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Investigating Factors That Determine Continuous Intention Behaviour To Use Mobile Payment Services In Malawi

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ABSTRACT

Mobile payments usage is low in Malawi and there are many limitations to encourage users to continuously use mobile payments. The purpose of this research was to examine determinants of continuous intention to use mobile payments in Malawi. A quantitative method using the survey approach was used. TAM 3 model was used and seamlessness was added as one of the predictors of the inner model. Data analysis followed Structural Equation Modeling Partial Least Squares using SmartPLS software. The model showed very high levels of internal consistency reliability (CR values > 0.7). Validity was confirmed (AVE > 0.5 and indicator reliability >0.4). There were no collinearity issues (VIF < 5 and Tolerance Values > 0.2). Society norms showed significance in explaining continuous intention (p=0.012). Seamlessness was also found to be significant in explaining satisfaction (p=0.002) and society norms (p=0.001). Seamlessness and service quality were found to have significantly negative effects on satisfaction. The findings of this research provide a guideline for improvements to existing mobile payments systems as well as business models, marketing strategies and customer engagement. Regulators will also find the findings of this study to be very insightful in advancing the mobile payments agenda in Malawi.

Key Words: Mobile Payments; TAM; PLS-SEM; Continuous Intention; Seamlessness

INTRODUCTION

The power of technology to bring about exponential returns in communities and societies across the world cannot be overemphasized. The world economy is characterized by a number of trends but foremost amongst which are financialisation and informationalization (Carmody & Murphy, 2016). Financial services have become highly significant drivers of economic globalization, while with informationalisation, there has been increasing ability to access, manage, and process information at a distance (Carmody & Murphy, 2016). Financial services and information services are linked as the new information and communication technologies (ICTs) for example, mobile phones, computers, and the Internet – have greatly facilitated financial trading and, of course, the informationalization of business activities.

Technological progress in information and communication technology has offered innovations and inventions for wide range of services from payment systems to processing and receipt. If we take the Internet for example, it has revolutionised traditional commerce by boosting sales and creating a wealth of customer information (Madise, 2015). Customer data is a very valuable commodity given its capacity to offer insights into consumer preference (Me, 2017).

BACKGROUND

The emergence and success of electronic commerce led to digitization of payment systems, referred to as electronic payments, or simply e-payments (Ondrus & Pigneur, 2006). Tiwari, Buse and Herstatt (2006, p. 39) probably gives the simplest definition of e-commerce as “the

buying and selling of products and services over the Web". The US Bureau of the Census adds that e-commerce is "any transaction completed over a computer-mediated network that involves the transfer of ownership or rights to use goods or services, completed transactions may have a zero price (e.g. a free software download)" (as cited in Tiwari et al., 2006, p. 39).

According to various scholars, e-payments refer to all payments that are initiated, processed and received electronically and sometimes it can generally be referred to as digital payments and may be linked or not linked to a financial institution or a bank (Hartmann, 2006; Diniz et al., 2011; Srivastava, 2015; Ahmed & Ali, 2017). According to Ondrus and Pigneur (2006), the most common e-payments systems in the world are credit cards, debits cards and email based PayPal transactions. However, due to the widespread usage and adoption of mobile phones around the world, a new channel, called mobile commerce started to emerge adding a new dimension to e-commerce (Ondrus & Pigneur, 2006). Tiwari et al. (2006) concur in their study report titled 'From electronic to mobile commerce' by suggesting that the need for mobility is a key driving force behind wide spread acceptance of mobile commerce.

Mobile payments use mobile money, an electronic currency for transactions (Diniz et al., 2011) and this has led to people using mobile money and mobile payments interchangeably. Currently, there are two kinds of mobile payment or mobile money systems in use around the world; telecommunications-led mobile payment platforms and bank-led mobile payments. According to Madise (2015) and Reserve Bank of Malawi Annual Report (RMB, 2014), of the two types of mobile payment platforms in Malawi, it is the telecom-led mobile money platforms that have

become a key financial player, often touted as being a saving grace among the millions of unbanked people in Malawi, particularly in rural areas. With commercial banks concentrated in urban and semi urban areas, rural areas remain highly financially secluded. Mobile money is a very fast growing industry, not only in Malawi, but in the developing world.

Problem Statement

A range of mobile payment solutions and mobile wallets are being introduced on the Malawian market. Despite an increase in mobile payment solutions in Malawi, data on usage is suggesting that very few people are actually using these services. In their Monthly National Payment Systems Report for June 2017, Reserve Bank of Malawi (RBM) reported that of the 4 million subscribers of telecom-led mobile payments, only 22.1% of registered users were active during the previous 30 days. This trend is not good and therefore it is against this background that this study was instituted to investigate factors that determine continuous intention to use mobile payments by people in Malawi. While there have been studies elsewhere to examine factors that affect adoption and use of mobile payments for example in Somalia (Ahmed & Ali, 2017), in Nigeria (Me, 2017) and in Kenya (Onsongo & Schot, 2017; Tankha, 2016; Jack & Suri, 2011), little is known of the factors that affect the adoption and use of mobile payments in Malawi (Nyirenda & Chikumba, 2014; Tsilizani, 2015; Madise, 2015).

