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Continuance Usage of Mobile Banking Services Among Small and Medium Enterprises (SMEs) in Tanzania

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ABSTRACT

The study examines the intention to continue using mobile banking services among SMEs in Tanzania. The study extended the ECS-IS model by adding three variables: ease-of-use, perceived trust, and attitude to address the existing challenges in continuance usage of mobile banking services. Data was collected using a self-administered questionnaire from company's owners and managers. A total of 287 responses were used in data analysis. SEM technique was employed to evaluate the measurement and structural models. The study found that satisfaction and attitude have a direct influence on continuance usage of mobile banking among SMEs in Tanzania. Furthermore, confirmation, perceived trust, and perceived usefulness have an indirect effect on continuance usage of mobile banking services among SMEs. The study provides useful insights which could be used by mobile banking service providers to improve banking services delivered through mobile technology. Furthermore, the findings will assist scholars in understanding the antecedents which affect continuance usage of mobile banking services among SMEs.

KEYWORDS

Attitude, Confirmation, Continuance, Mobile Banking, Perceived Trust, Satisfaction, SMEs, Tanzania

INTRODUCTION

Technological innovation is rapidly changing the traditional banking approach. The transition from the costly physical branch system to modern banking ranging from automated teller machines to 24/7 e-banking is definitely an achievement (Arif, Afshan, & Sharif, 2016). The advancement of information technology has certainly provided banks and users such as micro and small enterprises with significant unit cost-saving and the required level of efficiency for a competitive edge. For example, Small and Medium Enterprises (SME) owners/managers have taken the liberty to adopt mobile banking as they need low-cost accounts to take advantage of small savings and micro-credit opportunities, as well as to enhance the quality of their services and increase growth (Kones, 2014). The use of information technology has therefore placed banks closer to their customers by providing convenience and comfortable banking services (Bangens & Söderberg, 2011). With the help of the internet, the branchless banking system has revolutionized the way micro, small and medium companies

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pay their suppliers, receive customer deposits and settle their trades with wholesalers (Bangens & Söderberg, 2011; Ndiwalana, Morawczynski& Popov, 2010).

Mobile banking refers to a "channel whereby the consumer interacts with a bank via a mobile device, such as a mobile phone or personal digital assistant; in that sense it can be considered as a subset of electronic banking and an extension of internet banking with its own unique characteristics" (Laukkanen & Pasanen, 2008). The use of mobile banking technology can, therefore, be considered as an innovative alternative channel to traditional banking approaches such as Automated Teller Machine (ATM), internet banking and physical branch-banking (Arif et al., 2016).

In Tanzania, the use of mobile banking technology picked up since 2007 when the idea was first introduced (Masamila, 2014; Mwinyimvua, 2013). Although there are nearly 50 Banks in the country, most of them are operating in a greatly unbanked market (Masamila, 2014). According to the Bank of Tanzania BOT (2016), mobile banking transactions had reached 4,411,674 million worth of TZS 194.1 billion in 2016. The benefits attached to mobile banking such as convenience, accessibility and personalization are an indication of its positive effects on daily business transactions in the country.

Other benefits related to mobile banking usage particularly for small enterprises include improved banking facility, easy settlement of trade, and an improved small business environment due to faster transactions and better cash management (Ahad, 2014). Despite its benefits, researches show that the adoption and continuance usage of this technology-enhanced financial channel between Micro and Small Enterprises is still low in Tanzania (Chale & Mbamba, 2015). The major barriers to mobile banking continuance usage by Micro and Small-sized Enterprises include technology complexity, privacy and security aspect of the service (Arif et al., 2016; Bangens & Söderberg, 2011). Furthermore, a thorough literature review reveals no evidence for any empirical studies which have examined the antecedents for continuance usage of mobile banking among SMEs in Tanzania. Bhattacherjee (2001a) argued that the success of any technology depends on its continuance usage. This is because ineffective usage could lead to wastage of resources and effort invested to develop the technology. This means mobile service providers could not make a profit, if users discontinue from using their services. Furthermore, it is established that the cost of acquiring new customers is five times than that of retaining existing customers (Reichheld & Schefter 2000). Therefore, unless SMEs continue using mobile services, mobile service providers could not achieve success. Due to these reasons, there is a need to examine continuance usage of mobile banking service in providing SMEs' services in Tanzania. In Tanzanian context, SMEs are categorized as micro enterprises with capital up to US dollars 2,174, small enterprises with capital from US dollars 2,174 to US dollars 86,957, medium enterprises with capital from US dollars 86,957 to US dollars 347,826 and large enterprises with capital from US dollars 347,826 and above (URT, 2003).

