**UNIVERSITY OF ZAMBIA IN COLLABORATION WITH**

**ZIMBABWE OPEN UNIVERSITY**


**A  CRITICAL REVIEW OF DIGITAL INNOVATIONS CHALLENGES ON CUSTOMER SATISFACTION AMONG FINANCIAL INSTITUTIONS IN ZAMBIA. A CASE STUDY OF STANBIC BANK ZAMBIA, LUSAKA.**


**BY**


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# DECLARATION

I, **Namwanja Jessy Malambo** do hereby, declare that this dissertation: Represents my own work, has not previously been submitted for a Master Degree at this or any other University. Each contribution to, and quotation in, this report from the work(s) of other people has been attributed, and has been cited and referenced.

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## DEDICATION

This piece is dedicated to my loving parents Ethel Kapita and Blann K Malambo whose words of encouragement tenacity ring in my ears. To my Husband Pascal K Ngosa and my daughters Elsah ,Michelle And Naomi you have been the best in this  journey, with your tolerance, support, am truly thankful for having you in my life, my sisters who stand by me when things are bleak, I can't force myself to stop loving you. To all the people in my life who touch my heart, I dedicate this research and may the Lord bless you .

# ACKNOWLEDGEMENTS

# ABSTRACT

The main goal of this study was to analyse the challenges of Stanbic Bank Zambia's digital innovation services on customer satisfaction among the bank's customers. The study sampled 50 customers and collected data using questionnaires. A descriptive survey design was used in the study. Quantitative data collected was coded and fed into a computer statistical software SPSS to run the analyses. Descriptive data analysis entailed counts, percentages, cross-tabulations, and measures of central tendencies. Correlation analysis was used to check the relationship between dependent and independent variables. Qualitative data from the research schedule entailed the use of thematic analysis techniques. The results were interpreted and data were presented in tables for uniformity and ease of interpretation. The study found that the customers at Stanbic Bank, Zambia were indifferent about the system timeouts on digital banking platforms provided by the bank causes disruptions in service provision. The majority of the males influenced this response as the majority of females disagreed with the assertion that system timeouts cause any service disruptions. The researcher also found that network problem when reaching the digital banking platforms was a major challenge in digital banking systems especially among male customers, and this led to customer frustration and dissatisfaction. Among females, the length of time it took for reversals to be processed caused frustration and customer dissatisfaction. These challenges led many customers to feel; online banking platforms are unreliable. The study concluded that Banks need to use data and behavioural analytics to improve and iterate the customer acquisition process continuously. By identifying the friction points, where activities stall and errors occur, banks can make incremental changes to improve over time. The study recommends that to have faster processes in digital banking, there is a need by banks to invest more in robust reliable systems to reduce incidents of failed transactions and transactional errors in ATMs, Mobile banking, and POS terminals. Banks should further automate most services like loan recovery, loan disbursement and introduce queue management systems.

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## 1.0 OVERVIEW

Chapter one presents the background to the study, Statement of the Problem, Purpose of the study, study objectives, Research hypothesis, Significance of the study, theoretical framework, scope of the study, Limitation of the study, operational definitions, and a summary.

## 1.1 STUDY BACKGROUND

Before the global economic crisis of 2008-2009, the banking industry created shareholder value through financial leveraging. Today's increased regulations and competitive challenges are forcing banks to deleverage and identify alternative sources of value. Enter digital banking. New digital models steer banks in the direction of customer relationships that present new sources of value. The focus is on engaging customers and building trust in the key activities of digital banking: marketing and sales; customer on boarding; and account opening and servicing.

Ogden (2014) says that the state of digital banking influx is like never before. It's been about five years since Bank of America launched the first mobile banking application on the iPhone, and users are now demanding new functionality faster than financial institutions can typically provide it. He notes that today users want a powerful digital experience, and they are willing to switch banks to get it. He mentions that in one of the surveys conducted that 27 percent of users would consider branchless digital experience. Ogden (2014) In a survey conducted by Ernst and young's 2014 global banking data gathered from 32000 retail banking customers in 43 countries, they found out that customers pointed out five areas where banks and credit unions could improve namely: simplicity of offers and transparency of fees, provision of Omni channel experience, better advice, leveraging greater use of data and digital channels to empower customers and enhancing problem resolution experiences.

