# Factors Influencing Mobile Money Adoption in Tanzania

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***Abstract***
*Financial inclusion is being promoted in most economies as it fosters economic development. Traditionally, banks were used to promote the agenda of financial inclusion until about two decades ago when Mobile Network Operators (MNOs) introduced mobile money services. Since then, there has been a rise in the number of individuals using mobile money services. Due to this, studies have been carried out to investigate the factors responsible for adopting mobile money globally. Despite thorough research in this area, aspects such as affordability and integration of mobile money with other financial services and promotions have not been thoroughly studied. Therefore, with its unique focus on these unexplored new aspects, this study was carried out to fill this gap using Tanzania as a case study. Along with the common factors such as trust, performance, and ease of use, the study used primary data collected through an online survey from 384 respondents. It was anchored on the Technology Acceptance Model (TAM) and employed Semi-Structural Equation Modeling (SEM) as the analysis method. The study found that perceived risk has a negative but statistically insignificant influence on adopting mobile money, with a coefficient of -0.181 and a p-value of 0.078. Results also indicate that perceived trust, performance expectancy, ease of use, social influence, affordability, integration of mobile money with other financial services, and promotion have a positive and statistically significant influence on mobile money adoption, with coefficients of 0.694, 0.627, 0.623, 0.605, 0.101, 0.083, and 0.438 respectively, and a p-value of less than 0.005. These findings highlight the need for MNOs to build trust through improved security measures, offer affordable services, integrate mobile money with other financial platforms, and promote their services to increase adoption. Policymakers are encouraged to create regulatory frameworks that promote consumer trust, ensuring a safe and reliable mobile money ecosystem.*

***Keywords:*** *Mobile Money Adoption, Perceived Trust, Performance Expectancy, Ease of Use, Affordability.*

## 1.0 INTRODUCTION

Financial inclusion is actively promoted in every country around the world. This is because it plays a significant role in the nation's economic development (Hasan et al., 2024). Research conducted in the area of financial inclusion shows that it allows more people to participate in economic activities by providing access to financial services such as loans, savings, and insurance, which in turn improves entrepreneurship and investment (Van & Linh, 2019). The ultimate goal of this is the reduction of poverty, job creation, improved financial resilience, efficient allocation of resources, and enhanced economic stability, among others (Ifediora et al., 2022). Financial inclusion is the process of bringing individuals who were previously financially excluded into the formal financial sector (Rwechungura, 2020). For many years, banks were considered the primary vehicles for promoting financial inclusion in many economies. Therefore, it is true to say that banks have been spearheading the promotion of financial inclusion since 1472, when the first bank, Banca Monte dei Paschi di Siena, was established in Siena, Italy. In contrast, in Tanzania, the first bank, Deutsch-Ostafrikanische, was established in 1905 (Rwechungura, 2020).

The model of promoting financial inclusion through banks, especially in developing countries, has reduced the number of financially excluded individuals. However, it still faces several challenges that hinder the uptake of banking services (Ahmad et al., 2020). Factors documented in many studies that hinder banks from reaching many individuals in developing countries, especially rural dwellers, include a lack of infrastructure such as bank branches, and insufficient funds to save or maintain the minimum amount required in bank accounts (Hasan et al., 2024; Ifediora et al., 2022). The solution to many challenges hindering banks from serving people, especially in areas where banks do not reach, is mobile money, provided by Mobile Money Operators (MNOs) (Naito et al., 2021). The challenge of infrastructure faced by banks seems not to face MNOs since mobile money services leverage the widespread use of mobile phones, which often have better coverage than traditional banking infrastructure (Bland et al., 2024). This allows MNOs to reach remote and rural areas where setting up physical bank branches would be impractical or too costly to build and operate (Agyei & Abrokwah, 2021). Furthermore, mobile money has lower entry requirements than traditional banks, such as lower minimum balance requirements (Kelly & Palaniappan, 2023). This has made accessing mobile money services easier for individuals with unstable incomes, showcasing the inspiring potential of MNOs in the financial inclusion landscape, offering a hopeful outlook for the future.