Objectives

The general objective of the study was to investigate factors that determine continuous intention to use mobile payments in Malawi. To achieve the main objective, the study had the following specific objectives;

i. To propose a model of factors that determines people's continuous intention to use mobile payments in Malawi.

ii. To empirically analyse and test the proposed model of factors that determine people's continuous intention to use mobile payments in the context of Malawi.

LITERATURE REVIEW

Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) was coined by Fred Davis in 1985 when he found out that there are two main reasons why people will adopt or reject a technology namely perception of the technology usefulness and perception of ease of use of the technology (Bradley, 2009). TAM is one of the mostly used models when predicting information technology adoption and according to different scholars, it consistently explains between 40% to 50 % of user acceptance and actual usage (Park, 2008; Venkatesh & Bala, 2008; Lee et al., 2003; Surendran, 2012).

Venkatesh and Davis (2000) proposed an extension of TAM, to include possible explanation of perceived usefulness and usage intentions (Venkatesh & Bala, 2008). Venkatesh (2000) also developed a model of determinants of perceived ease of use by arguing that individuals will form early perceptions of perceived ease of use of a system based on several anchors related to individuals' general beliefs regarding computers and computer use. Combining TAM 2 and the model of determinants of perceived ease of use, Venkatesh and Bala (2008) proposed and validated TAM 3 (Figure 1).

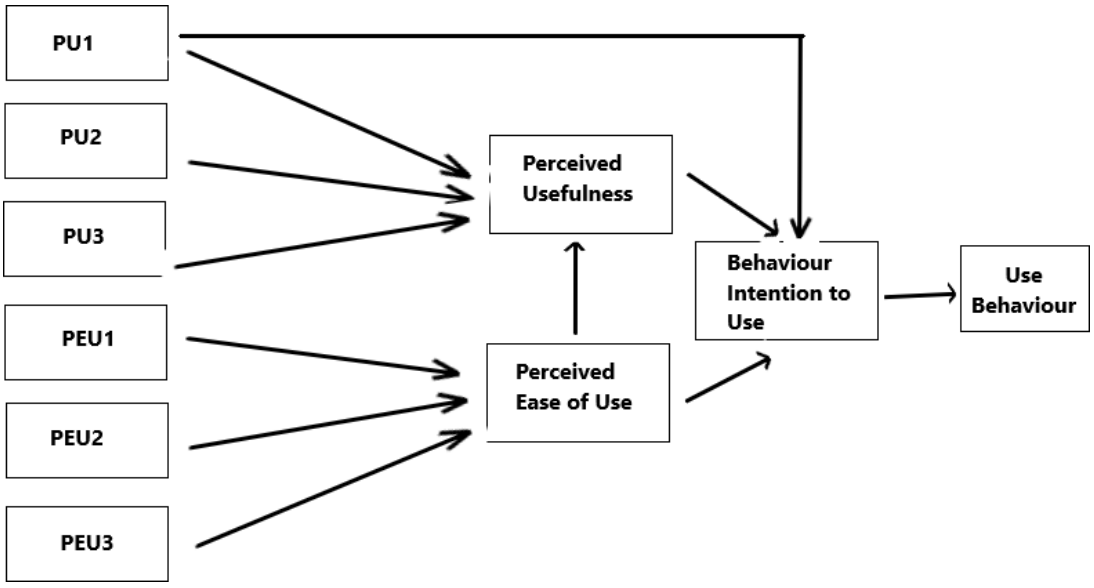

Figure 1: Technology Acceptance Model 3. Adapted from "Technology Acceptance Model 3 and a Research Agenda on Interventions" by B. Venkatesh and H. Bala, 2008, *Decision Sciences 39* (2), p.280. Copyright 2008 by Viswanath Venkatesh and Hillol Bala.

Satisfaction and Continuous Intention

A satisfied customer is more likely to continue using a service or product. Ahmed and Ali (2017) reported a significant positive relationship between satisfaction and continuous intention to use mobile money transfer. Their conclusion was that satisfied customers are more likely to continue using mobile money transfer.

Trust and Continuous Intention

User's trust towards mobile payments has an impact on their continuous behaviour intention to use mobile payments technology. Pavlou (2003) describes trust as the belief that the other party

will behave in a socially responsible manner, and, by so doing, will fulfill the trusting party's expectations without taking advantage of its vulnerabilities. Several studies have found that trust is positively related to continuance intention. In a study to understand challenges of mobile banking in Kenya, Dupas, Green, Keats and Robinson (2012) found that while 63% of people opened an account, only 18% actively used it. Survey evidence from the study suggested that the main reasons people did not begin saving in their bank accounts are that they do not trust the bank.

