Factors Affecting the Adoption of Mobile Money Services in Zambia: Case of Central Bank of Zambia

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ABSTRACT: Mobile money services have technologically advanced with an increase in popular usage in Africa and the rest of the world. The advancement in technology has birthed mobile money which is a new and popular service in Zambia. This study was a cross sectional study conducted to determine the influences of consumer adoption of the service. This study used a mixed research design involving both qualitative and quantitative methods (Saunders et al, 2016). The qualitative method was used to provide an explanation of various variables while the quantitative approach was used to quantify incidences in order to describe current perceptions as regards the factors influencing the adoption of mobile services. This enabled the researcher to gain in-depth information that would be used to find solutions for the research questions of the study. Purposive sampling techniques was employed to select respondents to select a sample size of 100. It is a conclusion emanating from this study that the majority of the respondent’s number of customers believed mobile money service by network operators was less costly than traditional banking and this influenced their adoption. As electronic money transfer service by network operators is becoming more prevalent, so is the level of customer service delivery thus the level of customer adoption of the service is increasing as the service is perceived not only to be convenient but a low cost service. The study recommended that Mobile network operator’s staff and officials should be adequately trained in e-banking products and services to be able to address customers’ needs and challenges. Furthermore, the network providers need to effectively package their products to ensure increased use of the service. Products and services to customers to close the seemingly knowledge gap that exists among the populace with regard to the benefits that can be derived from mobile money services. Such innovation now includes small loans which consumers can access and repay within a chosen time period.

KEY WORDS: Bank of Zambia, Central of Zambia, Mobile Money adoption, Zicta.

INTRODUCTION

Internet banking (e-banking) is the method of banking in which transactions are conducted electronically via the internet. It’s the use of internet and telecommunication networks to deliver a wide range of value added products and services to bank customers (Ovia, 2012) through the use of a system that allows individuals to perform banking activities at home or from their offices over the internet. Some online banks are traditional banks which also offer online banking, while others are online only and have no physical presence. Online banking through traditional banks enables customers to perform all routine transactions, such as account transfers, balance inquiries, bill payments, and stop-payment requests, and some even offer online loan applications. Customers can access account information at any time, day or night, and this can be done from anywhere.

Electronic banking is considered as a new revolution of the traditional banking services which offers customers the greatest expediency for performing banking transactions via electronic platforms. All banks, especially the large banks and mutual banks, have gradually increased their number of Internet banking services available to customers over the past decades (Momeni, 2013).

Mobile banking has technologically advanced with an increase in popular usage in Africa and the rest of the world. The advancement in technology has birthed mobile money which is a new and popular service in Zambia. Mobile money services include balance inquiry, funds transfer, utility bill payments and other additional services. The adoption of mobile money technology has brought about the advancement of mobile communication technologies and changes in banking operations in conjunction with the mobile service providers. Mobile banking technology is increasingly becoming beneficial to people as well as the banking industry. The advancement in electronic banking and the introduction of M-business that is making usage of mobile phones in settling monetary transactions like transfer of funds, utility payments ad generally paying for goods and services by use of a portable gadget (Aboelmaged, M. 2013).
In recent years, Zambia has increased its chances of improving various levels of cash procurement, such as Airtel Money, MTN Money and Zamtel. Mobile cash is a serious competitor to Zambia's commercial banks. According to a draft filed by the Bank of Zambia in the National Financial Inclusion Strategy Report of 31 March 2018 “Zambia had approximately 6 million mobile money enrolled accounts compared to almost 3 million enlisted bank accounts. There are 3.9 million exchanges on a month to month premise and this outperformed the number of conventional bank accounts in Zambia with 2.6 million exchanges from commercial banks (World Bank, 2018).”

