# Effect of the ubiquity of mobile banking on customer satisfaction in the banking sector in Zimbabwe

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## Abstract

Marketing in the 21st century have been revolutionised by the fast proliferation of information and communication technology (ICT) and has result in fundamental advancements in ways of banking from marketing, service delivery and how transactions are done on a daily basis. The adoption of ICT in the banking industry have been reflected by increase in use of new delivery channels such as mobile and internet banking. Today's customers spend more of their time online and this has shifted the face of bank marketing. Marketing of services and products from banks has become indispensable due to competition in the banking sector that have been a cut throat as banks compete for market share, growth and survival. Of importance to note is that, today's customers have ever changing needs and are highly discerning hence the need to pay special attention to the needs of customers (Manoj, 2016). Nowadays ICT use has become a global tendency and a channel for marketing activities of a brand (Razak, 2019). This study focuses on ICT in marketing but with particular reference to mobile banking. The study was based on the Theory of reasoned action by Fishbein 1967 and Innovation diffusion theory postulated by Roger 1983. This study adopted a quantitative approach by gathering data from 208 questionnaires distributed to customers from the 19 banks in Harare. Cleaned data was then captured in IBM SPSS V20 software and also AMOS V21 so that it can be analysed and presented. Measurement model was used to measure the fit of the data. Structural equation modelling was used to test the hypotheses. Reliability was tested using Cronbach's alpha. The study used convenience sampling for collecting data. From the findings it can be concluded that trust, mobile interface usability, accessibility and perceived risk positively influence customer satisfaction. Once these factors are present customers can perform banking transactions anywhere and anytime using portable devices (ubiquity).

**Keywords:** ICT in marketing, Mobile banking, delivery channels, marketing, Internet banking, Customer satisfaction; Banking sector; Banks

## Introduction

The landscape of banking is changing and customer expectations are evolving and banks are looking for new ways to attract and satisfy profitable customers (Cleveland, 2016). Thakur (2014) [24] postulates that customer satisfaction and loyalty have been traditionally two main goals aimed at by managers. As electronic banking is becoming more prevalent, so is the level of customer service delivery thus the level of customer satisfaction is also changing the scenario of technological environment (Hamisah, 2013) [10]. The banking sector believes that in order to tie customer's closer, banks need to improve on customer service level through the adoption of new technology (Hasan *et al*, 2013) [11].

During the 21st century mobile banking (m-banking) advanced from providing mere text messaging services to that of pseudo internet banking where customers could not only view their balances and set up multiple types of alerts but also transact activities such as fund transfers, redeem loyalty coupons, deposit cheques via the mobile phone and instruct payroll based transactions (Ndungu & Okiro, 2013) [15]. Mobile banking is the provision of financial and banking services using mobile telecommunication devices (Ndungu & Okiro, 2013) [15]. Innovative mobile-based technology provides convenience for customers to make use of financial services anywhere, on condition that mobile communication is accessible (The World Bank, 2009). In comparing branch and online banking, the main benefit of mobile banking is on ubiquity (Zhou, 2013) [26], that is, users can perform banking transactions anywhere and anytime using portable devices. Mobile banking providers must focus on trust and satisfaction (Chen, 2012) [7].

Chen (2012) [7] reiterated that in the circumstance of enhancing level of trust in mobile banking, consumers will facilitate the unceasing intention towards mobile banking, therefore solution providers can add sales prospects and offer services and products that meet customer wants and needs.

Delivering outstanding and stable m-banking service means meeting the requirements of customer expectations in a consistent basis, that is, banks can take advantage from much lower operational costs by offering mobile banking, which require fewer staff and fewer traditional branches and consumers will also benefit through convenience, round-the-clock availability speed of mobile banking (Chen, 2012) [7]. Banking institutions should enhance their mobile banking to make it flexible, fast and easy to use and also management of banking institutions should enhance application of mobile banking to increase satisfaction of their customers (Simon & Thomas, 2016) [23].

