# Exploring Customers' Perception on Adoption and Use of Electronic Banking Services in Tanzania Commercial Banks

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**ABSTRACT:** This study aimed at examining Customers' perception on adoption and use of e-banking services at Tanzania Commercial Banks. The main objective was to examine customers' adoption and use of electronic banking services in Tanzania Commercial Bank and specifically, the study determined customers perception in terms of usefulness, usage, trust and awareness, and whether this perception have an impact in the use of traditional methods at National Microfinance Bank (NMB) in Tanzania. Questionnaires method was employed to collect information of the study from the NMB customer and for NMB annual report was used. Data was analysed by the use of statistical package for social science (SPSS).

Findings indicated that majority of the respondents were appealed to use traditional banking services due to security, assurance, convenience and accessibility of services. The findings also indicated that majority of respondents found that the electronic banking services technology was easy to use, simple but needed training on its usage and also the customers have less awareness about the electronic banking services. On factors that influence the adoption of internet and mobile banking, the study found that majority of respondents indicated that internet and mobile banking improve the banking service to a great extent and majority of respondents rated the performance of the internet and mobile banking as excellent. Similarly, the study found that, ease of use, perceived risk, reliability, perceived usefulness and received creditability influenced adoption of internet and mobile banking.

The study concludes that secure and better ICT quality positively assists in building trust among the users who will utilize the electronic banking services. It is recommended that banks should give high priority to customer service efficacy and should consider electronic banking as important key drivers towards successful implementation of customer service efficacy. Bank managers and policy makers should direct efforts and resources in the most effective and efficient way to increase bank business in long run and encourage customers to adopt electronic banking by training customers.

**KEYWORDS:** Internet Banking, Usage, Mobile Banking, Adoption, Banking Services.

# 1 BACKGROUND AND INTRODUCTION

As the business world revolves around technological innovation, internet banking has become a significant tool in today's financial sector. Bank customers are helped by internet banking to conduct their transactions online without been physically present in the banking hall or premises. Up to 1980s, banks provided only one channel for delivering banking services to their clients: the branch network (Uppal, 2011). Later, due to e-banking needs, banks acquired direct banking e-channels including ATMs, POS devices, Mobile banking, and Internet banking (Daniela, Simona & Dragos, 2010) to improve e-banking performance through anywhere, anytime and multiple banking services (Kumbhar, 2011).

However, banks now support direct channels that include mobile banking, internet banking, and social media in rendering better customer services. This development has given customers several channels to choose from based on the unique benefits of each channel and what channels complement each other in service provision (Ostergaard, 2010). Even though banks recognize the significance of multi-channel customer service delivery that aims at improving customer experience, one of their key challenges is monitoring these disparate platforms and systems to ensure optimal uptime and rapid response to incidents reported that affect the provision of services to customers through these channels. However, providing 24/7 service delivery

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is more practicable on certain channels such as ATMs but not bank branches. Therefore, there is a focus shift from manned channels to self-service channels (Uppal, 2011). In the current situation of technological changes from analogue to digital application in East – Southern Africa, developments in Information and Communication Technology (ICT) are rapidly changing the way business is done of which is directly impacted by the pressure in competition and change in customer preferences.

Information Technology (IT) is currently regarded as the easy handling of data and information through electronic means or ways of which involves processing, storing, accessing, transferring and delivery (Ige, 1995). IT has been a push factor or facilitator in growth of competitive financial environment or sector in Tanzania especially in the recent years (Coombs, R., Saviotti, P. and Walsh. V., 1987). The recent activities done in Tanzania are changing the technological activities from analogue to digital tending to affect the customer behaviour of which the psychological aspect happens to demand much from the financial institutions due to the overwhelming feelings brought by technological innovations.

Compared to physical banking, internet banking has some unique characteristics, such as the extensive use of technologies and the impersonal nature of the online environment. These characteristics, however, give rise to customers' uncertainty about using internet banking for financial transactions (Gan et al., 2006; Yousafzai et al., 2003). In fact, there are still a large group of customers who are reluctant to adopt internet banking due to this uncertainty (Kuisma et al., 2007; Littler & Melanthiou, 2006). As a result, banks and policymakers consider increasing the adoption rate of internet banking as their priority when creating strategic plans to build competitive advantage (Shih & Fang, 2004).