Perceived Usefulness, Perceived Ease of Use and Continuous Intention

These two are the original constructs put forward by Davis in 1985 as keys determinant of acceptance of an information system. Perceived usefulness is the degree to which consumers believe that a particular technology will facilitate the transaction process. Perceived ease of use is the degree to which a consumer believes that using a particular technology will be effortless. Applying these constructs in mobile commerce, in Nigeria, Me (2017) found that electronic banking provides higher degree of convenience that enables customers to access their money at all times and places. Perceived usefulness directly influences intention, but perceived ease of use acts indirectly through usefulness (Pavlou, 2003).

Subjective Norms and Continuous Intention

Subjective norms negatively affect user's continuous behaviour to use mobile payments. Ahmed and Ali (2017) define subjective norms as the perceived social pressure to perform or not to perform the behavior. In India it was found that the lower usage of online shopping was highly attributed to social-psychological factors for example influence of friends and relatives Sinha (2010).

In Somalia, Ahmed and Ali (2017) also found that the opinion of one's surroundings including friends, colleagues, and family members are contributing very significantly to one's adoption of mobile money transfer. They specifically found that a subjective norm is the best predictor of continuous intention to use mobile money transfer among the respondents of their study.

Perceived Risk, Service Quality and System Quality versus Satisfaction

Satisfaction has been identified already as a major predictor of behaviour intention to use mobile payments in this study. To measure satisfaction other factors must be used to explain the major predictor. Ahmed and Ali (2017) reported that several prior studies use perceived risk, service quality and system quality as antecedent factors. Me (2017) indicated that generally consumers associate risk with loss of money and found that security and privacy are highly significant predictors of adoption of Internet banking. However, Sinha (2010) found that perceived risk was not significant as a whole in online shopping but at gender level found that men and women behaved differently due to perceived risk. When it comes to service quality and system quality, Ahmed and Ali (2017) found that these antecedent factors significantly affected adoption of mobile money transfer.

Task Technology Fit versus Perceived Usefulness

This is another antecedent factor that this research particularly introduced to further understand perceived usefulness of mobile payments especially for corporate users and SMEs. The researcher was curious to find out if at all a better fit between task requirements and mobile

payment system functionalities increases perceived usefulness. Ahmed and Ali (2017) found out that task technology fit has an impact on perceived usefulness.

Firm Reputation and Structural Assurances versus Trust

Trust is a defining feature of most economic and social interactions in which uncertainty is present (Pavlou, 2003). According to Pavlou (2003), trust has always been an important element in influencing consumer behavior. In a study on mobile commerce adoption, Lin and Wang (2006) found that trust has significant positive impact on customer satisfaction and loyalty.

Seamlessness

This is one of the constructs that the current study introduced in order to understand user behaviour towards mobile payments in Malawi. In this study seamlessness is defined as the technical and operational compatibility between two different mobile payment systems regardless of whether the users are on the same network or not.

Hypotheses

Based on TAM model with additional constructs from different literature discussed above as well as new constructs hypothesised for the purpose of achieving this study, figure 3 summarises the hypotheses that were made for this study.