Thakur (2014) [24], in his article conducted in India titled, "What keeps mobile banking customers loyal", postulate that customer satisfaction and loyalty have been traditionally two main goals aimed at by managers. Thakur (2014) [24] further reiterated that, focusing on the mobile banking (m-banking), and the importance of these concepts is even greater due to the increasing focus of banks on mobile phones in order to reach out to a larger set of customers. The purpose of Thakur (2014) [24]'s paper was to characterize both these concepts in the m-banking context and the design/methodology/approach was to study the influence of satisfaction and trust and their antecedents in developing customer loyalty in the m-banking. Thakur (2014) [24]'s research showed that satisfaction from m-banking based on previous interactions had a positive effect on customer loyalty and in addition, mobile interface usability and service were found to have a positive effect on customer satisfaction. The study by Thakur (2014) [24] has practical implications which were: in order to develop customer loyalty in m-banking, banks should prioritize user friendly interface and provide services valued by m-banking customers. In terms of originality/value of the study by Thakur (2014) [24] the following was derived: although the increasing competitiveness in m-banking is motivating banks to offer the same to customers, there is lack of studies that analyse the formation of satisfaction, trust and loyalty concepts in this context, therefore, Thakur (2014) [24]'s study was therefore represented an initial contribution to the field of m-banking, which is gradually acquiring popularity in recent years especially in developing countries.

Chen (2012) [7], in an article conducted in Malaysia titled, "To use or not to use: understanding the factors affecting continuance intention of mobile banking", figured out the determinants that affect the customers in mobile banking. Chen (2012) [7]'s study offers theoretical understanding on a conceptual model concerning the formation of a relationship quality and continuance intention on mobile banking by simultaneously in view of perceived risk, service quality and technology willingness as exogenous impacts. Chen (2012) [7]'s study was conducted using online survey consist of 390 mobile banking knowledgeable participants, structural equation modelling was used in testing the research model. Chen (2012) [7]'s research findings were service quality and technology readiness has indirectly significant impact on continuance intention over the intervention of relationship quality, involving satisfaction and trust. Chen (2012) [7]'s findings have implications for mobile banking experts: to retain customers and also technology readiness should always

be strengthened and most importantly mobile banking solution providers who can satisfy the needs and wants of customers, respond to their requests on time will win users' loyalty and patronage.

Also, empirically in a study by Simon and Thomas (2016) [23] titled, "Effect of electronic banking on customer satisfaction in selected commercial banks, Kenya", the general aim of the study was to determine the effect of electronic banking and customer satisfaction among first tier bank in Nairobi town. Simon and Thomas (2016) [23]'s study also concludes that convenience of mobile banking affects customer satisfaction to a great extent. From their research findings, it was clear that understand ability and reversal of transactions in mobile banking had a moderate effect on customer satisfaction while use of a mobile phone account, efficiency of mobile banking and availability of mobile banking has little effect on customer satisfaction (Simon & Thomas, 2016) [23].

Agwu and Carter (2014) [5] in a study in Nigeria postulates that, internet and the other electronic media had a positive effect on the lives of businesses and individuals over the world. Mobile phones are nowadays ubiquitous and a normal aspect of daily life of a large percentage of world population, also, innovations in mobile transactions offer the potential to transformation the way customers do financial transactions (Agwu & Carter, 2014) [5]. Many banking customers across the world continue to be sceptical about the advantages of the mobile financial facilities and the level of security provided on these services (Agwu & Carter, 2014) [5]. Thus, the aim of the study by Agwu and Carter (2014) [5] were to understand usage and non-usage levels by customers on these financial services in Nigeria. In the research by Agwu and Carter (2014) [5] 10 out of 21 banks was selected in Nigeria and stakeholders were interviewed included staff from the bank, higher education students and customers, in addition, data was gathered in two months using an unstructured interview questions and also data analysis was done through thematic evidences emanating from data analysed (Agwu and Carter, 2014) [5]. Their findings revealed that phone banking channel was more established compared to internet banking and automated teller machine services, however, automated teller machine services had a widespread reach and the superseding factors affecting this scenario included the maintenance and cost involved, customer education and infrastructure availability (Agwu and Carter, 2014) [5]. Therefore, there is need for awareness creation of services and related business environment, security enhancement of the services and also hard government regulations for overall electronic banking services that are in Nigerian (Agwu and Carter, 2014) [5]. Their study findings show that Africa has an extremely fast-growing market for mobile technology but few Nigerians are creating innovative use of technology in mobile phone to meet the necessity of a cashless system (Agwu and Carter, 2014) [5].

