

**THE FUTURE OF DIGITAL BANKING SERVICES IN MALAWI: EXPLORING THE  
CHALLENGES AND GROWTH**

**MASTER OF BUSINESS ADMINISTRATION DISSERTATION**

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**UNIVERSITY OF MALAWI  
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CHALLENGES AND GROWTH**

**MASTER OF BUSINESS ADMINISTRATION THESIS**

**By**

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## DECLARATIONS

I, Anna Tinyade Khuntho Kayira, declare that this dissertation is my own original work. Where other sources of information have been used, I have acknowledged the information accordingly. As such, this work has not been submitted at any university before in partial fulfilment of any other degree or examination.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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**CERTIFICATE OF APPROVAL**

We, the undersigned, hereby certify that we have read and approve for examination by the University of Malawi, this dissertation entitled *‘The future of digital banking services in Malawi: Exploring the opportunities and growth’*

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## **DEDICATION**

I dedicate this work to my dear late mother, Mrs. Emily Sunganani Khuntho. She was a great mother and always believed in me. Her beautiful spirit will always live on in us.

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## **ABSTRACT**

Globally, banks continue to invest in Information and Communication Technology (ICT) to accelerate the growth of digital banking. Banks have now migrated from the usual “brick and mortar” to what is called “click and mortal”. Developing countries have not been left out, they are also doing anything possible to compete in the global market. This research aimed to explore the knowledge and usage of e-banking services, identify challenges that affect the growth of digital banking in Malawi and explore the growth strategies for the acceleration of digital banking services. Five banks in the Southern Region took part in this research where four customers from each bank were interviewed. Key informants from the banks were also interviewed to understand the challenges and possible remedies banks would use to accelerate digital banking growth. Using thematic analysis to analyze the data, the study came up with the following themes: lack of awareness (of banks’ products and services), banks’ complacency, the need for change and external factors challenges. Participants highlighted the need for the banks to act with urgency whenever they present their grievances to the bank. Automation of more services on e-banking was also highlighted as one of the areas that the banks need to improve on to keep away customers from the banking halls. The desire for cyber security enhancement and sensitisation of the banks’ products and services were also emphasized. These results have significant implications for policymakers, who have an important role to play in making sure that the country’s e-banking infrastructure and services are improved to have a conducive environment for digital banking adoption. The research was cross sectional as five banks were sampled for this research. It is therefore recommended that for future research, all the banks in the country should take part in this research to have a better perspective of the delivery of digital financial services. It is also important that for further research, third parties in the service delivery of digital financial services be included to also have a better understanding from all concerned parties.

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## **ABBREVIATIONS AND ACRONYMS**

ATM	Auto Teller Machines
ICT	Information, Communication & Technology
POS	Point of Sale
USSD	Unstructured Supplementary Service Data
MNO	Mobile Network Operator
E-banking	Electronic Banking
Mobile banking	Act of making financial transactions on a mobile device

## CHAPTER ONE: INTRODUCTION AND BACKGROUND

### 1.1 Background of the study

The advancement in Information and Communication Technology globally has changed the way firms conduct their businesses. The shift of digital technology from mechanical and analogue electronic technology started as early as the 1940s and this led to the adoption of digital computers and digital record keeping (International Monetary Fund[IMF], 2021). The Internet was developed in the 1960s and 1970s and became one of the prominent applications of digital technology (IMF, 2021). The rapid increase of digital technology has led banks to be one of the leaders in adopting these new technologies (Borges et al., 2020). The banking industry, through the introduction of digital banking, has responded to the new needs and changes in the lifestyle of its customers (Shcherbatykh et al., 2021).

The banking industry has witnessed how the “brick and mortar” type of business, where people traditionally used to visit the banking halls to transact, to know what is called the “click and mortar” where most of the banking transactions are being done at the click of a button (King, 2018). The younger generation expects faster services more connected to their smartphones, is more attracted to international travel, and is aligned with their mobile and convenient lifestyle (IMF, 2021). The banking industry therefore comes in to answer to the modern way of living that the younger generation wants to adapt to. A study has shown that banks appear to have been the digital leaders, likely benefiting from a sound digital infrastructure, a strong legal and business environment, and healthy competition (IMF, 2021). As such, it is inevitable for the banks to follow the technological advancements that are being experienced globally.

The COVID-19 pandemic has also necessitated the need for banks to change how they conduct their business (Reserve Bank of Malawi, 2020). It has provided a great boost to emerging digital banking services as it provides more convenient access to financial services (Borges et al., 2020). During the peak of the pandemic, many people were afraid to go out of their homes for fear of catching the virus (Andrade et al., 2022). Others were also limited to going out because they were either in isolation or they were looking after their sick relations. Life still had to go on, it was, therefore, electronic banking that was more convenient for people to keep in touch with the business world (Reserve Bank of Malawi Monthly Economic Review, 2022). This made life easier for most of the people who were unable to go out of their homes to do traditional banking.

There are different ways in which banks can apply digital transformation to their services. Firstly, using websites is the customer's first touch point with the bank (Borges et al., 2020). A customer can know the products and services that a bank offers before visiting the bank. This helps customers make informed decisions on what to do at the bank. The use of mobile applications is also another way that banks have applied digital transformation. Mobile applications are where the banks have applications that people can download to access their bank accounts through their phones (Kaur et al., 2021). The use of Automated Teller Machine (ATM), internet banking, and Point Of Sales (POS) machines have all made it possible for banks to be technologically advanced therefore keeping in touch with their customer base (Skinner, 2014).

As much as there are these technological advancements that banks must adopt to stay competitive in the market, there are also challenges that are hindering the advancement of digital banking on the global level. It has been noted that about 49% of American adults do not participate in online banking (Revathi, 2019). This is the case because the older generation prefers traditional banking to modern banking. Security is also one of the drawbacks of digital banking. In 2015 in the United Kingdom, roughly 130 million British pounds were stolen from online bank accounts through fraud (Revathi, 2019). Frauds contribute to people's continued preference for traditional banking channels, which are considered safer for customers (Rabiu et al., 2019a). Additionally, the complexity of transactions poses a challenge to the global progress of digital banking. It has been observed that depositing and withdrawing money from an online bank is significantly more difficult and time-consuming (Revathi, 2019). Technical issues have also been attributed to be one of the major challenges in the advancement of digital banking worldwide (Selvam et al., 2018). Despite the heavy investments in digital technology, banks still find themselves dealing with the challenges to do with technology.

There are also opportunities in the digital banking world that banks can explore and benefit from. The e-banking has brought in an increase in the volume of deposits from customers (as cited by Agwu & Carter, 2014; Taiwo & Agwu, 2017 & Severino et al., 2015). The deposit mobilisation is important for the banks as these funds can be used to lend to customers which can in turn lead to more interest for the bank and the deposits also help with the bank's cash flow (Banke & Yitayaw, 2022). Digital banking is generally viewed as a means of providing traditional services in a modern way as it aims at providing speedier and time efficient transactions for customers with little or no paperwork involved (as cited by Hossain et al, 2013 in Taiwo & Agwu, 2017). This is an opportunity for both the customer and the bank as the customer can transact at the tip of a button

which is convenient and fast, and it is also important to the latter as it saves from the establishment of more physical banks which are generally costly than managing a virtual bank (IMF, 2021). Digital banking is largely motivated by the prospects of minimising operating costs while maximising operating revenue (Selvam et al., 2018).

It should be noted that digitalisation has changed the face of banks. It was noted that globally, in 2019, digitalisation cut the operating costs of banks from 50% to 30% due to fewer branches and employees (as cited by Citi, 2019 in IMF, 2021). The initial investment of new technology is usually costly as the bank must invest in internal and external hardware, new software, and new staff with information technology expertise, however, the recurrent costs in the medium to long term are expected to be lower as banks now spend less on system maintenance (IMF, 2021). Digital banking has also enhanced operational efficiency and it has allowed for financial inclusion as mobile wallets have made it possible for those without accounts to access financial services just like those who have bank accounts (Rabiu et al., 2019b).

Malawi, being a developing country economically, has not been spared by these digital technological advancements. As a country, it has experienced several digital advancements such as the use of Internet banking, mobile banking, the use of Automated Teller Machines (ATM), mobile wallets, and debit and credit cards which have necessitated a smooth flow of business (Rabiu et al., 2019b). Banks have taken advantage of an increase of people using smart gadgets such as smartphones and tablets to tap into this market (Shcherbatykh et al., 2021). Despite these digital advancements, the banking industry has seen several challenges such as high internet prices, low electricity coverage, lack of digital skills, fraud, and traditional hindrances, among other challenges (MACRA, 2020), that must be addressed to find solutions that will mitigate the above challenges. It can be noted from the above literature that despite the challenges that banks globally are facing, there are more opportunities that Malawian banks can embrace to stay competitive. It was therefore the aim of this research to explore those challenges that were hindering the growth of digital banking in the country and explore the growth strategies that would help the acceleration of digital banking in the country.

## **1.2 Problem statement**

The development of digital banking in Malawi dates back to 2002 when the Reserve Bank of Malawi (RBM) established the Malawi Switch (then Malswitch now National Integrated Technologies Limited [Nitl]) to facilitate the implementation of a clear, secure, and guaranteed e-

payment infrastructure (Majanga, 2016). Since the establishment of Malswitch, the penetration of digital banking has been at a snail's pace. People still rely on traditional banks to transact, unlike the digital bank which is faster and more convenient to the customers (Taiwo & Agwu, 2017). Banks have invested heavily in technology as can be witnessed with frequent system upgrades by the service providers. As much as there are these investments which show that there are opportunities in digital banking, the banking industry is still facing more challenges both from the customers' perspective and the banks' perspectives in terms of fraud, system downtime, high internet prices, and low deposit volumes. The much-invested digital technology is not yielding what it ought to yield.

As the long queues at both the ATMs and banking halls have now become the order of the day, this has resulted in bad publicity for the banks. People have now lost trust in the banks that they are unable to solve in-house problems which have resulted in long queues. The system downtime has also affected people's daily lives as they are not able to transact at their convenient times. In Malawi, there is a high number of the unbanked (Malawi Population and Housing Census, 2018) which the banks can take advantage of, but with the challenges that the banks are facing such as fraud, and intermittent system challenges, it is hard to convince such people to open accounts with banks which they can benefit from. The technological challenges have also affected the banks' revenue since most of the digital transactions are chargeable (Revathi, 2019), but where people are not making use of these channels, then the banks are losing out on revenue. Since more people are still resorting to traditional banking than electronic banking, banks are spending more on the establishment of more physical branches and have more manpower to serve such customers which is very expensive for the banks (Selvam et al., 2018). If the above challenges were resolved, the banking industry would see a boost in their deposits, revenue as well as operational efficiency which would all lead to more revenue.

With the above-highlighted issues, it was important that the problems that the banking industry was facing would be looked at seriously and understood from both the customers' and banks' perspectives why such problems were still there. From the bankers, it was also important to seek from them the opportunities and growth strategies they visualise for the future of digital banking in the country if the challenges highlighted above were to be resolved. It was therefore the purpose of this research to identify the challenges that were being faced by banks in terms of the acceleration of digital banking in the country and explore opportunities in digital banking for a desired future in the digital banking industry that people would like to witness.



### **1.3 Main objective**

The main objective of this study was to explore the knowledge and usage of e-banking services and identify challenges that affect the growth of digital banking in Malawi.

### **1.4 Specific objective**

The following were specific objectives for this study;

- a. To assess customer's knowledge and user experience of digital banking services
- b. To establish the challenges that are hindering the growth of digital financial services in Malawi.
- c. To explore the bankers' and customers' perceptions of the growth of digital banking services

### **1.5 Research questions**

- a. What is the customers' knowledge and user experience of digital banking services?
- b. What are the challenges that are hindering the growth of digital banking services in Malawi?
- c. What are the bankers' and customers' perceptions on the growth of digital banking services?

### **1.6 Rationale of the study**

Malawi as a developing country, has set goals that it wants to achieve by the year 2063 ("Malawi Vision 2063 Paper," 2020). The Malawi Vision 2063, in terms of Information and Communication Technology, states that "the country shall have a robust ICT infrastructure with cross-country coverage of reliable and affordable services fostering technological adoption and digital access" ("Malawi Vision 2063 Paper," 2020). As is the case now, the country has not achieved a robust infrastructure in terms of ICT as some areas in the country still face network challenges that people are unable to inclusively take part in digital banking services (Malawi Population and Housing Census, 2018). As it is the vision of this country to see to it that the country by 2063 it has advanced in terms of ICT, this research would assist in fostering this vision by compiling the challenges that the banking sector is facing in terms of the adoption of digital banking services and opportunities that would help in the implementation of Malawi's Vision 2063.

Secondly, the Reserve Bank of Malawi is advocating for a cashless society where people need to embrace the use of plastic money when making payments (Reserve Bank of Malawi Monthly Economic Review, 2022). This has a favourable consequence in the sense that it would improve

financial inclusion (IMF, 2021). As of 2021, out of a total population of 19.3 million in the country, only 23% had access to banking activities leaving out a huge figure of 77% of people not involved in any banking activities (*Malawi Key Country Statistics*, n.d.). This is worrisome as being in the 21<sup>st</sup> Century, as a country, there should have been strides made in terms of digital advancements. This research would help to find the challenges that people face that make them not take an active part in financial inclusion activities. The research would also help to find the opportunities that the banks can make to include more people in digital financial activities.