SMEs with the initial experience of using mobile banking services are in a good position to share their experience on continued usage of the mobile banking services as compared to those which have no prior experience. Therefore, this study aims to examine the factors that induce existing SMEs which are using mobile banking technology to continue using mobile banking services. ECM-ISC model was extended by using perceived ease-of-use; perceived trust and attitude to develop a research framework for examining continuance usage of mobile banking among SMEs in Tanzania. Specifically, this study examines the significant effects of ECM-ISC's variables in continuance usage of mobile banking among SMEs. Furthermore, the study examines the significant effects of ease-of-use, perceived trust and attribute on continuance usage of mobile banking among SMEs. The findings of this study could be useful to Tanzanian banks and other financial institutions in developing their strategies for promoting mobile banking usage especially for micro, small and medium enterprises. The research framework developed in this study could offer alternative strategies for continuance usage of mobile banking service among SME's in Tanzania.

LITERATURE REVIEW

Theoretical Background

Governments are increasingly motivating SMEs to use ICT in their businesses since they play major roles in national economies (Baporikar, 2019; Ongori & Migiro, 2010). In Tanzania, several institutional infrastructures have been put in place to enable smooth utilization of ICT among SMEs. Examples include, the establishment of centers for easy access of information pertinent to the development of SMEs, the National SMEs policy which provides among other things guidance on facilitation and adoption of technologies (including ICT) (URT, 2003), and numerous training workshops organized by the Ministry of Industry, Trade and Investment to empower SMEs on ICT use in business. Several studies have indicated how ICT could help SMEs to harness the benefits of ICT in the following categories: to achieve a competitive advantage, support business processes and decision making. For example, Baporikar (2016), Kalkan, Erdil and Çetinkaya (2011), Mandal (2016), Melville, Kraemer and Gurbaxani (2019) investigated general use of ICT in shaping business competitiveness and Ge¨rguri-Rashiti, Abazi-Alili and Dika (2013), López-nicolás and Soto-acosta (2010) studied the role of ICT in supporting business processes and decision making. However, attaining the benefits of ICT entirely depends on SME's willingness to adopt and preserve ICT presence in their daily activities. Banking and financial services are among critical business activities in any SME which drives SMEs to use ICT(Baporikar, 2013). One useful way of managing finance in any business can be achieved through mobile banking (Beneke, 2011).

Review of the literature suggests that SMEs are likely to apply theories as a platform for determining factors which motivates the adoption and continuance usage of mobile banking services. Different theories have been used to examine the adoption of mobile banking technology. The dominant theories such as Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT) and Innovation Diffusion Theory (IDT) are used in examining the intention and the actual usage behaviour which are considered as pre-conditions for initial acceptance of the technology (Bhattacherjee, 2001a; Malik, Suresh, & Sharma, 2017). Nevertheless, previous studies have shown that for sustainable and successful utilization of information systems, post-conditions for continuance usage also should be examined (Bhattacherjee, 2001a; Hsieh & Wang, 2007). This is because infrequent, inappropriate and ineffective long-term usage of IS contributed to organizational failure (Bhattacherjee, 2001a). Various studies have examined the continuance usage of technology by using behaviour adoptive theories used in evaluating the adoption of information system in initial acceptance stage (Hong, Thong, & Tam, 2006; Lankton, McKnight, & Thatcher, 2012). However, using adoptive theories have been criticized because their constructs tend to produce insignificant relationships over a long period of time due to experience gained by using the technology (Venkatesh, Speier, & Morris, 2002; Yin, Cheng, & Zhu, 2011). Therefore, Information Systems (IS) literature suggests using theories dedicated to examining IS continuance behaviour(Yin et al., 2011).

Expectation-Confirmation Model of Information Systems Continuance (ECM-ISC) is one of the theories developed specifically to examine continuance usage of Information System or technology (Bhattacherjee, 2001b; Yaojun & Yongliang, 2015). ECM-ISC theorizes that continuance intention is determined by satisfaction, while satisfaction is determined by two factors which are confirmation and perceived usefulness (Bhattacherjee, 2001a). The theory has been used to study different technologies in examining continuance intention and produced a significant relationship between the variables (Bhattacherjee, 2001a; Yin et al., 2011). Based on the above arguments, this study adapts ECM-ISC to examine the continuance usage of mobile banking among SMEs in Tanzania.

