adaba, G. B., Ayoung, D. A., & Abbott, P. (2019). Exploring the contribution of mobile money to well-being from a capability perspective. *Electronic Journal of Information Systems in Developing Countries*, 85(4). <https://doi.org/10.1002/isd2.12079>
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Prentice-Hall.
- Alfadda, H. A., & Mahdi, H. S. (2021). Measuring Students' Use of Zoom Application in Language Course Based on the Technology Acceptance Model (TAM). *Journal of Psycholinguistic Research*, 50(4), 883–900. <https://doi.org/10.1007/s10936-020-09752-1>
- Alhassan, A., Li, L., Reddy, K., & Duppati, G. (2020). Consumer acceptance and continuance of mobile money. *Australasian Journal of Information Systems*, 24. <https://doi.org/10.3127/ajis.v24i0.2579>
- Ax, C., & Greve, J. (2017). Adoption of Management Accounting Innovations: Organizational Culture Compatibility and Perceived Outcomes. *Management Accounting Research*, 34, 59–74. <https://doi.org/10.1016/j.mar.2016.07.007>
- Baganzi, R., & Lau, A. K. W. (2017). Examining trust and risk in mobile money acceptance in Uganda. *Sustainability*

- (Switzerland), 9(12). <https://doi.org/10.3390/su9122233>
- Bukari, C., & Koomson, I. (2020). Adoption of Mobile Money for Healthcare Utilisation and Spending in Rural Ghana. *Network for Socioeconomic Research and Advancement*, 20/002, 37–60.
- Chen, L., Gillenson, M. L., & Sherrell, D. L. (2002). Enticing online consumers: an extended technology acceptance perspective. *Information & Management*, 39(8), 705–719. [https://doi.org/10.1016/S0378-7206\(01\)00127-6](https://doi.org/10.1016/S0378-7206(01)00127-6)
- Cocosila, M., & Trabelsi, H. (2016). An integrated value-risk investigation of contactless mobile payments adoption. *Electronic Commerce Research and Applications*, 20, 159–170. <https://doi.org/10.1016/j.elerap.2016.10.006>
- Creswell, J. D., & Creswell, J. W. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods* (Fifth Edition). SAGE Publication.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *Management Science*, 35(3).
- Davis, F. D., Bagozzi, Ricard P. W., & Paul R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982–1003.
- Davis, F. D., & Venkatesh, V. (1996). A critical assessment of potential measurement biases in the technology acceptance model- three experiments. *International Journal Human Computer Studies*, 45(1), 19–45.
- Gbongli, K., Xu, Y., & Amedjonekou, K. M. (2019). Extended Technology Acceptance Model to Predict Mobile-Based Money Acceptance and Sustainability: A Multi-Analytical Structural Equation Modeling and Neural Network Approach. *Sustainability*, 11(13), 3639. <https://doi.org/10.3390/su11133639>
- Gichuki, C. N., & Mulu-Mutuku, M. (2018). Determinants of awareness and adoption of mobile money technologies: Evidence from women micro entrepreneurs in Kenya. *Women's Studies International Forum*, 67, 18–22. <https://doi.org/10.1016/j.wsif.2017.11.013>
- Granić, A., & Marangunić, N. (2019). Technology acceptance model in educational context: A systematic literature review. In *British Journal of Educational Technology* (Vol. 50, Issue 5, pp. 2572–2593). Blackwell Publishing Ltd. <https://doi.org/10.1111/bjet.12864>
- Jakhiya, M., Mittal Bishnoi, M., Purohit Professor, H., & Banasthali Vidyapith, L. (2020). Emergence and Growth of Mobile Money in Modern India: A Study on the Effect of Mobile Money. *Advances in Science and Engineering Technology International Conferences (ASET), IEEE*, 1–10.