According to Vasya and Patrick (2006), the recent development of information technology has led to major changes in the way services are delivered to customers. Nowadays, customers are using more and more self-service options, which are more convenient and fast. Kumar (2014) suggests that customers' growing use of digital channels for banking and their demand for an

individualized experience have forced many banks to revisit their customer service efforts. In the face of increasing competition from emerging digital banks, which are redefining customer satisfaction and luring younger customers, traditional banks must leverage digital channels to create more rewarding customer satisfaction. The study also points out that for a successful transition to digital banking, banks must formulate a strategy focused on six key areas: customer, mobile and online capabilities, use of customer data, social media, modernized branches/ATMs, and provision for a seamless experience across all channels (Schlich, 2014).

Some banks that have adopted digital channels like internet banking are being faced with various obstacles like teething problems ranging from security concerns by the users, lack of adequate legal framework, poor marketing strategies, and issues regarding the connectivity of internet banking sites these provide for low customer satisfaction. Digital modernization is giving traditional banks a second chance to deepen customer satisfaction and loyalty, driving long-term relationships and profitability with the approach also embracing the potential to meet consumers' expectations and bring banking back to the bank.

Moreno (2014) highlights that banks are facing a growing challenge from non-bank entities that are aggressively using digital innovations to take on functions traditionally part of banking. He gives an example Amazon, which now offers loans to its merchants and the giant Alibaba (Chinese E-Commerce Company with the Largest IPO in US Stock History), now the world's largest payment provider. However, he points out that banks have a huge competitive advantage in this digital world. With their vast digital data, payment know-how, and deep understanding of compliance, security, and financing, they are positioned to become an Everyday Bank, providing unparalleled personalized customer satisfaction that cannot be replicated by non-banks.

Digital and mobile technology allow access to new pools on under banked or unbaked populations across the globe and customer behaviors' changing extensively. Holley (2013) notes that Banks in the UK and Ireland need, to adjust to changing consumer behaviour as customers cut back on the amount of time they spend banking online and visiting bank branches, according to new research by Accenture. He also points out that several new banks are currently hoping to capitalize on dissatisfaction with existing offerings to enter the market in the coming months.

Finnish bank Holvi is an online-only bank that aims to rollout across Europe, offering a combination of personal financial management features, social and business networking, and reworked core products. Meanwhile, Moven (formerly Movenbank), another online bank, is based around the mobile wallet concept, in which the customer downloads a mobile app and then uses their mobile phone to make payments, transfer funds, and withdraw cash. Kumbhar (2009) and Shrotriya (2007) point out that today's customers are now looking for multiple delivery channels and flexible as well as convenient working hours neither the clock nor the geographical locations are constraints. Therefore, almost all Indian commercial banks are providing services through the various alternative e-channels; it is called 'Alternative Banking. There are various means of alternative banking i.e. Core Banking Solution (CBS), ATM, POS Terminals, Mobile Banking, Internet Banking, Credit Cards, Debit Cards, EFT, RTGS, MICR clearing, etc.

In Africa, the majority of the population has no access to banking services, with only 20% of African families having bank accounts. There is limited access to financial services in Africa stemming particularly from deficient infrastructure, geographical isolation or inaccessibility, financial illiteracy. Even Africans with bank accounts often face high charges for moving their cash around, due to high transactions costs. It is this gap in the financial services market that is creating a unique niche for mobile phone banking to develop on the continent, enabling a growing number of people to access financial services for the first time. In this context, new technology-based financial services, such as mobile phone banking and the use of smartcards, have the potential to substantially increase people's access to finance.

South Africa is by far the country where mobile banking is most widely used on the continent. By end of March 2009, the total mobile customer base in South Africa increased by 3.8% from 2008 to over 51.9million with the mobile penetration rate rising to 107%. Ondiege (2010) further gives an example of Vodacom - Nedbank M-PESA – South Africa's largest mobile phone operator Vodacom which teamed up with Nedbank to unveil an M-PESA mobile-based cash transfer service, similar to the successful one operating in Kenya. Nyangosi et al. (2009) highlight in their findings that ATM banking is one of the earliest and widely adopted retail banking services in Kenya. However according to an annual report by the Central Bank of Kenya its adoption and usage has been surpassed by mobile banking in the last few years (CBK, 2008).

To keep up pace with digital technology, Stanbic Bank Zambia Limited in a bid to provide digital innovative financial solutions to leverage the capability of its core banking system to deliver customer-led product enhancements, capabilities, and solutions to the increasingly sophisticated local and global clientele, introduced digital self-service fleet in 2019 which has been enhanced with the introduction of the digital lending platform through the banks' Internet Banking system. The bank also integrated MTN Mobile Money, the largest mobile money payments provider, to facilitate cross-platform payments for its customers and financial inclusion.