Research Model and Hypotheses

ECM-ISC model was adapted to develop a conceptual model of this study. This is because the theory was specifically developed to examine users' continuance usage behaviour in information systems (IS)

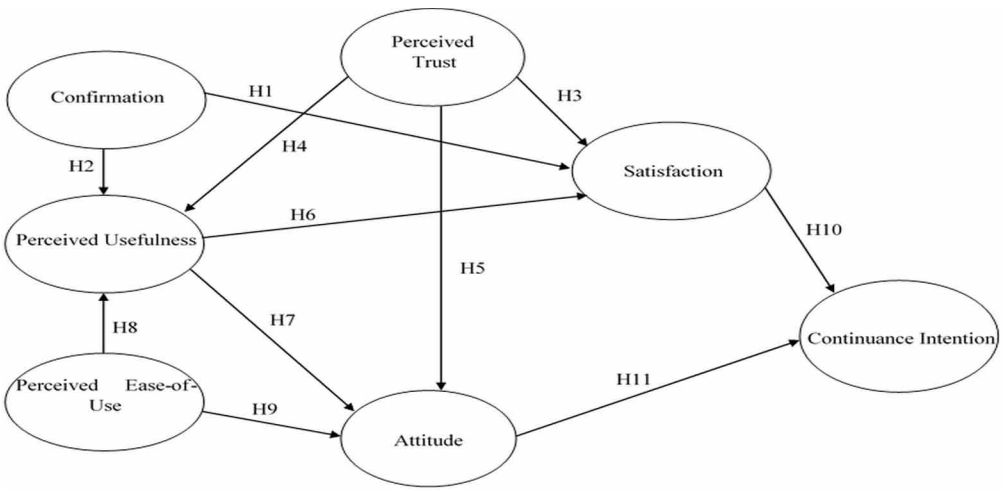
(Bhattacherjee, 2001a). Furthermore, in examining the continuance usage behaviour, satisfaction and confirmation are among the key very factors. Therefore, using ECM-ISC model will provide useful information on satisfaction and confirmation factors. The theory was further extended by adding three variables which are perceived trust, perceived ease-of-use and attitude. This is because, most of the studies have highlighted that majority of the mobile banking users in Tanzania are more concerned with trust issues and complexity of mobile banking applications (Masamila, 2014; Zafiropoulos, Karavasilis, & Vrana, 2012). This implies that a low level of trust and complexity of mobile banking application also tends to affect users' attitude. This means if mobile service's users have low trust on service providers while perceiving the services to be very complex to use, their attitude over the mobile services could be affected and they may stop using the services. Despite this fact, to the best knowledge of the authors, no previous studies have conducted an empirical study to examine the impact of the three variables on continuance usage of mobile banking among SMEs in Tanzania. Therefore, this is a research gap this study intends to fill by examining the influence of the added variables on continuance usage of Mobile baking among SMSs (Figure 1).

The user's pre-adoption expectations and actual performance of the information system defines a user's satisfaction regarding the adopted information system (Yuan, Liu, Yao, & Liu, 2016). Previous studies have shown that if the user is satisfied with the performance of the adopted system, then his/her pre-adoption expectations are relative with the performance of the system, therefore, user's expectations are confirmed or else are not confirmed (Yuan et al., 2016; Yaojun & Yongliang, 2015). Several studies have shown that confirmation has a positive influence on satisfaction (Yuan et al., 2016). In this study, if SME confirms their pre-adoption expectations, then they will be satisfied with the performance of mobile banking and therefore they will continue using mobile banking. Hence, this study hypothesizes that:

H1: Confirmation is positively influencing the satisfaction of mobile banking services among SMEs.
H2: Confirmation is positively influencing the perceived usefulness of mobile banking among SMEs.

Trust is considered as one of the most important factors in the success of mobile banking because transactions are conducted online without human interventions (Bataineh, Al-Abdallah, & Alkharabsheh, 2015; Zhou & Liu, 2014). Trust allows the banks' customers to willingly become vulnerable after using mobile banking systems and therefore the systems have to reliable and

Figure 1. Research model



trustworthy. Most of the mobile banking users are satisfied with technology if they have high trust in the security, privacy and convenience (Bataineh et al., 2015). Several previous studies have shown that trust has a positive influence on satisfaction (Dlodlo, 2014). Similarly, SME's mobile banking users will be satisfied if they perceive mobile banking to be trusted. Hence, this study hypothesizes that:

H3: Perceived trust is positively influencing the satisfaction of using mobile banking services among SMEs.
H4: Perceived trust is positively influencing the perceived usefulness of mobile banking among SMEs.
H5: Perceived trust is positively influencing SME's attitude to continue using mobile banking.