Lastly, as digital technology has advanced, banks have often been leaders in adopting these new technologies (IMF, 2021). Financial institutions are heavily investing in e-banking infrastructure to improve service delivery to their customers (Borges et al., 2020). As much as this is the case, banks still face challenges in the adoption of digital services such as low electricity coverage, high internet prices, high cost of smart devices, lack of digital skills, cultural issues and other factors that are yet to be explored (National Survey on ICT Access and Usage, 2019). It was therefore important that these challenges that people were facing needed to be looked at critically and explore strategies that would help banks reap the heavy investments that they are making in digital financial services.

Malawi as a developing country, the digital advancement is not yet at its peak as is the case with developed countries. For digital maturity to reach in the country, there is a need for more research to be conducted to understand the digital banking platforms and developments that are happening globally. A review of the literature has shown that there are not many studies that have been conducted in terms of digital banking in the country. A few of the studies that have been conducted on digital banking have given much attention to ATMs and mobile banking as these were the first platforms that were first launched on the market. Digital banking (which encompasses Internet banking, mobile banking, ATMs, POS, and debit cards) has not been given much attention just like the two platforms have been given the attention. The challenges that were explored in other surveys, may not be the same challenges that the banking system is facing today. Therefore, this study sought to understand the challenges that customers face today in the adoption of digital banking.

With an increase in the number of banks and customers as well, there are opportunities that probably banks are missing out on that can accelerate the adoption of digital banking in the country. This research was important therefore to explore those opportunities that would help banks to drive

their business and in the long run, accelerate the economy of the country. If the banking industry is to improve, then there is a need for researchers to well understand the volatile environment that the banking industry is operating in. Therefore, as banking transactions are the order of the day, the results from this research would help to understand the ever-changing environment in which banks are operating in. The results from this study would also help to contribute to the academic literature on digital banking in Malawi as the literature currently is limited and help those wishing to undertake similar studies to have more access to literature on which they can base their studies. Even though qualitative results cannot be statistically generalised, they can be generalised or transferred to other contexts or settings. The results from this research can therefore be generalised in other settings apart from the setting that was used to conduct this research.

### **1.7 Definition of key terms**

The key definitions the study used are as follows:

#### **Digital banking**

An electronic payment system that allows customers of financial institutions to conduct financial transactions through the financial institution's website or through the use of a smart gadget.

#### **Mobile banking**

An act of making financial transactions on a mobile device (cellphone, tablet, etc.).

#### **Auto Teller Machines**

An electronic banking outlet that allows customers to complete basic instructions without the aid of a bank official.

### **1.8 Structure of the thesis**

This chapter has given a background of where digital banking originated and how developing countries have adopted e-banking. The chapter also introduced the problem statement, main and specific objectives of this study and rationale for this study.

Chapter two presents the literature review of this study. This chapter reviewed the literature about the studies that have been done in developed countries and how developing countries are adopting digital financial banking. The chapter also introduces the theories that were used to support this research.

Chapter three introduces the methodology that was employed to gather data that was useful for this research.

Chapter four discusses the results that were found from this research using Nvivo 12 plus where thematic analysis was used to come up with codes and later themes that were dominant in this research.

Chapter five summarises what has been discussed in the previous chapters and recommends areas for further study and limitations for this study.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Chapter overview**

The chapter discusses the theories that inform this study. The Technology Acceptance Theory (TAM) and the Diffusion of Innovation underpinned this study. The study then reviews the literature on digital banking adoption both in developed and developing countries. The discussion establishes a gap in how digital banking is being implemented in developing countries, and this study aims to fill this gap.

### **2.2 Theoretical framework**

This research was guided by the Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT). The two theories are explained below in connection with the issue that was at hand. Technology Acceptance Theory is the anchoring theory for this research as it explains how technology is accepted and how the perceived usefulness of a technology advocates for people to accept a technology.

### **2.3 Technology acceptance theory**

The Technology Acceptance Model theory was developed by Davis in 1989 to examine the acceptance and usage of technologies (Chindudzi et al., 2020). The concept is centred on analysing the user's adoption behaviour concerning the internal and external factors of technology. The theory is centered on two main perspectives which are perceived ease of use and perceived usefulness which are the two main factors that influence electronic banking adoption. The perceived ease of usefulness is defined as the degree to which a person believes that using a specific technology will help them to perform better. In contrast, the perceived ease of use is the degree to which a person can treat and interact with technology without complications or effort (Aburbeian et al., 2022). This therefore illustrates that, if the technology is easy to use, then this will improve its usefulness. If a user interacts with a new technology that is useful, easy to use and valuable, then the user will have a positive attitude which will increase the intention to use that technology (Aburbeian et al., 2022). This theory has an impact on the attitudes towards technology use and as a result, it will influence behavioral intention.

One of the issues that were highlighted in the literature was that some customers found it hard to access online banking because of the processes involved and customers found it difficult to do so. The literature also revealed that about 49% of adults in America do not take any part in online

banking as they prefer the old traditional way of banking. Customers are being hindered from using online banking because they have an attitude that online banking is for the elite, and it is hard to operate. If the banks can take a step further by educating their customers on how they can go about the use of digital banking, customers would then change their attitudes and they will see fit to take part in such practices. If this is repeatedly told to the customers, the ease of use of online banking would be easy which would lead to the usefulness of such innovations.

#### **2.4 Innovation diffusion theory**

The Innovation Diffusion Theory (IDT) was developed by E.M. Rogers, a communication theorist in 1962. This theory attempts to explain and describe the mechanisms of how new inventions (in this case, online banking) are adopted and become useful (Chindudzi et al., 2020). Not all inventions are adopted, even if they are good, it may take a long time for that innovation to be adopted and used. The resistance to change is one of the factors that may hinder the diffusion of change of a certain innovation. Cultural beliefs, attitudes, and behaviours are some factors that may advocate for resistance to a technological change. The rate of adoption of innovations will also depend on how an organisation perceives its relative advantage, compatibility, triability, observability and complexity (Chindudzi et al., 2020). If a firm perceives such an innovation to be useful, then it will have all it takes to make sure that innovation is more visible to people who will later adopt that technology. The adoption of such innovations is quicker in banks that have strong internet access and robust IT departments than in banks without (Rogers, 2005 cited in Kombe & Wafula, 2015). It is therefore important for banks to have strong IT departments that well know what they ought to do and how to do it for innovations to be diffused to their customers.

Not all inventions are adopted, even if they are good, it may take time for such innovations to be accepted and used by the customers. Some of the factors that hinder the diffusion of innovation are the beliefs, attitudes, cultural practices and behaviours that people are engaged in. The rate of adoption will also depend on how an organisation perceives its relative advantage, compatibility, and complexity. If an innovation tends not to be not very complex, a firm will try as much as possible to speed the rate of diffusion, but if a firm tends to see an innovation to be very complex, then the rate of diffusion will also be slow as the organisation does not pay much attention to that innovation. This entails that there are innovations that are being advocated for by the banks, but their rate of diffusion is low depending on how the banks handle such innovations. It is therefore the responsibility of banks to make sure that when innovations have been developed, the diffusion

rate should be high by marketing that product and making their customers aware of such innovations.

## **2.5 Digitisation of the banking services industry**

Digital banking is a system which enables banking transactions like payments, deposits, and withdrawals of cash virtually with the help of the Internet rather than visiting the physical bank (Sharma & Dubey, 2022). The terms internet banking, online banking, and electronic banking (e-banking) are used interchangeably to mean digital banking (Sharma & Dubey, 2022). Digital banking has changed the face of banking globally. The banking industry has changed from the usual “brink and mortal” to what is now called “click and mortar” since most of the banking transactions are done at the click of a button (King, 2018). To stay competitive in the market, banks have taken a central and leading role in terms of the advancement of digital banking. Since most of the business transactions require the involvement of banks, this has necessitated banks to build a strong brand for themselves to be more visible.

The shift from mechanical and analogue electronic technology to digital technology started as early as the 1940s and this led to the adoption of digital computers and digital record-keeping (IMF, 2021). In the 1970s, home computers were introduced but they were not widely used until the 1990s. The Internet was developed in the 1960s and 1970s and it became one of the prominent applications of digital technology (IMF, 2021). In late 2005, the use of the internet had reached a population of about one billion people (Digitalisation and the Future of Work in the Financial Services Sector, 2021). The rapid rise of technology is one of the key developments that have led to the diffusion of digital technology.

As digital technology has advanced, banks have also been the leaders in adopting these new technologies. Citibank in the United Kingdom was the first bank to install an ATM in 1977 but customers only started using it regularly in the 1980’s (IMF, 2021). Online banking was piloted in the 1980s by Chemical Bank but it was not widely used until the 2000s with more widespread Internet usage (Selvam et al., 2018). With computer and internet proliferation, a younger generation of customers has quickly adapted to the newer technology and they are demanding higher quality and more digital-based services (IMF, 2021). The new technology has also allowed banks to boost their operational efficiency with fewer operational staff and bank branches.

There are different ways and platforms on which customers can have access to digital banking. Firstly, it is the use of Automated Teller Machines (ATM). An ATM is a computing device that

allows users of a financial organisation to perform financial transactions automatically with the use of a card (Rahman & Rani Saha, 2018). Using an ATM, customers can access their bank accounts at any time of the day even when banks are closed. Customers can pay their utility bills, make cash deposits and withdrawals, transfer funds between accounts, enquire about their balance, mobile tops, mini statement enquiry and cheque book requests (Rahman & Rani Saha, 2018). The coming in of ATMs has helped with the financial inclusion drive where ATMs are placed in remote areas where there are no physical branches and people have the chance to access their bank accounts (Dasho et al., 2016).

Mobile banking has also become one of the widely used digital banking modes. Mobile banking is referred to as interacting with bank facilities and services through smartphones to electronically complete financial and non-financial transactions without the need to directly interact with bank employees (Payne et al., 2018). Mobile banking has become one of the most commonly used modes of digital banking. To the banks, it creates operating efficiencies, enhances productivity, and provides payroll cost savings, and to the customer, it provides satisfaction, time management and decreased need to interact with the bank employees (Payne et al., 2018). Unlike ATMs where a customer only makes a transaction with the physical presence of an auto teller machine, with mobile banking a customer can initiate a transaction if there is internet availability or access to a network. It is because of this reason that the younger generation is more obsessed with this application as they demand convenient and better customer service (IMF, 2021).

Internet banking is also fast becoming one of the commonly used methods of digital banking. It is a method of banking which allows users to conduct financial transactions via the Internet (Kaur et al., 2021). Internet banking, also known as web banking, offers most of the services that are normally found at the traditional bank. One can send funds to another account, request a cheque book, pay utility bills, check for balance, and apply for a loan using Internet banking. Internet banking is now becoming one of the commonly used methods of digital banking because customers can access it at any time of the day worldwide. Internet banking has made it more convenient for travellers who usually need convenience when they travel to make payments using their local accounts. As much as Internet banking has benefits such as these, most people do not patronise it just like mobile banking. It is therefore an opportunity for banks to advertise this product which can coax more customers and at the same time, banks will be able to collect more revenue from the use of this product.



As we are living in the digital era, no one can run away from the use of digital banking. In one way or the other, we have been affected by the activities of digital banking knowingly or unknowingly. As digital banking has come in to stay with the advancement in technology globally, some advantages are associated with the use of digital banking to both the banks and users. E-banking has proven to be time-saving for users (Devulapalli & Oruganti, 2021). Customers do not need to travel long distances to transact at the traditional bank. Banking transactions can be done in the comfort of one's home. Instead of queuing at the physical bank, which is time-consuming, customers can use that time to do other equally important things.

Secondly, the availability of digital banking at any time of the day has also provided flexibility and convenience to customers (Devulapalli & Oruganti, 2021). The physical banks provide a barrier in that, once banks have closed, customers do not have any access to the bank even if they have an emergency. But with the coming of digital banking, customers can withdraw money, make transfers, or pay for utilities in the comfort of their own time. This has also provided convenience to the customers as they do not have to worry about travelling to the bank, but rather, they can transact at any time of the day. Banks have also benefitted in that, instead of extending more banking hours to allow their customers to transact at the bank, which is costly as the bank has to foot bills that come with the extension, such as, paying staff allowances and overtime, providing transportation to their staff, online banking has helped to cut such costs. Employees have also benefitted in that, banking halls close at good time which helps them to get refreshed in readiness for the next day's work and productivity is also enhanced for the satisfaction of customers.

A recent study by Accenture (2019) suggested that digital maturity is associated with increased profitability, that is, digital advanced banks have on average experienced an overall increase of Return On Equity (ROE) of 0.9% between 2011 and 2017 (IMF, 2021). The study also showed that the adoption of new technology has large profitability in the long run although the initial investment is usually costly as the bank needs to invest in internal and external hardware, new software, and new staff that have information technology expertise fit for the job (IMF, 2021). The recurrent costs in the medium to long term are expected to be lower as the bank spends less on inefficient systems. Digitalisation could also cut the bank's operation costs by 30% to 50% since there will be less need for more branches and employees will not have to be many to serve customers (Citi, 2019). Operational efficiency will be enhanced and at the same time, banks will save on operational costs.

To substantiate the point above which says that digital banking is associated with increased return on equity, a recent study by Dickson and Priyar, 2023 (Dickson & Priyar, 2023) on NBS Bank plc (a Malawian bank), showed that the bank has been positively reporting ROE and Return On Assets (ROA) since it embarked on the digital transformation drive. The profitability has been favourable to the bank ever since the bank embarked on digital transformation. The bank has also grown in terms of deposit mobilisation, assets, and customer base since it embarked on the digital transformation drive. This shows that with digital banking, there is hope that banks will do well once the required resources are put together and this will lead to the growth of banks and at the same time improve operational efficiency and growth of banks in all dimensions.