The Zambia Department of Information and Communication Technology (ZICTA) has allowed licensed multipurpose system administrators (MNOs) to provide portable cash management if banks are unable to accommodate low-income income. The MNO has devised a convenient cash exchange method for conducting financial transactions using mobile phones and PIN codes or secret words. As a result, they face fierce competition in the form of accounting for the majority of commercial banks (Inambao, W., Phiri, J., & Kunda, D 2018).

STATEMENT OF THE RESEARCH PROBLEM
Banks are critical to a country’s economic development. The Central Bank of Zambia is the key stake holders to the economic development of the country as it is mandated to build an inclusive and resilient financial Sector in its 2020 -23 strategic Plan.

There are currently seventeen (17) Commercial banks in Zambia and they have all implemented mobile banking platforms however with the introduction of the MNOs bank account holders prefer to use mobile money accounts like Airtel, MTN or ZAMTEL Money or a combination of these. Despite the having 17 commercial banks in the financial system and the influx of mobile money services providers with less Know your customer (KYC) requires the problem of high unbanked population remains alarmingly high for a Country with a population of about 17 Million.

It is against this background that the researcher has embarked on this case study that seeks to find out factors that affect or influence the selection of mobile money from the customer’s point of view in Zambia with a specific reference to confidence, relative advantage, convenience and perceived risks. The Central Bank of Zambia has 600 employees and is the target population for this study. The area of study will comprise of employees that hold MTN, Airtel or Zamtel mobile money accounts as well as commercial bank accounts.

PURPOSE OF THE STUDY
The general objective of the study was to determine the factors that influence adoption of mobile money services in Zambia. Specifically, the study examines
1. To determine to what extent convenience that is the perceived ease of usage plays a role in the adoption process among the central bankers.
2. To ascertain the extent to which relative advantage that the cost benefit analysis with regards to time and cost affect the adoption of mobile money among the central bankers.
3. To ascertain the extent to which perceived risks associated with mobile money affects adoption of mobile money among the central bankers
4. To ascertain the extent to which the levels of confidence in the mobile operator such as Airtel or MTN affects the adoption of mobile money among the central bankers

SCOPE OF THE STUDY
According to (Babbie 2013) the scope of a study explains the extent to which the research area will be explored in the work and specifies the parameters within which the study will operate. This study concentrated on the factors affecting the adoption of mobile banking services within the CBD of Lusaka. The study focused on what influences the rate of adoption of mobile banking services.
LITERATURE REVIEW

From the viewpoint of banks, Internet banking helps them to maintain profitable growth through reducing operation and fixed costs (Hernando and Nieto, 2007). A simple transaction cost for a non-cash payment at a branch is likely to cost a bank as much as 11 times more than the same transaction over the Internet (Jayawardhena and Foley, 2000). In addition, Internet banking enhances marketing and communication, as it serves 24 hours a day and a customer can be guided through a catalogue of products and services (Eriksson, 2015).

Over the past few years, advancement in information technology and communication technology (ICT) has transformed the way in which organizations operate and conduct business (AL-Jabri, 2012). Technological advancement introduced mobile banking in the banking arena and this innovation has revolutionized the way in which commercial banks operate. Saleem and Rashid (2011) define mobile banking as the use of mobile telecommunication devices such as mobile phones and tablets to perform banking services.

Hendrickson and Nichols (2011) focused on a study of the performance of small banks in the United States of America. The authors found out that banks are more efficient when they use mobile banking because mobile banking is a low cost delivery channel to both the bank and the consumer hence leading to profitability and increased market share should a bank adopt it. Apart from all the performance benefits gained, mobile banking allows for the integration of advanced e-commerce in the organization. Hendrickson and Nichols, 2011. This allows the bank to stay relevant in a fast-paced and innovative industry as technology is causing changes. On the contrary, another group of scholars is of the opinion that the innovation of mobile banking has a negative effect on financial performance. Scholars who subscribe to this school of thought include (Shih et al, 2014) and (Maringe, 2012). Shih et al (2014) conducted a study on mobile banking as a method of financial inclusion and the author found that people in rural areas, who are financially excluded, do not need the service offered by mobile banking. The author goes on to explain that they only need basic banking services like receiving money, sending money and balance enquiry, all of which can be provided by mobile money operators. Mobile money operators are mobile telecommunications companies.