Perceived usefulness is defined as the extent to which the user perceives the technology to enhance his/her job performance (Davis, 1989). If the adopted information system is perceived to assist the user to accomplish his/her job in an efficient and effective way, then, the satisfaction of the user tends to increase (Yuan et al., 2016; Zhou & Liu, 2014). Furthermore, if mobile service providers will guarantee availability and timely access to information to services consumers, they will increase satisfaction and maintain a good relationship with their customers. This will prevent customers from discontinue using the services. On the other hand, if service consumers are likely to stop using the services or switch to alternative service providers if they do not find the expected utility from mobile service providers. Several studies have shown that perceived usefulness has a positive influence on satisfaction and continuance intention to use technology (Bhattacherjee, 2001a; Yuan et al., 2016). This study hypothesizes that:

H6: Perceived usefulness is positively influencing the satisfaction of mobile banking services among SMEs.
H7: Perceived usefulness is positively influencing continuance usage intention of mobile banking services among SMEs.

Perceived ease-of-use is defined as the extent to which a user perceives that using a particular technology/system will be free from the effort (Davis, 1989). Service consumers are likely to continue using services if they found it to be easy to use. On the other hand, service consumers are likely to stop using services if they found difficultness on using the services. Findings from previous researchers have shown that perceive ease-of-use has a positive and significant influence on perceived usefulness and continuance usage intention (Yuan et al., 2016; Zhou & Liu, 2014). Similarly, a mobile banking system which is easy to use could be perceived as usefulness and could increase the likelihood of intention to continue using it in different SME activities. Based on this, this study hypothesizes that:

H8: Perceived ease-of-use is positively influencing the perceived usefulness of mobile banking services among SMEs.
H9: Perceived ease-of-use is positively influencing continuance usage intention of mobile banking services among SMEs.

Satisfaction is defined as the emotion-based responses shown by the user after the initial adoption of an information system or information technology (Malik et al., 2017; Yuan et al., 2016). Furthermore, it is considered as a pleasure expressed by the user after using the information system or information technology. If the user is satisfied with the value received from using the information system/technology then the likelihood to continue using the information system or information technology tends to be very high (Yuan et al., 2016). Past studies have shown that satisfaction has a positive and significant influence on continuance usage of mobile banking (Dlodlo, 2014; Yuan et al., 2016). Similarly, if SMEs are satisfied with the value provided by using mobile banking technology,

their likelihood to continue using the mobile banking services in their activities will be very high. Therefore, this study hypothesizes that:

H10: Satisfaction is positively influencing the continuance usage intention of mobile banking services among SMEs.

Attitude is defined as the degree to which an individual is favourably or unfavourably toward a given technology. Different studies have shown that positive attitude which is built based on past experiences and available information has a positive influence on the adoption of technology (Fishbein &Ajzen 1975; Ma, Gam, & Banning, 2017). In the case of continued usage of technology, studies have shown that technology users who hold a positive attitude after adoption keep on using the technology (Praveena & Thomas, 2014). Similarly to this study, SME's with an attitude that using mobile banking could enhance their activities have a high likelihood of keep on using mobile banking services. Therefore, this study hypothesizes that:

H11: SME's attitude is positively influencing continuance usage intention of mobile banking services among SMEs.

METHOD

Measurement Items and Questionnaire

The theoretical research model employed in this study composed of seven (7) constructs. Each construct was measured using multiple measurement items. Measurement items were adopted from past studies to ensure content validity (Straub et al. 2004), carefully selected and modified to reflect the context of this study (Kim & Oh, 2011). All measurement items corresponding to each construct in this study were measured using a five-point Likert scale anchored from strongly disagree (1) to strongly agree (5). A total of thirty (30) measurement items for measuring constructs of the study and five (5) questions for gathering demographic information of respondents were used. The measurement items for confirmation were drawn from Bennett, Perrewé, Kane, Borgatti and Performance (2001) and Bhattacherjee (2001b), perceived trust from Lee and Benbasat (2004) and Shin (2010), perceived usefulness and perceived ease-of-use from Venkatesh and Davis (2000), attitude from Ajzen (1991); satisfaction from Bhattacherjee (2001b), Premkumar and Bhattacherjee (2008). Additionally, measurement items for continuance intention were drawn from Bhattacherjee (2001); Liao, Palvia and Chen (2009) and Wang, Xu, and Chan(2015). The questionnaire was developed using English language and translated to the Swahili language. This is because Swahili is the native language in Tanzania. Linguistic experts from credible Institution were used for translation. The translated questionnaire was piloted to check if it is clearly understood by respondents. Further fine-tuning was done based on pilot study suggestions.