## **2.6 Digital banking services from the banker's perspective**

As technological advancements are taking centre stage, banks have a role they need to play to drive the initiatives that are being accelerated to have conducive digital banking in the country. This section discusses both the opportunities and challenges that are being faced by both developed and developing countries, including Malawi, in advancing digital banking.

To begin with, since the inception of digital banking, the banking industry has been faced with fraud perpetrated by both employees and outsiders (Bunker, 2020). It is worrisome to note that instead of employees being the custodians of private information about their systems, they are the ones who let loose such information to outsiders who later defraud the banks. It was noted by Bunker (2020) that half of the security incidents were perpetrated by bank employees. Apart from the employees being the ones who perpetrate fraudulent transactions, outsiders have also advanced in their tactics on how to defraud banks. The fraudsters are usually ahead of the banking systems and try to make whatever effort they can to stay ahead of whatever they do. In the United Kingdom (UK) in 2015, roughly 130 million British Pounds were stolen from online bank accounts through fraud (Revathi, 2019). For an advanced country like the UK to be defrauded all such huge sums of money is worrisome, let alone for developing countries that are not yet at the peak of technological advancements.

Technical challenges have also been noted to be one of the challenges in the advancement of digital technology (Revathi, 2019). Developing countries lack the expertise to advance in digital technology; the banks lack experienced personnel that can handle the new technology that is supposed to be used daily. This has therefore resulted in system downtime most of the time which gives a bad picture for business (Dickson & Periyar, 2023). Developing countries are also having

challenges in buying modern software and hardware that is supposed to be used to match international standards (Devulapalli & Oruganti, 2021). It should be noted that the equipment that is supposed to be used is quite expensive, as such, most banks prefer to use the same old obsolete equipment that cannot manage to take care of the overload of transactions that happen daily. This has therefore let down customers who still resort to using the old traditional way of banking which does not inconvenience them, unlike digital banking which has hiccups now and again.

Low broadband internet penetration is also one of the factors that are impeding the advancement of digital technology in developing countries including Malawi (Devulapalli & Oruganti, 2021). Unlike developed countries that are now using 5G internet, most mobile operators in the country still use 4G except for Telekom Networks Malawi (TNM) which has recently announced the launch of 5G network. The country is yet to witness how TNM's internet will be performing, but still, the banking sector cannot rely on TNM to provide the much-wanted internet. Internet access is also expensive in the country unlike in developed countries. Users fail to subscribe to the internet because of the exorbitant charges (Malawi Population and Housing Census, 2018). As such, people still resort to traditional banking which is cheaper for them unlike buying data bundles. The number of people who have internet access is still low, which stood at 17.8% against a population of 19.39 million people in 2018 (Malawi Population and Housing Census, 2018). This just shows how challenging it is for the banking industry to penetrate through, but at the same time, there is hope for financial inclusion since about 80% of the population does not have access to the internet. This gives room for banks to explore more and find ways on how they can take these people on board.

Old traditional habits are also a major challenge that banks must overcome to advance in digital banking technology (Revathi, 2019). People are so fixated on the old way of banking instead of exploring the new way of banking which is convenient and fast. In America, about 49% of adults do not participate in online banking, they still prefer traditional banks to digital banking (Revathi, 2019). People prefer to physically meet the bank staff and transact unlike using smartphones and laptops which do not have the human touch. It has been discovered that people love the human interactions at the bank as they can enquire for whichever transaction, they want to know, unlike the gadgets which lack the information that people may need. This is therefore a drawback to the banks as the banks still must increase their capacity in terms of opening more branches and increasing more manpower to serve those customers which is costly in the long run to maintain.

With the introduction of mobile wallets, banks also must face competition from mobile network service providers for customers. Mobile wallets have now taken centre stage in terms of usage. In Malawi, the number of mobile wallet users stood at 12.2 million in December 2022 from 10.7 million in December 2021 representing a 14.1% increase (Reserve Bank Of Malawi, 2022). The number of active digital banking subscribers stood at 1,500,000 in the same period last year. This shows that mobile wallets have taken the centre and most people prefer to use the wallets probably because of their easy registration, accessibility of any other phone and the mobile wallet agents that are easily found in most parts of the country. The mobile network is also usually stable, unlike digital banking which usually relies on the accessibility of the Internet. This has made most people prefer the wallets which have posed a challenge in the acceleration of digital banking in the country.

Despite these challenges, there are also opportunities that banks can explore that can help them accelerate their business and in the long run improve operational efficiencies. This section will discuss the opportunities from the literature that banks can explore.

The Reserve Bank of Malawi issued a directive in 2022 that all merchants that have a turnover of MWK10,000,000 per month should have at least a POS machine at their disposal while those that are below this threshold should have at least one digital banking payment that customers can use (Reserve Bank Of Malawi National Payments Report, 2022). This directive has come in place to encourage people to run away from the use of cash and instead make use of these digital platforms which are convenient and safe. This directive also encourages people to use plastic money thereby advocating for a cashless society just like other banks are doing in the developed countries. This is an opportunity for the banks to boost, improve and market their digital platforms for people to get familiarised with them. If the banks are to take these initiatives seriously, then they can see a growth in the number of accounts being opened, and growth in digital utilisation but also this will result in volumes of deposits being realised. If the volume of deposits can be increased, these funds can be used to lend to their customers which in turn the banks can realise more interest.

It has also been noted that one of the challenges that banks are facing in the drive towards bank digitisation is the culture and preference for the traditional way of banking. If the banks can work well with the RBM, as the regulator of financial entities in the country, and come up with literacy programmes that should support people's attitudes towards digital banking, then this would help banks to improve the numbers of people that are on digital platforms (Reserve Bank of Malawi

Monthly Economic Review, 2022). There are different myths and beliefs that people have concerning digital banking. If these beliefs and attitudes can be corrected, then the banking industry can have a boost in terms of users. It has also been observed that most of the customers do not know how to go about for them to be on digital platforms. If banks can work out these shortfalls, this will pose as an opportunity to banks on how best they take on board most of the customers who do not have access to digital banking.

In India, the government has taken the initiative to introduce internet banking into the school curriculum (Devulapalli & Oruganti, 2021). India is one of the countries that is well advanced in terms of technological advancements. By introducing digital banking into the curriculum, they have seen that this is one way of entrenching the upcoming generation to be well-versed with the digital advancements that are happening globally. If other countries can also emulate the same just as India is doing, this would help children to know what is involved in the digital world. This younger generation will not have a problem later when they are older because they will have been birthed about the pros and cons of using digital advanced gadgets.

Digital banking can also be used as a competitive advantage for banks to excel and do better than other banks in the industry (Devulapalli & Oruganti, 2021). As much as other challenges in digital banking such as low broadband penetration are beyond the bank's ability, banks can use some of the challenges that they face to be their competitive advantage. For example, in the issues of fraud, banks can go beyond what they are doing currently and work out ways that they can do to reduce fraud penetrated by both employees and outsiders. Employee civic education is important, and this education should encompass both the top management and clerical. This will help to make all staff members aware of what they ought to do and what they not do and their implications. Banks can also now and again try to maintain good software and hardware that is updated to compete in the market. This will in turn improve banks' reputation and people will then start to trust such banks and customers will now be freely able to transact on digital platforms since they are assured that things such as frauds are things of the past.

## **2.7 Digital banking services from the customer's perspective**

This section looked at the benefits that customers enjoy in the times of online banking, but also the section looked at the challenges that customers face in the efforts by banks to accelerate the growth of digital banking in the country.

Digital banking has presented an opportunity to customers in that, they can have access to capital through digital banking (Al-Ajlouni & Al-Hakim, 2019). Customers open accounts with banks for different reasons such as for safe custody of their money and to also have access to loans to boost their lives and their businesses. Digital platforms have provided platforms where customers can access loans right in the comfort of their homes or offices. The banking system has been enhanced in such a way that the system can scrutinise and approve loans according to the customer's acceptable amount allowed. This has provided an opportunity for customers to have access to financial assistance even though they are living in remote areas. Digital banking has provided a platform for most of the customers to be self-reliant and financially stable.

Secondly, digital banking has also provided a platform for financial inclusion in the sense that, digital finance has improved access to financial services to underserved groups (Al-Ajlouni & Al-Hakim, 2019). For example, in Malawi, most of the people live in rural areas unlike those who live in urban. It is usually these people who live in rural areas that are neglected in terms of access to financial services because of their geographical location. But with the coming of digital banking, these people are now being included in the financial inclusion drive since it only takes one to have any kind of a mobile phone to have access to digital banking such as mobile banking. The Reserve Bank of Malawi is also advocating for a cashless society where people need to make conscious decisions to be involved in at least one of the digital platforms that are being offered on the market (Reserve Bank Of Malawi National Payments Report, 2022) This will lead to a digitally conscious society where access to financial services such as loans will be available despite the geographical location of a person.

Digital banking has also provided an opportunity for customers to have tailor-made banking services that are suitable according to their preferences (Al-Ajlouni & Al-Hakim, 2019). As has already been alluded to in the introduction, the younger generation is the most involved in digital services activities because of their way of living; they want services that are flexible and suit their modern lifestyles. With digital banking, it is possible to have tailor-made services that are specifically unique to a person. Banks can also take advantage of these tailor-made banking services to have a competitive advantage over their customers. Usually, customers flock to banks that will provide them with the services that they need. With tailor-made services, banks can use these to their advantage and have many customers flocking for such services which in turn will contribute to the bank's revenue through commissions and charges that are incurred using these tailor-made services.

Despite the many opportunities that digital banking can provide to customers, some challenges are being faced by customers in their execution of transactions of digital banking. Below are the challenges that customers are facing in dealing with online banking.

Firstly, customers are the most hit when it comes to fraud in online banking. External threats such as hacking, sniffing, and spoofing are exposing customers' accounts to risk of being defrauded (Selvam et al., 2018). Bank employees and other third parties have become more advanced in the way digital platforms work. Therefore, they are working tirelessly to find ways how they can defraud such customers. It is because of these fraudulent activities that some customers still resort to traditional banking which is safer for the customers. However, the traditional banks are costly to the banks because maintaining such branches is expensive and the banks also need to have enough manpower to serve such customers. This therefore is derailing the drive for banks to go fully digital.

Secondly, financial illiteracy is also one of the contributing factors to the derailing of improving digital banking in developing countries like Malawi (Ofosu-Ampong, 2021). Financial literacy is lacking in most of the developing countries, as such, for the banks to advance in their digital drives it is difficult since their targeted customers are not aware of the developments that are happening. Because of this financial illiteracy, most of the customers still must spend their time at traditional banks instead of putting that time to good use. It is also because of this financial illiteracy that some of the customers that were migrated into the digital platforms do not know how best they can operate their accounts, as such, it is found that instead of keeping confidential information to themselves, they share that information with third parties who are malicious and who later defraud them.

Studies have also shown that banks do not put in much effort to educate their customers on the good use of these digital platforms; banks will only introduce new products on the market and yet it was found that even employees are not very knowledgeable on how to go about such products. A study by Rahman et. al (2017) in Bangladesh at Dutch-Bangla Bank Limited found that customers do not have enough knowledge about the e-banking services offered by the bank (Ali et al., 2021). Another study by Nam (2014) in Vietnam also found that the major challenge in the adoption of online banking services was the lack of knowledge by both employees and customers (Ali et al., 2021). As such, it is very hard for employees to impart such knowledge to customers since they are also not aware of the online products being served by their banks. Both studies

therefore recommended that management should take the initiative to teach their staff members how they can go about digital platforms for their personal use which they can later teach the customers. Staff members are the first line where customers first meet them. If they (staff members) lack such important information to tell the customers, then it is hard for customers to be kept abreast of the knowledge of digital banking products and services.

A study by Farooqu and Rajani (2017) on Indian banks also found that customers are not willing to take part in online banking because of the security risks, trust factors and privacy risks associated with online banking (Ali et al., 2021). It was found that even customers who have never been r=defrauded were reluctant to take part in online banking because of the speculations that they heard from their fellow counterparts. This assertion that online banking has a security risk goes back to the lack of knowledge that people have concerning online banking. This therefore influences people's attitudes not to use digital platforms.

As we are living in the digital age, online banking will always affect us positively or negatively in one way or the other. Online banking is booming globally, therefore, developing banks also need to take a step further in the way they conduct their businesses to match the global standards. This section has reviewed literature from both developed and developing countries and how digital banking is positively and negatively changing them. Different reasons have emerged that still need to be looked at such as attitudes and beliefs that are affecting the use of digital banking in the developing. This research therefore went further to find out the challenges that both customers and banks face in the adoption of digital banking in the country. The results from this study would help to shape the future of digital banking in the country which also aligns with the country's vision 2063 strategy to have a digitally advanced country by that time.

## **2.8 Chapter summary**

The chapter has provided the Technology Acceptance Theory and the Diffusion of Innovation Theory as theories that influence the study. It also discussed the concepts that inform the theory and the relevance of the theory to the study. The researcher also reviewed the existing literature on the adoption of digital banking. The review has demonstrated that there is a need for more literature on how developing banks can best attain digital banking acceleration in Malawi, and this study aims to fill this gap.



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Chapter overview**

This chapter discusses the research methodology. It presents the research philosophy, research design, population, sampling technique, sample size, data collection, data analysis, ethical considerations and validity and reliability of the results.