**Theoretical Framework**
This study is based on the theoretical framework propounded by Simon and Thomas in 2016. Simon and Thomas (2016) [23] studied the effect of electronic banking on customer satisfaction in selected commercial banks in Kenya. Their study focused on the following banking channels: point of sale, mobile, automated teller machines and internet banking and their effect on customer satisfaction. Simon and Thomas (2016) [23] build their conceptual framework mainly from the theory of reasoned action by Fishbein 1967 and innovation

diffuson theory postulated by Roger 1983.

Theory of Reasoned Action (TRA), was developed to better understand relationships between attitudes, intentions and behaviours (Fishbein, 1967) [9]. This is one of the most important theories that are used to explain human behaviours (Poon *et al.* 2008). Behavioural intention to use technology is explained by people's attitudes toward that behaviour and subjective norms. Intensified competition and deregulation have led many services and retail businesses to seek profitable ways to differentiate them; one strategy that has been related to success in these businesses is the delivery of high service quality (Cheah *et al.*, 2011) [6]. Therefore, service quality has developed to become an important research topic over past decade because of high revenues, higher customer retentions, purchasing behaviours, greater cross sell ratios and the prolonged market share (Kaynak and Harcar, 2015).

Having and evolving mobile banking features will be required to maintain relevance (Board of Governors of the Federal Reserve, 2015) [4]. In every study performed, whether by banks, consulting agencies, newspaper or whoever else, concerns about security is the number one reason listed across the board for why individuals are resistant to adopting mobile banking (Cleveland, 2016). Cleveland (2016) further reiterated that, with the evolution of mobile banking, the security requirements have also required advancement. The second most commonly listed reason for resistance to adopting mobile banking is customers not being aware of the services that are offered (Cleveland, 2016). Cleveland (2016) also postulates that, marketing for mobile banking was initially done mainly through in-branch advertising and banner advertising on bank websites. The paradox of these efforts is that the channels used to advertise mobile banking are the very channels that the banks are looking to transition customers away from in order to grow the mobile channel (Cleveland, 2016). Cleveland (2016) argued that, studies show that other forms of marketing would be more effective and one alternative is social media and also cookie tracing. Mobile banking helps strengthen the banks' relationships with customers and the more the bank satisfies the customer with simpler services, the easier it is to initiate conversations about more profitable financial products (Cleveland, 2016).

Cleveland (2016) postulates that, the popularity of mobile banking is starting a customer behaviour change and attitudes towards mobile banking are shifting away from personal service to convenience and efficiency, therefore, the spread of this attitude and behaviour will aid mobile banking in becoming the channel of choice for banking. Security advancements must be cutting-edge to ensure integrity of the full aspect of banking features and any breach could drive customer's away (Cleveland, 2016). Given the migration to mobile banking and the appetite for new features, Cleveland (2016) suggest that having an attractive mobile banking product offer keeps the bank in competition for the customer's business and loyalty, particularly as the demographics of users changes to more millennia's who are very transient in their use of features and benefits.

Rouse and Verhoef (2017) [20] argued that, the growth in mobile phone technologies in Africa result in rapid expansion of mobile banking, however, many countries from Africa have poor network infrastructure in retail banking especially in rural areas. Rouse and Verhoef (2017) [20] reiterated that through mobile communication networks, innovative products were developed to spread mobile banking into isolated rural locations and also the growth of mobile banking contributed towards improved financial inclusion in the Sub-Saharan Africa, in addition, mobile banking has been important in providing access towards financial services to those previously unbanked.

There is need for education in using mobile banking; the absence of trust and awareness in mobile banking were recognized as significant barriers in the widespread acceptance of mobile banking (Rouse & Verhoef, 2017) [20]. Mobile technology reduces cost of transferring money over long distances significantly and it offers certainty of process and also minimises the danger of theft (Rouse & Verhoef, 2017) [20]. Rouse and Verhoef (2017) [20] postulates that, through mobile banking there is now easy access towards financial services in case of proximity of isolated households whereby those previously excluded have now access to formal banking services.

Shaikh and Karjaluoto (2016) [22] studied mobile banking usage in Finland through relating it with bank-customer relationship development. Shaikh and Karjaluoto (2016) [22] examined the relationship between usage and relationship commitment, general satisfaction, intention to commend the bank and forthcoming intentions to continue with the bank Shaikh and Karjaluoto (2016) [22] conducted a survey to gather data from experienced users of mobile banking application, 273 valid responses were obtained and the results agree with the hypotheses and make known that there is a strong positive association between user satisfaction and mobile banking app usage. The results have implications both practical and theoretical for usage of mobile banking and its impact on customer-bank relationships.