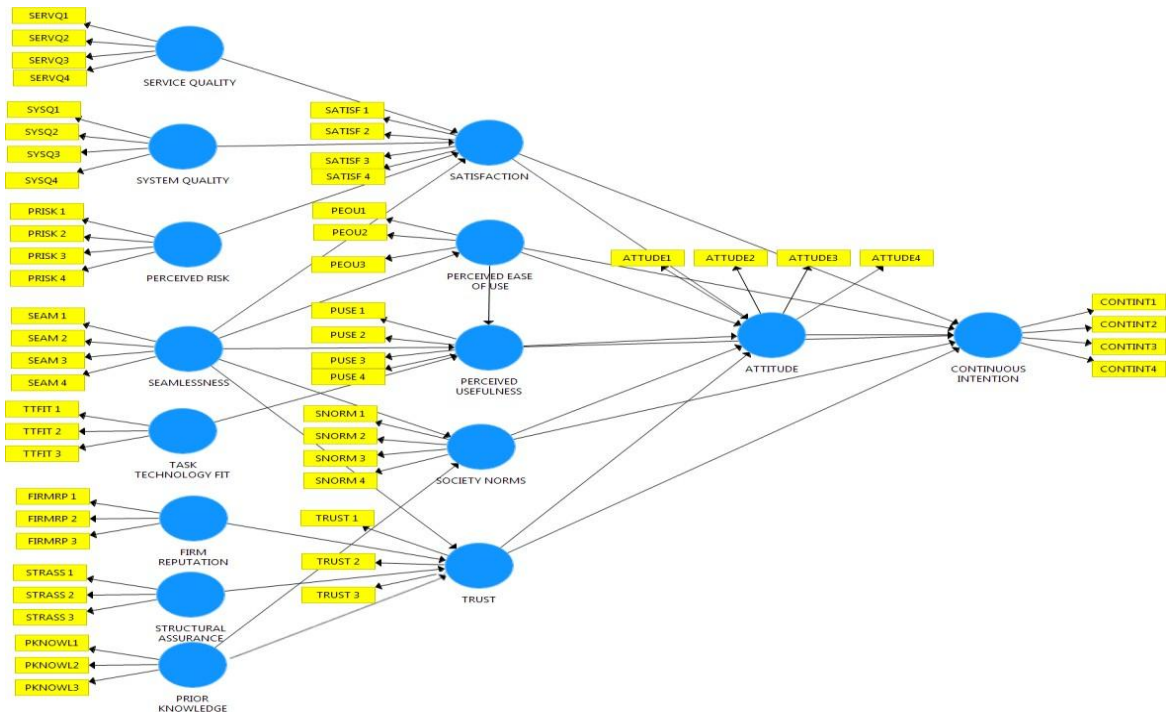

Figure 3: Hypothesised Model for determinants of behaviour for using mobile payments in Malawi.

METHODOLOGY

This study used a quantitative data collection method using the survey approach to collect data concerning the use of mobile payments in Malawi by current users. The questionnaire that was used was based on existing TAM 3 model with some adjustments and additions according to the proposed new model of the study. Data analysis for proposed model was done using Partial Least Squares Structured Equation Modeling (PLS-SEM) using SmartPLS3 software and SPSS (version 22). Structural Equation Modeling (SEM) is a second-generation multivariate data analysis method that is used in behavioral sciences to test theoretically supported linear and additive causal models (Wong, 2013). On the other hand, PLS is a soft modeling approach to

SEM which makes no assumptions about data distribution (Vinzi, Chin, Henseler and Wang, 2010).

Research Design

The specific quantitative strategy that was used for this study is the survey design. As put by Creswell (2009) survey research provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. It includes cross-sectional and longitudinal studies using questionnaires or structured interviews for data collection, with the intent of generalizing from a sample to a population (Creswell, 2009). The survey design is preferred for this study for many reasons. Firstly, a small sample of mobile payments users would need to be studied in order to make conclusions about the population other than studying the whole population. Secondly, survey research is very economical and doesn't require a lot of resources if it's done effectively. Thirdly there is rapid turn-around in data collection. The survey conducted for this study was cross-sectional whereby data was collected at one point in time rather than spread over a period of time.

Setting and Population

The study was conducted in Lilongwe covering both Lilongwe city and Lilongwe rural. Data was collected from users of mobile payment services both telecom-led and bank-led services between end January 2018 and February 2018. The population for this study was defined as subscribers who have an account with any mobile payments service providers. Inclusion criteria comprised

the following: above 18 years of age, male or female, able to read and write English, must have used their mobile payment service in the last 6 months.

Sampling frame and Sample size

According to Jackson (2009), a sampling frame is the set of people that has a chance to be selected given the sampling approach that is chosen. Because the population size was greater than 50,000 (actual population was 4, 581,244), the formula for calculating sample for infinite populations was used as proposed by Godden (2004). Therefore the following formula was used to calculate sample size with 90% confidence level and a probability of 5% with a margin of error of 4% as given in Godden (2004).

$$ME = z\sqrt{\frac{p(1-p)}{n}}$$

Where: ME = Margin of error; n = sample size; z = z-score at 90% confidence level (z=1.645) and p = probability

Substituting the values in the formula we get:

$$0.04 = 1.645\sqrt{\frac{0.5(0.5)}{n}}$$

$$\frac{0.5 * 0.5}{n} = \left(\frac{0.04}{1.645}\right) \wedge 2$$

$$n = \frac{0.25}{0.0005913}$$

$= 422$

Therefore, a sample of 422 respondents was used.

Data Analysis

Data was coded and entered into Microsoft Excel before exporting it into Statistical Package for Social Scientists software (SPSS) for descriptive analysis (i.e. mean, standard deviation, variance, frequency, percent and correlation). To understand the relationships between the constructs, the constructs were first tested for validity and reliability using Exploratory Factor Analysis. This is in line with similar studies (Ahmed & Ali, 2017; and Alkhalif et al., 2012). After confirming the reliability and validity of the constructs, structural model analysis followed. Structural model analysis was done following a procedure for Partial Least Squares Structural Equation Modeling (Figure 4) using SmartPLS 3 software.