The bank further introduced the Trader Stock Advance through partnerships with financial technologies such as Business Optics and Nomanini which allows the bank to increase its presence and therefore enhancing its financial inclusion to satisfy its customer needs and gain a larger market share. Stanbic Bank also partnered with Union Pay International the world's largest card issuer to promote ease of payments in trade and tourism industries as well as foster economic and social transformation in Zambia. This made the bank launch the first ever digital loan platform which enables its customers' access online personal loans for those with existing approved facilities, scoring as first on the Zambian market (Stanbic Bank, 2020).

The bank has not remained behind in its quest to stay at pace with modern technology through its continuous implementation of digital innovations. But with all these efforts the challenge still remains appalling in that clients' queue up on customer consultants' desks for loan applications and there are also long queues on the banks ATMs (Automated Teller Machines) especially during month ends. This is evidence enough that the digital innovation the bank implements is not yielding the intended results of serving customers efficiently and thus improving productivity. Hence the need for this research to be conducted to uncover the challenges and the causes of these challenges in the face of digital innovation efforts the bank has implemented thus far.

AN OVERVIEW OF DIGITAL BANKING AND CUSTOMER SATISFACTION

Kennedy and Jacky (2013) note that the digital banking technology has greatly advanced there by playing a major role in improving the standards of service delivery in the financial institution sector. They say that days are long gone when customers would queue in the banking halls waiting to pay their utility bills, school fees or any other financial transactions. They can now do this at their convenience by using their ATM cards or over the internet from the comfort of

their homes. Additionally due to the tremendous growth of the mobile phone industry most financial institutions have ventured into the untapped opportunity and have partnered with mobile phone network providers to offer banking services to their clients.

Cross (2014) cites several opinions of what digital banking means. He says, what digital essentially does is that it uses technology to design experiences, both seen and unseen. Digital is all about making what can be seen unseen – making services so smooth and seamless that it becomes invisible to the customer. It involves planning for digital initiatives which requires more than just the automation of services, but to also taking into account the emotional aspect of banking – how do customers feel about money and what do they do with it? Emotional needs must be at the centre of the entire customer experience. "Customer satisfaction is a measure of how happy customers feel when they do business with a company in this context a bank. Kotler (2012) in defining Customer satisfaction he says it involves customer creation, customer maintenance and retention. According to Meuter, Ostrom, Roundtree and Bitner (2000) Customer satisfaction is a highly personal assessment that is greatly influenced by individual expectations. Some definitions are based on the observation that customer satisfaction or dissatisfaction results from either the confirmation or disconfirmation of individual expectations regarding a service or product. Schlich (2014) notes that customers are satisfied with convenience of traditional banking but expectations are constantly rising as new technologies and consumer behaviours develop. Increasingly, customer behaviour is changing to involve web, mobile, social media and in-person interactions for a single purchase. To stay competitive, financial institutions need to continue building capabilities to provide 24/7 real time access to banking seamlessly, across channels. Digital communication should feel natural for digital customers, and banks have a crucial opportunity here to present themselves in a new light and to a new audience accustomed to a completely different way of interacting with friends and for whom purchasing online is second nature. Deepening the customer relationship, in a seamless fashion and in step with the user's lifestyle, precludes any thoughts of being too present – this is the key of knowing customer preferences and thinking, how much presence, when and in what ways. Getting it right reaps rich rewards over the long-term; getting it wrong portends a potential lost generation of customers. The digital banking offering should be based on a solid understanding of digital consumer behaviour as well as consideration of how to build and extend bank brand value for digital consumers. Fundamentally, good customer service is crucial to the value of long-term customer loyalty. The digital tipping point is a crucial opportunity and one that offers substantial benefits to those who exploit it well. In addition to

properly addressing the relevant technological and security aspects, digital banking strategy for private banks should be developed with a clear focus on current and future customer behaviour and needs Villers (2012).