## Development of research hypotheses and conceptual framework

In a study carried in India by Agarwal and Mehrotra (2017) [2] titled, "An analysis of adoption pattern of alternative banking channels by Indian customers", their findings show an increasing trend in the usage of mobile banking as a channel of banking, especially by the people in the age group of 46 to 60 years, with balance enquiry being the most common reason for using mobile banking. Agarwal and Mehrotra (2017) [2] also found out that accessibility is found to be the most important factor, whereas security is observed to be the least important in affecting customer's choice of a banking channel.

Empirically, in America, Cleveland (2016), explores the effect of mobile banking on the banking industry, and investigated if banks improve financial performance as well as customer conversion and retention due to mobile banking. Cleveland (2016)'s research sifts through early entries in mobile banking features, data transfer technology evolution along with hand-held mobile device advances. Overall, the data suggests that bank performance does improve on the balance sheet and in customer conversion/retention when the bank has leading-edge mobile banking features along with disciplined cost reduction in front-line tellers and reduction in brick and-mortar investments (Cleveland, 2016). The hypotheses are derived from previous studies on mobile banking and customer satisfaction. The research hypotheses are outlined below.

## Research hypotheses

The following hypothesis will be tested in line with the outlined conceptual framework:

**H1:** Trust has a positive effect on customer satisfaction.

**H2:** Mobile interface usability has a positive effect on customer satisfaction.

**H3:** Accessibility has a positive effect on customer satisfaction.

**H4:** Perceived risk has a positive effect on customer satisfaction

**Conceptual framework**

Bapat (2017) [3] identified limitations on his research and propose that, first, an interesting route to extend his research would be to analyse the effects of new electronic access methods such mobile banking on customer satisfaction at a time when customers and banks interact by means of these new technologies. Second, it is suggested to improve generalizability by using a wider sample of customers. Therefore, there is a need to analyse the process of

satisfaction and loyalty development in more detail (Bapat, 2017) [3]. The uncertainty of mobile banking is with customer retention or loyalty and once that aspect is sorted out and banks can fully develop integrated plans with products, service offers and retention plans, the performance indicators will begin to more fully reflect success in improving year-on-year (Cleveland, 2016). This shows that there is a gap that has not been closed between mobile banking and customer satisfaction. Review of the literature has attempted to address the aspects of adoption of mobile phone financial services. It has however, not adequately linked the adoption of mobile phone financial services on customer satisfaction. The conceptual framework is trying to address the gap. The model is derived from mobile banking variables and their effect on customer satisfaction.
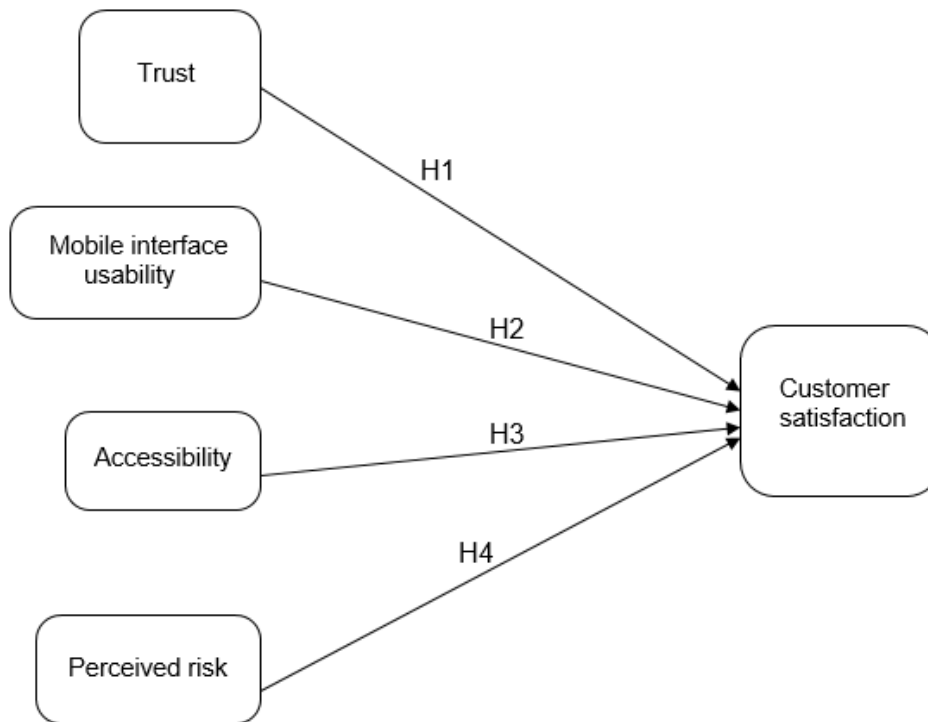