- Kasilingam, D. L. (2020). Understanding the attitude and intention to use smartphone chatbots for shopping. *Technology in Society*, 62, 101280. <https://doi.org/10.1016/j.techsoc.2020.101280>
- Khatimah, H., & Halim, F. (2016). The effect of attitude and its decomposed, perceived behavioral control and its decomposed and awareness on intention to use e-money mobile in Indonesia. *Journal of Scientific Research and Development*, 3(1), 39–50., 3(1), 39–50.
- Kleijnen, M., Wetzels, M., & Ruyter, K. de. (2004). Consumer acceptance of wireless finance. *Journal of Financial Services Marketing*, 8, 206–217.
- Koenig-Lewis, N., Palmer, A., & Moll, A. (2010). Predicting young consumers' take up of mobile banking services. *International Journal of Bank Marketing*, 28(5), 410–432. <https://doi.org/10.1108/02652321011064917>
- Kwon, D., Hwang, C., & Hong, S. (2015). Effect on Acceptance Intentions to Service Quality factors of Social TV : Focus on Technology Acceptance Model. *Journal of the Korea Society of Digital Industry and Information Management*, 11(3), 201–218. <https://doi.org/10.17662/ksdim.2015.11.3.201>
- Lashitew, A. A., van Tulder, R., & Liasse, Y. (2019). Mobile phones for financial inclusion: What explains the diffusion of mobile money innovations? *Research Policy*, 48(5), 1201–1215. <https://doi.org/10.1016/j.respol.2018.12.010>
- Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2014). Antecedents of the adoption of the new mobile payment systems: The moderating effect of age. *Computers in Human Behavior*, 35, 464–478.
- Mahmoud, Z. (2019). Determinants of Mobile Money Adoption. *2nd Europe - Middle East - North African Regional Conference of the International Telecommunications Society (ITS)*.
- Mathieson, K. (1991). Predicting User Intentions: Comparing the Technology Acceptance Model with the Theory of Planned Behavior. *Information Systems Research*, 2(3), 173–191. <https://doi.org/10.1287/isre.2.3.173>
- Mesfin, W., Grønli, T.-M., Ghinea, G., & Younas, M. (2015). *A Mobile Money Solution for Illiterate Users*. <https://doi.org/10.1109/MS.2015.53>
- Min, S., So, K. K. F., & Jeong, M. (2019). Consumer Adoption of the Uber Mobile Application: Insights from Diffusion of Innovation Theory and Technology Acceptance Model. *Journal of Travel and Tourism Marketing*, 36(7), 770–783. <https://doi.org/10.1080/10548408.2018.1507866>
- Momani, A. M., & Jamous, M. M. (2017). The Evolution of Technology Acceptance Theories. In *International Journal of Contemporary Computer Research (IJCCR)* (Vol. 1, Issue 1). <https://ssrn.com/abstract=2971454>
- Mombeuil, C., & Uhde, H. (2021). Relative convenience, relative advantage, perceived security, perceived privacy, and continuous use intention of China's WeChat Pay: A mixed-method two-phase design study. *Journal of Retailing and Consumer Services*, 59. <https://doi.org/10.1016/j.jretconser.2020.102384>
- Mugambi, A., Njunge, C., & Yang, S. C. (2014). *Mobile-Money Benefit and Usage: The Case of M-PESA*. 16(3), 16–21.