THEORETICAL REVIEW

This research study is based on three main theories: innovation diffusion model, technological adaptation model and behavior reinforcement theory. These theories have been adopted because they address the issue how technology becomes popular among the citizens and employees in doing business with each other.

Theory of Reasoned Action

Theory of Reasoned Action (TRA) was developed to better understand relationships between attitudes, intentions and behaviors (Fishbein, 1967). This is one of the most important theories that are used to explain human behaviors (Poon, 2008).

So service quality has become a significant research topic in past decade due to high revenues, increased cross sell ratios, higher customer retention, purchasing behaviors (Kaynak & Harcar, 2015) and expanded market share. The significance of customer service in the banking sector came to force to compete in a market driven environment. The service sector as a whole is very heterogeneous and what is heterogeneous may hold true for one service and may not hold for another service sector. Due to this differentiation, services in this industry could not be standardized, moreover these services are intangible in nature which could not be compared or seen. The concept of customer satisfaction and service quality is interrelated with each other.

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). Informational technology in form of digital banking plays a significant role in providing better services at lower costs. Increased satisfaction in turn increases the mutual understanding, customer retention and a bond of trust between a customer and the bank. The banks which are providing these services at a large extent to customers are more reputed in the eyes of customers. As the customer satisfaction is the function of customer expectation level and service quality level provided by the organization, digital banking plays a pivotal role in giving satisfaction to the customers because digital banking fills the gap between the expected and perceived service quality.

Technology Adaptation Model (TAM)

The technology acceptance model (TAM) is an information systems theory that models how users come to accept and use a technology. Perceived usefulness (PU) – This was defined by Fred Davis (1989) as ‘the degree to which a person believes that using
a particular system would enhance his or her job performance”. This theory is significant in that if both the employees of and customers of mobile operator firms in ensuring that there is increased uptake of mobile banking as the traditional modes of banking are costly and are fast getting outdated.

Behavior Reinforcement Theory
Reinforcement theory is the process of shaping behavior by controlling consequences of the behaviour (Skinner, 1938) as cited in Armstrong (2006). Reinforcement theory proposes that you can change someone's behaviour by using reinforcement, punishment, and extinction. Extinction is a means to stop someone from performing a learned behaviour. This theory is applicable to the current study because the customers of the Bank will need to be informed that the bank is encouraging online transactions through mobile Once a customer adopts mobile banking and it succeeds then they will be much more willing to permanently change their behaviour.

2.1.4 Innovation diffusion theory
This research employed the diffusion of innovations theory which was proposed by Rogers (1995). Diffusion is referred to as a social process by which an innovation is communicated through certain channels over time among members of a social system (Rogers, 1962). This process is undoubtedly similar to the subject under study which falls in the electronic commerce location. Specifically, a task or transaction needs to be communicated to a set of firms or customers (members of a social system) within a market or an industry. In this case, the distribution channel being promoted by the Bank is mobile banking (Fienna and Bernard, 2012).

METHODOLOGY
The study adopted both qualitative and quantitative approaches. Qualitative analysis provided an interpretation of views gathered from interviews with customers and managers. On the other hand quantitative data generated attitude scales filled by customer. This called for the interpretation of the statistics (Babbie, 2013). These approaches provide a more comprehensive view about the subject matter under investigation.

RESULT DISCUSSION AND INTERPRETATIONS
The researcher conducted both qualitative and quantitative analysis for the data collected from the study. This method of data analysis was therefore adopted to enable the researcher to draw meaningful conclusions from the data provided.

![Figure 4.1: Distribution of respondent by Gender](source: Field study, 2021)
The figure above depicts the distribution of respondents by their gender. From the target sample size of 100 about 52% were female while 48% of the respondents were male.