**Fig 1:** Conceptual framework

**Research Methodology**

**Questionnaire design and measures**

The questionnaire was divided into three categories that is the general demographics on gender, age and customer category and also questions derived from each objective on mobile banking and their effect on customer satisfaction. Mobile banking was operationalized as a multi-dimensional construct comprising of trust (TRT), mobile interface mobility (MIU), Accessibility (ACS) and perceived risk (PCR). Customer satisfaction was abbreviated as (CUS). These were derived from literature as shown on table 1 below. Respondents rate these factors using a 5-point Likert scale which range from 1 up to 5, where 1 (strongly agree), 2 (agree), 3 (neither agree nor disagree), 4 (disagree) and 5 (strongly disagree).

**Sampling and data collection**

The target population for this study was 193200 bank customers from 19 banks in Harare. The population figures were obtained from RBZ 2017 first quarter report. Cross-sectional survey was done to bank customers in August 2019 in Harare. Structured and Self-administered questionnaires

were distributed to 224 bank customers who were in queues waiting to withdraw money outside the banking halls. The sample was obtained using coefficient of variation. The study therefore used a coefficient variation of 30% and a standard error of 2%. The higher limit for coefficient of variation and standard error was selected so as to ensure low variability in the sample and minimize the degree or error. Kombo and Tromp (2009) [13], gives the formula as follows: $n = Nc^2 / c^2 + (N-1) e^2 = 193200(0.3)^2 / 0.3^2 + (193200-1)0.02^2 = 224$. Where, n=Sample size, N=Population, c=covariance, e= standard error. Using this formula, a sample of 224 customers was selected from the 19 banks in Harare. Respondents were enlightened on the purpose of the study. Completed questionnaires were collected while clients were on the queue. Out of 224 questionnaires distributed, 208 were completed in full and usable for the study. The sample profile is shown on table 2 below.

Results from table 2 below shows that female respondents dominate the sample with 56.7% whereas male counterparts trail behind at 43.3%. In terms of age groups, 30 to 40 age group dominate the sample with 46.6%, the second category is 25 to 30 age group with 21.6%, followed by less than 25

age group with 13.5%, then 40 to 50 age group with 10.6% and the last group is above 50 with 7.7%. Individual account holders have the highest percentage of 57.7%, then the second category is student account holders with 22.6%, then the last category is corporate account holders with 19.7%.

**Table 1:** Constructs, codes, items and item sources

| Latent constructs | Code | Items | Sources of items |
|---|---|---|---|
| Trust | TRT1 | Do you trust mobile banking? | Rouse & Verhoef, 2017 [20]; Chen, 2012 [7]; Thakur, 2014 [24]; |
| | TRT2 | Is mobile banking reliable? | |
| | TRT3 | Do you feel confident when using mobile banking? | |
| | TRT4 | Do you frequently use mobile banking? | |
| | TRT5 | Is mobile banking your first choice among different banking channels? | |
| Mobile interface usability | MIU1 | Does mobile interface usability affect your satisfaction with mobile banking? | Thakur, 2014 [24]; Kanchan, 2012; Oluoch, 2017; |
| | MIU2 | Is the mobile interface from your bank user friendly? | |
| | MIU3 | Do you say positive things about the mobile interface from your bank? | |
| Accessibility | MIU4 | Does the usability of the mobile interface affect your intention to switch banks? | Rouse & Verhoef, 2017 [20]; The World Bank, 2009; Simon & Thomas, 2016 [23]; Agarwal & Mehrotra, 2017 [2] |
| | MIU5 | Are you loyal to this bank because of the quality of mobile interface usability? | |
| | ACS1 | Is mobile banking service accessible? | |
| | ACS2 | Is mobile banking convenient to you? | |
| | ACS3 | Does mobile banking create access to financial services? | |
| | ACS4 | Is mobile banking infrastructure widely available? | |
| Perceived risk | ACS5 | Are you able to access mobile banking all the anytime and anywhere? | Chen, 2012 [7]; Aliyu & Tasmin, 2012; Rahman *et al*, 2017 |
| | PCR1 | Is mobile banking secure? | |
| | PCR2 | Is there privacy when using mobile banking? | |
| | PCR3 | Do you develop fear when transactions using mobile banking? | |
| | PCR4 | Have you ever lost money while using mobile banking? | |
| | PCR5 | Is mobile banking safe to transfer money and payment of bills? | |
| Customer satisfaction | CUS1 | Does mobile banking offer you flexibility? | Chen, 2012 [7]; Thakur, 2014 [24]; Shaikh & Karjaluoto, 2016 [22]; Simon & Thomas, 2016 [23] |
| | CUS2 | Does mobile banking give you quick and easy access to financial information? | |
| | CUS3 | Do you feel confident and satisfied when using mobile banking? | |
| | CUS4 | Does mobile banking improve online customer service quality? | |
| | CUS5 | Are you satisfied with mobile banking service? | |