### **3.2 Research Philosophy**

This research was guided by Interpretivism research philosophy. This philosophy considers humans as different from physical phenomena as they create further depth in meanings with the assumption that human beings cannot be explored in a similar way to physical phenomena (Alharahsheh & Pius, 2020). The theory is also based on the assumption that social reality is shaped by human experiences and social contexts (Alharahsheh & Pius, 2020). Since this research was qualitative and needed to hear views and experiences of customers from the use of digital banking services, Interpretivism was there used to guide the research.

### **3.3 Research design**

This study employed a qualitative research method. Qualitative research is defined as the type of research method that is concerned with the deepening of understanding of a given problem (Almeida et al., 2017). The objective of qualitative research is to produce in-depth, illustrative information to understand the various facets of a problem under analysis (Crick, 2021). Maxwell (2013) advocates that qualitative works with the universe of meanings, motives, aspirations, beliefs, values, and attitudes which respond to a deeper space of relationships, processes and phenomena that cannot be reduced to the operationalisation of variables (Almeida et al., 2017). Since the study was concerned with understanding the challenges that both banks and customers faced in the times of digital banking and explored the growth strategies that were there in digital banking, cross-sectional research design was best used for this research as it provided a platform where the researcher was able to ask questions from both parties and sought to gain an understanding from the parties on the subject that was under discussion.

### **3.4 Population**

#### **3.4.1. Study setting**

The study was conducted in the southern region of Malawi, and it included the service centres that were located in Blantyre. This was due to the researcher's proximity but also because there were quite a substantive number of banks that the researcher took advantage of.

#### **3.4.2 Characteristics of the sample**

This study had participants from both the customers and the bankers themselves. Customers who were registered for at least one of the digital banking platforms were randomly sampled to include them in the study. The total sampled number of customers for this research was 20. The study also included four participants who were managers from the Digital Financial Services (DFS) department, one from each bank as these are the people who interface the digital banking platforms, and they are aware of the most challenges that customers face since the service centres (branches) report the challenges to them. These are also the personnel that are involved in the strategic planning and development of the digital banking platforms.

#### **3.4.3 Sampling technique**

For this study, different sampling techniques were used to have the desired sample. Purposive sampling was used to choose the banks that would take part in the survey. First, the researcher looked at all banks in the country that have been on e-banking for at least five years and there were eight banks that fell into this category. It was found that eight banks have been on e-banking for that period. From the eight banks, the researcher did a simple random sampling to come up with five banks whose customers and staff members (from the Digital Financial Services department) were to take part in this research and the following were the banks that were sampled: National Bank of Malawi, Standard Bank, FDH Bank, NBS Bank and Ecobank. Five Digital Banking Services staff members, one from each bank, were also purposively sampled because they are the key informants in terms of the digital innovations that are happening in the banks and because they interface with the service centres in terms of the challenges that may arise now and again. The customers were equally divided to represent their respective banks that they bank with; four customers each from the five banks took part in the study. During the interviews, the customers were conveniently sampled from the service centres depending on their availability, willingness, and convenience.

### **3.4.4 Sample size**

Unlike quantitative research design, the qualitative research method usually has a small sample size. This is the case because the researcher gets more rich information from the participants and the researcher must make sure that the information is a representation of the ideas being advanced by the participants. A sample size of one to ten is recommended in qualitative research according to Mocanasi, 2020. Other authors advocate for a sample size of 13 to 15 while others advocate for a sample size of 20 to 25. For this study and to get rich information, this research had a sample size of four participants for the banks' key informants from the five banks that were sampled (one bank did not grant an interview for their key informant). And a sample size of 20 customers was used for the study; four customers each from the five banks that were sampled took part in the research. Even though a sample size of 20 customers was used, the researcher still relied on saturation levels to reach. For the customers, saturation was reached at 20 as there was no new information that was being unveiled from the interviews. For the banks' key informants saturation was not used as the information from the respective banks was unique in its own way. A total of 24 participants; for both customers and banks' key informants was used.

### **3.5 Data collection**

This research used interview guides to collect data from the participants. Interviews give the most direct and straightforward approach to gathering detailed and rich data which is useful for a particular phenomenon (Aspers & Corte, 2019). Interview guides allow flexibility in the structure of the questioning to allow the interviewee to respond promptly to what is relevant and ask for clarifications from the researcher (Adosi, 2020). The interview also gives room to the researcher to make use of probing questions in the guide to make the information gathered more relevant and useful for the topic under research (Adosi, 2020). Since this research explored the challenges that the banking sector is facing in accelerating digital banking and the strategies that could be explored in digital banking, interviews gave more room for the respondents to be able to explain their answers in a manner that was beneficial to the researcher's work. The researcher was also able to ask probing questions that followed up on the interactions that she had with the respondents.

The customers were mainly asked to narrate the challenges that they were facing for them not to fully participate in e-banking services, their knowledge of the available e-banking services and what hindered them not to taking part in those available e-banking services. The DFS staff are the ones who implement online banking at the branch level. The researcher also found out what

challenges they faced in their delivery of online banking at the bank level. From the challenges that they faced; they were asked to narrate the strategies that they foresaw if the challenges that they talked about were going to be resolved. The four DFS staff that were sampled for this research were also allowed to talk about the future of online banking from their perspectives on the way online banking was being implemented in the country.

The interview guides were framed in both closed and semi-structured questions. Semi-structured questions are loosely structured to give participants more opportunities to express themselves freely (Adosi, 2020). This helped to elicit more information from the respondents since they were not confined to closed questions only. This also helped to reveal the attitudes, beliefs, preferences, and ideas that the respondents had towards digital banking in the country. The online banking platforms that formed the basis for this research were; internet banking, mobile banking and debit cards as these are commonly and widely used by personal customers.

### **3.6 Data analysis**

Data analysis transforms data into findings by bringing order, structure and meaning to the mass of collected data (Patton, 2002 cited in (Adosi, 2020). This research was guided by thematic analysis following Braun and Clarke's stages for qualitative data analysis.

Thematic analysis is a method of identifying, analysing, and reporting patterns or themes within qualitative data (Braun & Clarke, 2006). This method undergoes six stages for the researcher to analyse the data and come up with meaningful results. The first stage is whereby the researcher familiarises herself with the data. The researcher needs to be familiar with the depth of the content and search for meanings, patterns, and other important points. The data is also transcribed at this stage for the researcher to familiarise herself with the data. The second stage is where the researcher searches for codes from the data. Codes are elements of raw data which can be assessed in a meaningful way regarding a phenomenon (Boyatzis, 1998 cited in (Braun & Clarke, 2006). Coding can be done by the researcher highlighting important information that she sees as useful for the research. The third step is whereby the researcher searches for themes from the data. This stage involves sorting different codes into meaningful themes. After this stage, the researcher revises the themes which have been formed, and at this stage, this is where the researcher can change the names and come up with more meaningful ones that will communicate with the research questions at hand. The next stage is defining and naming themes. This stage involves formulating exactly what we mean by each theme and figuring out how it helps us to understand the data (Braun &

Clarke, 2006). The last stage of thematic analysis is where the researcher writes up the discussion of how the thematic analysis was done. In the write-up, the researcher narrates how the data was collected and discusses the findings that have been made from the data that was collected.

During the second stage of thematic analysis which is coding, the researcher inputted the data into qualitative software called NVivo 12 plus. This is a qualitative data analysis software that helps to organise and analyse qualitative data. Once the data was fed into the NVivo 12 plus, the subsequent steps of thematic analysis as highlighted above were followed to analyse the data. The researcher analysed on her own.

### **3.7 Ethical consideration**

This study considered all ethical considerations in order not to offend the participants who helped to get the responses. The researcher got consent from the participants before the research was conducted. The participants signed on to the interview to show their consent to the research. The respondents were made aware of the right to withdraw at any point in the research whenever they felt they could no longer continue with the study. To ensure anonymity, participants' names were not disclosed, instead, numbers were used. The participants were also made fully aware of the nature of the study and that participation was strictly voluntary. Lastly, the participants were given adequate time to ask questions and present any concerns if they had any. This helped the participants to feel that they were part of the research and that whatever information they were giving out was important to both the researcher and the respondents (Mohd Arifin, 2018).

### **3.8 Validity and reliability**

Reliability assesses the consistency of results over time while validity is the confidence with which conclusions can be drawn from an analysis (Hafeez-baig & Chakraborty, 2016). To have valid and reliable results that will be a representation of the study findings, the researcher did the following to achieve validity and reliability; firstly, the researcher took the interview guides to the experts in the banking field for them to assess whether all the areas that needed to be looked at were addressed in the guides. The need for amendments was advised by the experts to have rich data that would come out from the research. The researcher employed one data analyst to compare the results to reduce biases. The analyst worked on the data independently only to merge the findings (themes) with the researcher later and checked for similarity rate which, using NVivo, the Kappa coefficient for nodes and sources was 0.78. Further, the researcher herself made sure that all necessary protocols for the research were observed.

### **3.9 Chapter summary**

This chapter discussed the research methodology. It has presented the research design, population, sampling technique, sample size, data collection, research procedure, data analysis, ethical considerations and validity and reliability. The researcher also provided justifications for adopting each factor. This study used a qualitative method. It had a sample size of 20 participants for the customers that were interviewed and the saturation point was reached at 20. There were four key informants instead of five as one bank did not grant the researcher an audience. The total number for participants was 24; 20 customers and four key informants. Thematic data analysis was done using Nvivo 12 Plus. Furthermore, the chapter highlighted the issues of trustworthiness and reliability in the study.

## CHAPTER FOUR: RESULTS AND DISCUSSION

### 4.1 Chapter overview

The chapter discusses the results of the study. The questionnaire return rate for this research was excellent as out of the 25 participants that needed to be interviewed, 24 granted the interviews and only one key informant did not grant the interview. Four main themes emerged from the data and these themes have sub-themes. The following are the themes that emerged: lack of awareness, banks' complacency, the need for change and external factor challenges. A discussion follows from the themes that were derived from the research.

#### 4.1.1 Demographic characteristics of the respondents

Demographic characteristics of participants in this study are shown in Table 1. There was a balanced representation in terms of participants that came from the banks that took part in this research. However, there was a slight difference in terms of the representation of the gender of the participants; 55% was represented by males and 45% by females, marital status where 65% of the participants were married and 35% were single, age range of 18-30 years was represented by 30%, 31-40 years dominated by 60% and 41 years and above was represented by 10%. The employed were represented by 79%, self-employed 13% and 8% for unemployed.

*Table 1: Demographic information of the sample for the qualitative research*

<b>Participants groups</b>	<b>Sub-groups</b>	<b>Frequency</b>	<b>Percentage</b>
Gender	Male	13	54
	Female	11	46
Marital status	Single	9	38
	Married	15	62
Age range	18-30 years	6	25
	31-40 years	16	67
	41 years & above	2	8
Employment status	Employed	19	79
	Self-employed	3	13
	Un-employed	2	8

A total sample of 24 (13 males and 11 females) participated in the in-depth interviews which were conducted in the selected banks in Blantyre, namely: National Bank of Malawi, Standard Bank, FDH Bank, Ecobank Malawi and NBS Bank. From the 24 participants, 20 participants were customers from the previously mentioned banks and four participants were the key participants that are in digital financial services from all the banks except for Standard Bank.

#### **4.1.2 Theme and sub-themes**

The participants' responses were analyzed using qualitative research data analysis software called NVivo 12 plus where codes were generated, and later themes were derived. The analysis came up with the following four overarching themes: i) lack of awareness ii) banks' complacency iii) the need for change and iv) external factors and challenges. Table 2 illustrates all the themes and their sub-themes for each theme with their extracts from the data.



Table 2: Themes and sub-themes

<b>Theme</b>	<b>Sub-themes</b>	<b>Example of an extract</b>
Lack of awareness	Limited knowledge of e-banking services	<i>Mmmh basically, what I know about E-banking is just how you can do transactions from the bank like to your phone or you can make payments through your phone, yeah that's all I can say.</i>
	Limited use of e-banking services	<i>I usually make bill payments and airtime buying, that's all</i>
	Lack of cyber-security knowledge	<i>The security measure that I know is just as simple as not giving someone my pin, yeah, I think that's it</i>
	Limited sources of information	<i>Usually the bank itself communicates by sending messages.</i>
Bank's complacency	Lack of sensitization	<i>It depends on how we get that information because the bank doesn't inform you directly. Its either you have to go to their Facebook page for you to know more of certain information. If you don't follow their Facebook page it means you will not have that information. So maybe if the bank would have a different way of trying to communicate to their customers.</i>
	Lack of urgency in serving customers	<i>I should mention, my phone number for some reasons, has never successfully received notifications from the bank. It's the problem that has been there for years, I reported it multiple times but it was not resolved so I ended up giving up.</i>
	Increased application downtimes	<i>Usually, when the network is down, and you are trying to do a transaction, let's say over the weekend, the system is not able to return that money to your account. You are forced to wait until the next working day, which is a Monday. And then usually when you are following it up on Monday, they tell you 'Give us 48 hours.' I'm usually not pleased with that</i>
External factors challenges	Customers' rigidity to change	<i>The other challenge is, as much as we have seen an improvement in the adoption, but we still have a challenge especially with some customers who as much as we school them, they are used to the old traditional banking. They haven't yet adopted the digital technologies and the like. So, it still poses as a challenge because for us, our aim is to make sure that we simplify the way they do transactions</i>
	Third party technical challenges	<i>When we are offering these solutions, we partner with other players. For example, for electricity we partnered with ESCOM. So it might be that at the point the customer is making the payment, ESCOM system was down. Obviously the token can't be generated. So you find that one has paid but the token is not there. So as a bank, we take it up on</i>

		<i>ourselves to check in our systems and with our partner too. If the token is retrieved, we provide it to the customer. If it is not there, then we refund. But in such instances it is the third party's system issue that you can go beyond...</i>
The need for change	User-experience enhancement	<i>In other markets I have seen people use the USSD to pay for goods in a shop and things like that. So it's something that we'd love to see because that is where the convenience comes in. We want to see people not carrying cash but using the different digital platforms that are there.</i>
	Continuous feedback	<i>I think banks should also listen to customer's feedback more and see where they can improve on their services and the processes underlying the e-banking platforms so that they are more user friendly.</i>
	Need for introduction of automated services	<i>First one maybe would be the KYC one. I would expect them to improve from what happened this year. A lot of customers complained especially the bank which I bank with, it has a lot of customers and there are a lot of complaints too. I expect them to use the complaints that were there to improve the KYC process</i>

## **4.2 Customer`s knowledge and user experience of digital banking service**

### **4.2.1 Lack of awareness**

A lack of e-banking awareness was the dominant theme throughout the research. It was found that customers were not aware of how some of the e-platforms work because they lacked sensitization from the banks themselves. The banks are quick to introduce new products or services without first sensitizing the masses on how that service works. It was also found that customers got the information about new services or changes from relations or friends in cases where they indicated having heard about something new that has just been introduced. Lack of cyber security was also prevalent, as out of 20 participants that were interviewed, only six had high knowledge of cyber security. This theme, therefore, was supported by four sub-themes, namely, i) limited knowledge of e-banking services, ii) limited use of e-banking services, iii) lack of cyber security knowledge and iv) limited sources of information.