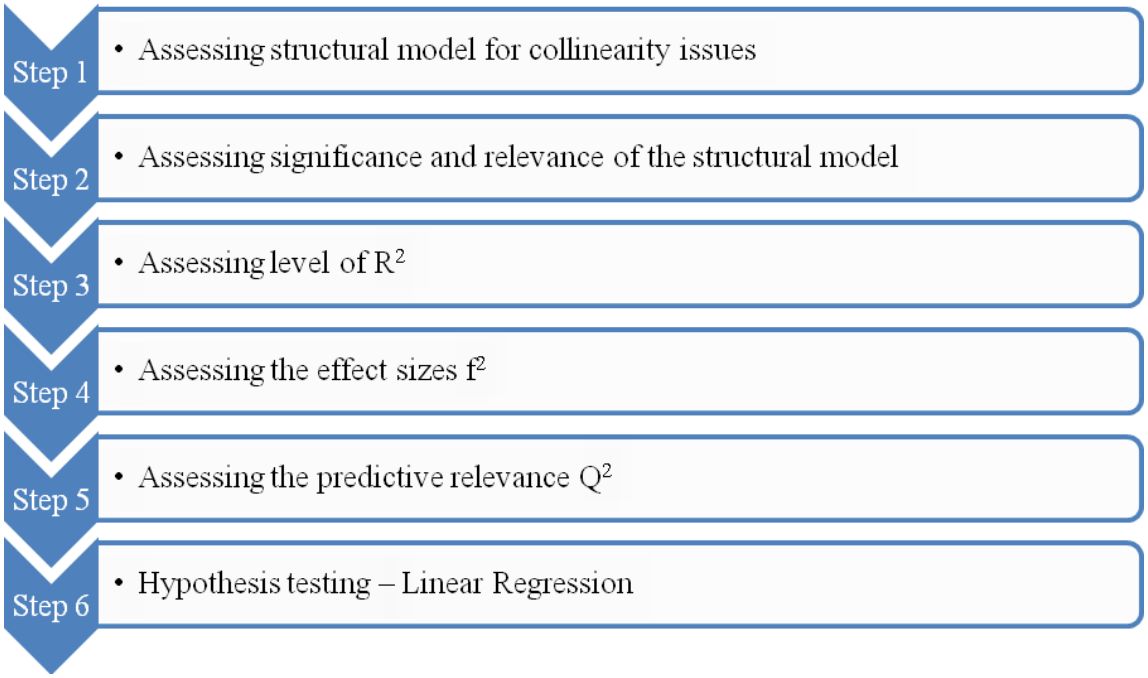

Figure 4: Step by step Structural Model Assessment Procedure for this study. Adapted from 'A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)' by J.F. Hair, G.T. Hult, C.M. Ringle and M. Sarstedt, 2014. Exhibit 6.1, p.169. Copyright 2014 by Sage.

RESULTS

Four hundred questionnaires were returned out of 422 distributed, representing a response rate of 95% of the original sample size. From the returned questionnaires, seven questionnaires were discarded because three respondents had said that they had not used mobile money before while four respondents had only partially answered the questions or some pages were missing from their questionnaires. Therefore 393 questionnaires were used for data analysis representing a final response rate of 93%.

Socio-economic and Demographic Attributes of Respondents

Women represented 60.3% of the respondents while 39.4% were men and 0.3% who did not want to disclose their gender. By age, the age bracket of 21 to 30 had the highest respondents at 57%. Education level wise, more than 80% of the respondents had at least a Malawi School Certificate of Education (MSCE) as a minimum qualification. In terms of marital status, most respondents (66.7%) were single. Only 35.4% indicated that they were heads of household. Table 1 summarises the socio-economic and demographic characteristics of the respondents.

Table 1: Socio-economic and demographic characteristics of respondents

Variable	Category	Frequency*	Percentage
Gender	Male	155	39.4
	Female	237	60.3

	Rather not disclose	1	0.3
Age	Less than 20	69	17.6
	21 – 30	224	57.0
	31-40	59	15.0
	41 – 50	32	8.1
	>50	9	2.3
Education	Primary school	11	2.8
	Secondary (MSCE)	132	33.6
	Certificate/Diploma	128	32.6
	Bachelors degree	113	28.8
	Postgraduate degree	9	2.3
Marital status	Married	119	30.3
	Single	262	66.7
	Widow/Widower	9	2.3
	Divorced	0	0.0
	Separated	3	0.8
Head of Household	Head of Household	139	35.4
	Not Head of Household	254	64.6

*n = 393

Uses of mobile payment services

A whopping 58.5% of the respondents said that they use mobile payments services for sending money to others while 24.9% said they use mobile payments services for buying airtime for their mobile phones. Only 9.4% of the respondents said they use mobile payments services for shopping in stores and shops. Table 2 summarises uses of mobile payments services in Malawi.

Table 2: Uses of mobile payments services in Malawi

Variable	**Category**	**Frequency***	**Percentage**
Use of mobile payments	Buying from shops/stores	37	9.4
	Sending money to others	230	58.5
	Buying airtime	98	24.9
	Paying school fees	5	1.3
	Paying utility bills	12	3.1

	Buying things online	3	0.8
	Other	8	2.0

*n = 393

Collinearity, Convergent validity and Discriminant Validity

There was no collinearity problem among all the constructs. Variance Inflation Factors (VIF) values for all indicators' were lower than 5 and their tolerance values were higher than 0.2. All the constructs showed significant convergent validity with scores of more than the recommended value of 0.5. On the other hand, all Indicator Reliability values were found to be above the acceptable threshold of 0.4 in exploratory research (Hulland, 1999) except for one indicator – Firm Reputation 3 which was 0.3.

Internal Consistency

All the Composite Reliability (CR) scores for the measurement model were found to be above the recommended value of 0.7 (Hair et al., 2014) which means that very high levels of internal consistency reliability were demonstrated among all reflective latent variables (Figure 5).