Figure 4.2: Distribution of Respondents by highest level of education attained

Source: Field study, 2021

The figure above depicts the distribution of respondents by education attained. The majority respondents were well educated with sixteen (22) of the respondents being graduates. Thirty four (34) had diplomas, and 8 were holders of Postgraduate qualifications, 36 were secondary school certificate holders. It was crucially important to find out the educational attainments of the participants because of the nature of the topic, which calls for people to be technologically competent to conduct mobile money transactions. When the majority of respondents have a humble education and are computer illiterate, they may regard a topic as being complicated and fail to participate in the study effectively.

Table 4.3: Distribution of respondent by Age and Management level

| Management level  | 18-25 years | 25-34 years | 35-44 years | Above 45 | TOTAL |
|-------------------|-------------|-------------|-------------|---------|-------|
| Middle management | 6           | 8           | 7           | 6       | 27    |
| Middle management | 5           | 6           | 8           | 8       | 27    |
| Senior management | 0           | 0           | 7           | 12      | 19    |
| Unionized staff   | 12          | 9           | 2           | 4       | 27    |
| **TOTAL**         | 23          | 23          | 24          | 30      | 100   |

Source: Field study, 2021
The age distribution according to levels indicate that age wise the latest group of respondents were the above 45 age group (30%) followed by 35-44 age group (24%) followed by the, followed by 25-34 age group (23%) and 18-25 age group who were equally at 23%.

Table 4.4: Respondent’s current mobile money service provider

| MOBILE MONEY OPERATOR | RESPONSE | PERCENTAGE |
|-----------------------|----------|------------|
| MTN                   | 45       | 45%        |
| AIRTEL                | 35       | 35%        |
| ZAMTEL                | 14       | 14%        |
| OTHER                 | 6        | 6%         |
| TOTAL                 | 100      | 100%       |

Source: Field study, 2021

Table 4.4 above indicate that the highest number of respondents were with MTN at 45%, followed by Airtel at 35% and Zamtel at 14%. The other mobile money providers were at 6%. This distribution is in accordance with the market share of the mobile money providers in Zambia which according to ZICTA (2020) stood at 46% for MTN, 40% for Airtel and Zamtel 16%.

Figure 4.4 above shows respondents’ level satisfaction with mobile money services provided by the mobile operator.

The data reveals that 25% of the respondents were highly satisfied and 30% were satisfied while 20% were dissatisfied and 20% were highly dissatisfied while 5% were neutral. The implication of this finding is that almost half of the respondents were not satisfied with the services provided by mobile money service providers and as such there was a real need to improve this service to enhance customer satisfaction.
Figure 4.4 above shows respondents’ level satisfaction with do it yourself selves service provided by the mobile money network providers. The data reveals that 25% of the respondents were highly satisfied and another 25% were satisfied while 15% were dissatisfied and 20% were highly dissatisfied while 15% were neutral. The implication of this finding is that the mobile money service providers do it yourself services were fairly good though there was to still need to improve this service.

Figure 4.6: Respondents satisfaction with Mobile services

Figure 4.4 above shows respondents’ level satisfaction with mobile money service dealers. The data reveals that 28% of the respondents were highly satisfied and another 36% were satisfied while 20% were dissatisfied and 20% were highly dissatisfied while 7% were neutral. The implication of this finding is that the services provided by mobile service dealers were fairly good though this could be improved upon.
Table 4.5: Response to attitude scales