#### **4.2.1.1 Limited knowledge of e-banking services**

During the research, it was found that most participants had limited knowledge of e-banking services. Customers attributed e-banking to the act of sending funds from their mobile gadgets to another gadget. Other participants were not aware that ATM cards, and credit cards, are all regarded as e-banking platforms, and yet, they were so inclined to use mobile phones as their main source of transacting on e-banking. Consider the following sentiments from a participant who translated what e-banking is:

*Mmmh, what I know about E-banking is just how you can do transactions from the bank like to your phone or you can make payments through your phone, yeah that's all I can say (customer in-depth interview 1).*

It is because of this limited knowledge of e-banking that many people are not patronizing other e-banking services such as Internet banking, and credit cards because probably they are not well exposed to them which makes their knowledge limited.

#### **4.2.1.2 Limited use of e-banking services**

It has been found out from the research that there is limited usage of the available e-services; the commonly used being funds transfers and utility bill payments. Out of the 20 participants that took part in this research, 18 mentioned that they use e-banking for funds transfers and from the same

20 when they were asked what other services they use, 16 mentioned that they use e-banking for funds transfers. Customers are also able to pay for rentals, check for forex rates, pay for taxes and make tuition fee payments, but all the above four were once mentioned that they are used. Consider the following statement that a participant mentioned about their usage of e-banking:

*Ok, I use e-banking services almost daily. Maybe buying some airtime, paying some bills, transferring money and other things but usually it is the utilities like payment of bills, transfer of money and finding mobile airtime on mobile banking. So, those are the main ways in which I access and how often I do it*

As the above extract shows, several other participants mentioned that the above are usually the types of services that they use. The limited usage of a few e-banking services can contribute to congestion in the banking halls as more customers flock into the banking for transactions that they can do on their phones. The lack of knowledge is probably what is pushing them into the banking halls.

#### **4.2.1.3 Lack of cyber-security knowledge**

Knowledge of security is one of the concerns that has been highlighted by the participants in the in-depth interviews. During the interviews, participants were asked about their knowledge on how to keep their accounts safe, only six participants out of the 20 showed that they had high knowledge on security issues. An issue of customers being duped by fraudsters because they (participants) gave out personal information that is meant for them was also mentioned. Fraudsters have come up with tactics where they pose as if they are from the bank and ask customers to give their personal information such as personal identification number as part of updating their accounts. Customers end up giving out such information which results in fraudulent activities in their accounts. Consider the following sentiments from a key informant from one of the banks that participated:

*“You find that in some cases customers do share their pins. They share pins for their ATMs, they share passwords for their internet banking, and they share credentials for mobile banking, be it knowingly or unknowingly”* (key informant in-depth interview 1)

As much as it is a shared responsibility between the banks and the customers, the banks also need to take an active role in making sure that their customers are well-sensitized and equipped on how best they should keep their information safe. Consider another sentiment from a participant about how he was duped without the bank’s knowledge:

*The worst challenge I've ever encountered was this fraud thing. Somebody managed to make online payments without me knowing. They were paying for some things online that I didn't know. I was just getting notifications like 50-something thousand gone, and like 15 thousand something gone and the next day it also happened until I had to get my account blocked (customer in-depth interview 8)*

Such malpractices tend to push away customers from using e-banking to traditional banking for fear of getting their funds duped. It is disheartening also to the customers to note that such malpractice would happen to a customer two to three times without the bank's mechanisms of tracing such malpractices.

#### **4.2.1.4 Limited sources of information**

It was found that during the research, limited sources of information were one the key issues that was keeping customers away from what was going on. From the twenty participants that took part in this research, most said that they get information the text messages while the second most said that they get information from social media. As much as social media might be a powerful tool for the younger generation, people still consume newspapers and radios for information. The radio is one of the powerful tools for communication as it reaches out to the masses, but it is sad to note that banks no longer use this medium to reach out to the masses. Consider the following sentiments from a participant:

*They usually share some alerts, like via email and sometimes via SMS and we also have*

*Instagram and Facebook platform where they usually constantly post the recent developments (in-depth interview 15)*

From the time of the research, banks were paying attention to two or three sources of communication and neglecting the others which are also powerful in reaching out to the masses. It is therefore recommended that the banks use all types of communication so that they are sure that they are well covered in terms of communication that reaches out to their targeted masses

### **4.3 Challenges hindering growth of digital financial services in Malawi**

#### **4.3.1 Banks' complacency**

It was established that banks have become complacent while executing their duties. That urgency to attend to customers is no longer there as some other sentiments they get them from people's

frustrations on social media. The same customer issue is being reported more than twice for that customer to be assisted. There has been an outcry from customers that usually at the end of the month the system is either slow or down which makes it hard for customers to transact at such a crucial time of the month. It has now become a norm that network connectivity challenges have now been familiarized by the customers and no lasting solution seems to be provided. Complacency has affected the banking industry as they take serious business as “business as usual”. This theme was supported by the following sub-themes: i) lack of urgency ii) lack of sensitization iii) increased application downtimes and iv) lack of accessibility and convenience.

#### **4.3.1.1 Lack of urgency**

The lack of urgency was reported by the participants that banks were lacking that urgency to assist them on their pressing issues. The bank officials were reported to not take their issues seriously as on some occasions, an issue took more than a year for a customer to be assisted. With this lack of urgency, some other customers resorted to the old way of banking which was banking or using another e-platform which they were not comfortable with but that was the only option that they had. Consider the following complaint from a participant:

*Again, I should mention I had access to Bank X's mobile app but at one point in time, I had challenges logging in. Those challenges have never been resolved; I complained about it to the bank on multiple occasions but a few empty promises, and still now the issue hasn't been resolved. So, I am forced to go to the internet portal but my preference would be the mobile app (in-depth interview 12)*

From the above sentiments from a concerned customer, it shows that customers were not getting the services or products that they wanted, they just used the available services for them to complete certain transactions. But if they were given a wide range of choices or if their challenges were being taken into consideration, the e-platform experience would have been a better one.

#### **4.3.1.2 Lack of sensitization**

The banks in the country have not taken an active role in making sure that their customers are well-informed about the products and services that they offer on the market. Civic education has not been done in the way it should. This has resulted in customers not taking an active role in digital banking acceleration. Despite this shortfall, the banks' key informants were quick to acknowledge this shortfall

and said they were doing everything possible to sensitize their customers on the need to know and be well acquainted with digital services for the economic benefit of this country. Consider the following sentiments from one of the key informants:

*One of the things that we have been suffering the most is fraud. On our end, we try our best to safeguard the customers' money, but the fraudsters are also very clever. They always find ways of requesting Pin or maybe the OTPs from the customers. And sometimes the customers are not aware of these kinds of situations. They end up giving information that they were not supposed to give and then they are eventually defrauded. What we have done is, we have teamed up with the marketing team to roll out campaigns, where we send out SMS alerts alerting the customers that they shouldn't disclose their personal information to avoid being defrauded (key informant in-depth interview)*

Unfortunately, fraud has painted a bad picture of online banking, but if the banks are vigilant enough and take an active role to avert these challenges, customers are willing to embrace change as has already been seen by the number of transactions that customers make daily.

#### **4.3.1.3 Increased application downtimes**

System downtime was reported by almost all the participants. The participants complained that most of the time they have challenges with the system usually at the end of the month. This is the time that most people are busy with the e-platforms to initiate different transactions, ironically, usually the system is either slow or down such that they fail to complete their transactions. Customers are therefore not left with any option but to go and queue in the banking hall which is a big inconvenience to the customer. This is what a participant had to say about the system downtime challenges:

*I would say there are specific times, especially during month end when the application is mostly down. If you are trying to send money or let's say you are in a shop you are trying to make a payment on the POS machine and boom, there is no service! I rarely get joy when I am trying to transact, and the application is down (participant in-depth interview 6)*

These connectivity challenges have been there for some time, a certain participant complained. They lamented that the banks are aware of these challenges and probably they have become complacent in taking an active role in making sure such challenges are resolved once and for all.

#### **4.3.1.4 Lack of accessibility and convenience**

Online banking is supposed to be convenient and accessible to all who want to indulge in it, but it has been shown that online banking accessibility is somehow limited. It has been revealed from the in-depth interviews that customers were not able to do all the transactions that they needed because some services were not available on the platform. It was also revealed that the banks and the MNOs sometimes had disagreements that made it impossible for other services such as money wallets not to be on the list of some mobile or internet applications. E-banking has also not solely provided the convenience that people need to comfortably transact at the comfort of their preferred locations. Customers are still left for example to go to the banking hall to apply for forex when this can be automated. Consider the following sentiments from a participant:

*The limitation in terms of the services you can get on the online platform is discouraging. There are some services which will require you to have a face-to-face meeting with your banker, so we are not yet there, but maybe we will get there. For example, if you want to apply for forex, you must physically go to the bank and meet your banker which is time-consuming (participant 20 in-depth interview)*

No automation of services has created an environment where customers are being forced to queue in the banking to make transactions and if the banks were to take a leading role, the issues that are being faced now would be history.

#### **4.3.2 External Factor Challenges**

Banks do not work in isolation, other players in the industry complement the works of the banks. Some of the challenges that the banks are facing could be attributed to the negligence or system challenges that their third parties are facing which cripple service delivery for the banks. As much as the banks are somehow complacent in their service delivery, with some other issues they cannot do anything, let alone leave those challenges to the owners until such a time when the third party resolves that issue. This theme, which falls under objective two, was supported by the following sub-themes; i) customers' rigidity to change and ii) third parties' technical challenges.

##### **4.3.2.1 Customers' rigidity to change**

Customers are key players in the drive for digitalization. All the efforts that banks are involved in revolve around a warm good user experience for their customers. But it is the nature of man, there are different stages that one takes to accept an order. Customers, as the backbone of any business, are also somewhat derailing digital growth because they are unable to embrace new change. Consider the



following statements from key participants on the customer's conduct regarding the use of POS machine:

*So, you find that for example, a shop, you have some shops that are still focusing on cash transactions while as banks, we are offering a digital solution for their businesses. So, you provide a solution, for example, you would give a POS machine to a customer for them to accept card payments. But now you find that those merchants hide the machines, the reason being maybe they are running away from the commissions that we bank charge on them.*

Such external challenges have an impact on the adoption and growth of digital banking as banks also rely on the players to actively participate when new initiatives have been introduced to accelerate digital growth.

#### **4.3.2.2 Third parties' technical challenges**

Challenges with infrastructure surfaced as the banks complained that they were unable to deliver what they had because the third parties did not provide a good conducive environment for them to thrive. This is what one key informant had to say:

*As much as it is a bank's system issue, it also goes back to the partner. Because when you are offering these solutions, we partner with, if it is electricity, we partnered with ESCOM. So it might be that at the point the customer is making the payment, the ESCOM system was down. The token can't be generated. So, you find that one has paid but the token is not there. So as a bank, we take it up on ourselves to check in our systems, to check with the partner if the token is there then we provide feedback to the customer.*

With such a challenge, it is difficult to give a customer some concrete as the banks are also waiting to get feedback from their partners. It is therefore that both banks and partners have a common understanding of how best such issues should be handled to give an excellent service to their customers.

The issue of vandalism was also mentioned by one key participant that this issue is commonly affecting their services. Since the banks rely on mobile phone operator's networks for the systems to work, vandalism is affecting the work of the banks as well. Consider the following sentiments:

*This one is two-fold, it's two ways; it can be a bank issue, or we have had instances where some people have torn fibre cables somewhere and you find that we banks don't have any*

*connectivity and we can't render digital services to our customers (key informant 3 in-depth interviews)*

Another key informant also complained that the country's infrastructure leaves a lot to be desired; the government is not doing enough to make sure that different players, banks inclusive, are given a good playing ground where transactions are done without challenges. This is what one key informant had to say:

*Our infrastructure is not yet to the level where the services are available 100 percent, so there are incidences that the customers want to transact but then you hear that there is a fibre link cut somewhere and there is no network or there is no internet. We have cases whereby we, have power outages and the systems cannot operate (key informant 1 in-depth interview)*

Challenges such as vandalism or power outages are affecting the services of digital banking. In such cases, banks cannot do anything as such responsibilities are in the custody of others.