The transition of the banking industry over the past two decades has been historical, following the path from online enabled capabilities, to multichannel integration, to more seamless full function solutions that leverage mobile devices and big data analytics. According to the Cisco research, the next stage of banking evolution will make transactions so convenient and automated that they will appear virtually invisible to the consumer, but will deliver value added benefits beyond the transaction (Marous, 2014). Another view is that of Shaw & Ivens (2002) who define customer experience as an interaction between an organization and a customer as perceived through a customer's conscious and subconscious mind. It is a blend of an organization's rational performance, the senses stimulated and the emotions evoked and intuitively measured against customer expectations across all moments of contact. A good customer experience leads to a satisfied customer. Boonlertvanich (2011) asserts that satisfaction can be reflected as a feeling of pleasure when a person attains his or her wants, goals or motivation. Banks are providing new innovative techniques of satisfying customers, such as online system and internet banking, telephone and call centre. The two important elements of banks which effect the overall satisfaction of customers are competitiveness and ease. So, in order to increase the efficiency of the organization it is necessary to measuring the customer satisfaction (Parasuraman, Zeithaml & Berry, 1988).

 DIGITAL BANKING CHANNELS

DeLaCastro, Krishnan, Kulkarni and Pande (2014) emphasize the fact that customers expect to experience banking without boundaries, just as they do in retail and other industries. What matters most to them is how they experience the bank's brand. There are various channels as far as digital banking is concerned. The channels to be discussed are: Internet Banking, ATMs, Telebanking, Digital wallets, Mobile banking and POS terminals.

1. Internet Banking

Internet Banking lets you handle many banking transactions via your personal computer. For instance, you may use your computer to view your account balance, request transfers between accounts, and pay bills electronically. Internet banking system and method in which a personal computer is connected by a network service provider directly to a host computer system of a

bank such that customer service requests can be processed automatically without need for intervention by customer service representatives. Price- In the long run a bank can save on money by not paying for tellers or for managing branches. Plus, it's cheaper to make transactions over the Internet.

Customer Base- the Internet allows banks to reach a whole new market- and a well off one too, because there are no geographic boundaries with the Internet. The Internet also provides a level playing field for small banks who want to add to their customer base.

Efficiency- Banks can become more efficient than they already are by providing Internet access for their customers. The Internet provides the bank with an almost paper less system.

Customer Service and Satisfaction- Banking on the Internet not only allow the customer to have a full range of services available to them but it also allows them some services not offered at any of the branches. The person does not have to go to a branch where that service may or may not be offer. A person can print of information, forms, and applications via the Internet and be able to search for information efficiently instead of waiting in line and asking a teller. With better and faster options, a bank will surely be able to create better customer relations and satisfaction.

Image- A bank seems more state of the art to a customer if they offer Internet access. A person may not want to use Internet banking but having the service available gives a person the feeling that their bank is on the cutting image.

2. ATMs

An automated teller machine or automatic teller machine (ATM) is an electronic computerized telecommunications device that allows a financial institution's customers to directly use a secure method of communication to access their bank accounts, order or make cash withdrawals (or cash advances using a credit card) and check their account balances without the need for a human bank teller (or cashier in the UK). Many ATMs also allow people to deposit cash or cheques, transfer money between their bank accounts, top up their mobile phones' pre-paid accounts or even buy postage stamps.

3. Digital Wallets

These are electronic devices that allow for making financial transactions. An individual's account can be linked to the digital wallet. Digital wallet systems enable the wide spread use of digital wallet transaction among various retail vendors in the form of mobile payment systems and digital wallet applications. ZAZU, Yellow Card, etc. are examples of good mobile payment systems in Zambia and the MasterCard Pay pass in the US and worldwide.

4. Mobile Banking

Okiro and Ndungu (2013) define Mobile banking (m-banking) as, provision and availing of banking and financial services through the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, administer accounts and to access customized information. Mobile networks in Zambia offer m-money services in the name of Airtel Money by Airtel, Momo by MTN, and Zamkwacha by Zamtel. Currently the mobile money market size is over 10million users transferring Kwachas daily.

Commercial Banks too offer mobile based financial products that aim to reach the unbanked. It offers services such as balance enquiries, mini-statements, SMS alerts on credit and debit transactions to an account, pay utility bills and funds transfer.

5. Point of Sale (POS) Terminals

Rouse (2011) define POS terminal as a computerized replacement for a cash register but with the ability to record and track customer orders, process credit and debit cards, connect to other systems in a network and manage inventory. The POS terminal allows real time online access to funds and information by a debit or credit card holder. It has many features given that it is fast, reliable and secure. It is a cheaper means of transacting and encourages spontaneous buying or spending. Many banks in Zambia have established POS terminals in various retail outlets in order to create accessibility of the banking system to their customers. The POS terminals are also placed at various outlets to improve the accessibility and usage of debit and credit cards. POS terminals are part of the wider enterprise resource planning modules for banks and they are mainly aimed at increase the bank cash service distribution channels among various customer shopping outlets.