## 1.1 PROBLEM, PURPOSE AND SIGNIFICANCE

Despite the fact technological innovations through IT facilitation has brought about alternative banking channels, and also the availability of numerous ATMs and agents in streets, still customers are moving inside banking halls to access banking services. Commercial banks in Tanzania are yet to adopt appropriate alternative banking channels to enhance accessibility of banking services. Researchers such as Mkoka, (2014) have argued Tanzania's banks continue to conduct most of their banking transactions using traditional methods and lack of technological innovations in developing countries such as Tanzania will develop a fruitful investigation. Mkoka, (2014) have been conducted to ascertain the level of banking services in Tanzania as a result of technological innovations.

All commercial banks are profit oriented (Hannsens& Schultz, 2011). For that reason, alternative banking channels are taken to be one of the key ways of optimizing services and minimizing costs. Commercial banks are also keen on transforming their operations in order to provide 24-7 services. For this to be realized, alternative banking channels are viewed as the best option to provide greater differentiation from their competitors (Park & Weber, 2012). Hence, the emergence of new technologies, processes, markets and competitor banks places demand on any commercial bank to apply any skills and channels necessary to enhance their financial performance, remain competitive and achieve competitive advantage (Parasuraman, A., Zeithaml, V., & Malhotra, A. 2001).

Electronic banking channels set up alternative delivery channels, financial transactions are done electronically, without physically interacting with the bank. Alternative banking is alternative options for process banking transactions other than traditional means (Chebii, 2013). In Tanzania banking sector, alternative banking channels which have strong been adopted by commercial banks include internet banking, mobile banking and agency banking. The reasons for adopting these alternative banking channels are convenience alternatives for branch banking as customers are not required to visit physical bank branches, reduce cost of operations and improve competitiveness and also alternative banking channels retain existing customers and attract new customers.

Despite the availability of the alternative banking channels which have become a major banking service channels, many customers still prefer to enter in banking halls for banking retail services resulting in long queues (NMB Annual Report 2016). This has been appealed by customers and stakeholders that can be caused not only by the perception of the service but the traditional ways preferences. This study therefore sought to examine why customers adopt traditional banking services while there are electronic banking service in those banks which is quick, more convenient and easily assessable. The emphasis is to determine customers' perceptions of e-banking in terms of usefulness, usage, trust and awareness, to determine whether these perceptions in have impact in the use of traditional methods in the National Microfinance Bank in Tanzania and to analyze the factor leading to adoption and use e-banking services based on perceived self-efficacy in the National Microfinance Bank in Tanzania. The study focused on National Microfinance Bank because the bank is one among the largest commercial bank in Tanzania and holds the largest number of customers compared to other commercial banks in Tanzania (The Citizen 2016).

This study is substantial in specially for banking industry in Tanzania and it will assist the managers to cope the problems of customers about electronic banking services available and to articulate approaches about those electronic banking services which are still unavailable to the customers in the country. The findings of the study will point out clearly where and how

alternative banking channels can be used as a tool for improving customer service; hence it acts as an initiative for all financial institutions on technological innovations decisions. The findings of the study will also assist policy makers in the banking industry to understand why customers adopt traditional banking services while there are alternative banking channels in banking services sector. This will enable them to develop appropriate policies that can enhance adoption of technological innovations in the banking sector.

#### 1.2 LITERATURE OUTLOOK

Kumbhar, (2011) defined Customer satisfaction as the state of mind that customers have about a company when their expectations have been met or exceeded over the lifetime of the product or service while Internet Banking refers to electronic payment system that enables customers of a bank or other financial institution to conduct a range of transactions through the financial institution website. Maduku, (2014) defined *Perception* as the way a person thinks or understand someone or something. The ability to understand or notice something easily. Also Maduku, (2014) has defined *Usefulness* as the quality of having utility or benefit or value and especially practical worth or applicability. Alex, (2015) on the hand defined *Usage* as the action, amount or mode of using ie it is the amount of using something. Various theories and models have explained the alternative banking channels on the commercial Banks in Tanzania. These include; Technology Acceptance Model, Theory Planned Behaviour, and Social Construction Theory.

