



Print ISSN: 1738-3110 / Online ISSN 2093-7717  
 JDS website: <http://accesson.kr/jds>  
<http://doi.org/10.15722/jds.22.07.2024.07.43>

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

Ricardo INDRA<sup>1</sup>

Received: December 02, 2023. Revised: January 14, 2024. Accepted: July 05, 2024.

## 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 identifying the best solution among the various existing alternatives. There are two types 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 collected quantitative data from users of server-based electronic money through surveys conducted based on the sample size. The data were processed using SEM LISREL 8.70. **Results:** 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 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 such as 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 and have the potential to reduce cash transactions. Bank Indonesia established the GNNT or Less Cash Society. Telecommunications infrastructure and microfinance are merging to create mobile money (Nan et al., 2021). The total transaction value of 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 convenience, accessibility, security, and ease of use. Users can quickly initiate and complete mobile money transactions, providing a higher level of transaction security compared to 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

<sup>1</sup> First Author. Senior Lecturer, Communication Department, Master of Strategic Marketing Communications, Bina Nusantara University, Indonesia. Email: [ricardo.indra@binus.ac.id](mailto:ricardo.indra@binus.ac.id)

© Copyright: The Author

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

development, mobile money can also be used by illiterate users (Mesfin et al., 2015).

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

Individuals generally have the option to either embrace or reject technology. Nonetheless, there exists technology that is indispensable, requiring individuals to use it. On the other hand, voluntary technology adoption allows individuals the freedom to decide whether to accept or reject its presence (Momani & Jamous, 2017). Despite the ubiquitous use and numerous advantages of cell phones in society, the acceptance or rejection of mobile money remains a topic of ongoing debate. The distribution of mobile money can be considered as an indicator of a financial institution's performance (Mahmoud, 2019; Tengeh & Gahapa Talom, 2020).

This research facilitates the voluntary adoption of technology for mobile money by the public. Research based on the Technology Acceptance Model (TAM) examines factors such as intention, the ability to articulate intentions into behavior, subjective norms, perceived usefulness, and perceived ease of use. According to Davis, through the TAM framework, the process of technology adoption is influenced by psychological factors aimed at the utilization of technology (Davis, 1989; Davis et al., 1989). TAM is used in various fields such as e-procurement, health, education, mobile payments, and technology (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 Technology Acceptance Model (TAM) is rooted in the Theory of Reasoned Action (TRA) established by Ajzen and Fishbein (Ajzen & Fishbein, 1980). Subsequently, the TRA evolved into the Theory of Planned Behavior (TPB) by Ajzen (Ajzen, 1991). Initially, TAM, formulated by Davis, stemmed from psychological theories, elucidating computer user behavior based on beliefs, attitudes, intentions, and their relationship with actual behavior. TAM's principal objective is to provide a framework for elucidating how external factors influence attitudes, beliefs, and intentions regarding technology adoption. Fundamentally, TAM centers on the discussion of the user's Attitude towards technology use (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.

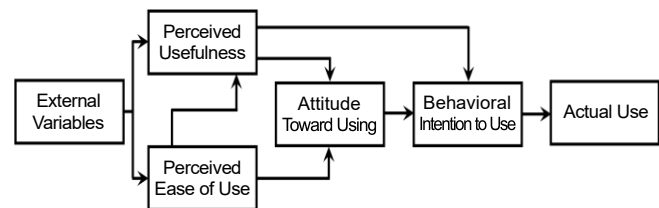


Figure 1: Technology Acceptance Model

The TAM framework comprises Perceived Ease of Use, Perceived Usefulness, Attitude Toward Use, Behavioral Intention to Use, and Actual Use. TAM posits that an individual's perceptions of the ease of use and usefulness of information systems are crucial determinants of their inclination to use the system. Perceived Usefulness refers to the belief of a prospective user that employing a particular application system will enhance their job performance within an organizational context. Perceived Ease of Use, on the other hand, pertains to the extent to which a potential user expects minimal cognitive or physical effort in utilizing the target system (Davis, 1989).