Participants and Sampling Procedures

Data were collected from SMEs located in Dar es Salaam city, Tanzania. Dar es Salaam is the business city of Tanzania with relative higher number SMEs compared with other regions (NBS, 2016). Therefore, the selection of SMEs which are based in Dar es Salaam offers a fair representation of other SMEs located in other regions. 293 questionnaires were collected, of which six (6) questionnaires were dropped during data cleaning. 287 questionnaires were considered to be valid and were used for subsequent data analysis. Data collection took three (3) months, from January to March 2019.

The study examined self-reported behaviours of SMEs owners on their intention to continue using mobile banking services. In order to increase the external validity of the data collected, data were collected using the questionnaire from respondents (SMEs) who are currently using mobile

banking services. Purposive sampling technique was employed to identify only SME owners and managers who are currently using mobile banking and willing to complete the questionnaire (Etikan, Musa, & Alkassim, 2016). The questionnaires were physically administered to only respondents with required characteristics and willing to complete the questionnaire. In addition, the authors included questions regarding a number of employees and capital invested in the demographic part that reflect different categories of SMEs in the Tanzanian context(URT, 2003). The purpose of the study was clearly stated in the questionnaire. Furthermore, the respondents were assured of anonymity and confidentiality of data collected.

DATA ANALYSIS

Descriptive Analysis

Table 1 shows that most of the SME's (41.9%) are in the "other" SME category. Furthermore, findings show that most of the SMEs have up to 49 employees and with a capital investment of up to 200 million. SMEs with capital US dollar 2,174 – US dollar 86,957 and 2,174 or less were largely represented in the sample. This sample is comparable to findings by the Tanzania Ministry of Industry, Trade and Investment, which indicated that the SME sector is dominated by the above two groups(URT, 2012).In addition, the findings show that most of the organizations (67.5%) have used mobile banking service for more than three years and most of them (71.3%) are using mobile banking more than six (6) times a week for business activities.

Data Normality Assessment

The study employed maximum likelihood estimation (MLE), a robust procedure for studies using SEM (Schumacker & Lomax, 2015). This procedure data should meet conditions for multivariate normality. An assessment of the multivariate normality was based on kurtosis values because kurtosis is more relevant to SEM since it affects the estimation of variance and covariance (DeCarlo, 1997). The study found that multivariate kurtosis value was101.762, which is well above the accepted threshold of less than 5 for the normally distributed data (Byrne, 2009). Nevertheless, MLE is robust to multivariate normality violations given that the sample size is greater than 200 and the impact of violations diminishes as the sample becomes large (Hair, Black, Babin, & Anderson, 2010; Tabachnick & Fidell, 2007). This study used a sample size of 287 which is greater than 200, therefore the effects of multivariate non-normality would not affect the findings of the study.

Assessment of Quality of Measurement Model

The assessment of the quality of measurement items and the structural model was done using covariance-based structural equation modelling (CB-SEM) technique. The covariance-based approach is widely accepted data analysis technique for testing and confirming theoretical perspectives in IS research similar to this study (Joe Hair, Ringle, & Sarstedt, 2011). Given the facts that, the study aims to confirm the hypothesized relationships, CB-SEM was found to be a suitable technique for achieving the specified objectives. The software used was SPSS AMOS version 24.

The quality of the measurement model was evaluated through reliability, construct validity analysis and model fit assessment. Analysis of the reliability of measurement items was accomplished by estimating the composite reliability scores. Composite reliability scores were above 0.7 indicating that the measurement items used in the study were reliable (Fornell & Bookstein, 1982). Regarding convergent validity, Table 2 shows that AVE values are above 0.5 and the composite reliability values were above 0.7. Also, Figure 2 shows that the factor loadings for each construct are above 0.5 suggesting that the threshold level for convergent validity has been achieved (Bagozzi & Yi 1988). Discriminant validity was assessed based on the recommendation of Fornell and Larcker(1981) and Parolia, Goodman, Li, and Jiang, (2007). The square root of the average variance extracted (AVE) of

Table 1. Descriptive information

	Category	% of Respondents
SME Category	Agricultural	4.2
	Trade	26.3
	Tourism	6.2
	Finance	21.5
	Others	41.9
No. of Employee	1-4	33.9
	5-49	47.1
	50-99	12.8
	100 and above	6.2
Capital Investment	Up to US $ 2,174	36.3
	US $ 2,174 – US $ 86,957	43.3
	US $ 86,957 – US $ 347,826	15.6
	US $ 347,826 and Above	4.8
Experience in Using Mobile banking	Less than a year	4.8
	1-3 Years	27.7
	Above 3 Years	67.5
Frequency in Using Mobile Banking	1-3 times	14.5
	4-6 times	14.2
	7-9 times	20.1
	Above 10	51.2

Note: Exchange rate: Bank of Tanzania – 2,300TZS = 1 US dollar

each construct should be higher than an inter-constructs correlation coefficient. Results indicate that the AVE of each construct was higher than inter-correlation coefficient indicating that discriminant validity has been achieved.