The benefits of using mobile money over traditional banking have made mobile banking more popular in many economies, including Tanzania. Statistics from the Tanzania Communications Regulatory Authority (TCRA)(2024) and the Bank of Tanzania (BoT, 2024) indicate that many individuals had more mobile money accounts than traditional bank accounts. Table 1 presents detailed information regarding this matter.

**Table 1:** The number of bank savings accounts and registered SIM cards to use mobile money for four years (2019 – 2022)

| Year | Number of bank savings accounts (Million) | Number of registered SIM cards to use mobile money (Million) | Number of mobile money transactions (Million) |
|---|---|---|---|
| 2019 | 6.39 | 25.86 | 3.02 |
| 2020 | 6.79 | 32.27 | 3.41 |
| 2021 | 7.12 | 35.26 | 3.75 |
| 2022 | 7.59 | 40.95 | 4.20 |

The data presented in Table 1indicates that the percentage of registered SIM cards used for mobile money increased by about 58%. In comparison, the rate of savings accounts only increased by 17% during the same period. This indicates that individuals are likelier to have mobile money accounts than bank accounts. This could be because mobile money is more convenient for most people than banks, making it a preferred choice for many.

Due to the popularity of mobile money and its benefits, it has become an area of interest to researchers, particularly regarding the factors influencing its adoption. During the literature review, it was evident that most studies in this area focused on how trust and security affect mobile money adoption (Agami & Du, 2017; Alrawad et al., 2023; Baganzi & Lau, 2017; Bland et al., 2024; Hossain, 2019; Kelly & Palaniappan, 2023; Mng'ong'ose, 2017; Mswahili, 2021; Sowon et al., 2023). Few studies, such as Njele & Phiri (2021) and Kelly & Palaniappan (2023), have investigated the determinants of mobile money usage. Although these studies revealed important information about the adoption and usage of mobile money, some aspects, such as affordability, integration of mobile money with other financial services, and promotion, were either not included or only partially addressed. The exclusion of these variables in the predictive model could reduce the predictive power of the model. Therefore, this study will fill that gap by including these variables to provide a bigger picture of the factors influencing mobile money adoption using Tanzania as a case study. Including these variables in the current study provides novel evidence in this area.

## 2.0 LITERATURE REVIEW

This section discusses the relevant literature. It begins with the theoretical review and then presents the empirical review.

### 2.1 Theoretical literature review

In this study, the Technology Acceptance Model (TAM) is employed, which was first proposed by Fred Davis in 1986 and has since become a popular framework for researching individuals' acceptance and use of technology. According to this model, technology adoption is influenced by perceived usefulness and perceived ease of use (Mswahili, 2021). Perceived usefulness refers to the extent to which a person believes using a particular system would improve their job performance (Bland et al., 2024). On the other hand, perceived ease of use refers to the extent to which a person believes using a particular system would be effortless (Alrawad et al., 2023). This study defines perceived usefulness as the extent to which users believe that mobile money services will enhance their financial transactions and daily activities. On the other hand, perceived ease of use is defined as the ease with which users find it easy to use mobile money services without encountering significant challenges.

While this study applies the model by adopting variables that measure the proposed constructs of perceived usefulness and perceived ease of use, it also introduces additional constructs such as trust, social influence, promotions, integration of mobile money with other financial services and affordability to better capture the determinants of mobile money usage in Tanzania. These constructs were added to the TAM model because they appear crucial for understanding mobile money adoption, as documented in previous studies such as Agami and Du (2017), Alrawad et al. (2023), Baganzi and Lau (2017), Bland et al. (2024), Hossain (2019), Kelly and Palaniappan (2023), Mng'ong'ose (2017), Mswahili (2021), Njele and Phiri (2021), and Sowon et al. (2023) mentioning just a few. This theory is relevant to this study because mobile money is still a relatively new technology in Tanzania, having been introduced in 2009 by Vodacom with its mobile money service known as M-PESA (Mng'ong'ose, 2017). Thus, as the trend in adopting this technology continues to rise, applying this model in the study helps to understand the factors responsible for its adoption. Further, this model has been used in similar previous studies conducted in this area (see Alrawad et al. (2023); Bland et al. (2024); Mswahili (2021).