#### **4.4 Banker`s and customer`s perceptions of the growth of digital banking services**

##### **4.4.1 The need to embrace change**

The need to embrace change was one of the themes that was highlighted in this research. Although customers expressed challenges that they are facing in the adoption of digital financial services, there are statements that they have made to show that they want this change now than before. It is also interesting to note that despite the challenges highlighted in the interviews, customers expressed satisfaction with the current performance of digital banking. Out of the 20 participants, 70% showed high satisfaction with the performance of e-banking platforms. This theme was supported by the following sub-themes; i) user-experience enhancement and ii) continuous feedback.

##### **4.4.1.1 User-experience enhancement**

Customers are longing for a user enhancement that is friendly and able to meet their demands. It was noted that some customers complained that e-platforms are not user-friendly, as such, they are not able to use them fully. System challenges have also contributed to customers not having a good user experience. It was noted that sometimes a customer would initiate a transaction, but that transaction does not materialize due to network challenges that interrupt such transaction. Participants also complained that they had challenges in receiving alerts to confirm that their

transaction was successful and others also complained that they were unable to retrieve utility tokens due to intermittent system failures. Consider the following sentiments from concerned participants:

*The first thing that comes to my mind is in terms of payment of utility bills. Sometimes you will pay for a utility bill, and you don't get to receive the token. Maybe let's say you are buying electricity then in the end you are not getting the token for the electricity, that's where the puzzle comes in "Should I contact the bank?" "Should I contact ESCOM?" You are not sure who to contact (participant in-depth interview 4).*

In such scenarios as the above customers are left puzzled as to who to contact as they do not have proper information of who to get hold of in such scenarios. This leaves customers with no choice but to abandon e-platforms and revert to the old way of transacting as they no longer trust the platforms.

In the same vein of crying out for solutions/help, participants have also gone ahead to provide solutions to the challenges that they continue to face to have a good banking experience. We are living in a time when collaboration with other service providers is so crucial. With an influx in the number of people that have access to cell phones, whether smartphones or not, this has created room for expansion and an opportunity to reach out to the unbanked. Banks have now started to collaborate with Mobile Network Operators (MNOs) to have a link where a customer who has a bank account can transfer funds to a mobile wallet and vice versa. As much as this is the case in some banks, some banks are not in collaboration. And for those banks that have already made these agreements, customers are having challenges in terms of the delivery of these services. Consider the following sentiments from a participant:

*I look at the e-banking future in a way that it will even be smoother than now, transactions will not take time to go through and also, and they will be well-coordinated with mobile money services. Sometimes people want to access money but maybe there is no ATM nearby so transferring money from the bank to the mobile money wallet will make it easier and more convenient (participant in-depth interview 2)*

If the banks and the MNOs can organize themselves well and improve on the grey areas that are currently available, then as a country, the issues to do with failed transactions would minimize which will lead to improved customer satisfaction. The collaboration will also help to reach out to

other customers who were hesitant to be a part of this transaction which in turn can facilitate deposit mobilization for concerned agents.

#### **4.4.1.2 Continuous feedback**

It has been noted that participants lack feedback from their banks on the developments that are happening. Participants complained that a certain product or service would just be introduced, and they get to hear about it after some time. It was also noted that customers are not able to get feedback on lodged complaints or enquiries which has shown a failure on the part of the banks. Lack of urgency in giving feedback to customers has also been noticed in the interviews. This has led to frustrations for the customers as they are no longer willing to lodge complaints or ideas as they know that they are going to get the same responses or no responses at all. Consider the following sentiments from a customer:

*Again, I should mention I had access to my bank's mobile app and at one point in time, I had challenges logging in and those challenges have never been resolved. I complained about it to the bank on multiple occasions but a few empty promises later it is still unresolved. So, I am forced to use the internet portal, but my preference is still the mobile app (participant in-depth interview 12)*

*Of particular issue that I had been involved in was the product of cardless withdrawal not working, and the ATM was not working too. I had to go into the banking hall and there I was also told that I needed to come with a chequebook because of the nature of my account (which is a current account). I needed the money urgently but the urgency in assisting me wasn't there. (participant in-depth interview 12)*

With these two scenarios of customers not being helped timely may lead to reputation damage for the banks as word of mouth goes very far. Customers are also most likely to resort to the traditional way of banking as they are assured, they are going to get the service which they are failing to get on an e-platform, which defeats all the interventions to get as many people as possible to online banking.

The issue of high tariffs is also one of the interventions that customers have been crying a lot for the banks to consider. We live in a country where most of the citizens live below the poverty line. For such people, being on an e-platform is sort of a luxury as they need to sort out their basic needs first. And if these people are to be dragged to online banking and they face such tariffs, they would

likely be willing to fully participate online. Despite the conditions that people are living in, they are still crying out to the banks to consider them to reduce the tariffs so that they can be a part of the global financial market. Consider the following sentiments from one of the participants:

*We hope to see good coordination between banks and mobile money operators whereby people will not have so many charges on the transfers and people are going to access their money easily. This will make it easier to make transfers of a certain amount without any problems. You will not be bothered to go to the bank as often as sometimes we ought to, we can do everything online (participant in-depth interview 2).*

If the banks are to consider revising the prices and collaborating well with the MNOs, we can see an increase in the number of online transactions. Many people are still sceptical about embracing online banking due to the perceived high tariffs.

#### **4.5 Discussion of results**

E-banking has come to stay. All the banks globally are advocating for the promotion of digital payments which will enhance economic activities and avoid issues to do with fraud as it is now rampant with the introduction of digital banking platforms. As much as this is the case, some other banks especially those in the third world are finding it difficult to adapt to these changes due to the geographical allocation of the countries. This section will discuss the results that have emanated from the research where the researcher was exploring the customers' e-banking knowledge, e-banking challenges in a Malawian setting and the strategies that banks have lined up ahead to accelerate digital banking growth.

##### **4.5.1 Customer knowledge of e-banking services**

Issues of knowledge are paramount if banks are to promote e-banking services. Customers must be aware of the services that are being offered and the steps on how they can initiate a transaction. The research has revealed that lack of knowledge is contributing to the customers' low usage of e-banking financial services. This can be attributed to the rigidity of change where people are more inclined to use traditional banking and not embrace digital banking. As much as customers are now seeking a faster and more convenient technology which offers a more rewarding banking experience (Taiwo & Agwu, 2017), other customers are rigid to change especially the older generation. The older generation are the ones that are more rigid to change because they are so engrossed in the traditional way of banking while the younger generation of customers has quickly adapted to the new technology and is

demanding higher quality and more digital-based services (IMF, 2021). It is because of not embracing the new change that is contributing to the people's lack of knowledge on digital products.

The lack of knowledge of e-products has also been vindicated in this research where customers use fewer e-services than the ones that are being offered on the market. There are a variety of products that are offered by banks in the country such as bill payments, funds transfers, tuition fee payments, MRA payments, loan applications, DSTV payments, MASM payments, stop payments and other services. But it is sad to note that out of all the services that are offered, only the funds' transfer option and balance enquiry are the dominant services that customers use. This means that for other services that people may also use such as making a payment to MRA, a lot of people still queue in the banking hall to make such transactions. This is defeating the whole idea of making seamless e-banking where people need to patronize these services. On the other hand, the blame should also go to the banks themselves as it has been vindicated that banks do not relay important information to their customers such as new changes to the e-platforms and the introduction of new products or services. Customers sometimes hear important information from their friends and family which may be misleading. Banks have an important role to play in making sure that they provide useful information to their customers for them to stay abreast of the new information.

A study by Rahman et al (2017) in Bangladesh on Dutch-Bangla Bank Limited showed that customers did not have enough knowledge about the e-banking services (Ali et al., 2021). In a sample of 100, most of the participants showed that they lacked knowledge information on e-banking which was a contributing factor to the low e-banking usage in Bangladesh. Similar research conducted by Beatrice (2017) in Kenya also revealed the same challenge of lack of knowledge in customers which is making it hard to penetrate the e-banking usage (Ali et al., 2021). Customers are not knowledgeable enough to make decisions on the usage of internet banking, as such, internet banking usage is still low. It was therefore recommended that banks should make it a point to train their staff members on the knowledge of e-banking so that they should be able to pass on adequate and useful information to the customers. Banks also need to take a leading role by sensitizing their customers on the usage of Internet banking.

The research also revealed that the banks are not taking a leading role in sensitizing their customers on internet banking usage. Customers complained that when the banks introduce something on the market, it takes longer for them to get to know such information. As much as we are living in the digital era where most of the communications are done using social media and emails, banks also need

to be aware that not many people consume these platforms. Therefore, banks have a role to play in financial inclusion to get the unbanked masses into the banking system. Financial inclusion is defined as “the process of ensuring access to financial services and timely and adequate credit needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost” (Nkuna et al., 2018).

The government of Malawi through the Central bank is also advocating for the campaign of financial inclusion where the rural masses have to be targeted for them to be also part of the financial activities that are happening in the country (Nkuna et al., 2018). The banked population currently stands at 19% (Reserve Bank of Malawi, 2020) which leaves 81% of the adult citizens unbanked. The Central Bank is also advocating for a cashless society where business persons are being encouraged to have different forms of payments where customers can choose from (Reserve Bank Of Malawi National Payments Report, 2022). If these government efforts together with the commercial banks’ efforts of financial inclusion, the literacy levels can go down which will see an improvement in people’s knowledge of e-banking services thereby increasing the number of people accessing the e-services.

#### **4.5.2 Challenges to E-banking growth strategies**

There is an outcry from the customers on an improved user experience of e-banking services. The participants who took part in this research were very open and suggested solutions that would help alleviate the challenges that the banking industry is facing in terms of digital banking transformation. As much as most of the challenges that were highlighted were pointing the blame on the banks, the bankers also had their say on how they envision the future of e-banking in the country and what strategies they foresee that would improve the e-service delivery. The section will discuss the growth strategies that both participants and key informants put across.

In this research, both the participants and the bankers recommended improved infrastructure to support the current e-platforms. The current infrastructure does not support the current demands and a growing number of people who are longing for an improved digital banking experience. Both parties called for the government to act quickly on this situation. Mwiya et al. (2017) recommended that if developing countries are to excel globally, there is a need for a good infrastructure that would propel more people to engage in e-banking service use. Cameroon is one of the countries in developing countries that is doing well in its implementation of e-banking adoption. The country effectively led the reform of its banking sector after the financial crisis and devaluation of the XAF currency in 1994 (Tangakou & Mba, 2015; Kuikeu, 2021 cited in Kala Kamdjoug et al., 2022). Cameroon alone has a

network of 47% of the banking network of the Economic and Monetary Community of Central Africa (CEMAC) (Kala Kamdjoug et al., 2022). Cameroon is one of the leading countries in e-banking adoption in developing countries because of the government's commitment to improving infrastructure. If the Malawian government is to follow the same that other leading developing countries are doing in terms of e-banking adoption strategies, this would improve the service delivery of e-banking.

Security is one of the challenges that has affected the e-banking adoption in the country. Security lapses were noted by both the participants and the bankers. It was reported that customers were being duped of their funds through online transactions that they did not initiate and this affected several customers. Security lapse is a challenge that most developing countries are facing. According to the TAM model, the perceived usefulness of e-banking would only be encouraged if the perceived security is there (Kamdjoug et al., 2022). Once customers perceive that there is no security in the e-platform that they want to use, customers will likely indulge in an e-banking activity. It is therefore advised that banks take an active role in making sure that their customers are well protected from the fraudster's malicious activities. It was suggested by the participants that the use of One Time Password (OTP) should be enhanced to make sure that before any e-banking transaction goes through, customers are notified through a text message for them to give a go-ahead if they know that transaction. Security lapses in e-banking also pose a challenge to the reputation of banks' once customers know that Bank X's customers are not being protected from fraudster activities, it is very unlikely that more customers would flock to that bank. For the banks to protect their reputation, they need to be vigilant enough to stay ahead of the fraudster's activities.

The lack of sensitization was also noted to be one of the challenges that banks were facing in the adoption of digital banking services. Most participants complained that banks do not notify them when new products have just been introduced or if there are any new changes in terms of digital banking. Participants lamented that sometimes they heard of new developments from their families or friends, others also came to know of the new developments on their own when they were navigating through on their e-platform. Customer awareness and product/service knowledge are other factors that were noted to influence digital banking in Nigeria (Festus & Amaechi, 2019). According to Rodgers and Shoemaker (1971), "consumers go through a series of processes in knowledge, conviction, decision and confirmation before they are ready to adopt a new product or service" (Festus & Amaechi, 2019). Therefore, for the successful adoption of Internet banking in the country, there is a need for the banks to sensitize their customers on the new product offering, and how it works, iron out all security



concerns and let the customers know how that product adds value to their digital banking journey. If the banks were to take sensitization seriously before embarking on the release of a product or service, probably the issues that are being faced in the digital banking industry would be lessened.