The model fit assessment was evaluated by estimating model indices. This study has employed five most commonly used model fit indices in IS research: Relative Chi-Square (x^2), Root Mean Square Error of Approximation (RMSEA), Incremental Fit Index (IFI), Confirmatory Fit Index (CFI) and Tucker-Lewis Index (TLI). As reported in Table 3, all model fit indices were well above their acceptable threshold values, suggesting a good fit of the measurement model. Based on the above statistical analyses, the measurement model used in this study was of acceptable quality.

Assessment of the Structural Model

The quality of the structural model was assessed using model fit indices reported in Table 3. All model fit indices exceeded the acceptable threshold values as shown in Table 4. Results of the structural model assessment suggest that the structural model is acceptable for data analysis.

FINDINGS AND DISCUSSIONS

After assessing the quality of the measurement items, the path analysis was conducted to check the statistical significance of its structural loads. Paths analysis of the structural model indicates that eight (8) hypothetical relationships out of eleven (11) as specified in the research model were

Table 2. Constructs AVE and CR

	CR	AVE	CONF	TR	PU	EOU	CONT	ATT	SAT
CONF	0.861	0.674	**0.821**						
TR	0.880	0.718	0.430	**0.847**					
PU	0.828	0.549	0.550	0.394	**0.741**				
EOU	0.805	0.579	0.154	0.181	0.158	**0.761**			
CONT	0.661	0.500	0.505	0.315	0.394	0.136	**0.707**		
ATT	0.859	0.605	0.099	0.365	0.258	0.040	0.287	**0.778**	
SAT	0.817	0.599	0.390	0.407	0.316	0.106	0.339	0.472	**0.774**

Legend: CONF: Confirmation; PU: Usefulness; CONT: Continuance ; SAT: Satisfaction; TR: Trust; EOU: Ease of Use; ATT: Attitude; CR: Composite reliability; AVE: Average Value Extracted

Figure 2. Structural model assessment

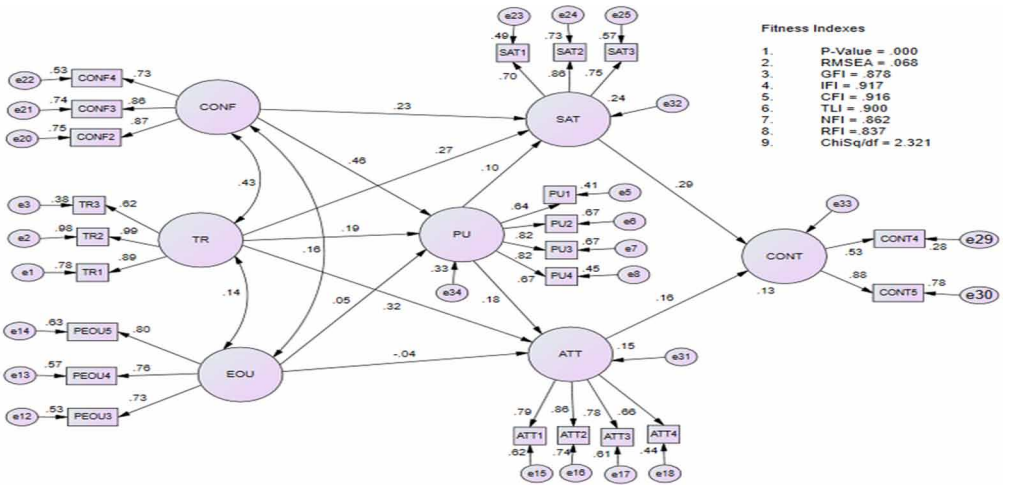


Table 3. Threshold values for the measurement model

Fit Indices	Measurement Model Fit Indices	Acceptable Values	Source of Acceptable Values
x^{2}/df	2.455	< 3	(Bentler & Bonett, 1980)
RMSEA	0.071	≤ 0.08	(Byrne, 2009)
IFI	0.920	≥ 0.90	(Hu & Bentler, 1999)
TLI	0.901	≥ 0.90	(Byrne, 2009)
CFI	0.919	≥ 0.90	(Bentler, 1990; Hartwick & Barki, 1994)

supported. Specifically, confirmation of expectations of mobile banking services users have positive and significant effects on satisfaction ($\beta = 0.201$, $p = 0.005$) and perceived usefulness towards mobile banking services ($\beta = 0.35$, $p = 0.000$) respectively. Perceived trust on mobile banking services has

