

An Analysis of the Factors Influencing Consumers' Adoption of Mobile Money Transfer Services (MMTs) in Masvingo Urban, Zimbabwe

John Marumbwa^{1*}, Munyaradzi Mutsikiwa²

*+263 772 116 952 jmarumbwa@gmail.com

¹Department of Management Studies, ¹Great Zimbabwe University, Masvingo, Zimbabwe

²Department of Management Studies, ¹Great Zimbabwe University, Masvingo, Zimbabwe

ABSTRACT

The ever-expanding technological innovations have stirred a phenomenal transmutation of the face of businesses across the globe, especially the mobile telecommunications sectors resulting in the introduction of mobile money transfer services (MMTs). This paper sought to analyse the factors that influence consumers' adoption of MMTs from a consumer behavioural perspective based on the extensions of the construct extracted from the propositions made by Davis (1989) in his Technology Acceptance Model (TAM) and Rogers (1983) in the Diffusion of Innovation theory.

In Zimbabwe, the mobile telecommunication companies, Econet Wireless Zimbabwe, Telecel Zimbabwe and the government owned Netone have launched the mobile money transfer businesses. However, the major concern related to this paradigm shift of sending money has been the market acceptance and the actual usage of these products with particular emphasis on the factors influencing consumers' adoption decisions. It was concluded that the perceived ease of use, consumers' perceived usefulness of the service, perceived trust and the perceived relative advantage of MMTs are the critical determinant factors in influencing consumers' adoption decisions.

Key words: Mobile money, mobile money transfer services, mobile penetration, behavioural intention, consumer adoption

1. INTRODUCTION

The mobile telecommunications services sector in Zimbabwe has tremendously grown over the years with the telecommunications operators defying all logic and sense in a bid to create and sustain a competitive edge. With the basic services relatively identical, the need for differentiated market offerings became vital hence the launch of mobile money transfer services. Along with global trends, innovation has become a buzzword and epitomizes modern day enterprises such that survival in today's turbulent environment is somewhat hugely dependant on continuous product innovation and improvement. In light of this, there has been a foray of new mobile technology products by mobile telecommunications operators in Zimbabwe, that is, Econet Wireless Zimbabwe's Ecocash product, Netone's One Wallet product and Telecel Zimbabwe's Skhwama mobile money transfer platform. Questions are however raised concerning the consumers' adoption of these services and the determinant factors influencing their acceptance and usage.

2. BACKGROUND OF THE STUDY

The worldwide use of mobile phones has proliferated since the turn of the millennium and they are professed to be devices that serve the individual that owns it, they are also recognized as a social artefact. In Zimbabwe, the ubiquity and convenience of the mobile phones has brought about new value and immeasurable opportunities in the delivery of financial services. For business enterprises, the opportunities include reaching vast numbers of new customers particularly the rural unbanked population and providing better services to existing financial service consumers. For customers, the opportunities include increased affordability, service convenience, flexibility and security. Furthermore, the mobile

phone may even open access to financial services for many who are currently excluded from the market altogether – the majority of the population in many developing countries, (Jenkins, 2008).

Expectations are undoubtedly high that mobile money transfer services will open up financial sector services to millions of unbanked Zimbabweans, particularly in the rural areas since they only need mobile phones to access a certain range of essential financial services which they had no access to. However, the economic meltdown which prevailed in Zimbabwe over the past decade contributed enormously to the failure by telecommunications industry and traditional banking institutions to adopt mobile money transfer platforms in spite of their power to cover a broad spectrum of customers. Contrarily, in East Africa, Kenya in particular, mobile money transfer services have had a transformative effect especially to the unbanked low-income earners, who had been traditionally ignored by commercial banks. M-Pesa, an MMT platform is regarded as a mobile money success story, and only time will tell whether the same will pick up in similar fashion in Zimbabwe. Hence the main objective of this study was to analyse the factors that affect consumers' adoption of mobile money transfer services in Masvingo urban, Zimbabwe.

3. STATEMENT OF THE PROBLEM

In spite of the weighty investments, passionate advertising and promotional campaigns, media reports indicate that the usage of MMT services is negligible although there are more than a million registered subscribers, (www.techzim.co.zw). Other reports suggest that despite the enormous opportunities, subscribers seem incredulous and hesitant to try and use the services. Therefore the study sought to analyse, from the consumer behaviour perspective, the factors affecting the consumers' adoption of mobile money transfer services with particular reference to perceived ease of use, perceived usefulness, perceived trust and relative advantage.