## 1.2.1 TECHNOLOGY ACCEPTANCE MODEL

This is a model that was introduced by Davis, Bagozzi, and Warshaw (1989). This model is the most cited model that researchers used to study the underlying factors which motivate users to adopt and accept a new information system (Al Shibly, 2011). Technology Acceptance Model (TAM) plays the principal role of providing an explanation of the factors that affect computer applications acceptance. This model also helps researchers and practitioners to identify why a particular system is unacceptable (Davis, 1989). In this Davis suggested that attitude, behaviour and perceived usefulness are the key determinant to the use of information system. This model is used to explain how banks adopt to electronic banking.

### 1.2.2 THEORY PLANNED BEHAVIOUR

This theory suggests that human behaviour is determined by the intention to perform the behaviour; this is however affected by attitude (feeling about a specific behaviour), perceived behavioural control (persons' perception) and subjective norm (organizational or social pressure) (Ajzen, 1991, 2002). This theory is used in the study to explain how electronic banking is adopted.

# 1.2.3 SOCIAL CONSTRUCTION THEORY

This theory argues that it is not technology that determines how people use and receive mobile technology but people. In this regard, the theory argues that the use of technology is best understood through getting an understanding of how it's socially integrated within society. This is therefore dependant on how the society views the technology (Vankatesh, Davis and Morris, 2007).

# 1.2.4 EMPIRICAL REVIEW

Under the wave of technological innovations to improve commercial banking services, many scholars and organizations have conducted researches and come up with their own findings and conclusions: Dilijonas et al., (2009) examined the essential aspects of ATM service quality in Baltic States. They identified essential resources (adequate number of ATMs, convenient and secure location and user-friendly system); important dimensions of operation of ATM (maximum speed, minimum errors, high uptime, cash backup); and value-based aspects (quality service at reasonable cost, and maximum offering to cover maximum needs of customers) as vital facets. Based on the prior studies, Al-Hawari et al. (2006) compiled a list of five major items about ATM service quality that include convenient and secured locations, functions of ATM, adequate number of machines and user-friendliness of the systems and procedures. An empirical study found that these items constitute important aspects of ATM service quality.

According to Singhal and Padhmanabhan (2008), User of ICT based banking expect Convenience, Flexibility, Easy to use and user friendliness, Reliability, Fulfilments, Real time access, Cost effectiveness, Alternative Options, Security & Privacy, Speed & Continuity, Anytime and anywhere banking facilities. There is some risk factors include in e-banking like data loss, fraud, lack

of adequate information, password theft etc. Kaleem Ahmad (2008). Hence customers expect security and trust in e-banking services.

Islam et al., (2005) examined the satisfaction level of ATM card holders of a leading bank (HBSC) in Bangladesh. The study found significant relationship of ATM service quality with customers' satisfaction. The study identified that location, personnel response, quality of currency notes, promptness of card delivery and performance of ATM were positively and significantly related to customer' satisfaction. The security, frequent breakdown of machine, and insufficient number of ATM were major contributors of customers' dissatisfaction.

In another study in Bangladesh, Shamsdouha et al., (2005) found that 24 hours service, accuracy, and convenient locations were the main predictors of customer satisfaction. The study also indicated lack of privacy in executing the transaction, fear of safety and complexity of the machine were the major cause of concern for the customers.

Thanika et al., (2012) investigated factors influencing the adoption of internet banking in Mauritius. This study reports upon the empirical findings of the customer survey on the various factors impacting on the adoption of internet banking by the questionnaire method. Data analysis showed that perceived ease of use and perceived usefulness have a direct influence on the adoption of internet banking in Mauritius. Results have also indicated that both trust and security aspects are deemed crucial factors to explaining internet banking adoption in Mauritius. Further examination of the inferential analysis highlighted that level of education and income level of respondents may be a major determinant in influencing the adoption of internet banking. This research provides banking institutions with significant information on the various aspects that need to be highlighted in their banking communications strategies to increase the adoption rate of internet banking services. The research findings revealed that secured web contents and design were key tools to increase the adoption rate of internet banking.