Banks do not work in isolation as lamented earlier; they rely on the services of other third parties to deliver seamless services to their customers. For example, banks rely on the MNO's availability of the Internet to get their services delivered to the customers. The same banks also rely on the same MNO for mobile wallets transfers between customer's bank accounts and their phone numbers. The banks also have different Memorandum of Understanding between utility companies for the banks to collect utility bills on behalf of the utility companies. However, it has been noted by some of the participants that sometimes when they buy tokens, it takes time for the token to be delivered to their mobile phone numbers. Another participant also complained that it took them more than a year for their DSTV payment to be sorted out. The participant's bank and the concerned utility company were all throwing the blame on each other which left the customer in the middle and frustrated and inconvenienced too. Mobile wallets have a bigger role to play in terms of financial inclusion in the country (Nkuna et al., 2018). If the banks are to coordinate well with the MNOs, the unbanked market can be tapped which can be a benefit to both the banks and the MNOs. The Central Bank is also advocating for a cashless society where the use of cash should be a story of the past (Reserve Bank Of Malawi National Payments Report, 2022). If this initiative is to be achieved, there is a need for both banks and their third parties to have a cordial working relationship which will benefit both the customer and the financial institutions that are involved.

Social media has taken centre in recent times. People nowadays spend much time on social media, and they get to hear more information using social media. In the United States of America, as of February 2019, at least 72% of the adults were on social media, and the number increased to 90% for US adults between the ages of 18 to 29 (Hunt et al., 2021). The younger generation is the one that consumes more of social media, unlike the older generation. To stay competitive, more banks often offer value-added services to make the services more appealing and attractive to their targeted consumers (Taiwo & Agwu, 2017). Since customers now spend most time on time, the participants also asked for e-banking where the platform should also be available on their social media platforms. Instead of logging out of social media to transact on an e-platform, participants asked for seamless digital banking where both social media use and digital banking use can all be happening at the same time. This will create relevance and convenience for the customers thereby increasing digital banking use. While this is the case, participants also asked for more services to be available on digital platforms

where they do not need to travel to the banks for transactions that they can be able to do on their phones. The banks need to enhance the security of these platforms to create a secure digital platform use.

As the adoption of e-banking is increasing, there is also a need for banks to understand the internal business within the organization to make informed decisions that will help in the operation of the banks. One key participant highly recommended the use of data analytics in the digital era. Data analytics is defined as the collection and analysis of large volumes of structured and unstructured data to create value for the company (Cyril & Cyril, 2019). Data analytics can give more insights, predict risk and revenue and make informed decisions for the company (Cyril & Cyril, 2019). With the advancement of e-banking, more transactions are made, as such, it is not easy for the banks or companies to track well the areas that the company needs to concentrate on. With the employment of data analytics, banks would be able to know which platform brings them more revenue, help them in credit risk scoring for their customers and also help in segmenting well their customers to give them a custom-made service which suits their needs (Taher, 2018). It is therefore imperative that the banks in the country take this route for them to deliver services that are meaningful to the customers and this will create value for both the customers and the banks.

### **4.5.3 Perceptions on growth of digital banking services**

#### **4.5.3.1 Customers' perspective**

For e-banking to accelerate in Malawi and developing countries in general, there is a need for banks to take an active role in taking into consideration the challenges that their customers are facing in the adoption of e-banking services. Internet banking penetration is low because customers are facing different challenges that probably banks are failing to address or probably the banks are not even aware that customers are meeting such problems. This section will discuss the challenges that customers are facing in the wake of the campaign of digital acceleration in developing countries.

Technological challenges have proved to be one of the challenges that are hindering the growth of digital banking financial services in Malawi. During the research, almost all the participants reported that connectivity issues were hindering their usage of e-platform. Customers reported that most of the transactions happen at the end of the month when most of the transactions happen. This was attributed to system overload since the systems take a lot of transactions than normal. Participants reported issues such as failing to get a token when they bought electricity or water bills or when they were buying airtime. Due to these challenges, customers were left frustrated. Ali et al. (2021) cited that connectivity

and infrastructure issues are some of the challenges that are hindering the growth of digital banking in developing countries. A study by Fetu (2019) on Ethiopian banks on the challenges and opportunities of e-banking also showed the same challenges of poor the in developing countries in the adoption of digital financial services (Fetu, 2019). Infrastructure challenges are making it hard for consumers to fully utilize e-services due to intermittent challenges. The convenience of using e-services is no longer there.

Security is one of the areas that has also been tackled much by the participants in this research. Security is paramount if e-banking is to be highly patronized by many. Customers have reported security lapses where they are being duped of their funds by fraudsters. Of is a case of one of the participants whose account was debited with an online transaction which he did not initiate. It should also be noted that the customer had never made any online payment and yet the fraudsters were able to defraud his account. It is also reported that in the United Kingdom in 2015, roughly 130 million British pounds were stolen from online bank accounts through fraud (Revathi, 2019). This posed a great concern to the banks that were involved and it posed a security threat to the customers that their money was not safe. Such incidences also pose a reputation risk to the banks as they are considered not to be trustworthy in the eyes of their companies. Issues of security need to be looked at critically to avert damages that fraudsters have caused. It should also be noted that it is both the banks' and customers' responsibility to make sure that customers are well educated on how to keep their personal information not to be divulged by anyone else and the customers also practice caution on the best ways of keeping their personal information safe, respectively (Devulapalli & Oruganti, 2021).

Lack of urgency in assisting customers was also reported in this research. Customers reported that, whenever they had a complaint and they presented it to the bank, usually the banks took too long to assist the customers. They also complained that they were unable to use certain applications that were self-registered because the bank stopped the self-registration process due to fraudsters' penetration of the system. Another participant complained that his digital application was not working at the time of the interviews, and he had reported the issue to the bank several times, but a year lapsed without him being assisted and he later abandoned the application. A 2013 survey that was conducted by MIT Sloan Management Review and Capgemini Consulting to better understand how businesses succeed or fail in using digital technology to improve business performance, found that most businesses are failing to cope with the demands of the customers and customers' issues are not treated with the urgency that they deserve (Fitzgerald et al., 2013). Business is being done as usual and customers later

feel frustrated with using such technology because of the way they are being treated by the bank employees.

In this digital era, for one to access an e-platform, there is a need to have access to the internet. The use of Unstructured Supplementary Service Data (USSD) is mostly used by people who do not have smartphones but still want to be part of digital innovations. It should be noted that the high cost of internet services is making it hard for customers to stay abreast with digital initiatives. Developing countries, Malawi inclusive, have been affected highly by the high cost of internet charges. The current price of a standard monthly internet package is \$200, less than \$25 the average salary (Mokoena, 2020). This means that for most of the people in the country, it is difficult to have access to the internet as their priorities are to fetch the necessities; access to the internet is regarded as a luxury. Accelerating digital banking in this environment is hard since people must prioritize basic needs.

High tariffs have also been recorded as one of the reasons why participants failed to participate fully in the digital banking platform. Participants complained that banks charged them high tariffs which made them either resort to transacting in the banking halls where the tariffs were much lower or withdraw the whole salary to avoid being charged now and again when they wanted to transact. This poses a challenge to the economic well-being of the people because they are tempted to exhaust the money which they had prepared to take them up to the end of the money. The Technology Acceptance Model (TAM) asserts two notions of perceived ease of use and perceived ease of usefulness (Ma & Liu, 2011). People tend to use technology if they perceive technology to be useful to them or if it is easy to use. E-banking is being faced with the challenge of lack of penetration because of the high tariffs; people do not see the need or the usefulness of digital banking because they get their satisfaction elsewhere, which is traditional banking. If the tariffs were to be decreased, the perceived usefulness would tend to be improved.

A study by Fonjai (2017) in Cameroon has shown that perceived reliability, trust, security and accessibility significantly impact the perceived usefulness of the e-banking adoption (Kala Kamdjoug et al., 2022). People do not see the usefulness of using e-banking when the platforms do not provide them with security, reliability and convenience due to system downtimes. If the banks are to work out these challenges, more people would perceive e-banking to be useful thereby accepting the technology. The banks should also make it more possible to customize the platforms to be user-

friendly so that more people should not have trouble navigating through the platforms. This would thereby lead to perceived ease of use for e-banking.

#### **4.5.3.2 Bankers' Perspective**

Customers are on the receiving end of digital services; they are not aware of what happens for them to meet such challenges that they face. Banks, since they are the initiators of these developments, they have their explanation of what goes behind a service to be delivered to the end-users. In the process of delivering their services to the customers, they also face different challenges that are a hiccup to their smooth delivery of the service. The following paragraphs will discuss the challenges that banks face in the service delivery of digital banking.

Just like customers have complained about the issue of connectivity being paramount in their journey of e-banking, banks also reported that they faced the same challenges from their service providers, such as mobile network operators and internet providers. This is an issue that has been reported by all the banks that participated in this interview. The situation usually got worse during the month's end due to the traffic of transactions that had to be processed at that time. Over 50% of transactions are now being done electronically which poses a strain on the available infrastructure (Taiwo & Agwu, 2017). Connectivity is an issue that has been reported by several developing countries in their quest for an improved e-banking service delivery (Kala Kamdjoug et al., 2022). Connectivity issues are one of the challenges that is chasing away customers from e-banking usage. Banks have a big role to play to make sure that such challenges are being dealt with by their fellow business counterparts such as the mobile network operators. Long-lasting solutions must be found instead of a blame game between the banks themselves and the network providers. Banks need to be vigilant enough to make sure that a permanent solution is provided once and for all.

Secondly, banks also complained about poor infrastructure that is hindering their service delivery. The infrastructure that is currently available is outdated and needs to be updated. It is sad to note that the same infrastructure that used to serve fewer customers then is being strained to serve to large population of people who have migrated to the use of digital banking services (Mokoena, 2020). The banks also attributed this challenge to the government's lack of support in making sure that the country has good infrastructure that should facilitate e-commerce transactions. It was also reported that vandalism of network cables has also facilitated the challenges to digital financial services delivery (Rana & Pandey, 2015). Since banks rely on other service players in the industry for them to deliver quality service, it was sometimes found that people had vandalized cables that were meant to

necessitate seamless delivery of digital services. As much as customers would attribute this challenge to the banks, some of the reasons that the banks are facing are beyond them. This goes back to the policymakers to find alternative ways on how best they can safeguard such infrastructure to accelerate the growth of digital banking.

Resistance to change is also one of the challenges that is hindering the growth of e-banking in the country. As much as the banks would do anything possible to make sure that they reach out to their customers on the availability of digital banking platforms, there are always laggards that will not move with the times. The key informants complained that despite reaching out and sensitizing their customers on digital platforms, still, more customers were still not answering this call. According to the Diffusion of Innovation theory developed by Rodgers in 1962, it asserts that, change is always difficult to adapt to, there will always be the early adopters, those that will adopt the new technology once it has been developed, and there will also be others that will take time to adopt such initiatives despite that technology being good (Al-rahmi et al., 2019). Fonjai (2017) in his research regarding e-banking in Cameroon, argued that banks need to increase e-banking security, accessibility and trustworthiness and reduce the cost of e-banking services to encourage customers' attitudes towards adopting e-banking services (Kamdjou et al., 2022). Fonjai (2017) cited these issues because they are some of the challenges that are making customers rigid to change. If these issues can be taken seriously by the banks, then banks will see a change in the adoption of e-banking.

#### **4.4 Chapter summary**

The chapter discussed the results that were derived from the interviews with the participants. Through the themes and sub-themes discussed in the chapter, the results highlight the challenges that the banking sector is facing in the adoption of digital financial services. The participants explained the challenges that they are facing, and the bankers on the other hand also highlighted the challenges that they are facing in their quest for a seamless service delivery. As much as the banks are also facing challenges, it has been noted that most of the challenges that the customers are facing can be averted if the banks are to take a bold step in the execution of their duties. Despite that customers are facing challenges; they were so eager and open to state how they envision the future of e-banking in the country. If the banks are to take into consideration the proposed ideas from the customers, e-banking will not be the same in the years to come. Both the customers and the banks have a role in making sure that e-banking adoption is being taken seriously. Later, a discussion of the results was done which

shows that there are still gaps in the adoption of digital financial services in Malawi and needs an urgent intervention of the banks and the policymakers.

## **CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Conclusion**

The main objective of this study was to find out the challenges that hinder the growth of digital banking in the country and seek to find out the strategies that would help to accelerate and adoption of digital financial services in the country. Both the customers and the bank's key informants took part in this research to have a better understanding of both the customers themselves, as the end-users of e-services, and the bankers themselves as the initiators of these developments. It has been found out from the research that most of the challenges that the customers keep facing all point at the banks.

Most of the challenges that customers keep facing have to do with the banks' response to the customers' needs. Customers reported that banks take too long to resolve their issues and customers later lose hope of being helped. Customers also complained that banks do not let them know of new developments which makes their usage low. On the other hand, banks cried out on poor infrastructure that is hindering their service delivery of e-banking. The bankers also complained that some challenges are beyond them because they rely on the services of other third parties for them to deliver a seamless good banking experience. Some challenges are beyond the bank's capacity which is needed for the policy makers to act on. Despite that this is the case, those challenges that are within the banks' scope, need to be looked at with urgency to instill the lost confidence in the customers.

Both parties came up with strategies that would be beneficial for the acceleration of digital banking growth in the country. Some of the strategies that were proposed were improved security on digital banking platforms to safeguard hard-earned money for the customers and sensitisation of the banks' products and services before they are rolled out. This would help to get customers acquainted with the new product on offer which would also enhance customers' ease of use and ease of usefulness of the e-banking products. The use of data analytics was also suggested whereby it would be used to get more insights on the banks' performance and the banks would be able to segment their customers well and give them tailor-made solutions specifically suited for each customer. The data analytics would also help banks to know which areas of focus they should concentrate on to maximise revenue for the banks. If the banks are to go by with has been suggested, the banking industry would be a different one where customers would feel to be part of the global community.