**Table 2:** Profile of the Sample

| Characteristic | Frequency | Percent (%) |
|---|---|---|
| **Gender of respondents** | | |
| Male | 90 | 43.3 |
| Female | 118 | 56.7 |
| **Age of respondents** | | |
| Less than 25 years | 28 | 13.5 |
| Between 25 and 30 years | 45 | 21.6 |
| Between 30 and 40 years | 97 | 46.6 |
| Between 40 and 50 years | 22 | 10.6 |
| Above 50 years | 16 | 7.7 |
| **Customer type** | | |
| Individual account holder | 120 | 57.7 |
| Corporate account holder | 41 | 19.7 |
| Student account holder | 47 | 22.6 |

## Analysis and results
Before testing research hypotheses, the researchers conducted some tests to ensure data appropriateness. That is, normality, reliability test, measurement model and finally structural equation modelling.

## Normality test
Data was tested for normality using Shapiro-Wilk's test and Kolmogrov-Smirnov[a] test. Results confirm that data was approximately normally distributed and the tests were statistically insignificant at ($p>0.05$) that is at 95% confidence interval for all hidden constructs (Shapiro & Wilk, 1965; Field, Miles & Field, 2012).

## Reliability test
Table 3 below shows a reliability result of 0.791 using Cronbach's alpha index. Since the index is between 0.7 and 1 it means the data and instrument was reliable.

**Table 3:** Reliability test

| Reliability Statistics | |
|---|---|
| Cronbach's Alpha | N of Items |
| .791 | 28 |

## Measurement model
Measurement model was assessed based on CMIN, goodness of fit (GFI), adjusted goodness of fit (AGFI), normed fit

index (NFI), Tucker Lewis index (TLI), comparative fit index (CFI) and root mean square error approximation (RMSEA).

**Table 4:** Model Fit Summary CMIN

| Model | NPAR | CMIN | DF | P | CMIN/DF |
|---|---|---|---|---|---|
| Default model | 60 | 2263.510 | 265 | .000 | 4.542 |
| Saturated model | 325 | .000 | 0 | | |
| Independence model | 25 | 3228.441 | 300 | .000 | 4.761 |

The CMIN is 4.542 and is acceptable since it is within the acceptable level of between 0 and 5.

**Table 5:** Goodness of fit index (GFI) and Adjusted goodness of fit index (AGFI) RMR, GFI

| Model | RMR | GFI | AGFI | PGFI |
|---|---|---|---|---|
| Default model | .149 | .657 | .580 | .536 |
| Saturated model | .000 | 1.000 | | |
| Independence model | .238 | .463 | .418 | .427 |

The goodness of fit index (GFI) is 0.657 and is within the acceptable level since it must be close to 1. Also, adjusted goodness of fit index (AGFI) is 0.580 and is closer to 1.

**Table 6:** Normed fit index (NFI), Tucker Lewis index (TLI), comparative fit index (CFI) Baseline Comparisons

| Model | NFI Delta1 | RFI rho1 | IFI Delta2 | TLI rho2 | CFI |
|---|---|---|---|---|---|
| Default model | .799 | .606 | .826 | .727 | .818 |
| Saturated model | 1.000 | | 1.000 | | 1.000 |
| Independence model | .000 | .000 | .000 | .000 | .000 |

NFI is 0.799 then TLI is 0.727 and CFI is 0.818 and all are close to 1 and are acceptable.