### 2.2 Empirical literature review

The literature review revealed that common factors are used to study mobile money adoption globally. The first factor used was perceived risk, which assesses potential fraud and privacy issues. The study by Alrawad et al. (2023), Baganzi

and Lau (2017), Bland et al. (2024), Hossain (2019), and Kelly and Palaniappan (2023) found that perceived risk had a statistically significant negative influence on mobile money adoption. Another factor is perceived trust, which examines aspects such as the confidentiality of customer data, the integrity of the mobile payment system, and the reputation of the mobile money service provider. Studies such as Alrawad et al. (2023), Hossain (2019), Mng'ong'ose (2017), Mswahili (2021), Sowon et al. (2023) found that perceived trust had a positive and statistically significant influence on both mobile money adoption and customer satisfaction. Baganzi and Lau (2017) argued that trust mitigates the negative effect of perceived risk, resulting in a higher likelihood of adopting mobile money services. Agami and Du (2017) found that trust influenced users' willingness to use mobile banking services. They argued that robust security mechanisms positively impacted users' perceptions of security and trust in mobile banking applications. On the other hand, Kelly and Palaniappan (2023) found that perceived trust had a negative but not statistically significant influence on mobile money adoption.

Another critical factor influencing mobile money adoption is customer satisfaction, which examines aspects such as ease of use, accessibility, convenience, customer support, reliability, and innovation. Although this factor was not directly linked to mobile money adoption, Hossain (2019) and Mswahili (2021) found that it positively and significantly influenced customer loyalty and satisfaction. According to Hossain (2019), satisfied customers are more likely to be loyal and to spread the word about mobile money to others who are not yet using it. By doing so, those not using mobile money may be convinced to adopt the service, leading to greater adoption of mobile money services. Moreover, the factor of ease of use, which examines how easy it is to use mobile money, has been documented by several studies as a critical factor influencing mobile money adoption. Agyei and Abrokwah (2021), Kelly and Palaniappan (2023) and Mswahili (2021) found that ease of use, or effort expectancy, had a positive and statistically significant influence on mobile money adoption. Additionally, performance expectancy, which examines aspects such as the efficiency, effectiveness, and overall productivity of using mobile money, was also identified as a critical factor influencing its adoption. Agyei and Abrokwah (2021), Baganzi and Lau (2017), Bland et al. (2024) and Kelly and Palaniappan (2023) found that performance expectancy was positive and statistically significant influencing the adoption of mobile services.

Furthermore, social influence, which examines the degree to which individuals are encouraged to use mobile money by people around them—such as colleagues, friends, family, or social networks—was also identified as a significant factor

influencing mobile money adoption. Studies carried out by Agyei and Abrokwah (2021) and Kelly and Palaniappan (2023) found that social influence positively affects mobile money adoption. In addition to social influence, demographic factors such as age, gender, and education were identified as key influences in adopting mobile money. The study by Hossain (2019) found that gender moderated the relationships between perceived risk, trust, satisfaction, and loyalty, affecting individuals' intention to adopt mobile money. Similarly, Baganzi and Lau (2017) found that demographic factors such as age, gender, and education influenced mobile money adoption. Agami and Du (2017) found that user education regarding mobile banking security enhanced trust and confidence in using mobile banking. On the other hand, the study by Alrawad et al. (2023) found that demographic characteristics such as age and gender did not significantly influence the model constructs.

## 2.3 Research gap

It is evident from the empirical literature review presented above that most studies, such as Agami and Du (2017), Alrawad et al. (2023), Baganzi and Lau (2017), Bland et al. (2024), Hossain (2019), Kelly and Palaniappan (2023), Mng'ong'ose (2017), Mswahili (2021), and Sowon et al. (2023), carried out to investigate the factors influencing mobile money adoption, have focused on common factors such as perceived trust, perceived security, performance, and social influence. The current study adds to the model by including affordability, integration of mobile money with other financial services, and promotions.

## 2.4 Conceptual model

After reviewing the literature, the conceptual framework that guided the study was developed. This study suggests that mobile money adoption is influenced by eight independent variables: perceived risk, perceived trust, performance expectancy, ease of use, social influence, affordability, integration of mobile money with other financial services, and promotion. Figure 1 presents the conceptual framework.