4. MOBILE MONEY

In general, the true meaning of money is central to all forms of transactions, (Tobbin, 2009). Economists argue that the two key roles of money are: as a store of value and a means of exchange. However, since the Zimbabwean market operates a cash economy, mobile phones' ability to store value and be used as a means of exchange will depend on users' adoption of the mobile money transfer technology. Jenkins (2008) defines mobile money as money that can be accessed and used via mobile phone. The adjective "mobile", as used within the specific contexts of "m-commerce" or "m-business", signifies an "anytime and anywhere access" to business processes. The access takes place using mobile communication networks, making available these services independent of the geographic location of the user, (Hohenberg and Rufera, 2004).

4.1 Mobile penetration in Zimbabwe

The mobile phone penetration rate in Africa has exploded since the year 2000, as it has elsewhere in the developing world, according to the African Development Bank. In 1998 there were fewer than two million mobile phone users in Africa, but by 2009, the number had grown to over 400 million. The mobile telecom operators are therefore increasingly enamoured by the potential of reaching millions of prospective customers, especially the rural population who account for more than 60% of Africa's total population and previously had no access to banking services. In Zimbabwe, the mobile phone penetration growth rate has been remarkably high over the years. The mobile telecommunications operators face a daunting task of matching the increased appetite for MMTs.

The mobile penetration rate for all the three telecom giants in Zimbabwe has increased from below 1 million subscribers in 2006 to more than 9 million as at end of year 2011 as shown in Figure 1 on the next page. Econet Wireless Zimbabwe, (the parent company of Ecocash, the leading MMT platform) has had phenomenal growth in mobile penetration rates during the same period way ahead of its rivals. In addition, a survey by a local daily paper (Newsday, April 28, 2012) suggested that there are 1.1 million (about 10%) people in Zimbabwe who have bank accounts, compared to the eight million who possess mobile phones, which indicates a rapid growth in the use of mobile phones in general.

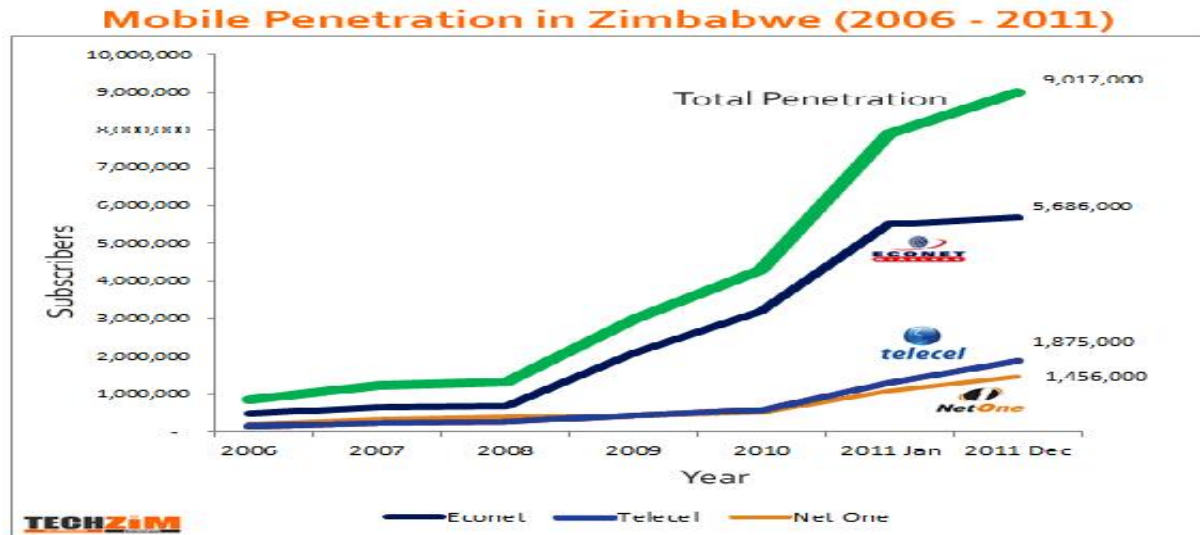


Figure 1: Mobile penetration rates in Zimbabwe

The adoption of the multi-currency financial systems since 2009, the prevalence of a highly regulated and protected mobile telecoms market, and notable absence of foreign competing firms act as strategic catalysts by present enormous growth opportunities for MMT services. Market analysts forecast a highly bright future benchmarking against the success stories of Safaricom's M-Pesa products in other developing countries such as Kenya and Tanzania. On the other hand, Zimbabweans have traditionally been sluggish in uptake of new technological products/services exhibited by the slow adoption and implementation of related products such as e-commerce, e-banking, SMS banking among others. This, coupled with depleting market confidence in the conventional financial service sector somewhat presents a skeptical reception of MMT platforms in Masvingo urban.