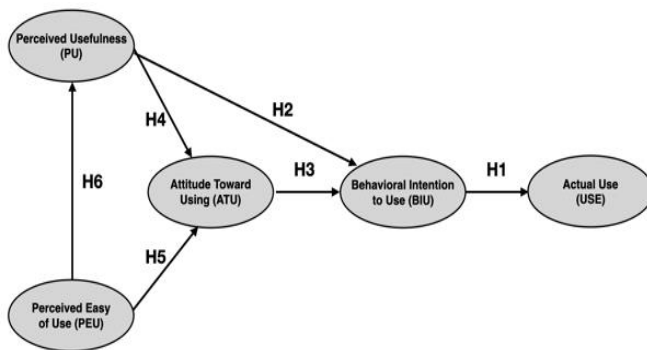
The construct of Attitude Toward Using TAM is defined as a person's positive or negative feelings when they have to take action. Some studies show that Attitude (Attitude Toward Using) positively affects behavioral interest (Behavioral Intention to Use). While Behavioral Intention to Use is defined as 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 of previous studies showed that behavioral interest is the best predictor of technology use. Actual System Use is a real condition of the use of technology (Davis et al., 1989).

Davis explained that TAM has variables that affect the acceptance of technology users. The hypothesis is that user attitudes toward a new technology will be influenced by various factors that will determine whether the new technology will be used or rejected. Technology adoption is largely perceived to be driven by cognitive mechanisms, aiming to either optimize the technology's utility or fulfill the user's needs (Davis, 1989).

### 3. Research Methods

This research aims to investigate how TAM functions as a determining factor in the adoption of mobile money. To collect data for testing the research model, a purposive sampling survey approach was utilized to gather samples from mobile money users. This study employed a quantitative method with a survey. The survey involved sampling a population to examine a phenomenon within a specific group or individual behaviors (Creswell & Creswell, 2017).

Structural Equation Modeling (SEM) was employed in this study to explore the causal relationship between the dependent and independent variables. The relationship between the variables in the study is depicted in the conceptual model, developed based on the research framework using the scientific method. The research data were analyzed using SEM with LISREL 8.70



**Figure 2:** Research Model

Behaviors that indicate intent or motive to use are essential factors and can explain 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 explain technology acceptance. Beliefs can also influence how technology is employed in behavior. Based on the research findings, the following hypothesis are developed:

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

TAM is built from human-computer interactions and based on the belief that Behavioral Intention to Use is determined by two key variables: Perceived Usefulness and Attitude Toward Using. Perceived usefulness is individuals' assessment of a system's ability to improve their performance. What is perceived as beneficial to the individuals 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 the various variables that influence the formation of behavioral intention in using a system, including Attitude Toward Using. It is posited that Attitude Toward Using has a positive influence on intentions regarding the use of a specific system. 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 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 efforts will exert influence and lead to attitudes forming the behavior of intent in using a new technology by individuals. Based on the findings, the following hypothesis is proposed:

**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 following hypothesis is proposed:

**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 getting all transaction information directly on the mobile screen.
	Using mobile money is faster compared to other payment methods, such as cash or credit card

Variables	Questions Design
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.
	In general, I have a favorable view of mobile money services
Perceived Ease of Use (Chen et al., 2002; Davis et al., 1989; Taylor & Todd, 1995)	It is 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