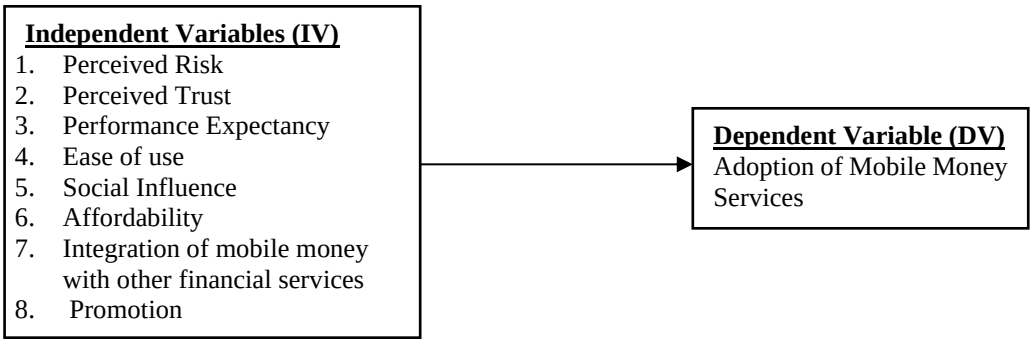


**Figure 1:** Conceptual Framework

From Figure 1, it is clear that the study investigated the influence of eight independent variables on mobile money adoption. Therefore, the study tested eight hypotheses, one for each independent variable. The first hypothesis (H1) guiding this study was that perceived risk significantly negatively influences mobile money adoption. This is because as the perceived risk, which is the risk related to potential risk and privacy issues increases, mobile money adoption decreases as individuals become more concerned about this risk (Alrawad et al. (2023); Hossain (2019)). The second hypothesis (H2) guiding the study was that perceived trust significantly positively influences mobile money adoption. This is because, as trust in aspects such as the confidentiality of customers' data, the integrity of the mobile payment system, and the reputation of the mobile money service provider increases, individuals' trust in mobile money also increases (Sowon et al., 2023). The third hypothesis (H3) guiding the study was that performance expectancy significantly positively influences mobile money adoption. This is because as performance expectancy—which examines aspects such as the effectiveness and overall productivity of using mobile money—increases, mobile money adoption also increases as people find it useful in their daily lives (Agyei & Abrokwah, 2021).

The fourth hypothesis (H4) guiding this study was that ease of use significantly positively influences mobile money adoption. This is because, as ease of use—which examines user-friendliness and simplicity—increases, mobile money adoption increases as individuals find the service more straightforward to use. The fifth hypothesis (H5) guiding the study was that social influence significantly positively influences mobile money adoption. This is because, as social influence—which examines the degree to which individuals are encouraged to use mobile money by people around them, such as colleagues, friends, family, or social networks—increases, mobile money adoption also increases, as individuals adopt the service to keep up with the expectations of those around them (Kelly & Palaniappan, 2023). The sixth hypothesis (H6) guiding this study was that affordability significantly influences mobile money adoption. This is because, as the cost of using mobile money is considered affordable by individuals, the likelihood of adopting it increases. This is in line with the theory of demand and supply, which shows that as the price of a product decreases, the demand for that product increases.

The seventh hypothesis (H7) guiding this study was that integrating mobile money with other financial services significantly positively influences mobile money adoption. This is because, as the integration of mobile money with other financial services—such as bank deposits or withdrawals and payment of utilities like water and electricity bills—increases, mobile money adoption among

individuals will also increase, as it facilitates their financial transactions with other service providers and utility companies more efficiently. The eighth hypothesis (H8) guiding this study was that promotion significantly positively influences mobile money adoption. This is because, as strategies to spread awareness about mobile services to the general public increase, mobile money adoption also rises as people become more informed about the benefits and features of mobile money.

## 3.0 RESEARCH METHODOLOGY

This study was conducted in Tanzania, where data was collected from Tanzanian adults. The study was conducted in Tanzania because mobile money adoption is on the rise, as shown by the empirical statistics in the introduction (see Table 1). Those statistics call for more studies to identify the key factors responsible for that rise. The study collected data from Tanzanian adults without considering where they lived, such as region, urban or rural, Tanzania mainland or Tanzania islands. This was done purposely to gain a comprehensive understanding of the determinants of mobile money adoption across different geographical and cultural settings within a country. Also, this aimed to ensure the study captures the experiences of individuals across various economic backgrounds.