4.2 Mobile money transfer services

In his article titled "Modelling Adoption of Mobile Money Transfer: A Consumer Behaviour Analysis", Tobbin (2009) view mobile money transfer as the process of transmitting money from one person to another through phone activation that can be ultimately honoured with cash transactions by a financial or business institution. He suggested that studies on MMT falls between two main mobile technologies related research areas namely mobile payment and mobile banking. He added that whereas literature on the adoption of mobile banking and mobile payment and the more broader scope of mobile commerce although not quite exhaustive have enjoyed significant attention of many scholars in recent times, research on mobile money is at its formative stages with a few DFID reports dominating (Jenkins, 2008; Hughes, 2007) recent research.

Conceptualised from the technical perspective, Veijalainen et al, (2003) suggest that mobile money transfer basically involves electronic transactions conducted using a mobile terminal and a wireless network. Mobile terminals include all portable devices such as mobile telephones, as well as devices "mounted in the vehicles that are capable of accessing wireless networks" and perform mobile commerce transactions. In addition, Müller-Veerse, (2000) view mobile money transfers as "any transaction with a monetary value that is conducted via a mobile telecommunications network". His focus was on the application of mobile hand-held devices such as mobile phones, smart phones and pocket PCs to transfer money across subscribers.

In essence therefore, as a process, mobile money transfer refers to the movement of value that is made from a mobile wallet, accrues to a mobile wallet, and/or is initiated using a mobile phone. It is thus a platform which allows mobile phone users or subscribers to transfer money from one to another using their hand-held devices such as smart phones. This paper accordingly defines mobile money transfer as including business activities involved in the transfer of value, the buying and selling of goods and

services, using hand-held devices such as mobile phones or personal data assistants (PDAs). It includes any transaction, involving the transfer of money which is initiated and/or completed by using mobile access to computer-mediated networks with the help of an electronic device.

The adoption of mobile money transfer services is not the same for all countries across the globe. In most cases, the different economic environments entail that the adoption of mobile money transfers systems in developed countries is not the same for the developing countries. Udovicic (2006) discovered that in Europe and the US, there has been limited use of mobile money transfer to date, despite earlier expectations to the contrary. The slower pace of adoption in these countries is perhaps no surprise, however: banked customers have had little reason to move from accessible, trusted traditional as well as electronic channels such as internet or use of card at point of sale, to a new approach which is not yet stable or pervasive. The same cannot be said for less developed countries like Zimbabwe which has the majority of the citizens residing in the rural areas where banks and other financial services are scarce. One common phenomenon in these developed nations is that MMTs are not a blue-ocean product; rather they are simply an extension of current product lines. Consequently the adoption of product extensions rides on the success of their predecessors. Needless to say that, the reputation of the parent product allows rapid market acceptance of any such extensions. The same might not be true for the developing world like Zimbabwe where MMTs are viewed largely as new to the world products whose adoption require methodical analysis, benchmarking against the adoption of such technology related initiatives in general.

Zimbabwe like most developing economies has a great number of households that depend on domestic remittance. An increase in urbanization in city centres and constant migration means that the need for money transfer services has been quite significant. Informal methods of remitting funds to families and relatives are quite established with diverse difficulties and challenges. One of the key factors in the choice of remittance services everywhere is accessibility. Until recently, the main methods of remittance have been through normal channels such as commercial banks. However, the major limitation with banks is how they are geographically dispersed coupled with their network coverage especially for the largely rural populace. In the last few years, several mobile money transfer systems have been launched by the three major telecom operators and as such many Zimbabweans that previously had no exposure to basic financial services are encountering them for the first time. This makes it easier to draw customers into the formal banking system where they can be offered access to a wider and more sophisticated range of products.

5. THEORETICAL FRAMEWORK

In technology adoption literature, Roger's (1983) innovation diffusion theory (IDT), Davies' (1989) technology acceptance model, and the extended technology acceptance model (Davis, 1989), have been used to explain possible consumer behaviour on adoption and acceptance patterns of new technologies and innovations, (Tobbin, 2009). Several researchers have sought to develop constructs that affect consumers' behaviour when deciding on the adoption of mobile services by applying these existing information system theories and models (Wu and Wang, 2005; Hung et al, 2004; Bouwman et al, 2007; Barnes and Huff, 2003).