**Table 7:** Root mean square error approximation (RMSEA) RMSEA

| Model | RMSEA | LO 90 | HI 90 | PCLOSE |
|---|---|---|---|---|
| Default model | .091 | .084 | .098 | .000 |
| Independence model | .217 | .210 | .224 | .000 |

The RMSEA is at 0.091 and is acceptable since it is between 0.05 and 0.10

**Testing research hypothesis**

Structural equation modelling was applied to test research hypothesis. Results shows that SEM fitted data well, where CMIN= 4.979, GFI= 0.594, AGFI= 0.513, NFI= 0.762, TLI= 0.800, CFI= 0.769 and RMSEA= 0.080 (Hair *et al*., 2010; Hooper *et al*., 2008). The results on table 8 shows that trust, mobile interface usability, accessibility and perceived risk positively influence customer satisfaction.

**Table 8:** Hypotheses testing

| Hypothesis | Path | Standardised estimates | Hypothesis supported (Yes/No) |
|---|---|---|---|
| H1 | TRT --> CUS | 0.844*** | YES |
| H2 | MIU --> CUS | 0.932*** | YES |
| H3 | ACS --> CUS | 0.846*** | YES |
| H4 | PCR --> CUS | 0.847*** | YES |

Notes: *p<0.05; ***p<0.001; ns p>0.05

**Discussion and implications**

The findings of this study have theoretical, practical and future research implications.

**Theoretical implications**

There is scarcity of studies that have empirically studied the effect of mobile banking on customer satisfaction. This study seeks to close the gap. The study used a conceptual framework which covers trust, mobile interface usability, accessibility and perceived risk and their effect on customer satisfaction. It was found that trust have a positive effect on customer satisfaction. This implies that customers consider trust as a critical factor for them to use mobile banking despite ubiquity as an advantage. This is supported by Chen (2012) [7] who postulate that mobile banking providers must focus on trust and satisfaction. Chen (2012) [7] further reiterated that in the circumstance of enhancing level of trust in mobile banking, consumers will facilitate the unceasing intention towards mobile banking, therefore solution providers can add sales prospects and offer services and products that meet customer wants and needs. There is need for education in using mobile banking; the absence of trust and awareness in mobile banking were recognized as significant barriers in the widespread acceptance of mobile banking (Rouse & Verhoef, 2017) [20].

Mobile interface usability positively affects customer satisfaction. This is supported by previous study by Thakur (2014) [24]'s research which shows that mobile interface usability has a positive effect on customer satisfaction. Therefore, banks must ensure mobile interface is user friendly and customers can access all services at easy.

Accessibility has a positive effect on customer satisfaction. This is supported by a study by Agarwal and Mehrotra (2017) [2] who found out that accessibility is the most important factor in mobile banking. Accessibility include the availability of network which translate to accessibility of mobile banking services by customers in their areas.

Perceived risk has a positive effect on customer satisfaction. This is supported by Chen (2018) who also found that continuance intention on mobile banking is influenced by perceived risk. Many banking customers across the world continue to be sceptical about the advantages of the mobile financial facilities and the level of security provided on these services (Agwu & Carter, 2014) [5]. This shows that customers will be satisfied by mobile banking advantages provided that the systems are safe and secure.

**Practical implications**

Trust is considered a key element in mobile banking, so banks must educate clients on the services and benefits derived from use of mobile banking services. Also, it is important for banks to maintain and improve on trust because once the trust is lost it is difficult to get it back. The practical implications on mobile interface usability are that, in order to develop customer loyalty in m-banking, banks should prioritize user friendly interface and provide services valued by m-banking customers. Accessibility is key hence banks must ensure that their network is everywhere such that customers can perform banking transaction from anywhere at any time (ubiquity). Perceived risk is also a threat to customer satisfaction hence banks must give assurance to customers and ensure that the perceived risk is well manageable through delivering consistent service to customers.

**Limitations and Implications on future research**

Research should be conducted in future in this area and must also consider other developing countries before generalising the results. This is due to differences in terms of the economic

environments prevailing in different countries, the Zimbabwean case may be peculiar. Future studies may include a wider geographical space and test both in towns and rural areas.

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