## 1.2 PROBLEM STATEMENT

Digital financial services are just one area of Zambia's digital transformation explored in the new digital economy diagnostic report. Digital technologies provide unprecedented opportunities to increase productivity through business growth and market access in the private sector, increase the efficiency of public expenditures, and enhance the cost-effectiveness of public services. The growth in digital transformation is in line with Zambia's ambitious goals of attaining the inclusive economic growth and conducive governance targets indicated in the Seven National Development Plan (World Bank, 2020).

Customer satisfaction is the most important factor for the long-term success of any organization. The primacy of the bank's relationship with its customers is under threat as never before. Demands and expectations continue to evolve, often fuelled by experiences outside financial services, and consumers are increasingly developing relationships with multiple providers. And to add insult to injury, customers' attitudes have fundamentally changed. Customers are still waiting for this new banking experience, touted as a revolutionary transformation that will bring many new features, including anytime and anywhere banking, ultra-fast response times, and omnipresent advisors (Moreno, 2014).The industry has been in a comfortable position for decades with low customer turnover, almost no regional competition, good personal relationships and trust as selling points, and not much intervention from regulators. Staying ahead of the curve was easy, and there was no pressure to change (Moreno, 2014).

Competitors from adjacent industries and financial technology start-ups are now flooding the market with innovative, technology-driven deviations from the traditional banking mode, Mobile money services are a good example in Kenya. Customers now are making decisions much faster and have access to a plethora of offers, leaving financial institutions struggling for customer loyalty.

Stanbic bank is one of the banks in Zambia that has embraced digital innovation systems through the use of information technology to improve business growth and customer satisfaction. Despite the bank's implementation of digital innovation in the financial services, which has increased significantly to above 65% since 2016, in a bid to lay the foundation to leverage digitized payment systems more fully for all its clients, particularly to reach the poorest; there are still long queues in the bank, on the ATMs (Automated Teller Machines) and

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customer consultant's desks for loan applications despite Stanbic bank launching a digital loan platform which can enable customers' access online personal loans for those with existing approved facilities. Therefore, this study was aimed at understanding the challenges in digital banking, so that the innovations the bank has implemented can yield the intended results of serving customers efficiently and hence improve productivity.

## 1.3 PURPOSE OF THE STUDY

The purpose was to analyse the challenges of digital innovation among the customers of Stanbic bank.

## 1.4 STUDY OBJECTIVES

1.4 1 General objective

To critically analyse the challenges of Stanbic Zambia's digital innovation services on customer satisfaction among the bank's customers.

1.4.2 Specific objectives

The specific objectives of this study are:

1. To determine the challenges of digital innovations faced by customers at Stanbic Bank Zambia, Lusaka Branch.
2. To assess the magnitude to which the digital challenges are correlated with Business growth among customers at Stanbic Bank Zambia.
3. To ascertain Stanbic Bank Zambia policy measures aimed at reducing digital innovation challenges and enhancing digital online services and customer service delivery.

## 1.5 RESEARCH QUESTIONS

1. What are the challenges of digital innovations faced by customers at Stanbic Bank Zambia, Lusaka Branch?
2. What is the magnitude to which the digital challenges are correlated with Business growth among customers at Stanbic Bank Zambia?
3. What policy measures has Stanbic Bank Zambia put in place aimed at reducing digital innovation challenges and enhancing digital online services and customer service delivery?

## 1.6 SIGNIFICANCE OF THE STUDY

The researcher anticipates that as this study will contribute substantially to the establishment of a theoretical understanding of the phenomenon of how organisational culture can be aligned with digital innovation and technology to yield increased productivity and serve customers efficiently with high satisfaction. This will form a new insight and contribute to the current ideas of organisational culture and digital innovation.

Furthermore, the findings of this study will be of paramount importance to inform policy makers and bank managers on the need to equip and update themselves and their employees with digital innovation and technology absorption skills. The study will also be an eye opener in the field of technology and staff training for the purposes of productivity improvements at various work environments.

The information that will be collected can be used by interested parties to come up with strategies and policies towards improving productivity and customer service provision in banks using digital innovation and information technology. Finally, the study will also serve as a significant addition to existing literature on this topic and a source of secondary data for future studies. Academics and business researchers will be able to borrow from the findings of this research to support literature citations as well as develop themes for further research.