5.1 Technology Acceptance Model by Davis (1989)

The Technology Acceptance Model is established on the premises that the perceived usefulness and perceived ease of use are fundamental determinants of system MMTs adoption and use (Davis, 1989). These two beliefs create a favourable disposition or intention toward using the MMT systems that consequently affects its use. Perceived usefulness is the "degree to which a person thinks that using a particular system will enhance his or her performance", whereas, perceived ease of use is "the degree to which a person believes that using a particular system will be free of effort", (Davis, 1989). The research framework for this study was based on Tobbin (2009)'s study of modelling the factors affecting the adoption of MMTs in Ghana. The hypotheses were thus based on his propositions with additions from other scholars such as Tan and Teo (2000).

A review of information technology literature revealed that the intention to use a specific technology can be seen as a determinant of actual usage such that behavioural intentions rather than actual usage is

deemed more relevant when considering the adoption process. In their framework for analysing the adoption of internet banking, Tan and Teo (2000) suggested that the intention to adopt internet banking was considered as the dependant variable whilst perceived behavioural constructs were considered to be independent variables. Similarly, the intentions to use MMTs have been considered as dependant variable whilst the user determinant factors are regarded as the independent variables.

5.2 Innovation Diffusion Theory by Rogers (1983)

The IDT has received similar attention by scholars in explaining consumer behaviour towards new technology. Rogers, (1983) suggest that diffusion of innovation is achieved by how a social system accepts and begins to use (adopt) an idea or a technology. He asserts that consumers' adoption of certain tech-products depends on product characteristics, for instance, its perceived relative advantage - the degree to which the product is perceived as being better than the practice it supersedes. Therefore, adoption of MMTs will depend on consumers' expected gains or losses from the service.

6. RESEARCH MODEL AND HYPOTHESIS

Copious empirical tests have shown that TAM is a robust model of technology acceptance behaviours in a wide variety of technology. Even though TAM was applied to study work-related activity, the theory is applicable and has been successfully applied to diverse non-organizational settings including several fields of mobile commerce.

6.1 Adopted TAM model for MMTs

The model adopted for this particular research depicts the combination of constructs from the TAM and the IDT models with an extended factor, perceived trust. The identified factors were deemed to have an influence on consumers' adoption of MMTs in Masvingo urban. In relative terms, many of the factors identified in these two models are similar with those used in previous studies, (Hoppe et al, 2001, Tobbin, 2009).

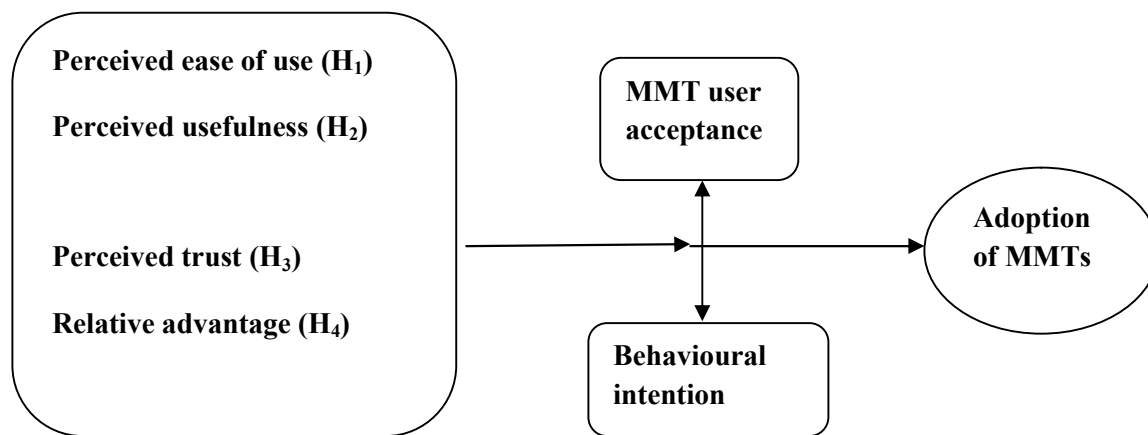


Figure 2: Adopted TAM Model for MMTs.