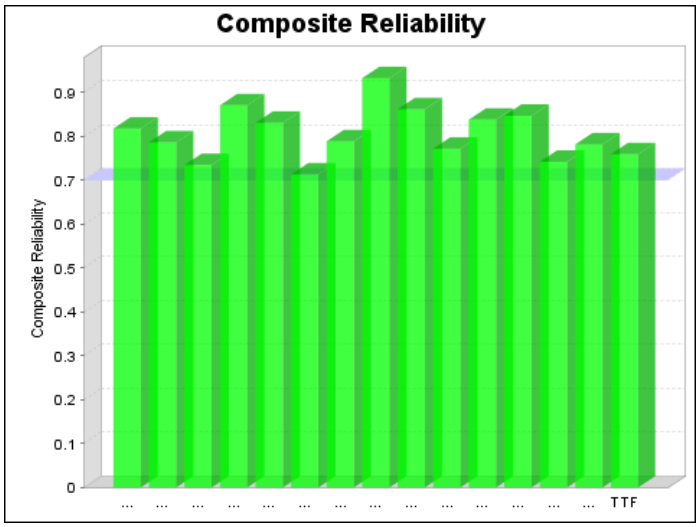

Figure 5: Composite reliability scores for latent variable.

Assessing effect size, f^2.

Attitude (f^2 = 0.01) did not have an effect on the variance explained in Continuous intention, just like perceived ease of use (f^2= 0.015), satisfaction (f^2=0.004), society norms (f^2=0.022) and trust (f^2=0). Perceived ease of use on the other hand showed a small effect on attitude (f^2=0.025) and a medium effect on perceived usefulness (f^2=0.135) (Appendix 7). The f^2 effect size measures the impact of a specific predictor construct on an endogenous construct and generally, effect sizes of 0.02, 0.15 and 0.35 indicate small, medium and large effects respectively (Hair et al., 2014).

Assessing Predictive Relevance of the Model, Q^2

All constructs scored predictive relevance or redundancy (Q^2) values above zero indicating that the path model's predictive accuracy is acceptable except for perceived ease of use which had a value of zero (Appendix 8). Blindfolding procedure was with an omission distance of ten as recommended by Hair et al., (2014) and Wong (2013).

Assessing Significance and Relevance of the Structural Model Relationships

Regression estimates (RE) and the p-value were used to explain relevance and significance respectively (Appendix 9). At 95% confidence interval, society norms (RE=0.153, p=0.003) and perceived usefulness (RE=0.159, p = 0.005) had the strongest effect on continuous intention explaining 15.3% and 15.9% of the total variance in continuous intention respectively and their paths significant. Also, perceived ease of use (RE =0.126, p= 0.016) and attitude (RE=0.111, p = 0.048) explained 12.6% and 11.1% of continuous intention respectively and their paths were significant. However, satisfaction (RE = 0.057, p = 0.243) and trust (RE = 0.020, p = 0.676) explained very little of continuous intention at 5.7% and 2% respectively and their paths were not significant at 95% confidence interval.

As for attitude, 40% of its variance was explained by perceived usefulness (RE=0.400) and the path was significant (p=0.000). This is quite high considering the other constructs contributed less i.e. society norms at 15.8% (RE = 0.158), perceived ease of use at 14.4% (RE = 0.144), satisfaction at 7.9% (RE = 0.079), and trust at 5.5% (RE = - 0.055). The paths for society norms and perceived ease of use were both significant (p = 0.001 and p = 0.002 respectively) while the paths for satisfaction and trust were not significant (p = 0.770 and p = 0.203 respectively).

Perceived usefulness was found to be strongly explained by perceived ease of use (RE =0.326) followed by task technology fit (RE = 0.307) with both paths being statistically significant (p =

0.000). Seamlessness only explained 4.5% (RE = 0.045) of perceived usefulness and the path was found not to be significant (p = 0.312). Satisfaction was strongly explained by system quality at 33.6% (RE = 0.336, p = 0.000) followed by seamlessness at 15.6% (RE= - 0.156, p = 0.001). Both service quality (RE= - 0.109, p = 0.023) and seamlessness portrayed a negative relationship with satisfaction while their paths were both significant. This means that one unit drop in service quality and seamlessness leads to 10% and 15% loss of satisfaction respectively. Perceived risk (RE=0.10, p = 0.034) explained 10% of satisfaction and its path was significant.

Society norms was found to be highly explained by structural assurances (RE =0.219, p = 0.008) followed by prior knowledge (RE = 0.193, p = 0.000) then seamlessness (RE = 0.165, p =0.000) with all paths being significant.

Trust was found to be highly predicted by firm reputation (RE = 0.381, p = 0.000) then prior knowledge (RE = 0.133, p = 0.003) with both paths being significant. But worth of noting here is the negative relationship portrayed by seamlessness (RE = -0.85, p =0.064) although the path was found not to be significant. Perceived risk (RE=0.58, p = 0.08) and structural assurances (RE = 0.35, p = 0.476) explained very little of trust and the paths were not significant.