Agboola (2006) did a study on Information and Communication Technology (ICT) in banking operations in Nigeria using the nature and degree of adoption of innovative technologies; degree of utilization of the identified technologies; and the impact of the adoption of ICT devices on banks, found out that technology was the main driving force of competition in the banking industry. During his study he witnessed increase in the adoption of ATMs, Electronic Fund transfer (EFT), smart cards, electronic home and office banking and telephone banking. He indicates that adoption of ICT improves the banks' image and leads to a wider, faster and more efficient market. He asserts that it is imperative for bank management to intensify investment in ICT products to facilitate speed, convenience, and accurate services, or otherwise lose out to their competitors.

Felix, (2012) explored how technological innovations have changed banking operations observed that in developing countries, banking is changing into being conducted electronically. The study revealed that most of the banking activities can be done faster by the use of modern technology. The study showed that technological innovations help in getting data, processing, storing and quick retrieval. The study concluded that e-banking represents the inevitable scenario of future banking by being faster, impatient and very responsive, and action oriented. Also he added that e-banking enables banks to expand their markets both locally and globally.

Maria, (2003) explored consumer adoption of technological innovations. This study introduced a conceptual model of consumer innovation adoption based on knowledge and compatibility. More specifically, innovation adoption is proposed to be determined by four adopter groups: technovators, supplemental experts, novices, and core experts, and the interaction between their knowledge and compatibility with the technological innovation. Compatibility occurs when a potential adopter perceives the innovation as being consistent with his/her existing values, past experiences, and needs. The model presented is intended to help researchers and practitioners successfully identify potential adopters of a technological innovation.

# 2 MATERIALS AND METHODS

The study adopted a descriptive research design. Mugenda and Mugenda (2003) described descriptive research design as a systematic, empirical inquiry into which the researcher does not have a direct control of independent variable as their manifestation has already occurred or because it inherently cannot be manipulated. Descriptive studies are concerned with the what, where and how of a phenomenon hence more placed to build a profile on that phenomenon (Mugenda and Mugenda, 2003). The choice for this design is made because it allows presenting a data in more meaningful way which results to simple interpretation of the data. The method is much appropriate in the case where the collected data are primary and instrument used is questionnaire.

#### 2.1 CONCEPTUAL FRAMEWORK

The Figure 1 shows the relationship between the independent variables and dependent variable. The conceptual framework shows that if Mobile banking and Internet banking technologies were introduced they would enhance the efficiency of banking services.

Perceived efficacy or effectiveness observed through the efficiency banking service depends on the choice of either electronic or Traditional banking services. If the customer adopt and use electronic or traditional banking service it will depend on the awareness, usefulness, usage and trust. Those four factors will force the customers to use either electronic or traditional banking services. The use of traditional banking services or electronic banking services are automatically related to perceived effectivess/efficiency which enhance efficiency banking services.

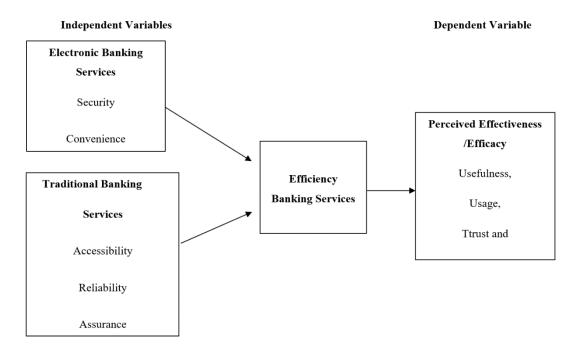


Fig. 1. Conceptual Framework

Source: Researcher Own Construct, (2019)

The customers of National Microfinance Bank in Zanzibar were used as Target population and. Random sampling approach has been used in sample selection where the respondent where randomly picked regardless of their age, education, sex and other factors ie there is no chance of discrimination. A sample of 90 respondents was selected among the customers of National Microfinance Bank in Zanzibar. Stratified sampling was used in this study to sample NMB customers, customers were grouped in sub-population called strata and then selection of customers was done under random selection to participate in the study. The reasons to use stratified sampling included many applications, measurements become more manageable and/or cheaper when population was grouped into strata. Also, it was often desirable to have estimates of population parameters for groups within the population. The respondendents were selected according to the type of bank account they had at National Microfinance Bank in Zanzibar.