The Technology Acceptance and Innovation Diffusion Theories have been the basis for this research. As the TAM theory focuses on the perceived ease of use and perceived usefulness, the results from



the study have shown that this theory was applicable. Lack of awareness of the digital financial services has been seen as one of the factors that are contributing to the non-adoption of digital financial services. As people are not aware of these platforms, the perceived usefulness of these platforms tends not to be there, as such, the digital platforms are not fully being utilised by the majority. The rate of diffusion of digital financial services also tends to be slow as the banks are not making enough efforts in order to sensitise the majority of the digital financial platforms. If the banks were doing enough of sensitization, then the fears that people have of cyber security threats would have been minimized. People need to be civic educated on how they should navigate the digital banking platforms in order to be vigilant enough. Therefore, the theories listed above are directly linked to how digital banking services are adopted by the majority of the customers.

## **5.2 Recommendations**

The following are the recommendations that the researcher came up with from the results of the study: firstly, the banks need to act with ruthless speed and urgency when it comes to customer complaints. Customers are the reason why banks exist, therefore, if the banks do not resolve customers' complaints, they (customers) will end up frustrated and the customers may end not going to that bank again. Secondly, cyber security is of paramount when it comes to digital banking. Most of the participants complained that the banks' cyber security is weak, therefore, they end up shunning some services for fear of being duped. The banks need therefore to invest in cyber security in order to regain the trust of their customers.

The banks also need to embark on sensitization campaigns in order to reach out to the majority of their customers. It has been noted that some campaigns that the banks embark on do not reach out to their mass customers, therefore, there is need to use media platforms and other channels that will reach to the masses. The banks also need to take on board proactively the financial inclusion campaigns that are being advocated by the Central Bank. There are a lot of people that are unbanked, hence, banks need to take these initiatives seriously in order to reach out to the many Malawians that are unbanked.

As we are going towards to full digitalization of the banking services, banks also need to act with speed in the automation of banking services. It was noted that some of the services that customers would have wanted to be automated, they are still being done at the banking halls. The banks therefore need to work out on this shortfall in order to reach out to many customers that need these services. Lastly, some of the key informants highlighted that some of the challenges that they are facing are due to the issues to do with their third parties like the mobile network operators or internet service

providers and some of the challenges are even beyond their said counter parts. It is therefore high time that the government also takes a leading role in order to make sure that the infrastructure for this country is up to date in order to match the standards that customers are looking for.

### **5.3 Limitations**

This study only explored the challenges and strategies that can be realised in the digital era; it only concentrated on banks' and customers' perspectives. But for the digitalisation drive to be achieved, other equally important players have a big role to play in the acceleration of digital banking growth in the country such as internet service providers, debit card issuers, software and hardware providers and others. As much as banks and customers are the critical players in the digitalisation drive, these players also have a role that they play. Since this research only focused on customers and banks, there is a need for further researchers to also explore the role that these third parties play in the acceleration of digital banking growth.

### **5.4 Areas for Further research**

For future studies, it is recommended that all banks in the country take part in such research to have a better understanding of the issues that banks in the country face in the acceleration of digital banking. This will also help policymakers to make informed decisions on how best they can do in the drive towards a good user experience of online banking. The research was also cross sectional, it did not cover all the urban and district banks. In future researches, it is recommended that a similar research should be conducted in order to get views of all the banks both urban and district on how they view the direction of digital financial services in the country. Lastly, it emerged during the research that some of the challenges that the banks are facing are beyond them, these are issues to do with their third party service providers. It is therefore important that a similar research should also involve these third parties like the Mobile Network Operators, Natswitch and other players on what they are doing in the acceleration of digital financial services in the country.

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## APPENDICES

### APPENDIX 1: INTERVIEW GUIDE-BANKERS PERSPESTIVE

A guide for in-depth interviews

E-banking opportunities and challenges- Banker's perspective

Name of interview .....

Date of interview .....

Interviewee code .....

#### Introduction

The interviewer will first welcome and thank the interviewee for their interest to participate in the research, then will introduce him/herself, describe main reasons for the interview, and explain the interviewee's role in the activity.

#### Consent

*Welcome and thank you for showing your interest to participate in this interview. I am Anna Tinyade Kayira, a Master of Business Administration student at the Malawi University of Business and Applied Sciences (MUBAS). I am interested to hear about the challenges that you are facing in the adoption of digital banking financial services. I would like to know the recurring issues that you face that encourage customers to visit the physical bank rather than the online bank. I would also like to know how supportive is the bank to their customers in their journey of the adoption of online banking and the opportunities that the banks can take in the digital era. Lastly, I would like to know what the bank is doing in order to migrate more people to the use of digital banking rather than the traditional banking. The interview should not take us more than 30 minutes. I would like to audio-record the interview so that we can accurately capture your experiences, thoughts and ideas. Since I will audio record your voice, please make sure that you are audible enough so that we do not miss any of your comments. Please be assured that your responses will be kept confidential, meaning, no names of individuals or banks will be attached to the interviews and the recordings will be kept at a safe place, and destroyed once transcription is done. Remember, there are no right/wrong answers; we just want to hear your experiences, so feel free to express your feelings and thoughts. Remember also that you do not have to be forced to talk about anything you do not want to. Are there any questions about what I have just said.....?*

*Please sign below if you agree to participate in this interview*

.....

.....

Interviewee (signature)

Date

## Questions guided by topic

### 1. Demographic information

I would like to start by asking you a few questions concerning the demographic information of your bank (The interviewer will then fill the responses in the table below)

Age range (years)	<input type="checkbox"/> 18-30	<input type="checkbox"/> 31-40	<input type="checkbox"/> 41-50	<input type="checkbox"/> 51 & above
Gender	<input type="checkbox"/> Male		<input type="checkbox"/> Female	
Marital Status	<input type="checkbox"/> Single		<input type="checkbox"/> Married	
	<input type="checkbox"/> Divorced/Separated		<input type="checkbox"/> Widowed	
Education	<input type="checkbox"/> Diploma		<input type="checkbox"/> Bachelors	
	<input type="checkbox"/> Masters			
Employment experience (years)	<input type="checkbox"/> 1-5		<input type="checkbox"/> 6-10	
	<input type="checkbox"/> 11-15		<input type="checkbox"/> 16 & above	

### 2. Performance of digital banking

I am now going to ask you some questions on what has been the trend of digital banking over the years. **Tell me everything you know on how digital banking has been performing over the years?** (Note to interviewer: after giving time to the interviewee to respond, probe specific planned questions he/she may not have addressed)

- How have the customers welcomed e-banking?
- Have you made significant progress over the years?
- What have been the developments since the launch of digital banking??
- What has been the feedback so far from the concerned stakeholders?
- Are you where you had intended to be now considering the number of years that digital banking has been existing at this bank?

### 3. E-banking opportunities

I am now going to ask you about views, opinions and suggestions considering your experience on this job on how best you think banks can take opportunities for digital banking growth in the country. **What opportunities can you foresee that can accelerate the growth of digital banking?** (Note to interviewer: after giving time to the interviewee to respond, probe specific planned questions he/she may not have addressed)

- As a bank, have you considered any collaborations with other service providers in order to enhance your service delivery?
- What opportunities does e-banking offer to your bank to expand your customer base?
- How can banks turn the security challenges associated with e-banking into opportunities?
- How has e-banking enhanced operational efficiency?
- How can e-banking improve financial inclusion since the RBM is advocating for a cashless society?

#### 4. E-banking challenges

I now want you to talk about the challenges of e-banking services that you face as the bank and the challenges that are also frequently reported by customers. **What would make customers not to use e-banking service?** (*Note to interviewer: after giving time to the interviewee to respond, probe specific planned questions he/she may not have addressed*)

- a. What are the challenges that you are facing as a division?
- b. What are the challenges that are frequently reported by your customers?
- c. Do you get constant feedback from the customers on the performance of digital banking platforms? Are the challenges timely addressed?
- d. In your opinion, what do you think still makes customers to visit traditional banks to digital banks?

#### 5. E-banking strategies

I am now going to ask you about your views, opinions and suggestions on how best you think digital banking can progress in the country. **What strategies do you think as the bank should put in place in order to stay competitive in the digital age?** (*Note to interviewer: after giving time to the interviewee to respond, probe specific planned questions he/she may not have addressed*)

- a. What role do you think your customers have that can help to accelerate the growth of digital banking?
- b. Since the world globally is going digital, what plans have you put in place that will assist you to compete globally?
- c. What effective forms of communication do you use in order to get constant feedback from your customers? Are the issues timely addressed?
- d. Do you use any incentives in order to migrate more customers to online banking?
- e. What security measures have you put in place in order to make sure that your customers are protected?

Is there anything you would like to add?

*Thank you for your participation*

## APPENDIX 2: INTERVIEW GUIDE-CUSTOMER PERSPECTIVE

A guide for in-depth interviews

E-banking opportunities and challenges-Customers' perspective

Name of interview .....

Date of interview .....

Interviewee code .....

### Introduction

The interviewer will first welcome and thank the interviewee for their interest to participate in the research, then will introduce him/herself, describe main reasons for the interview, and explain the interviewee's role in the activity.

### Consent

*Welcome and thank you for showing your interest to participate in this interview. I am Anna Tinyade Kayira, a Master of Business Administration student at the Malawi University of Business and Applied Sciences (MUBAS). I am interested to hear about the challenges that you are facing in the adoption of digital banking financial services. I would like to know the recurring issues that you face that encourage you to visit the physical bank rather than the online bank. I would also like to know your level of understanding of the online banking and how supportive is the bank in your journey of online banking and also how you envision the future of e-banking in the country. The interview should not take us more than 30 minutes. I would like to audio-record the interview so that we can accurately capture your experiences, thoughts and ideas. Since I will audio record your voice, please make sure that you are audible enough so that we do not miss any of your comments. Please be assured that your responses will be kept confidential, meaning, no names will be attached to the interviews and the recordings will be kept at a safe place, and destroyed once transcription is done. Remember, there are no right/wrong answers; we just want to hear your experiences, so feel free to express your feelings and thoughts. Remember also that you do not have to be forced to talk about anything you do not want to. Are there any questions about what I have just said.....?*

*Please sign below if you agree to participate in this interview*

.....

.....

Interviewee (signature)

Date

## Questions guided by topic

### 1. Demographic information

I would like to start by asking you a few questions concerning your demographic information (The interviewer will then fill the responses in the table below)

Age range (years)	<input type="checkbox"/> 18-30	<input type="checkbox"/> 31-40	<input type="checkbox"/> 41-50	<input type="checkbox"/> 51 & above
Gender	<input type="checkbox"/> Male		<input type="checkbox"/> Female	
Marital Status	<input type="checkbox"/> Single		<input type="checkbox"/> Married	
	<input type="checkbox"/> Divorced/Separated		<input type="checkbox"/> Widowed	
Education	<input type="checkbox"/> Primary		<input type="checkbox"/> Secondary	
	<input type="checkbox"/> Tertiary			
Employment Status	<input type="checkbox"/> Unemployed		<input type="checkbox"/> Self-employed	
	<input type="checkbox"/> Employed		<input type="checkbox"/> Still at school	
How long have you held an account with this bank?				

### 2. Knowledge of digital banking

I am now going to ask you some questions about your knowledge of e-banking services. **Tell me everything that you know about e-banking?** (*Note to interviewer: after giving time to the interviewee to respond, probe specific planned questions he/she may not have addressed*)

- What are the types of e-banking services that you know?
- What security measures are you aware of when using e-banking?
- How do you stay updated to the new changes in e-banking?
- Do you know any other means of sending money other than using cash?
- Do you know other e-banking services like bill payments, tuition fee payments, tax payment, masm payment, DSTV payment and loan application?

### 3. Customer's e-banking services use

I am now going to ask you about your usage of e-banking services. **How is your usage of online banking so far like?** (*Note to interviewer: after giving time to the interviewee to respond, probe specific planned questions he/she may not have addressed*)

- How often do you use e-banking services?
- What type of transactions do you usually perform on e-banking?
- What motivates your choice of e-banking service over the other?
- How satisfied are you with the performance of online banking so far?
- What would make you use e-banking over the traditional banking?

#### **4. E-banking challenges**

I now want you to talk about your challenges of e-banking services that you face. **What are the specific challenges that you are facing with e-banking?** (*Note to interviewer: after giving time to the interviewee to respond, probe specific planned questions he/she may not have addressed*)

- a. Are e-banking platforms user-friendly to you?
- b. Have you reported any of the challenges that you face?
- c. Is the bank able to address these challenges?
- d. Are security issues, technical issues, lack of trust, connectivity problems, not hindering your e-banking usage?
- e. Is the bank available to take you through on the use of e-banking services?

##### **a. The future of digital banking**

I am now going to ask about your perceptions on what you think the banks in the country should do right in order to accelerate the digital banking growth. **How do you envision the future of e-banking?** (*Note to interviewer: after giving time to the interviewee to respond, probe specific planned questions he/she may not have addressed*)

- a. What new features or improvements would you like to see?
- b. What features do you find most useful in your current e-banking service that you would love the bank to continue improving?
- c. What current features of e-banking services you would want the bank to remove altogether?
- d. What measures would you like to see to enhance the security of online banking?
- e. What are your thoughts on digital/mobile wallets on the future of e-banking?

Is there anything you would like to add?

*Thank you for your participation*