Table 4. Model fit indices

Fit Indices	Structural Model Fit Indices	Acceptable Values	Source of Acceptable Values
x^2/df	2.321	< 3	(Bentler & Bonett, 1980)
RMSEA	0.068	≤ 0.08	(Byrne, 2009)
IFI	0.917	≥ 0.90	(Hu & Bentler, 1999)
TLI	0.900	≥ 0.90	(Byrne, 2009)
CFI	0.916	≥ 0.90	(Bentler, 1990; Hartwick & Barki, 1994)

positive significant effects on the attitude of mobile banking users (β = 0.204, p = 0.000) and perceived usefulness (β = 0.134, p = 0.004) and satisfaction of mobile banking services (β = 0.218, p = 0.000), respectively. Also, perceived usefulness of the mobile banking services have positive and significant effects on the attitude of mobile banking users (β = 0.136, p = 0.006), and both the attitude of users (β = 0.228, p = 0.02) and satisfaction (β = 0.332, p = 0.000) on mobile banking services have positive and significant effects on intention to continue using mobile banking services. On the contrary, the hypothetical relationships between perceived ease of use and perceived usefulness, perceived ease of use and attitude, perceived usefulness and satisfaction were not found to be significant. The results of the structural model are reported in Table 5 and Figure 2. Among eight hypothetical relationships, satisfaction and continuance intention to use mobile banking services among SMEs have the strongest relationship followed by confirmation and perceived usefulness and perceived trust and satisfaction.

Confirmation of expectations and perceived trust of mobile banking services were the key predictors of satisfaction. This finding suggests that satisfaction is the function of both perceived trust and confirmation of expectations such that when SMEs perceived trust increases and expectations after using mobile banking services are confirmed their satisfaction level towards the mobile banking services also increases. A similar finding is also reported in studies conducted by Zhan, and Kim (2015); Alraimi, Zo, and Ciganek (2015); Chou, Lin, Lin, and Farn (2017); Vedadi and Warkentin (2016), respectively. Apart from influencing satisfaction towards mobile banking services, confirmation

Table 5. Hypotheses testing findings

Hypotheses				Estimate	Standard Error	*t*-Values	*p* Values
H1	CONF	→	SAT	0.201	0.072	2.814	0.005
H2	CONF	→	PU	0.35	0.059	5.977	***
H3	TR	→	SAT	0.218	0.056	3.879	***
H4	TR	→	PU	0.134	0.046	2.895	0.004
H5	TR	→	ATT	0.204	0.044	4.676	***
H6	PU	→	SAT	0.112	0.092	1.22	0.222
H7	PU	→	ATT	0.136	0.05	2.734	0.006
H8	EOU	→	PU	0.05	0.06	0.826	0.409
H9	EOU	→	ATT	-0.033	0.057	-0.583	0.56
H10	SAT	→	CONT	0.332	0.082	4.028	***
H111	ATT	→	CONT	0.228	0.098	2.32	0.02

also plays a key role in cementing SME's perception that mobile banking services are useful to them. Specifically, this finding indicates that when an individual's expectations of the services have been confirmed, they drive them to believe that the services are useful and could boost their performance. Chang, Wong and Maruthappa (2015) and Hsu and Lin (2015) also found similar findings.

The influence of perceived trust is also reflected in its relationship with perceived usefulness and attitude of SMEs towards mobile banking services. This finding leads to the belief that perceived trust enhances attitude and perceptions of the usefulness of mobile banking services among SMEs. This finding corroborates previous studies such as Al-Debei, Akroush and Ashouri (2015); Mou, Shin and Cohen (2017).

In this study, it was found that perceived usefulness had an influence on the attitude of SMEs towards mobile banking services. The attitude of SMEs in mobile banking services is likely to increase if the benefits (usefulness) of mobile banking services on the overall performance of SMEs are well substantiated to the users. This finding is consistent with Chang, Hung, Cheng, and Wu (2015), Chuah et al. (2016). Contrary to the technology acceptance model (TAM), the relationship between perceived ease of use on both attitude and perceived usefulness was not confirmed. Nevertheless, the finding is consistent with Chuah et al. (2016). The finding indicates SMEs are not interested in how ease to use the mobile banking services are in order for them to increase their perceptions of benefits they offer and attitude towards them. Furthermore, the study found that both satisfaction and attitude towards banking services have an influence on the continuance intention of SMEs to keep on using mobile services. These findings are congruent with findings from studies conducted by Raza, Umer, and Shah (2017), and Vedadi and Warkentin (2016). Since satisfaction and attitude play an important part for both adoption and continuance to use mobile banking services, SMEs with a higher level of attitude and satisfaction towards mobile banking services are likely to continue using mobile banking services.