# 3 RESULTS AND ANALYSIS

# 3.1 CUSTOMERS PERCEPTION ON ELECTRONIC BANKING INTERMS OF USAGE, USEFULNESS, TRUST AND AWARENESS

Figure 2 shows that Customer perception on e-banking in term of usage the 34% of the respondents was strong disagree with the usage of e-banking, 20% of the respondents were also disagree with the usage electronic banking services, 22% of the respondents said they were strong satisfied with the usage of electronic banking services, 14% of the respondents were satisfied with the usage of e-banking and 10% were neutral on the usage of e-banking services. This implies that most of the

customers were not using the electronic banking services. The adoption of electronic banking services are still low compare to traditional banking services.

On the customer perception of electronic banking in term of usefulness 33% of the respondent were strong disatisfied with the usefulness of e-banking services at NMB, 13% of the respondent were satisfied with the usefulness of e-banking services at NMB, 11% of the respondent were neutral about the usefulness of e-banking services, 20% of the respondent were disagree with the usefulness of e-banking services at NMB and 23% of the respondents were strong satisfied with the usefulness of the e-banking services at NMB. High percentage of the respondents were disagree with the usefulness of e-banking as it was not easy to access the transaction and it was only if the system working perfecty. Morever, the customer perception of electronic banking interm of trust. This is the one among most challenging aspect on e-banking and the findings shows that 39% of the respondents were strong disagree with the trust on NMB e-banking services, 24% were disagree with the trust in the NMB electronic banking services, 6% of the respondents were neutral about the trust on electronic banking services, 8% of the respondents were satisfied with the trust on electronic banking services at NMB and 20% of the respondents were strong satisfied with the trust on electronic banking services offered. The majority of the respondents were not on a good terms with electronic banking services because of the small percentage of trust they had with NMB and so they prefer not to use electronic banking services.

Customer perception on e-banking services interm of awareness. The finding shows that 45% of the respondent were strong disagree to have the awareness about the electronic banking services, 20% of the respondents were disagree with the awareness of electronic banking services at NMB. 8% of the total respondent were neutral about the awareness of e-banking at NMB, 9% were satisfied with the knowledge of e-banking at NMB and 18% were were strong satisfied with the awareness of the e-banking at NMB. Awareness is the important factor for the improvement and sell of the product without the awareness the customer will not be able what is going on the business world and on this findind most of the customers did not have any awareness about the electronic banking services.

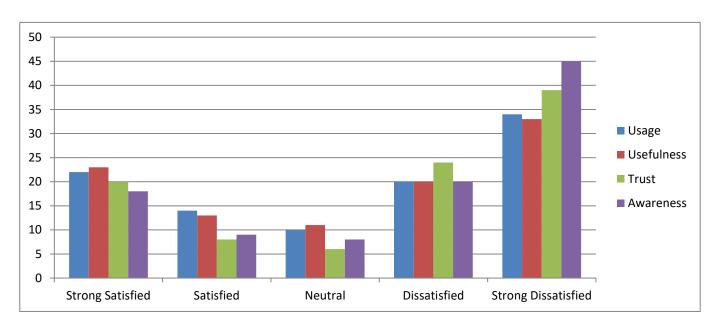


Fig. 2. Customer perception on electronic banking on usefulness, usage, trust and awareness

# 3.2 CUSTOMERS SATISFACTION ON ELECTRONIC BANKING SERVICES OFFERED BY NMB

Table 1. Customers satisfaction on electronic banking services offered by nmb

	Frequency	Percentage	
Poor	51	57	
Good	20	22	
Very Good	13	14	
Excellent	6	7	
Total	90	100	

Findings in Table 1 has indicated that 57% of respondent were not satisfied with the electronic services offered by NMB, 22% of the respondents said the services were good, 14% of the respondents said the services were very good according to their satisfaction and 7% of the respondents said the electronic banking services were excellent. Most of the respondents were not satisfied by the electronic banking services offered by NMB. The respondents (customers of NMB) were not satisfied by the electronic banking services hence they were prefer to use traditional banking services, the reason for not using electronic services were mostly trust (security) and awareness.