DISCUSSION

Demographic Factors

Young adults are the biggest users of mobile payments. With a total of 57% of the respondents aged between 21 and 30, it is not surprising as young people are the ones who are most likely to be technologically savvy and are happy to try new things. Women (60.3%) use mobile payments more than men. It is very difficult to explain this finding, but it is most likely that a large part of these female users are still in school and therefore tend to use mobile payments to receive and send money from and to their family and friends. There is no big difference between those with lower education and those with higher education in terms of usage of mobile payments.

Uses of Mobile Payments Services

Not surprising and in agreement with reports from RBM, 58.5% use mobile payment services to send money to others. This could be because when mobile payment services were introduced in Malawi around 2011 by Airtel, the emphasis was on sending money before other services were incrementally introduced. It is no surprise also that the second most use of mobile payment services is buying airtime (24%) for both telecom-led and bank-led services because naturally the mobile payment services agenda had been driven by the telecom companies and in their marketing they had been emphasizing the fact that you can top up anytime with your mobile wallet. Surprisingly, just 9.4% use mobile payment services for buying goods in shops and stores. The findings of this study are in sharp contrast to current trends in other African countries

like Kenya where it was reported that in 2016, the major uses of mobile payments (particularly mobile money) were paying and receiving salaries and bulk payment (90%), depositing money (85%), withdrawing money (98%), buying airtime (69%) and receiving remittances (64%), (The Economist, 2016). Clearly, people in Malawi are not using mobile payments to its fullest capacity and it rests on industry players, regulators and users themselves to change this.

Satisfaction

There is no positive effect of satisfaction on continuous intention to use mobile payments. This finding is in sharp contrast to what Ahmed and Ali (2017) found in usage of mobile money transfer who found that satisfaction had a positive effect on continuous intention for using money transfer. However, it must be said that most studies in the space of TAM and do not include satisfaction as one of the predictors of continuous intention or indeed behaviour intention (Bradley, 2009; Lee et al., 2003).

Trust

User's trust does not have a positive effect on continuous intention. This is similar to what other studies found for example Ahmed and Ali (2017) who studied the relationship in mobile money transfer and Koening-Lewis et al., (2010) who studied the relationship in mobile banking. Perhaps, this finding may be explained well when we look at the predictors of trust. However, a possible explanation could be that trust is something which is earned over a long period of time and therefore, mobile payments users might not have been using the systems for a long time for them to know whether they have trust in the system or not.

Attitude

The construct attitude had one major hypothesis that attitude has a positive effect on continuous intention to use mobile payments. Attitude is one of the constructs that was adopted from the original TAM (Davis et al., 1989). The estimates for H6 were $\beta = 0.111$, t-value = 1.99 and p-value = 0.048 which means that the hypothesis was supported and therefore the hypothesis was accepted.

Perceived Usefulness

Perceived usefulness is one of main constructs for TAM and many people continue to use as one of the major components of understanding information system adoption and usage. In this study, perceived usefulness (PUS) was hypothesised to have a positive effect on both attitude and continuous intention. A couple of studies in the mobile banking space had reported similar findings (Me, 2017; Ahmed & Ali, 2017; Wu & Wang, 2005). It is implied from these results that the more useful people find a mobile payment system or service, they are more likely to develop a positive attitude towards that system or service and in turn the more likely for them to continue using that system or service.

Perceived Ease of Use

Perceived ease of use was hypothesised to positively influence continuous intention and perceived usefulness. Hypothesis H5c has already been discussed above. The estimates of H5a ($\beta = 0.126$, t-value = 2.42, p-value = 0.016) and H5b ($\beta = 0.144$, t-value =3.09, p-value = 0.002) supported the hypotheses and therefore both hypotheses were accepted.

Society Norms

Society norms was hypothesised to positively influence continuous intention and attitude. Other studies had found similar results (Ahmed & Ali, 2017). However, explaining society norms to understand what these results mean might be difficult if we don't explain and understand the predictors of society norms.

Industry Implications of the Study

Firstly, perceived usefulness was found to be the most significant factor in explaining continuous intention to use mobile payments. In turn, perceived usefulness was found to be significantly explained by perceived ease of use and task technology fit. In order to boost people's perceived usefulness of mobile payments, the regulator, could make a policy that every merchant must start accepting mobile payments and this includes paying for government services like road traffic services and fines, immigration services like passport application and renewal. When that happens, most people would see this as befitting their tasks and lifestyle and would increase their perception of mobile payments usefulness. As it is now, most people in Malawi do not see how mobile payments fit into their daily tasks because it is not widely accepted. Changing this would improve people's perception of mobile payments.

Secondly, it should be noted that while perceived ease of use was found to influence perceived usefulness, it was also found that perceived ease of use also directly influences both attitude and continuous intention to use mobile payments. Therefore, marketing efforts by service providers should focus on showing people how easy it is to use mobile payments. This could be done by using visual arts like videos, comic stories and even infographics. Current marketing efforts by

service providers are customer acquisition centric and not informative centric. If players understand this, they could save money by speaking directly to the people's hearts and winning them.