| Statement                                                                 | SA 1 | A 2 | N 3 | DA 4 | SDA 5 |
|--------------------------------------------------------------------------|------|-----|-----|------|-------|
| I am satisfied with the level of customer service provided by staff of my mobile operator in regard to mobile service stations. | 26 (26%) | 36 (36%) | 8 (8%) | 16 (16%) | 14 (14%) |
| My mobile operator’s technology used to provide mobile money service is reliable | 21 (21%) | 37 (37%) | 4 (4%) | 19 (19%) | 19 (19%) |
| Most people would prefer to be attended to within 5 minutes by mobile money service provider’s staff | 30 (30%) | 35 (35%) | 5 (5%) | 20 (20%) | 10 (10%) |
| Mobile money transfer problems are resolved expeditiously                  | 15 (15%) | 15 (15%) | 7 (7%) | 35 (35%) | 28 (28%) |
| The online procedure for registering for self-service as regards mobile money are easier to operate easy | 39 (39%) | 40 (40%) | 8 (8%) | 9 (9%) | 4 (4%) |
| My mobile operator keeps promises to its customers on aspects regarding changes to mobile money service | 18 (18%) | 17 (17%) | 11 (11%) | 25 (25%) | 29 (29%) |
| I feel my mobile operator service is less risk                            | 32 (32%) | 38 (38%) | 4 (4%) | 11 (11%) | 15 (15%) |
| Mobile operator’s ability to providing variety of services is excellent   | 35 (35%) | 26 (26%) | 6 (6%) | 18 (18%) | 15 (15%) |
| The behaviour of my mobile operator’s employees instils confidence in customers | 21 (21%) | 23 (23%) | 8 (8%) | 24 (24%) | 24 (24%) |
| My mobile operator staff apologize to customers for any inconvenience to customers as regards mobile poor incidences money service | 16 (16%) | 12 (12%) | 9 (9%) | 33 (33%) | 30 (30%) |
| My mobile money operator has good loyalty programmes to recognize me as a customer | 12 (12%) | 18 (18%) | 3 (3%) | 35 (35%) | 32 (32%) |
| My mobile money operator’s employees are approachable and easy to contact | 14 (14%) | 16 (16%) | 10 (10%) | 30 (30%) | 30 (30%) |
| My mobile money operator introduces innovative technology to enhance customer service | 35 (35%) | 34 (34%) | 1 (1%) | 15 (15%) | 15 (15%) |
| My mobile money operator has a good reputation in the market due to good customer service | 41 (41%) | 34 (34%) | 3 (3%) | 12 (12%) | 10 (10%) |
| The dealers of my mobile money service provider are conveniently located | 26 (26%) | 36 (36%) | 8 (8%) | 16 (16%) | 14 (14%) |
| I would recommend someone to utilize the services of my mobile network operator | 29 (29%) | 38 (28%) | 2 (2%) | 15 (15%) | 16 (16%) |
| I find mobile money transfer service less costly than traditional banking | 41 (41%) | 34 (34%) | 3 (3%) | 12 (12%) | 10 (10%) |

Source: Field study, 2021

The respondents were asked to rate their level of agreement with the statement “I am satisfied with the level of customer service provided by staff of my mobile operator in regard to mobile service stations.” The data in table 4.5 above reveal that 62% of the respondents agreed with the statement while 30% disagreed and 8% were neutral. The implication of this finding is that a high number of customers used mobile money service because they were satisfied with the services provide by the staff of mobile money operators.
4.5.2 The respondents were asked to rate their level of agreement with the statement
“My mobile operator’s technology used to provide mobile money service is reliable”
The data in table 4.5 above reveal that 58% of the respondents agreed with the statement while 38% disagreed and 4% were neutral. The implication of this finding is that a high number of customers used mobile money transfer service because the technology was reliable.

4.5.3 The respondents were asked to rate their level of agreement with the statement
“Most people would prefer to be attended to within 5 minutes by mobile money service provider’s staff”
The data in table 4.5 above reveal that 65% of the respondents agreed with the statement while 30% disagreed and 5% were neutral. The implication of this finding is that a high number of customers used mobile money transfer service more efficiently than conventional banking and this could encourage greater adoption of the service.