## 3.3 FACTORS LEADING TO ADOPTION AND USE OF ELECTRONIC BANKING SERVICES

**Percent** Responses Frequency Strong satisfied 44 49 Satisfied 22 25 Neutral 5 5 Dissatisfied 10 11 Strong dissatisfied 9 10 **Total** 90 100

Table 2. Level of satisfaction with traditional banking services

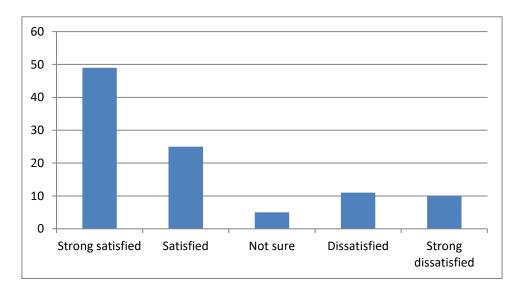


Fig. 3. Level of satisfaction with traditional banking services

Findings indicated that 49% of the respondents were strong satisfied with traditional banking services, 25% were satisfied with traditional banking services whereas 5% of respondents were neutral on their level of satisfaction with traditional banking services. Correspondingly, 11% of the respondents were dissatisfied with traditional banking services and 10% of the respondents were strong dissatisfied with traditional banking services. This implies that majority of the respondents 74% were satisfied with traditional banking services at National Microfinance Bank. The traditional banking services enhance efficiency banking services and lead perceived effectiveness / efficacy in terms of usage, usefulness, trust and awareness.

# 3.4 FACTORS INFLUENCE THE ADOPTION OF INTERNET AND MOBILE BANKING

The study aimed at examine Customers adoption and use of internet and mobile banking at National Microfinance Bank in Tanzania. Respondents were asked the extent Internet and Mobile Banking that are required in boosting bank service. The table 3 indicated the findings.

Table 3. Extent on internet and mobile banking

Response	Frequency	Percent
Little extent	3	3
Moderate extent	7	8
Great extent	60	67
Very great extent	20	22
Total	90	100

Findings indicated that 67% of respondents indicated that internet and mobile banking improve banking service to a great extent, 22% of respondents indicated that internet and mobile banking improve banking service to a very great extent, 8% of respondents indicated that internet and mobile banking improve banking service to a moderate extent and only 3% of respondents indicated that internet and mobile banking improve banking service to a little extent. Findings implied that internet and mobile banking are the services in the banking sector that can be used to improve banking service at great extent. E-banking is very helpful for the any financial institution because it helps to reduce the labor cost as the work is done through electronic way.

Table 4. Factor leading to adoption and use of electronic banking

Factor	Not at all	Little extent	Moderate	Great extent	V.G.extent
Ease of use	26	9	6	15	34
Perceived risk	5	8	17	18	42
Reliability	46	10	7	12	15
Perceived usefulness	22	5	14	16	33
Received creditability	47	7	4	8	24

The number of respondents was 90. 37% of the respondents said it ease to use electronic banking, 29% of the respondents said it is not easy, in general 54% of the respondents agreed that it is easy to use electronic banking services. More ever 47% of the total respondents said there is great risk on using electronic banking services, and only 5% of the respondents said there is no perceived risk on using electronic banking. On reliability as a leading factor to electronic banking 51% of the respondents were not relied on electronic banking at all and 16% were relied on electronic banking services. On usefulness basis 24% of the respondents said they are not agree on the usefulness of electronic banking and 37% of the respondents said electronic banking services is more useful in today generation. And lastly on credibility basis 52% of the respondents were not having credibility on electronic banking services and 27% of the respondents said there a very great extent on electronic banking services. In general according to the respondents it is very easy to use electronic banking services, there are great risk on using electronic banking services, the respondents were not relied on electronic banking services, the respondents said electronic banking services is very useful and lastly the respondents credibility on electronic banking services were very low.