## 1.7 Theoretical Framework

Diffusion Innovation Theory

Diffusion of innovation theory attempts to explain and describe the mechanisms of how new inventions in this case internet banking, ATMs, POS terminals, mobile banking and digital wallets, is adopted and becomes successful (Clarke, 1995). Sevcik (2004) stated that not all innovations are adopted even if they are good, it may take a long time for an innovation to be adopted. He further stated that resistance to change may be a hindrance to diffusion of innovation although it might not stop the innovation it will slow it down. Rogers (1995) identified five critical attributes that greatly influence the rate of adoption. These include relative advantage, compatibility, complexity, friability and observability. According to Rogers, the rate of adoption of new innovations will depend on how an organization perceives its relative advantage, compatibility, friability, observability and complexity.

If a bank in Zambia and for that matter in Lusaka observes the benefits of digital banking, they will adopt these innovations given other factors such as the availability of the required resources. These banks will do their best to ensure that their presence is felt in the industry and meet the gap that technology would easily address. Adoption of such innovations will be faster in organizations that have internet access and information technology departments than in organizations without. Diffusion Innovation theory cause a pro-innovation bias in that it promotes innovations. That is to say "the rate of adoption of successful innovation can be researched. "While it promotes successful diffusions which can easily be identified and investigated it does not sufficient account for unsuccessful diffusion which normally does not leave visible traces that can easily be studied.

## 1.8 SCOPE OF STUDY

This particular research was only delimited to Stanbic Bank, Lusaka, Zambia, but the results would be used cautiously in other Commercial banks as well as other financial institutions within and outside Lusaka.

In conducting this research, the emphasis was on the effects of digital innovations on customer satisfaction in financial institution, using Stanbic bank Zambia, Lusaka as a case study. Data on digital innovation challenges and customer satisfaction relevant to the study was collected and presented.

## 1.9 LIMITATIONS OF THE STUDY

1. Some of the problems that the researcher encountered during the course of carrying out the research included the reluctance of respondents as some were sceptical about the research.
2. Some bank customers were frustrated by bad service such that they were not interested in participating in the study.
3. Time limitation is one of the factors that hindered the researcher to collect more data from sample groups.
4. Language is also another limitation, as some of the respondents were not conversant with English, thus in order to acquire their responses the researcher had to use a local language the respondent was conversant with e.g., Nyanja or Bemba, in asking the questions from the questionnaire guide while at the end of the day the outcome was to be recorded and reported in English language.

**1.10 OPERATION DEFINITIONS**

This section gives clarification on the meaning of the terms used in the research paper; basically, the term that will be discussed under this section is digital innovation.

*Digital Innovation*: Digital innovation means innovating products, processes, or business models using digital technology platforms as a means or end within and across organizations. Digital innovation allows for the convergence and generativity of different forms of innovations in the information technology sector.

*Digital banking*: technology driven banking. (That is E-banking, Digital wallets like PayPal, Mobile banking, ATMs, RTGS and POS terminals.

*Customer Satisfaction*: a measure of how a customer respond having used digital banking platforms that makes them remain loyal to the bank, or lead to increase in the numbers of customers using the various digital channels platforms to do their banking.

*Commercial Bank*: is a bank that works with businesses handling banking needs for large and small businesses including lending money for real and capital purchases, foreign exchange etc.

*Speed of Transactions*: A measure of the quickness of a transaction using digital banking, to deliver desired result in a timely manner.

*Accessibility*: Extent to which a consumer or user can obtain a good or service at the time it is needed and at the convenient location and contact the organization which is in charge of that particular good or service.

*Adaptability*: Ability of a bank customer to alter their responses to the changed circumstances or environment brought about by digital banking. Adaptability shows the ability to learn from experience.

*Affordability*: A price or cost that is believed by bank customers to be within their financial means.

Furthermore, the flexible character of digital technology enables the modular integration of components into digital technology platforms. A *digital technology platform* is a building block, providing an essential function to a technological system which acts as a foundation upon which other firms can develop complementary products, technologies, or services.

## 1.11 SUMMARY

The chapter introduced the study on a critical review of digital innovations challenges on customer satisfaction among financial institutions in Zambia. A case study of Stanbic bank Zambia, Lusaka. The chapter also presented the background to the study, Statement of the Problem, Purpose of the study, study objectives, Research questions, Significance of the study, theoretical framework, and scope of the study, Limitation of the study and operational definitions.