The research design employed in this study is cross-sectional, as the data were collected at one point. This design is useful when longitudinal data on the phenomenon cannot be obtained. Furthermore, as in the current study, it is a suitable design for investigating the relationship between variables. The research approach used in this study is quantitative, as the data used was also quantitative. As a result, the analysis employed was also quantitative, as will be presented later in this section.

The target population of this study was individuals aged 16 and above living in mainland Tanzania and the islands of Unguja and Pemba. The study targeted these individuals because they have a sound understanding of adopting mobile money services. Since the study population was considered large, the study employed the finite method to calculate the sample size. This method is best used when the population of the study is considered large, and it is given as: -

$$n = \frac{z^2 * p(1-p)}{e^2}$$

Where:
n = sample size

Z = score corresponding to the desired confidence level (Z = 1.96 for a 95% confidence level)
p = estimated population proportion (the study assumes a cautious estimate of p = 0.5).
e = margin of error
After that, the sample size is computed as follows: -

$$n = \frac{1.96^2 * 0.5(1-0.5)}{0.05^2}$$

$n \approx 384$
Therefore, the sample size of the study was 384.

The study employed primary data collected using a structured questionnaire. The questionnaire was prepared in the form of a Google Doc, making it an online survey, and it was shared through social media platforms such as WhatsApp, Instagram, and Facebook. The researcher first shared the questionnaire with his contacts and friends on the mentioned platforms, who were then asked to share it further with their contacts. This type of sampling employed in the study is known as snowball sampling. This method resulted in 412 questionnaires being filled out and submitted. However, since the sample size for the study was 384, the researcher selected only 384 fully completed forms, leaving out the rest.

The study employed Structural Equation Modeling (SEM) as the model of analysis. This is because it allows for the simultaneous testing of multiple relationships, handling measurement errors, and evaluating the validity and reliability of constructs. Further, it comprehensively explains how various factors interact and influence mobile money adoption.

## 4.0 FINDINGS AND DISCUSSION

This section outlines and discusses the study's findings. It begins by presenting the descriptive findings, followed by the SEM results. Table 2 presents the demographic information of the respondents, which is part of the descriptive findings.

**Table 2:** Demographic information of the Respondents

| | Frequency | Percentage Distribution |
|---|---|---|
| Gender | | |
| Male | 208 | 54% |
| Female | 176 | 46% |
| *Age group* | | |
| 18 to 24 years old | 112 | 29% |
| 25 to 34 years old | 129 | 34% |
| 35 to 44 years old | 98 | 26% |
| 45 to 54 years old | 40 | 10% |
| 55 and above | 5 | 1% |
| Education Level | | |
| Primary education | 14 | 4% |
| Secondary education | 97 | 25% |
| Certificate or Diploma | 94 | 24% |
| Bachelor's degree | 141 | 37% |
| Postgraduate degree | 38 | 10% |
| Employment status | | |
| Student | 137 | 36% |
| Employed | 89 | 23% |
| Self-employed | 117 | 30% |
| Unemployed | 41 | 11% |

The results show that out of 384 respondents, 208 (54%) were male, while 176 (46%) were female. This indicates that the gender distribution among respondents was reasonably balanced. Results regarding the age of respondents indicate that 34% were in the 25-34 age bracket, 29% were in the 18-24 age bracket, 26% were in the 35-44 age group, and 1% were in the 55 and above age group. Results regarding education level indicate that 4% of respondents had attained primary education, 25% had completed secondary education, 24% had obtained a certificate or diploma, 37% had a Bachelor's degree, and 10% had a postgraduate degree. Furthermore, results regarding respondents' employment status indicate that 36% were students, 23% were employed, 30% were self-employed, and 11% were unemployed.

An analysis of the respondents' adoption and usage of mobile money services, which is also part of the descriptive findings, was conducted. This analysis aimed to gather information on which respondents have adopted mobile money and,

among those who have adopted it, how many are active users. Table 3 presents the results.