## 4 DISCUSSION AND IMPLICATION

On customers perception on adoption and use of electronic banking services in Tanzania Commercial Bank, researcher found that majority of the respondents were appealed to use traditional banking services due to security, lower transaction cost, assurance, convenience and accessibility of the services. Also, researcher found that most respondents were strong satisfied with traditional banking services at National Microfinance Bank. Similarly, researcher found that security positively influences the perceived ease of use of traditional banking and awareness of traditional banking services and its benefits has a positive impact on customer's perceived usefulness. Also, researcher found that customer's approach towards using traditional banking has a significant impact on intention to use it.

Moreover, researcher found that most of respondents found that the traditional banking services technology was simple, easy to use and needed for training. Furthermore, researcher found that majority of respondents agreed to prefer using electronic banking services due to services efficacy, easy to use, useful in use, and save time.

On factors influence the adoption of internet and mobile banking, researcher found that majority of respondents indicated that internet and mobile banking improve the banking service to a great extent and majority of respondents rated the

performance of the internet and mobile banking as excellent. Similarly, researcher found that ease of use, perceived risk, reliability, perceived usefulness and received creditability influenced adoption of internet and mobile banking.

Electronic banking has a direct effect on the profitability of the NMB bank over the traditional banking services because e-banking services enhance the profitability of banks. The study shows a strong connection between e-banking services and the profitability of the bank. Through reduced costs, convenience, security, higher speed of transactions and increased streams of revenue, e-banking services enhance the profitability of the NMB bank. The ease with which e-banking services can be accessed has led to higher subscription rates that boost turnover. Convenience has made it possible for the unbanked segment to subscribe to the bank which has in turn increased the revenue earned by banks. Moreover, the higher speed of transactions means more transactions at a time leading to higher profits. Finally, the reduced costs due to low manpower required to facilitate the delivery of banking services has enhanced the profitability of the banks. Governments in developing countries have a big role to play in the success of e-banking in their respective countries. In Tanzania, there is need for the government to constantly review and adopt clear and relevant regulations that address the dynamic nature of e-banking.

## 5 CONCLUSION

The study concludes that secure and better ICT quality positively assists in building trust among the users who will utilize the e-banking services thus effective customer self efficacy/effeciency which will assist in decongesting banking halls but still serving customers well. Also, the study concludes that electronic mobile devices can aid in effective customer self efficacy. This is so because customers do not necessarily have to visit the bank to carry out transactions on their account. Instead, they can do so anywhere, any time at their convenience with the help of the electronic mobile devises. This means that the devices have a great influence on customer service self efficacy in commercial banks. The study concludes that electronic transactions are determined by customer driven factors such as customer intention drivers, customer attitude, ease of use by customer, usefulness of e-banking service to customer and trust were as rated in the analysis. Cost reduction and customer related factors have emerged as the main drivers of e-banking and customer service delivery channels. Mobile banking growth is expected to continue, reputational risks increases with an increase in use of e-banking. Internet security remains a major threat in e-banking. Hence banks need to ensure proper controls in e-banking services