4.5.4 The respondents were asked to rate their level of agreement with the statement
“Mobile money transfer problems are resolved expeditiously”
The data in table 4.5 above reveal that 30% of the respondents agreed with the statement while 63% disagreed and 7% were neutral. The implication of this finding is that a high number of customers felt that mobile money transfer problems were not resolved expeditiously and this caused customer dissatisfaction and this could discourage greater adoption of the service.

4.5.5 The respondents were asked to rate their level of agreement with the statement
“The online procedure for registering for self-service as regards mobile money are easier to operate easy”
The data in table 4.5 above reveal that 13% of the respondents disagreed with the statement while 79% agreed and 8% were neutral. The implication of this finding is that a high number of respondents were computer literate to register for mobile banking service and this encouraged greater adoption of the service.

4.5.6 The respondents were asked to rate their level of agreement with the statement
“My mobile operator keeps promises to its customers on aspects regarding changes to mobile money service”
The data in table 4 above reveal that 35% of the respondents agreed with the statement while 54% disagreed and 11% were neutral. The implication of this finding is that a high number of respondents felt that the mobile money providers needed to walk the talk this could discourage the use if the service if they do not live by their promises.

4.5.7 The respondents were asked to rate their level of agreement with the statement
“I feel my mobile operator service is less risk “
The data in table 4.5 above reveal that 70% of the respondents agreed with the statement while 26% disagreed and 4% were neutral. The implication of this finding is that a high number of respondents were adopting the service because it was less risky.

4.5.8 The respondents were asked to rate their level of agreement with the statement
“Mobile operator’s ability to providing variety of services is excellent.”
The data in table 4.5 above reveal that 61% of the respondents agreed with the statement while 33% disagreed and 6% were neutral. The implication of this finding is that a high number of customers were using mobile money transfer service because of the accompanying excellent services and this tends to enhance the adoption of mobile services.

4.5.9 The respondents were asked to rate their level of agreement with the statement
“The behaviour of my mobile operator’s employees instils confidence in customers”
The data in table 4.5 above reveal that 44% of the respondents agreed with the statement while 48% disagreed and 8% were neutral. The implication of this finding is that there is need for the mobile service providers to instill more confidence in the service considering the high number of people that are trying to swindle customers out of their savings in mobile money platforms.

4.5.10 The respondents were asked to rate their level of agreement with the statement
“My mobile operator staff apologize to customers for any inconvenience to customers as regards mobile poor incidences money service”
The data in table 4.7 above reveal that 28% of the respondents agreed with the statement while 63% disagreed and 9% were neutral. The implication of this finding is that there was need to apologize to customers each time a service is aborted for example due to system failure.

4.5.11 The respondents were asked to rate their level of agreement with the statement
“My mobile money operator has good loyalty programmes to recognize me as a customer”
The data in table 4.7 above reveal that 30% of the respondents agreed with the statement while 67% disagreed and 3% were neutral. The implication of this finding is that there was need to introduce more loyalty programmes to encourage greater adoption of the service.

4.5.12 The respondents were asked to rate their level of agreement with the statement
“My mobile money operator's employees are approachable and easy to contact”
The data in table 4.5 above reveal that 30% of the respondents agreed with the statement while 60% disagreed and 10% were neutral. The implication of this finding is that a large number of respondents did not satisfied with the availability of staff to attend to their problems through the call centers.

4.5.13 The respondents were asked to rate their level of agreement with the statement
“My mobile money operator introduces innovative technology to enhance customer service”
The data in table 4.5 above reveal that 69% of the respondents agreed with the statement while 30% disagreed and 12% were neutral. The implication of this finding is that a high number of customers believed that their mobile money transfer operators introduced innovative technology which could further encourage adoption of the service.

4.5.14 The respondents were asked to rate their level of agreement with the statement
“My mobile money operator has a good reputation in the market due to good customer service”
The data in table 4.5 above reveal that 75% of the respondents agreed with the statement while 22% disagreed and 3% were neutral. The implication of this finding is that a high number of customers continued to use mobile money services because their providers had good name of the market. The implication of this finding was that people adopted mobile money services because the operators had a strong brand name on the market.