According to the TAM, perceived usefulness is defined as “the degree to which a person believes that using a particular system would enhance his or her job performance” and perceived ease of use is defined as “the degree to which a person believes that using a particular system would be free of effort” (Davis, 1989). Both constructs influence one’s attitude toward system usage, which influences one’s behavioural intention to use a system, which, in turn, determines actual system usage. The underlying logic is that users react rationally when they elect to use a technology. The more useful and easy to use is the MMT services, the more they will be used.

6.1.1 Perceived ease of use

The original TAM model, defines PEOU as “the degree to which a person believes that using a particular system will be free of effort” (Davis, 1989). In mobile money transfer services, it relates to the registration procedures, ease of use of the payment procedure, easy access to customer services, minimal steps

required to make a payment, appropriate screen size and input capabilities. In order to prevent the “under-used” or “inactive” system problem, the MMT platform should be both easy to learn and easy to use. Therefore we hypothesize that;

H₁: The higher the perceived ease of use, the more likely that consumers will use MMTs

6.1.2 Perceived usefulness

Perceived usefulness affects the demand and subsequent adoption of MMTs. The need for more convenient financial services contributes towards high perceived benefits of MMTs. A convenient as well as safe and secure MMT is preferable for consumers. In essence, convenience and mobility are regarded as the main benefits that are perceived by consumers along with how well consumers believe mobile services can be integrated into their daily activities (Davidson and McCarthy, 2010). Therefore we hypothesize that:

H₂: The higher the perceived usefulness of MMT services the more likely the customer will adopt.

6.1.3 Perceived Trust

In mobile payment systems literature, trust is defined as the belief that vendors/agents will perform some activity in accordance with consumers' expectations. Amoroso and Watanabe (2011) observed that trust is especially important in influencing consumer behaviour in uncertain environments such as mobile money transfer and internet based e-commerce. Therefore, perceived trust is also likely to be a critical factor in the adoption of MMT services because consumer trust in a company's integrity, benevolence and competence is pertinent in deciding to undertake any transaction with it. Therefore the following hypothesis was formed:

H₃: The higher the perceived trust, the more likely that the customer will adopt the MMT services.

6.1.4 Relative advantage

Relative advantage - the degree, to which a person believes that a particular technology would enhance his or her job performance, is regarded as a contributing factor towards adoption of related concepts such as mobile money transfer services. It is therefore possible to suggest that the advantages that mobile money transfer services offer over and above traditional banking methods could affect its rate of adoption. This provides support for the hypothesis that;

H₄: The greater the perceived relative advantage of using MMTs, the more likely that consumers would be adopted.

7. RESEARCH METHODOLOGY

To ensure achievement of the research objectives, a review of prior research studies was conducted (Tobbin, 2009; Khodawandi et.al 2003; Udovicic, 2006). The constructs used to develop the questionnaire were extracted from related research studies on mobile banking, mobile payment, electronic banking and e-commerce. In Zimbabwe, the adoption of mobile money transfer services has been met with mixed feelings, thus the use of TAM (Davies, 1989) model assumptions combined with Diffusion of Innovation theory (Rogers, 1983) assertions in developing data collection instruments. A survey was conducted in Masvingo urban. The survey questionnaire comprised of questions soliciting for information on the consumers' awareness and usage of mobile money transfer services, factors influencing their adoption decision with particular reference to user determinant factors used by Tobbin (2009) with adjustment to suit the Zimbabwean market. Perceived ease of use, perceived usefulness, relative advantage, and perceived trust were the major factors identified from a review of literature and subsequently used to determine how they influence adoption of mobile money transfer services measured against behavioural intention and user acceptance of MMTs.

A sample of 300 (n=300) MMT customers was used for the survey with only 272 successfully completing giving a 90.6% response rate which is regarded satisfactory for subsequent data analysis. Over and above the cost considerations and desire for relative objectivity, decisions on the sample size (n=300) were made in line with similar research studies which had sample sizes ranging between 114 to 1 167

(Khraim et.al, 2011, Tobbin, 2008, Udovicic, 2006). Convenient and purposive sampling techniques were used to select respondents. The SPSS version 16.0 was used to analyse quantitative data, and compute linear regression analysis for hypothesis testing. Prior to analysis, reliability and validity of data was tested using the Cronbach's Alpha test which for all the determinant factors was above 0.6 which is considered valid and reliable for discussion and analysis. Pre-testing of the questionnaire was done in consultations with fellow researchers and lecturers at the local state university cross-check on all questions. Questionnaire administration was done with the help of an assistant in gathering information from college students at local state colleges, MMT customers at private business companies, government offices, shopping malls and high density suburbs in Masvingo urban.