# CHAPTER TWO

# LITERATURE REVIEW

**2.0 OVERVIEW**

This chapter provides a review of literature relevant to the study. The chapter presents the literature related to the study at hand. It reviews the literature under the following themes: global perspective of digital innovation on business growth, regional perspective of innovation on business growth, local perspective of innovation on business growth and a summary.

**2.1 Global Perspective**

2.1.1 Digital innovation challenges on business growth

In a study conducted by Henriette, Emily; Feki, Mondher; and Boughzala, Imed, on "Digital Transformation Challenges". The study conducted an exploratory qualitative study to better understand the stakes and impacts of the digital transformation of businesses. Their first results showed that digitalization represents strategic, organizational and cultural stakes for the company and requires the commitment and involvement of Top management. The acceleration of technological innovations transformed the use and behaviours of individuals and organizations as well as the markets structures. Indeed, consumers, especially the digital native, more connected to Internet, transformed the way they select, buy and consume offered products and services. Digital technologies such as mobile technologies, collaborative technologies and the Internet of things allow companies to enhance firms' performance. Market volatility increased further to the arrival of new disruptive actors proposing new offers through web applications.

However, the gaps identified are that throughout the research the customers or rather users were not interviewed or involved on the challenges of digital transformation and the study used one method of data collection which is face to face interviews, therefore can be inadequate to get sufficient data on the challenges of digital transformation. The Target population of three senior consultants in digital transformation does not represent the true population and would not give the accurate information. This study endeavours to unveil the gaps.

Another study by Glumac, Brano. (2021). "Luxembourg: Digital Innovation Challenges". The study underlines the most active industry sector, transportation, which adopts the sharing economy principles. Moreover, it provides the status of sharing economy by the figures

showing participation and motivation of people living in the Grand Duchy of Luxembourg. The study also highlights its challenges and related issues in terms of citizen participation and sharing economy based on digital platforms. However, some digital intermediation platforms have emerged and created new opportunities to provide insight into the sharing economy in Luxembourg, partly at least. Although Glumac (2021) and Henriette et al., (2016) had a similar aims of study it is evident that none of them had an attempt to further look into the implications of the digital innovations on the banking sector and specifically on customer satisfaction. This study thus opted to bridge that gap of knowledge by aiming to determine the challenges and also look on the implications of business growth of customers of Stanbic Bank Zambia.

2.1.2 Digital Innovations in the banking sector

With a focus on the banking sector, Various qualitative and quantitative research have been done in the last decade on impact of demonetization on Indian economy, general public and various sectors of the economy. Dr. Arun Mittal (Mittal, 2017) in his qualitative research survey, whose aim was to evaluate the state of the Indian economy one year after demonetization and critically analyse its short and long term impacts, from general public during the days of demonetization found out that the people faced liquidity problem in early days and found out all possible methods of cashless transactions even helped each other with small currency notes besides changing their behaviour pattern in spending like curtailing their expenses and saving cash for urgent needs. Dr Arun's research study was limited to focus on digital transformation in India, he further centred his research on finding what the effect the cashless transactions had on SME's. On the other hand for deeper understand the implications of digitization, our study aimed at studying the implications of digital innovations and their impacts on customer satisfaction.

A study done on effects of demonetization on GDP of India (Sachin, 2017) found adverse effects of demonetization on GDP, small Traders, SMEs and agriculture sector both in last two quarters of 2016-17 and first two quarters of 2017. Sharma and Gupta (Gupta, 2017) studied the impact of demonetization on MSME sector and found that MSME sector was hardly hit by demonetization due to their greater dependence on hard cash. Construction sector and roadside vendors seems to be worst hit. A real time survey done during demonetization days in Ghaziabad city on retail sector by Dimpal Viji and Arora (Vij, 2017) found that demonetization impacted retail sector very badly especially the small vendors (Rehdiwala) totally depended on cash. Digital innovation are there to make work efficient and effective especially for the

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banking sector. The authors Sachin (2017), Gupta (2017) and Vij and Arora (2017) in their studies found that digital transformations had negative implications on small businesses and the GDP as well. Similarly our study also aimed to not only investigate the challenges the digital innovations have brought to the banking sector but also to investigate the implications the innovations have on consumer satisfaction. One noticeable fact is that the research studies were all quantitative and done in India, thus it may not be easy to replicate there study methods here in Zambia because economies are different.