Thirdly, society norms were also found to be highly significant in explaining continuous intention to use mobile payments. In turn, society norms were significantly explained by structural assurances, prior knowledge and negatively by seamlessness. Structural assurances is talking about things like people feeling safe about their privacy as well trust in the system, in case of system failure and having no hidden costs. Players like banks and telecom companies should educate users about threats to the security of their funds as well as privacy of their transactions and themselves as individuals. For example providing assurances that in terms of system failure or a possible hack, their funds are safe and they could go further to have agreement statements at the time of registration taking responsibility to refund people funds should such cases happen. This would create a generally positive image of mobile payments in the public domain which will in turn inform opinion about using mobile money as the study has shown us that society norms influence continuous intention.

Seamlessness was found to be highly significant in explaining society norms. This means that, people value interoperability and a lack of it, leads to a negative image in the public domain. The need for more interoperability was also proposed and discussed by the global mobile telecommunication companies' association, GSMA in their State of the Industry 2014 Report (GSMA, 2014). If mobile payments industry players want to reap the benefits of their investments, they need to start making their services seamless as this will help create confidence

and trust among the general public and will lead to a better attitude and continuous intention to use mobile payments.

CONCLUSIONS AND RECOMMENDATIONS

Firstly, the study has shown that, when it comes to continuously using mobile payments, society has a crucial role to play and players must be on their feet to understand what the society is telling them. Enhancing structural assurances by improving privacy and guaranteeing safety of funds as well as making systems and services as seamless as possible will most likely positively improve society's attitude towards mobile payments and eventually continuous intention. Therefore, on society norms, it is concluded that what the society thinks about a service has a significant impact on individual usage of that service. For mobile payments to succeed, service providers must do all they can to make sure that they are maintaining positive image with society. In return, it is concluded that society norms or perception is influenced by seamlessness of services and structural assurances.

Secondly, the more useful the users find mobile payments to be, the more the users are going to continuously use mobile payments. Perceived usefulness also has great positive impact on user's attitude. Therefore, service providers must focus on creating a need among the users so that they continue to see mobile payments as useful and eventually positively affecting their attitude and eventually influencing their continuous intention behaviour. Further conclusion is made that the easier it is to use a mobile payments service, the more the user will find that service useful. On

the other hand, if a mobile payment service is deemed to fit everyday tasks of users, the more useful the user will find that service.

Thirdly, mobile payments services must be easy to use. The easier it is to use a mobile payment service the user develops a positive attitude and is more likely to continuously use that mobile payment service. However, the study failed to find what predicts perceived ease of use as the only factor which was proposed, seamlessness, was found to be insignificant in explaining perceived ease of use.

Lastly people's attitude determines continuous intention behaviour. Positive attitude leads to positive behaviour intention. In turn, attitude towards mobile payments is affected by perceived usefulness, perceived ease of use and society norms. If a mobile payment system is deemed to be useful by users, then the user's attitude towards using that mobile payment is greatly improved positively. The same for ease of use of the service as well as what society generally thinks about mobile payments.

Recommendations

Based on the findings of the current study, the following recommendations are made:

a. Mobile payments service providers should do their best to ensure that their services are seamless and interoperable allowing users to transact between services and wallets without problems.

b. Mobile payments service providers must not hide their charges in order to avoid negative society perception.

c. Marketing language for mobile payments services must focus on showing the users how the services fit into their everyday lives.

d. Marketing efforts by service providers should focus on showing people how easy it is to use mobile payments. This could be done by using visual arts like videos, comic stories and even infographics. This is in contrast to current marketing efforts by service providers which are customer acquisition centric and not informative centric.

e. Many merchants must be introduced on the mobile payments systems to ensure that users find the services useful. This is directly related to the need for service providers to focus on creating a need in the users.

f. Customer experience is very important in ensuring that users develop a positive attitude. Therefore, mobile payment service providers could offer customer experience opportunities for users to enjoy some benefits for free or a small fee so that they show them how useful some services are. Later, these companies can start to charge fees.

g. Reserve Bank of Malawi as the regulator should deliberately encourage Government to start accepting mobile payments for public services like immigration and road traffic fees and fines. This is one way of creating need in people as well as ensuring that mobile payments fit into people's daily lives. This also has an opportunity to positively enhance society perception of mobile payments.

h. Mobile payments service providers should start to educate users (and potential users) about threats to the security of their funds as well as privacy of their transactions and themselves as individuals. They must provide assurances that in terms of system failure

or a possible hack, their funds are safe and they could go further to have agreement statements at the time of registration taking responsibility to refund people's funds should such cases happen.

i. Due to the high impact of society norms on both attitude and continuous intention behaviour, industry players should start to use role models and public figures in their marketing and advertising efforts. This would help to boost people's confidence in mobile payments.

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