**Table 3:** Respondents' Adoption and Usage of Mobile Money

| Have you adopted mobile money? | | |
|---|---|---|
| | Male | Female |
| Yes: n=379; 98.7% | n=206; 54% | n=173; 46% |
| No: n=5; 1.3% | n=2; 40% | n=3; 60% |
| **Are you currently using mobile money?** | | |
| Yes: n=307; 81% | n=181; 59% | n=126; 41% |
| No: n=72; 19% | n=25; 35% | n=47; 65% |

Results indicate a high adoption rate of mobile money services among respondents since out of 384 respondents, 379 (98.7%) had adopted mobile money, while 5 (1.3%) had not. Of the 379 respondents who adopted mobile money, 54% were male, and 46% were female. This indicates that males and females are adopting mobile money at almost similar rates. Of the five respondents who had not adopted mobile money, 40% were male, and 60% were female. This may imply that women face slightly more barriers to adopting mobile money than men. Results further indicate that out of the 379 respondents who had adopted mobile money, 307 (81%) were active users, while 72 (19%) were not active users. Results also indicate that, out of the 307 respondents who are active users of mobile money, 59% were male, and 41% were female. This suggests that men might use mobile money services more frequently than women. Additionally, out of the 72 respondents who are not active users of mobile money services, 35% were male, and 65% were female. This indicates that while women adopt mobile money services, they may not use them as frequently as men.

This paper presents the SEM results after presenting the descriptive findings regarding the respondents. SEM is divided into two parts, namely, the measurement model and the structural model. The measurement model evaluates how observed variables (indicators) relate to their underlying latent constructs. Aspects such as construct reliability and validity are assessed in this model. This study evaluated the construct reliability using Cronbach's Alpha and Composite Reliability (CR), whereas the construct validity was assessed using the Average Variance Extracted (AVE). Results regarding this assessment are presented in Table 4.

**Table 4:** Reliability and convergent validity

| Construct | Cronbach's Alpha | CR | AVE |
|---|---|---|---|
| PR | 0.825 | 0.855 | 0.630 |
| PT | 0.808 | 0.855 | 0.755 |
| PE | 0.806 | 0.848 | 0.689 |
| EU | 0.836 | 0.865 | 0.692 |
| SI | 0.863 | 0.887 | 0.694 |
| AFF | 0.839 | 0.873 | 0.703 |
| INTER | 0.850 | 0.876 | 0.666 |
| MAPO | 0.865 | 0.888 | 0.698 |

***NOTE.*** *PR: Perceived Risk, PT: Perceived Trust, PE: Performance Expectancy, EU: Ease of Use, SI: Social Influence, AFF: Affordability, INTER: Integration of mobile money with other Financial Services, MAPO: Promotion, CR: Composite Reliability, AVE: Average Variance Extracted*

The results show that all constructs had good internal consistency, with Cronbach's Alpha values ranging from 0.806 to 0.865. This means that the items within each construct reliably measured the same underlying concept. According to Hair et al. (2021), a construct is considered to have good internal consistency when the Cronbach's Alpha value exceeds 0.70. Thus, the construct used in this study met this criterion. Results for composite reliability show that the constructs have strong internal reliability, with values ranging from 0.848 to 0.888. According to Hair et al. (2021), a construct is considered to have met this criterion when the composite reliability value exceeds 0.70.

Furthermore, the results indicate that all constructs had a good convergent validity, with Average Variance Extracted (AVE) values ranging from 0.630 to 0.703, which exceeds the 0.50 threshold suggested by Hair et al. (2021). Additionally, the outer loadings, which indicate how well each indicator represents its underlying latent construct, were above the 0.7 threshold suggested by Hair et al. (2021). This implies that the indicators used in this study effectively represented their respective underlying latent constructs, thereby establishing discriminant validity. Also, the study assessed the Goodness of Fit (GoF), which was found to be 0.651. This indicated that the model satisfied this criterion as this value exceeds 0.3, as suggested by Henseler & Sarstedt, (2013).

After assessing the measurement model, the study evaluated the structural model. Multicollinearity was assessed within this model using the Variance Inflation Factor (VIF). The results showed no multicollinearity issues, as all VIF values were below the threshold of 5, as suggested by Hair et al. (2021). Further, the $R^2$ value in mobile money adoption is 0.56, which means that the factors included in this model explain 56% of the variance in mobile adoption. This implies that 44% of the variance in mobile money adoption is caused by other factors not

included in the model. The VIF results and the findings from testing the study's hypotheses are presented in Table 5.