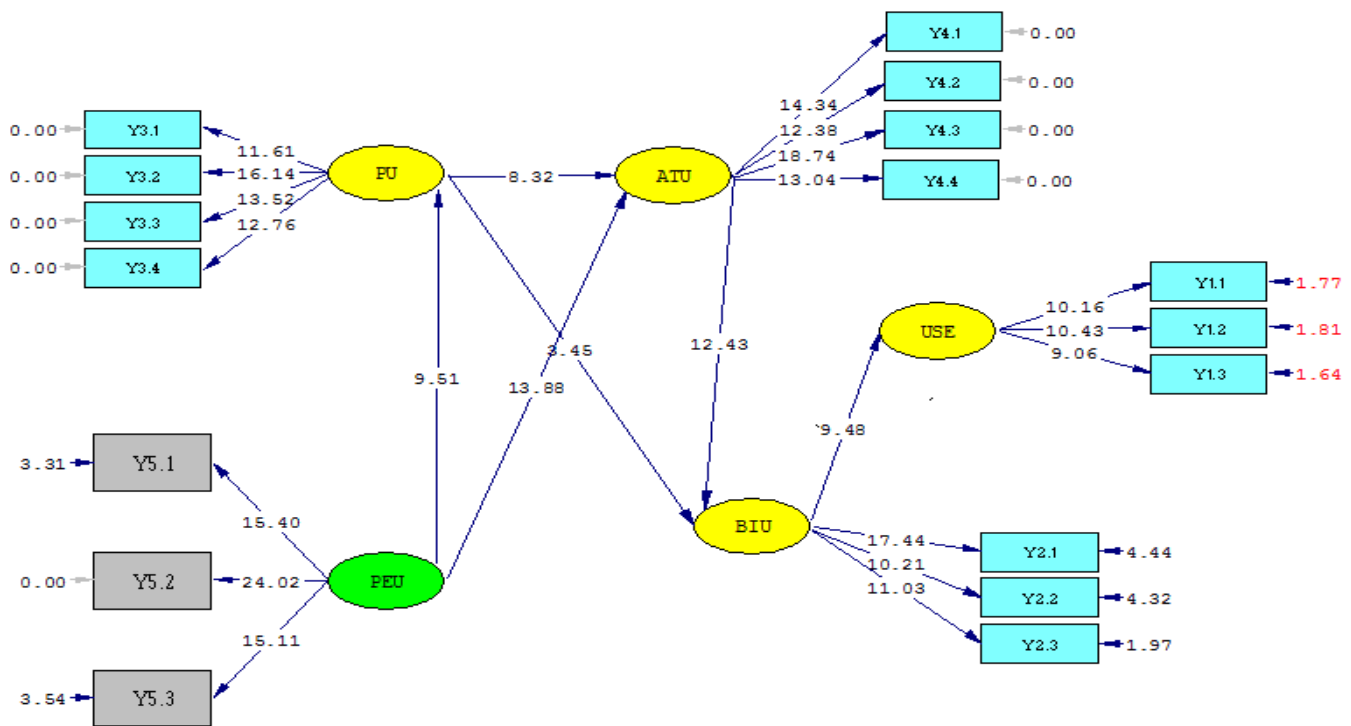
A total of 200 respondents selected based on two criteria, gender and age, participated in the study. The majority were within the age range of 17-36 years old, comprising 93.5% of the sample, with 26.5% men and 73.5% women. Data from Bank Indonesia in mid-2023 revealed 640.5 million

server-based and 90.1 million chip-based e-money units in Indonesia. Purposive sampling was employed as the probability technique was not feasible, enabling generalizations due to uniform features across e-money servers. This method was chosen over random sampling, consistent with research on mobile application acceptance in the United States (Yang, 2013).

**Table 2: Respondent Demographic**

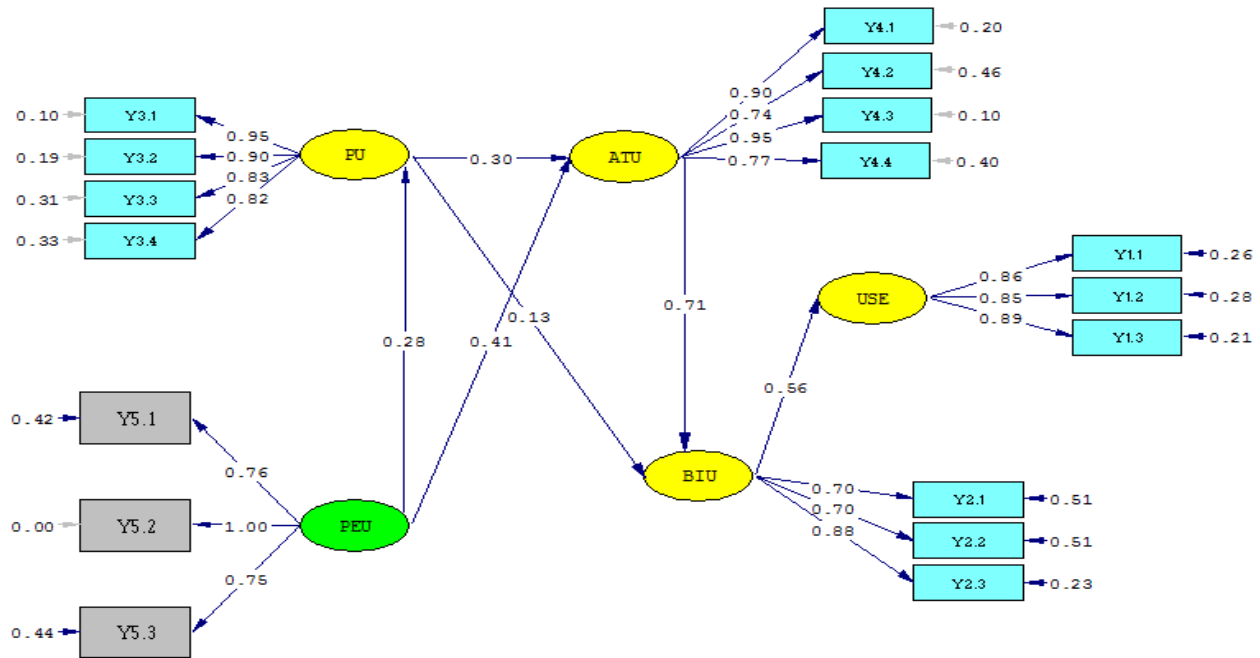
	Profile	Frequency	Percentage
Gender	Man	53	26.5%
	Woman	147	73.5%
Age	≤ 16 years	6	3.0%
	17-36 years	187	93.5%
	>36 years	7	3.5%