8. RESEARCH FINDINGS

The respondents were asked whether they were aware of the mobile money transfer services offered by the telecom companies. In total, 88.2% were aware of the MMT services through newspaper ads, television and radio ads and road-shows. The respondents reported on their usage rate of mobile money transfer services by answering to a question, 'how often do you use MMTs per month?' The results are depicted in Table 1 below.

Table 1: MMT Usage Rate

Usage rate	Once	Twice	Thrice	More than thrice	Never
Percentage response	44.12	29.41	5.88	13.24	7.35

The usage results indicates that 44.12 % of the respondents use MMTs only once per month, 29.41% twice per month, 5.88% of the respondents use the service thrice per month, 13.24 using the service more than thrice per month, and 7.35% have never used. The usage rate is thus infrequent as comparatively least of the customers use the service more than thrice per month. This is in line with what Tobbin (2009) discovered, that the usage of MMTs or monthly traffic is low.

Cross tabulations were also undertaken to ascertain the relationship between usage rate (frequency of use per month) and most activity done. The results of the cross tabulations are presented in Table 2.

Table 2: Cross tabulation results for MMT usage rate and most activity done.

How often do you use MMTs per month? (Percentage Response)	What activity do you do most?					
	Deposit /withdraw	Money transfer	Airtime top-up	Bill payment	Other	Total
Never	25	75	-	-	-	100
Once	46.6	10	36.7	6.7	-	100
Twice	25	50	15	5	5	100
Thrice	-	25	25	-	50	100
More than thrice	55.6	22.2	22.2	-	-	100

A total of 120 respondents who said they have used MMTs once per month, 46.6% of them have used it mostly to deposit or withdraw money while 36.7% to top-up airtime. 80 of the respondents who said they have used it twice per month, 50% of them have used it for money transfer, whilst 25% have used it for depositing and withdrawing money with only 15% saying they used it for airtime top-up. Of the 36 respondents who said they have used it more than thrice per month, 55.6% have used it to deposit or withdraw money, 22.2% for transferring money whilst another 22.2% to top-up airtime. 50% of the customers who said they have used Ecocash thrice per month have used for other services mainly registering other customers, whilst 25% of them have used it to top-up airtime with another 25% using it to transfer money. Therefore, of the 272 respondents, a combined total of 200 have used MMT services once or twice per month mostly to deposit/withdraw money, transfer money or top-up airtime. This is in line with Chatziagapis (2006) study findings in Greece which revealed that most active customers use mobile financial services once or twice per month to undertake routine transactions and Tobbin (2009)'s revelation in Ghana that MMTs are used for routine purposes infrequently per month.

8.1Hypotheses testing results

Hypotheses statements were formulated based on constructs derived from the IDT and TAM model. Therefore, to test the hypothesis statement, the multiple linear regression analysis was adopted for each construct. User acceptance and in some cases behavioural intention was considered the dependant variable whilst the others were regarded independent.

8.1.1Perceived Ease of Use

With regards to perceived ease of use, respondents were asked to express the extent to which they agree or disagree with a set of questions with constructs extracted from the TAM model. **Multiple regression analyses** were run to test the hypothesis statement (H_1) in order to establish the relationship between perceived ease of use and user acceptance and the results are shown in Table 3 below.

Table 3: Linear regression results for Perceived Ease of Use

	Unstandardised Coefficients		Standardised Coefficients	T-test	Sig.
	B	Standard. Error	Beta		
Use instructions are understandable	.017	.090	.015	.185	.853
MMTs are easy to use	-.431	.119	-.333	-3.619	.000
Learning to use MMTs is easy for me	.471	.125	.331	3.771	.000

a. Dependant variable: I am very likely to adopt MMT services

Pearson's Chi-square states that, the lower the significance value, the less likely it is that the two variables are independent (unrelated). Table 1 shows the significance values from the three questions. It can thus be deduced that perceived ease of use is related to user acceptance. This is confirmed by the low significance values of 0.000; 0.000; and 0.001 for all the three questions which indicate that the two variables perceived ease of use and user acceptance are related. Therefore, we accept the hypothesis statement (H_1) that the higher the perceived ease of use, the more likely that consumers will use MMTs.