**Table 5:** Summary of SEM results

| Hypotheses | VIF | Path coefficient | T | p | Significant |
|---|---|---|---|---|---|
| H1: PR ->ADPT | 1.382 | -0.181 | 4.009 | 0.078 | No |
| H2: PT -> ADPT | 1.931 | 0.694 | 32.620 | 0.000 | Yes |
| H3: PE -> ADPT | 2.082 | 0.627 | 22.838 | 0.000 | Yes |
| H4: EU -> ADPT | 1.639 | 0.623 | 21.596 | 0.000 | Yes |
| H5: SI -> ADPT | 3.401 | 0.605 | 21.771 | 0.000 | Yes |
| H6: AFF -> ADPT | 2.719 | 0.101 | 1.975 | 0.018 | Yes |
| H7: INTER -> ADPT | 1.429 | 0.083 | 1.744 | 0.031 | Yes |
| H8: MAPO -> ADPT | 4.002 | 0.438 | 8.952 | 0.000 | Yes |

The results indicate that perceived risk negatively influences mobile money adoption, with a coefficient (B) of -0.181 and a p-value of 0.078. Due to this, H1 is rejected, as the p-value is above the 0.05 significance level, indicating that perceived risk does not significantly influence mobile money adoption. This might imply that Tanzanians are unconcerned with privacy issues when adopting mobile money services. The findings of this study disagree with the findings from Alrawad et al. (2023), Baganzi and Lau (2017), Bland et al. (2024), Hossain (2019) and Kelly and Palaniappan (2023), who reported that perceived risk significantly negatively influenced mobile money adoption.

The results also indicate that perceived trust has a positive and statistically significant influence on mobile money adoption, with a coefficient of 0.694 and a p-value of 0.000. Thus, H2 is accepted, as the p-value was below the 0.05 significance level. The findings of this study are in line with the findings of Alrawad et al. (2023), Hossain (2019), Mng'ong'ose (2017), Mswahili (2021) and Sowon et al. (2023), who found that perceived trust was positive and statistically significant influencing mobile money adoption.

Results regarding performance expectancy and mobile money adoption indicated that performance expectancy has a positive and statistically significant influence on mobile money adoption, with a coefficient of 0.627 and a p-value of 0.000. Thus, H3 was accepted, as the p-value was below the 0.05 significance level. The findings of this study are in line with the findings of Agyei and Abrokwah (2021), Baganzi and Lau (2017), Bland et al. (2024) and Kelly and Palaniappan (2023) who found that performance expectancy was positive and statistically significant influencing the adoption of mobile services.

The results show that ease of use has a positive and statistically significant influence on mobile money adoption, with a coefficient (B) of 0.623 and a p-value of 0.000. Therefore, H4 was accepted, indicating that ease of use is a key factor in adopting mobile money, as the p-value was below the 0.05 significance level. The findings of this study are in line with the findings of Agyei and Abrokwah (2021), Kelly and Palaniappan (2023) and Mswahili (2021) who also found that ease of use had a positive and statistically significant influence on mobile money adoption.

The results also indicate that social influence has a positive and statistically significant influence on mobile money adoption, with a coefficient of 0.605 and a p-value of 0.000. Thus, H5 was accepted, as the p-value was below the 0.05 significance level. This implies that individuals are adopting mobile money since it is adopted by those around them or with whom they financially transact. These findings align with Agyei and Abrokwah (2021) and Kelly and Palaniappan (2023), who found that social influence positively affects mobile money adoption.

The results further indicate that the affordability of mobile money services has a positive and statistically significant influence on mobile money adoption, with a coefficient of 0.101 and a p-value of 0.018. Thus, H6 was accepted, as the p-value was below the 0.05 significance level. Even though the results are statistically significant, there is a small effect on adoption, as indicated by the T-statistic. These findings align with the theory of demand, which suggests that lower price is associated with higher demand. During the literature review, this factor was not identified in any study conducted in this area, making these findings unique and incomparable to previous research.