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 results of the statistical hypothesis testing are as follows:



Chi-Square=80.14, df=107, P-value=0.97561, RMSEA=0.000

**Figure 3: T-statistic**



Chi-Square=80.14, df=107, P-value=0.97561, RMSEA=0.000

Figure 4: Standardized Loading Factor

Table 3: Statistical Hypothesis

Hypothesis	Parameter	Statistical Hypothesis		SLF	T-Stat.	Result
		H <sub>0</sub>	H <sub>1</sub>			
1	$\beta_1$	$\beta_1=0$ Behavioral Intention to Usedoes not have a positive influence on the Actual Use Mobile money	$\beta_1>0$ Behavioral Intention toUse has a positive influence on the Actual Use mobile money	0.56	9.48	Significant
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 mobilemoney	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 influenc e on the Behavioral Intention to Use mobile money	0.71	12.43	Significant
4	$\beta_4$	$\beta_5=0$ Perceived Usefulness does not have a positive influence on Attitude Toward Using mobile money	$\beta_5>0$ Perceived Usefulness has a positive influence on AttitudeToward Using mobile money	0.30	8.32	Significant
5	$\beta_5$	$\beta_6=0$ Perceived Easy of Use does not have a positive influence on Attitude Toward Using mobile money	$\beta_6>0$ Perceived Easy of Use has a positive influence on AttitudeToward Using mobilemoney	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

#### **The Effect of Behavioral Intention to Use on Actual Use**

The findings from the hypothesis testing 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 advantages over other electronic payment methods and its own set of benefits, mobile money has become more popular 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).

#### **The Effect of Perceived Usefulness on Behavioral Intention to Use**

The hypothesis testing revealed a loading value of 0.13 and a t-stat of 3.45. 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. Previous studies demonstrate that the real use of mobile applications depends on perceived usefulness (Min et al., 2019) and the adoption of management accounting innovation (Ax & Greve, 2017).

#### **The Effect Attitude Toward Using on the Behavioral Intention to Use**

The results of hypothesis testing revealed 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 research has shown that Behavioral Intention to Use 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).

#### **The Effect of Perceived Usefulness on the Attitude Toward Using**

Results of the hypothesis testing showed 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).

#### **The Effect of Perceived Ease of Use on the Attitude Toward Using**

The results of the hypothesis testing revealed 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).

#### **The Effect of Perceived Ease of Use on the Perceived Usefulness**

The results of the hypothesis testing indicated 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. This aligns with the results of other studies which showed 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 findings of this study demonstrate that every TAM variable significantly affects Actual Use. It is important for mobile money institutions to consistently improve campaigns on the Perceived Ease of Use and Perceived Usefulness of Using mobile money. 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 understand and use.

Users believe they get the convenience from services using mobile money. Meanwhile, mobile money makes transactions easier and transaction information is directly shown on the mobile screen. It is also quicker than 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.

In Indonesia, users find mobile money appealing due to its ease of use. They perceive it as a technology that enhances their performance. Mobile money distribution services offer various benefits such as point-of-sale transactions, utility bill payments, and accessible, affordable financial services for the 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 payment. The Indonesian government has promoted the use of electronic money. Launching Less Cash Society is a positive move towards creating a more secure, efficient, and smoother payment system.

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

The TAM constructs can integrate innovation characteristics through external variables (Davis, 1989; Davis et al., 1989). The integration between TAM and innovation characteristics will create a new research model. In addition, other elements related to the mobile money ecosystem can also be included 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., Gronli, 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>
- Mombeul, 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/ICITSI50517.2020.9264916>
- 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>