Results in Table 1 confirm prior research findings which have concluded that PEOU is a key determinant to consumer behavioural intentions (Davidson and McCarthy, 2010). Therefore in order to prevent the "under-used" or "inactive" system problem, mobile money transfer systems should be both easy to learn and easy to use. The registration procedures should not be complex, payment procedures should be easy and compatible with the available technology for example, easy access to customer services, minimal steps required to make a payment, appropriate screen size for mobile phones and simple input and output process. Also, the services should be accessible on mobile phones with the most basic features and software.

8.1.2 Perceived Usefulness

With regards to the perceived usefulness, first ANOVA tests were run to determine whether there is a linear relationship between perceived usefulness and behavioural intention to adopt mobile money transfer services and the results are shown in Table 4 below.

Table 4: ANOVA test results for Perceived Usefulness

Model	Sum of squares	Degree of freedom	Mean square	F-test	Sig.
Regression	10.933	3	3.644	3.012	.031
Residual	323.302	268	1.210		
Total	335.235	271			

The ANOVA tests were significant at 3.1% indicating that there is a strong linear relationship between perceived usefulness and intention to use MMTs, implying that the higher the perceived usefulness, the greater the chances that consumers will adopt the service.

Table 5: Regression results for Perceived Usefulness

	Unstandardised Coefficients		Standardised Coefficients	T-test	Sig.
	B	Standard. Error	Beta		
I find MMTs beneficial	.102	.075	.106	1.354	.017
MMT services are easily accessible	-.196	.073	-.191	-2.705	.007
Has made money transfer easy for me	.103	.092	.090	1.120	.002

b. Dependant variable: I am very likely to adopt MMT services

Table 5 above shows the regression results for perceived usefulness and user acceptance. The regression coefficients (B-values) indicate the direction of the relationship whilst the significance value denotes the nature and the strength of the relationship between the dependant and predictive variables. Perceived usefulness was considered the independent variable whilst user acceptance was the dependant variable. The results indicate that the perceived usefulness variables: I find MMT services beneficial: ($B = .102$) is significant at $P = .017$; MMT services are easily accessible ($B = -.196$) is significant at $P = .007$; and MMTs have made money transfer easy for me ($B = .103$) is significant at $P = .002$. The negative regression coefficient on MMT services are easily accessible ($B = -.196$) suggest an inverse relationship with user acceptance implying that difficulties in accessing the MMTs services will lower the chances of consumer adoption. However, the other two PU variables have positive regression coefficient suggesting that the greater the perceived usefulness, the more likely that customers would adopt services. Therefore, we accept the hypothesis statement H_2 .

The findings concur with other scholar's study results. In a similar study in Japan, Amoroso and Watanabe (2011) found that perceived usefulness emerged as the most important factor affecting the constructs related to user acceptance of a variety of technologies. Moreso, Udovicic (2006) found that perceived usefulness was one of the main factors influencing acceptance of online banking technologies. In developing the TAM model, Davis, (1989) found a stronger and more consistent relationship between perceived usefulness and usage than between other variables reported in prior studies thus he concluded that individuals evaluate the consequences of their behaviour in terms of perceived usefulness and base their choice of behaviour on the desirability of the usefulness of the particular technology.

8.1.3 Perceived trust

Respondents were asked to express the extent to which they agree or disagree with three statements relating to perceived trust, that is: “is a reliable money transfer service; agents are trustworthy; and agents are honest” which were considered as the independent variables whilst **user acceptance** was the dependant variable represented by the statement; “I am very likely to adopt Ecocash”. The hypothesis statement (H_3) was tested using **multiple** linear regression and results are presented in Table 6.

Table 6: Regression results for Perceived Trust

	Unstandardised Coefficients		Standardised Coefficients	T-test	Sig.
	B	Standard. Error	Beta		
Is a reliable money transfer services	-.276	.086	-.226	-3.222	.001
Agents are trustworthy	.421	.101	.388	4.153	.000
Agents/dealers are honest	-.311	.088	-.289	-3.516	.001

a. Dependant variable: I am very likely to adopt MMT services

The regression results on perceived trust variables confirm that there is strong relationship between perceived trust and user acceptance of MMT services. The first statement; “Is a reliable money transfer service” ($B = -.276$) has a negative regression coefficient which indicates an inverse relationship and a significance value of $P = .001$ which imply a stronger relationship between reliability of the service and user acceptance. Contrarily, the second PU variable: “agents are trustworthy?” ($B = .421$) has a positive regression coefficient implying a positive linear relationship between trustworthiness and user acceptance of MMTs. Also, the significance level of ($P = .000$) which again entails a positive relationship between perceived trust and user acceptance. Lastly, the third statement; “agents are honest?” ($B = -.311$) has a negative regression coefficient which denote an inverse relationship, implying that dishonesty is a critical determinant of user acceptance. Moreover, the significance value of ($P = .001$) signify that honesty and integrity characteristics of MMT agents are important in determining user acceptance of the service. Therefore, the hypothesis statement H_3 : *The higher the perceived trust, the more likely that the customer will adopt MMT services*) is accepted.