The respondents were asked to rate their level of agreement with the statement
“The dealers of my mobile money service provider are conveniently located”
The data in table 4.5 above reveal that 62% of the respondents agreed with the statement while 30% disagreed and 8% were neutral. The implication of this finding is that a high number of customers believed traditional banking had limited services as compared to digital banking.

The respondents were asked to rate their level of agreement with the statement
“I find mobile money transfer service less costly than traditional banking”
The data in 4.5 above reveal that 75% of the respondents agreed with the statement while 22% disagreed and 3% were neutral. The implication of this finding is that a high number of customers believed mobile money service by network operators was less costly and then traditional banking and this influenced.

CONCLUSION AND RECOMMENDATIONS

Conclusions
In line with the objectives as set out in chapter one this study makes conclusions accordingly. The study found that that the majority of the respondents were of the view that they adopted the service because it was convenient in terms of use. This finding is supported by Shih et al, (2014) who conducted a study on mobile banking as a method of financial inclusion and the author found that people...
in rural areas, who are the financially excluded, do not need the services offered by mobile banking but instead preferred to use mobile money transfer services provided by network firms.

It is a conclusion emanating from this study that the majority of the respondent’s number of customers believed mobile money service by network operators was less costly and then traditional banking and this influenced. As electronic money transfer service by network operators is becoming more prevalent, so is the level of customer service delivery thus the level of customer adoption of the service is increasing as the service is perceived not only to be convenient but a low cost service. (Hamisah, 2013)

On perceived risk of the service this study concludes that the majority of customers were adopting the mobile money service because it was less risky. According to Airtel Zambia (2020) this is a service which allows customers to access information about their accounts via electronic devices with internet connection. What is needed is for the customer to download an application or simply register for mobile money service. Once access is gained, the customer can perform a lot of retail banking functions such as bill payments, transfer of funds from bank account to mobile money.

On consumer confidence, this study found that that the majority of the respondents adopted the service because they had great confidence in the service providers systems and the operation of the service itself. According to MTN customer service manager this consumer confidence is boosted by the fact that mobile money transfer service through the platform of a network provider has provided numerous benefits for both network providers and their customers

**Recommendations**

In the light of foregoing, this study recommends as follows:

Mobile network operators staff and officials should be adequately trained in e-banking products and services to be able to address customers’ needs and challenges. Furthermore, the network providers need to effectively package their products to ensure increased use of the service. Products and services to customers to close the seemingly knowledge gap that exists among the populace with regard to the benefits that can be derived from mobile money services. such innovation now includes small loans which consumers can access and repay within a chosen time period

Mobile money transfer service through the platform of a network provider has provided numerous benefits for both network providers and their customers. The firms should continue to be innovative to attract and retain customers to the service. Thus mobile operators should continue encouraging to customers who have not yet adopted digital banking by way of mobile banking, for example, to do so. Text messages and e-mail messages should be sent to customers to who have not yet registered for digital banking to do. The response can be overwhelming especially during this period of the COVID-19 during which time this research was conducted.

The network operators have made tremendous efforts to popularize their service since 2016. The increasing awareness of the importance of computer literacy has resulted in increasing the use of mobile phones. This certainly supports the growth of mobile money transfer services through network providers such as MTN, Airtel and Furthermore, it eliminates the barriers of distance or time and provides continual productivity to the informal sector including marketers, barbershops, salons and grocery shops. Thus both online and offline promotion of the service should continue more to tap into the rural customer segment.

The mobile operator firms should continue to partner with the commercial banks. The banks provide the customers with the proprietary software, which they use to access their bank accounts, sometimes the internet via the World Wide Web (www). This is however on a more limited scale though, as it has been targeted largely at corporate clients. Mobile operators must work with commercial banks to provide an enhanced service linking bank accounts to mobile money service.