Additionally, the results indicate that integrating mobile money with other financial services has a positive and statistically significant influence on mobile money adoption, with a coefficient of 0.083 and a p-value of 0.031. Thus, H7 was accepted, as the p-value was below the 0.05 significance level. This indicates that customers are influenced to adopt mobile money due to its ability to integrate with other financial services and facilitate the payment of utility bills. During the literature review, this factor was also not identified in any study conducted in this area, making these findings unique and incomparable to previous research. It should be noted that even though the study found a significant statistical influence regarding this variable, this variable has the smallest effect on adoption, as shown by the T-statistics of 1.744.

Finally, the results indicate that promotion has a positive and statistically significant influence on mobile money adoption, with a coefficient of 0.438 and a p-value of 0.000. Thus, H8 was accepted, as the p-value was below the 0.05 significance level. As for the affordability of mobile money services and the integration of mobile money with other financial services, these variables were also not identified during the literature review in any study conducted in this area, making these findings unique and incomparable to previous research.

## 5.0 CONCLUSION

### 5.1 Conclusion

The study investigated the factors responsible for mobile money adoption in Tanzania. It employed eight independent variables: perceived risk, perceived trust, performance expectancy, ease of use, social influence, affordability, integration of mobile money with other financial services, and promotion, and one dependent variable, mobile money adoption. The findings revealed that one variable, perceived risk, was negative but statistically insignificant in influencing mobile money adoption, suggesting that privacy concerns are not crucial among Tanzanians. The other seven variables positively and statistically significantly influenced mobile money adoption. These findings indicate the importance of these factors in influencing mobile money adoption in the country.

### 5.2 Theoretical contribution of the study

The study contributes to the Technology Acceptance Model (TAM) by enhancing it by introducing additional constructs, namely trust, social influence, promotion, integration of mobile money with other financial services, and affordability, which are not traditionally part of TAM. Traditionally, TAM focuses on perceived usefulness and ease of use as the key factors influencing technology adoption. However, this study added more constructs to capture a more comprehensive picture of mobile money adoption in Tanzania. The study's findings concluded that the added constructs were also critical factors influencing mobile money adoption. This indicates that the adoption of mobile money depends on more than ease of use and perceived usefulness.

### 5.3 Policy Implication

Since the study found perceived trust to have a positive and statistically significant influence on mobile money adoption, stakeholders in the mobile money sector should prioritise building and maintaining trust. This can be achieved through robust security measures and clear communication about the safety and reliability of the services. Further, policymakers should ensure that regulations are in place to ensure consumer trust and that MNOs adhere to those standards. Also, since it was found that performance expectancy has a positive

and statistically significant influence on mobile money adoption. MNOs should communicate the performance benefits of their services to the general public to make their services more attractive to potential users. Aspects such as how mobile money can enhance customers' financial efficiency and overall users' productivity should be communicated.

Furthermore, since the results indicated that the affordability of mobile money services is positive and statistically significant in influencing mobile money adoption, MNOs should offer affordable services to enhance adoption. Aspects such as transaction fees and service charges should be considered. Additionally, since the study found that integrating mobile money with other financial services has a positive and statistically significant influence on mobile money adoption, MNOs should enhance the integration of mobile money with other financial services and utility bill payments, enabling customers to manage their financial activities from a single platform. This could, in turn, increase mobile money adoption. Finally, since the results indicated that promotion positively and statistically significantly influences mobile money adoption, MNOs should invest more in these activities as they are among the key factors influencing mobile money adoption.

### 5.4 Limitations of the study and areas for further studies

The researcher faced several limitations in conducting this study, which calls for further studies in specific areas. The first limitation is using a cross-sectional design that captures a snapshot in time, which may not account for changes in the adoption of mobile money over time. One must consider conducting follow-up studies or using a longitudinal design to address this issue. Since this was not done in the current study, further studies employing those designs are needed. The second limitation, which calls for further studies, is the limited scope of variables. While the current study included eight determinants of mobile money adoption, there may be additional factors, such as technological advancements, customer service quality or cultural influences, that were not considered. Therefore, further studies should include more variables to have more empirical evidence regarding factors influencing the adoption of mobile money.

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