Essentially, the perceived trust variable measures the consumer’s level of assurance that the service will be provided with minimum possible hindrance. As a result, the existence of MMT agents who are well integrated into the Masvingo urban communities will be necessary for this level of trust to be obtained. MMT consumers would expect some level of privacy from these agents over and above reliable network and service provision. Therefore, the reliability of MMT services as measured by the successful utilization of the service over a period of time with little or no interference would thus be critical in determining user acceptance.

8.1.4 Relative advantage

In view of the relative advantage of MMTs, the respondents were asked to express their agreement or disagreement to three questions: “Has made money transfer easy; is a convenient method of money transfer; and is a safe and secure method of money transfer”. Their responses are confirmed by the regression tests results presented in Table 7.

Table 7: Regression results for Relative Advantage

	Unstandardised Coefficients		Standardised Coefficients	T-test	Sig.
	B	Standard. Error	Beta		
Is a safe and secure method of money transfer	-.188	.096	.148	1.954	.052
Is a convenient money transfer service	-.550	.136	-.381	-4.043	.000
Has made money transfer easy for me	.059	.122	.038	.487	.003

a. Dependant variable: I am very likely to adopt MMT services

In terms of convenience and easy transfer of money, respondents believed that the mobile money transfer services have brought about convenience in money transfer. However, with regards to safety and security, the respondents have been sceptical and very suspicious about the security of the MMT services. The results in Table 7 show that all the three constructs were considered significant at ($P = .05$): that is; easy money transfer, $P = .003$, convenient money transfer services, $P = .000$ and safe and secure money transfer method, $P = 0.05$). However, the regression coefficient which show the direction of the relationships suggest that the first two constructs have an inverse relationship with user acceptance whilst the 'safe and secure method' variable has a positive relationship implying that securing and safety are key determinants of user acceptance of MMTs. As a result therefore we accept the hypothesis statement (H_4) that the greater the perceived relative advantage of using MMTs, the more likely that they would be adopted. This validates the conclusions made by Udovicic (2006) that the advantages that mobile money transfer services offer over and above regular banking methods could affect its rate of adoption. In other words, adoption of MMTs is significantly influenced by the perceived relative advantage it offers to the user.

9. Conclusions

A point of interest in this study was how the constructs (independent variables) influenced the consumers' adoption decisions as reflected by the behavioural intention (dependant variable). First, the perceived ease of use (PEOU) was considered to significantly affect the adoption of MMT services, thus it can be concluded that once the customers regard the services as easy to use, the next step would be to accept and use it. The tendency for the customers is to evaluate the user-friendliness of a tech-product prior to making any purchase decisions in such a way that that complex procedures in mobile money transfer services may deter other customers but a more user- friendly service would attract quite a multitude. Secondly, perceived usefulness (PU) proved to be significantly critical in shaping individual customers decision to adopt mobile money transfer services, therefore it suffices to conclude that customers make evaluative decision regarding the tangible benefits of using a particular tech-product/service prior to making any adoption decision. In fact, the usefulness of the MMT services is what will attract the customers over and above the effects of the promotional campaigns, mainly because it is proved at the "moment of truth" where the customer interfaces with the product and gain first time experience which becomes the benchmark for future adoption decisions. Thirdly, the perceived trust was regarded to be an important determinant of consumers' intention to use mobile money transfer, thus it is safe to conclude that, trust in both the agent/dealer and or the parent company is significantly important in influencing the consumers' adoption decision. The reason is simple, once trusted, continued business is a surety, and customer loyalty is immensely a function of perceived trust bestowed upon the service provider by the consumers. Finally, we can draw up the conclusion that the relative advantage of the mobile money transfer services is an essential component in directing and guiding consumers' adoption decisions. The study results show that perceived relative advantage has a positive influence on the adoption of MMTs and that users who feel that mobile money transfer services are beneficial to their lives are more inclined to adopt. It is therefore highly commendable that MMT service providers be considerate of all these

important factors if their products are to receive unwavering market acceptance in this dynamic and highly competitive business market.

10. References

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