**Areas of Future Study**

This study was largely qualitative and focused on consumer adoption of mobile money service. This study was a cross section study. It is proposed that a future study consider the profitability of mobile network providers in relation to service provision.
REFERENCES

1. Aboelmaged, M., & Gebba, T. R. (2013). Mobile banking adoption: an examination of technology acceptance model and theory of planned behavior. International Journal of Business Research and Development, 2(1).

2. Akturan, U., Tezcan, N. (2012). Mobile banking adoption of the youth market: Perceptions and intentions. Marketing Intelligence & Planning, 30(4), 444-459.

3. Berger, J., Bayarri, M. J., & Pericchi, L. R. (2014). The effective sample size. Econometric Reviews, 33(1-4), 197-217.

4. Bryman, A. & Bell, E. (2011). Business research methods, (3rd edn), Oxford: University Press, Oxford.

5. Cavus, N., & Christina, D. (2016). Information technology in the banking sector: Review of mobile banking. Global Journal Of Information Technology, 5(2), 62.

6. Creswell, J.W, & Plano Clark, P. (2007). Designing and Conducting Mixed Methods Research. London: Sage Publications.

7. Fleisher C. and Ben Soussan, B. (2007) Business and Competitive Analysis: Effective Application of New Classic Methods, Financial Times Press.

8. Hair, J.F. Jr., Anderson, R.E., Tatham. R.L, and Black, W.C. (1998). “Multivariate Data Analysis”. New Jersey: Prentice Hall.

9. Hair, J.F., Black, W.C., Babin, B.J., and Anderson, R.E. (2010). Multivariate Data Analysis: A Global Perspective. 7th Edn., Pearson Education Inc.

10. Inambao, W., Phiri, J., & Kunda, D. (2018). Digital identity modelling for digital financial services in zambia. ICTACT Journal on Communication Technology, 9(3), 1829-1837.

11. Jobber, D (2010) Principles and Practice of Marketing. London, Prentice hall.

12. Kim, D. J., Ferrin, D. L., & Rao, H. R. (2009). Trust and satisfaction, two stepping stones for successful e-commerce relationships: A longitudinal exploration. Information systems research, 20(2), 237-237.

13. Kotler P and Keller K(2012)Marketing Management. London, pearson.

14. Koziol, N., & Arthur, A. (2011). An introduction to secondary data analysis. Research Methodology Series.

15. Mcknight, D. H., Carter, M., Thatcher, J. B., & Clay, P. F. (2011). Trust in a specific technology: An investigation of its components and measures. ACM Transactions on Management Information Systems (TMIS), 2(2), 12.

16. MHA, K. (2015). A Mobile Banking Adoption Model in the Jordanian Market: An Integration of TAM with Perceived Risks and Perceived Benefits. J Internet Bank Commer,

17. Nduta, R.W. and Wanjira, J., 2019. E-Banking Strategy and Performance of Commercial Banks in Kenya. International Journal of Current Aspects, 3(V), pp.147-165.

18. Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. International Journal of Economics & Management Sciences, 6(2), 1-5.

19. Salem, B.B. and Yosr, L(2015)., Perception of the impact of service quality on customer satisfaction and loyalty: The case of e-banking in Tunisia.

20. Saunders, M. and Thornhill, A.(2003). Organization justice, trust and the management of change: an exploration, personnel review, vol 32, no. 3, pp 360-375.64

21. Saunders, M., Lewis, P. H. I. L. I. P., & Thornhill, A. D. R. I. A. N. (2007). Research methods. Business Students 4th edition Pearson Education Limited, England.

22. Shankar, A., & Kumari, P. (2016). Factors affecting mobile banking adoption behavior in India. The Journal of Internet Banking and Commerce, 21(1).

23. Stahel, W., 1994. The utilization-focused service economy: Resource efficiency and product-life extension. The greening of industrial ecosystems, pp.178-190.

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