CONTRIBUTIONS AND IMPLICATIONS

This study contributes to the growing body of knowledge about IS continuance behaviour. Firstly, by integrating the three new constructs relevant for the prediction of continuance usage behaviours to expectation-confirmation theory. These new constructs are perceived trust, attitude and perceived ease-of-use. The interplay between the constructs of 1) perceived trusts, user's satisfaction and attitude towards the service 2) perceived ease-of-use, perceived usefulness and attitude demonstrated in this study suggest the massive influence of perceived trust construct within the expectation-confirmation theory and in IS continuance behaviours in general. We have not yet come across a study which has extended and considers these relationships in such a way. Although the interplay between these constructs contributes indirectly to continuance behaviour, they are an integral part of the formation of continuance behaviour. This study demonstrated that perceived trust has a positive influence on satisfaction, perceived usefulness and attitude.

Banks should bear in mind the importance of trust in motivating SMEs to continue using mobile banking services. Several mechanisms can be used to ensure trust. Customer charter and ICT policy should state transparently the level of guarantee they offer for data protection and privacy of financial-related information. Additionally, banks should state clearly in their policy documents procedures to undergo in case of financial fraud and make efforts to ensure customer's money in banks account are insured. If the banks provide insurance, this should be well communicated to customers to raise customers trust that their money will not get lost as a result of online fraud. The presence of customer charter and insurance of security of customer data and finance is an industry recommended practice for improving customer trust as indicated in several previous studies such as Davinson and Sillence (2014) and Torres (2006). Appropriate strategies for cultivating SME's perceptions of trust will eventually increase satisfaction level, perceived usefulness and attitude towards continuance usage of mobile banking services. Furthermore, high levels of perceived usefulness increase the attitude of

SMEs towards continuance usage intentions on mobile banking services. When SMEs are well aware of the benefits of using mobile banking services their attitude towards continuance usage intention is heightened. Promotional and awareness campaigns on mobile banking services should focus on encouraging SMEs to position mobile banking services as a strategic tool for finance management, by taking its advantages on board in their daily operations (Tiwari, Buse, & Herstatt, 2006).

Confirmation of expectations motivates SMEs satisfaction and perceived usefulness of the mobile banking services. To promote confirmation of expectations, the expectations of the users regarding mobile banking services should be well communicated in form of bank's customer or charter or policy documents to SMEs and banks should strive to meet those expectations to increase both satisfaction and perceived usefulness towards mobile banking services. Applying the discussed strategies for heightening levels of user's satisfaction and attitude towards mobile banking services will eventually motivate the intention of SMEs to continue using mobile banking services.

LIMITATIONS, FUTURE RESEARCH AND CONCLUSION

This study has several limitations worth to be listed which could be used as a base for improvement in future studies and during applying its findings in real-world settings. First, this study employed cross-sectional data; in which data was collected at one time thus it was not possible to use these findings as a base for assessing future continuance usage of mobile banking services among SMEs. Assessment of future trends is imperative for service provision planning. Future studies may apply a similar model proposed in this study to test longitudinal data with the intention of observing mobile banking services continuance usage among SMEs. Secondly, data were collected from SMEs residing in Dar es Salaam City only which represent a portion of SMEs in Tanzania. Even if Dar es Salaam has a large number of SMEs as compared to other regions, further studies are needed to evaluate the proposed research model using data collected from a SMEs residing from other regions in order to obtain a more generalized view of SMEs' perceptions on mobile banking services usage continuance.

In brief, this study extended the expectation-confirmation theory to investigate the intention of SMEs to continue using mobile banking services. Findings indicate that confirmation of expectations has a positive influence on both satisfaction and perceived usefulness towards mobile banking services among SMEs. Perceptions of trust have significant positive effects on the attitude of mobile banking among SMEs, perceived usefulness and satisfaction of mobile banking services. Also, perceived usefulness of the mobile banking services has positive and significant effects on the attitude of mobile banking users, while the attitude of users and satisfaction on mobile banking services have positive and significant effects on intention to continue using mobile banking services among SMEs. We posit that banks should consider not only traditional factors incorporated in ECT for continuance usage intention of mobile banking services but also perceived trust and attitude of users.

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