## **REFERENCES**

- [1] Alex (2015) Factors Affecting the Adoption of Internet Banking in Nigeria.
- [2] Al Shibly (2011). Factord Affecting Adoption of Electronic Banking. An Analysis of the Perspectived of Banks' Customers.
- [3] International Journal of Bussines and Science Vol. 3 No. 17 2012.
- [4] Ajzen (1991). Theory Planned Behaviour.
- [5] Chebii, M. (2013).Kenya Commercial Bank and SME banking alternative channels. Retrieved from http://smefinanceforum.org/post/kenya-commercial-bank-and-sme-banking-alternative-channels-by-milkah-chebii-from-kcb.
- [6] Coombs, R., Saviotti, P. and Walsh. V., (1987) Economics and Technological Change, Macmillan: London.
- [7] Davis, Bagozzzi, and Warshaw (1989). An analysis of the Technology AcceptanceModel in Understanding University Students' Behavioral Intention to Use e-Learning. Department of Management London School of Economics.
- [8] Gan, C., Clemes, M., Limsombunchai, V., & Weng, A. (2006). A logit analysis of electronic banking in New Zealand. International Journal of Bank Marketing, 24 (6), 360-383. https://doi.org/10.1108/02652320610701717.
- [9] Hannsens, D. M., & Schultz, R. L. (2011). Market Response Models: Econometric and Time Series Analysis. Boston, USA: Kluwer Academic Publishers.
- [10] Ige, O. (1995). "Information technology in a De-regulated Telecommunications Environment", Keynote address, INFOTECH 95. First International Conference on Information Technology Management. Lagos, Nigeria. November 16-17. Impacting the Adoption of The Internet among SMEs, ".
- [11] Kumbhar V. M. (2011). Alternative Banking: A Modern Practice in India, Professional Banker. India: ICFAI University press.
- [12] Kuisma, T., Laukkanen, T., & Hiltunen, M. (2007). Mapping the reasons for resistance to internet banking: a means-end approach. International Journal of Information Management, 27, 75-85. https://doi.org/10.1016/j.ijinfomgt.2006.08.006.
- [13] Kaleem, A., & Ahmad, S. (2008). Bankers perceptions of electronic banking in Pakistan Retrieved from http://www.arraydev.com/commerce/jibc.
- [14] Littler, D., & Melanthiou, D. (2006). Consumer perceptions of risk and uncertainty and the implications for behaviour towards innovative retail services: the case of internet banking. Journal of Retailing and Consumer Services, 13 (6), 431-443. https://doi.org/10.1016/j.jretconser.2006.02.006.

- [15] Mkoka, I. J., (2014). The factors affecting the Adoption e-banking in Tanzania Banking Industry: The Case of Banks in Dar es salaam Region. Master's thesis, The Open University of Tanzania.
- [16] Maria, S., (2003). "Consumer adoption of technological innovations", European Journal of Innovation Management, Vol. 6 Iss: 2, pp.90 100.
- [17] Maduku (2014). Customers' adoption and use of e-banking services: the South African perspective. Banks and Bank Systems (openaccess), 9 (2).
- [18] Mugenda, O., & Mugenda, A. (2003). Research Methods: Qualitative and Quantitative Approaches. Nairobi. Africa Center for Technology Studies.
- [19] Ostergaad (2010). The development perspectives for bthe ICT sector in North Jutland.
- [20] Park, K. H., & Weber, W. L. (2012). A note of efficiency and productivity growth in the Korean banking industry, 1992-2002. Journal of Banking and Finance, 30, 2371-2386.
- [21] Parasuraman, A., Zeithaml, V., & Malhotra, A. (2001). E-S-QUAL: A Multiple-Item Scale for Assessing Electronic Service quality. Journal of Service Research, 7 (3), 213-234.
- [22] Shih, Y. Y., & Fang, K. (2004). The use of a decomposed theory of planned behaviour to study internet banking in Taiwan. Internet Research, 14 (3), 213-223. https://doi.org/10.1108/10662240410542643.
- [23] Thanika, D. J; Sharmila, P and Priyasha R., (2012). "Factors influencing the adoption of internet banking: a case study of commercial banks in Mauritius", World Journal of Science, Technology and Sustainable Development, Vol. 9 lss: 3, pp.204 234.
- [24] Uppal (2011) A Comparative Study of Customer Perception toward E-banking Services Provided By Selected Private & Public Sector Bank in India.
- [25] Venkatesh, Davis and Morris (2007). The literature Review of Technology Adoption Models and Theories for the Novelty Technology.
- [26] Yousafzai, S. Y., Pallister, J. G., & Foxall, G. R. (2003). A proposed model of e-trust for electronic banking. Technovation, 23 (11), 847-860. https://doi.org/10.1016/S0166-4972 (03) 00130-5.