- Muñoz-Leiva, F., Climent-Climent, S., & Liébana-Cabanillas, F. (2017). Determinants of intention to use the mobile banking apps: An extension of the classic TAM model. *Spanish Journal of Marketing - ESIC*, 21(1), 25–38. <https://doi.org/10.1016/j.sjme.2016.12.001>
- Nan, W., Zhu, X., & Lynne Markus, M. (2021). What we know and don't know about the socioeconomic impacts of mobile money in Sub-Saharan Africa: A systematic literature review. *Electronic Journal of Information Systems in Developing Countries*, 87(2), 1–22. <https://doi.org/10.1002/isd2.12155>
- Noh, M., Jang, H., & Khongorzul, G. (2016). User Acceptance Model of Electronic Medical Record. *Indian Journal of*

- Science and Technology*, 9(41), 1–6. <https://doi.org/10.17485/ijst/2016/v9i41/103913>
- Nugraheni, D. M. K., Hadisoewono, A., & Noranita, B. (2020, November 10). Continuance Intention to Use (CIU) on Technology Acceptance Model (TAM) for m-payment (Case Study: TIX ID). *ICICoS 2020 - Proceeding: 4th International Conference on Informatics and Computational Sciences*. <https://doi.org/10.1109/ICICoS51170.2020.9299100>
- Opare, E. A. (2018). The Advantages and Disadvantages of Mobile Money on the Profitability of the Ghanaian Banking Industry. *TEXILA INTERNATIONAL JOURNAL OF MANAGEMENT*, 4(2), 39–46. <https://doi.org/10.21522/tijmg.2015.04.02.art004>
- Rahimi, B., Nadri, H., Afshar, H. L., & Timpka, T. (2018). A systematic review of the technology acceptance model in health informatics. In *Applied Clinical Informatics* (Vol. 9, Issue 3, pp. 604–634). Georg Thieme Verlag. <https://doi.org/10.1055/s-0038-1668091>
- Rogers, E. M. (2003). *Diffusion of Innovations* (5th Edition). The Free Press.
- Salloum, S. A., Qasim Mohammad Alhamad, A., Al-Emran, M., Abdel Monem, A., & Shaalan, K. (2019). Exploring students' acceptance of e-learning through the development of a comprehensive technology acceptance model. *IEEE Access*, 7, 128445–128462. <https://doi.org/10.1109/ACCESS.2019.2939467>
- Sánchez-Prieto, J. C., Olmos-Migueláñez, S., & García-Peñalvo, F. J. (2017). MLearning and pre-service teachers: An assessment of the behavioral intention using an expanded TAM model. *Computers in Human Behavior*, 72, 644–654. <https://doi.org/10.1016/j.chb.2016.09.061>
- Santoso, C. B., Suparta, W., Abdurachman, E., & Trisetyarso, A. (2020). Jakarta government official portal acceptance based on technology acceptance model. *2020 International Conference on Information Technology Systems and Innovation, ICITSI 2020 - Proceedings*, 270–275. <https://doi.org/10.1109/ICITSI150517.2020.9264916>
- Senyo, P. K., Karanasios, S., Gozman, D., & Baba, M. (2022). FinTech ecosystem practices shaping financial inclusion: the case of mobile money in Ghana. *European Journal of Information Systems*, 31(1), 112–127. <https://doi.org/10.1080/0960085X.2021.1978342>
- Sin, K. Y., Osman, A., Salahuddin, S. N., Abdullah, S., Lim, Y. J., & Sim, C. L. (2016). Relative Advantage and Competitive Pressure towards Implementation of E-commerce: Overview of Small and Medium Enterprises (SMEs). *Procedia Economics and Finance*, 35, 434–443. [https://doi.org/10.1016/s2212-5671\(16\)00054-x](https://doi.org/10.1016/s2212-5671(16)00054-x)
- Talom, F. S. G., & Tengeh, R. K. (2020). The impact of mobile money on the financial performance of the SMEs in Douala, Cameroon. *Sustainability (Switzerland)*, 12(1), 1–17. <https://doi.org/10.3390/su12010183>
- Taylor, S., & Todd, P. A. (1995). Understanding Information Technology Usage: A Test of Competing Models. *Information Systems Research*, 6(2), 144–176. <https://doi.org/10.1287/isre.6.2.144>
- Tengeh, R. K., & Gahapa Talom, F. S. (2020). Mobile Money as a Sustainable Alternative for SMEs in Less Developed Financial Markets. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 163. <https://doi.org/10.3390/joitmc6040163>
- Venkatesh, Morris, Davis, & Davis. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425. <https://doi.org/10.2307/30036540>
- Yang, H. 'Chris.' (2013). Bon Appétit for Apps: Young American Consumers' Acceptance of Mobile Applications. *Journal of Computer Information Systems*, 53(3), 85–96. <https://doi.org/10.1080/08874417.2013.11645635>