Demonetization has impacted e-business a lot and it will prove huge boom for digital payment market. Even small vendors have introduced cashless payment methods. Post- demonetization the people have finally started believing in the power of the plastic money in the form of credit card/debit card, and other channels of electronic payments. Online banking has gained prominence due to unavailability of enough cash in the market. (Shailey Gupta, 2017) Vandana Munjal et. al., (2017) in their primary survey adopted a descriptive, analytical approach based on secondary data to find out these positive and negative effects of this demonetization on Indian economy in last one year. Furthermore their focused on using of e-transactions and cashless methods in NCR region found out that people in India are sufficiently aware about e-payment methods but use of these methods depend on various factors including demographic. The findings by Vandana Munjal et. al., (2017) helped deepen the understanding of our research by highlighting that digitization has become wide range and can actually have implications on so many people. In spite of the insight the study just focused on secondary data and looked at the economy as a whole. The study lacked a particular focus area and thus still leaves room for more research. Our study aimed at using both qualitative and quantitative methods which Creswell (2014) stated as mixed methods to collect data and thus bridge the gaps by explaining what the numbers would not.

Dannenberg and Kellner (1998), in their study, overviewed the opportunities for effective utilization of the Internet with regard to the banking industry. The authors evaluated that appropriate application of today's cutting-edge technology could ensure the success of banks in the competitive market. They evaluated the services of banks via internet as websites provide sophisticated line of products and services at low price. The authors analysed that transactions via internet reduce the risk of data loss to customers, chance to cut down expenses, higher flexibility for bank employees, re-shaping the 43 banks' image into an innovative and technologically leading institutes, etc. The researchers found that banks could move one step

further by entering into a strategic alliance with internet service provider. So, the bank of tomorrow stands to be feasible with today's technology.

Daniel (1999), in his research paper, described e-banking as the newest delivery channel offered by the retail banks in many developing countries. The objective of the study was to analyse the current provision of electronic services of major retail banking organizations in the UK. The researcher through a questionnaire found that 25% banks in the UK were those already providing ebanking services, 50% banks were testing or developing such services while 25% were not providing any e-banking services. Electronic channels, PC, digital TV and all these provide greater accessibility and services at lower price. To make services more adaptable, customers should be provided maximum choice and convenience. Restriction and limitation within organization to operate the services and its market share or strength were viewed as important to decide and operate the e-banking services.

Dannenberg and Kellner (1998) and Daniel (1999) both focused their studies describing and evaluating digital platforms and their application to the banking sector. One author used an explanatory approach while the other used a quantitative approach respectively. In relation to our study, both authors did not investigate challenges of the digital innovations (e-banking) and how those challenges could affect consumer satisfaction and that is what this research aimed to unveil.

Sathya (1999), in his research paper, explored the factors affecting the adoption of internet banking by Australian customers. The author stated that internet and other virtual banking had significantly lower the cost structure than traditional delivery channels. So, the banks should encourage customers to use internet for banking transactions. The author also emphasized that for adoption of internet banking, it was necessary that the banks offering this service made the consumers aware about the availability of such a product and explain how it adds value to the other products. The analysis of the study showed that security concerns and lack of awareness stand out as the reasons for non-adoption of internet banking by Australian customers. However, internet should be considered as a part of overall customers' service and distribution strategy. These measures could help in rapid migration of customers to internet banking resulting in considerable saving of operating costs of banks.

Kamesam (2001) studied the changes that took place in the Indian banking industry which emphasized on technological advancements and profitability in banks. Technology has helped in centralized data storage with decentralized processing which has helped in reduction of costs

and NPAs. Further, emergence of services such as electronic data interchange (EDI), usage of smart cards, RTGS, e-commerce; all resulted in increasing the level of profitability and productivity of banks. The author concluded that in order to reduce crimes, security audit should be done which will be helpful in improving customer service, increase systematic efficiency and thus increased productivity and profitability.

Ramani (2007) studied the impact of e-payment system on Indian banking sector. E-payment was required for handling large volume of business payment and remittances for hassle free, quicker and faster payment remittances at low cost, and paperless transactions. The researcher highlighted various steps taken by RBI for the epayment. It includes RTGS, deferred net settlement system such as electronic clearing services debit and credit, electronic fund transfer and NEFT. The researcher studied that these methods had increased the use of core banking solutions, data warehousing and data mining. E-payment had reduced the chances of fraud, improved customer service by cutting the delay in payment obligation. In view of Dixit and Datta45, (2010), traditionally Internet banking refers to the development of a website by a bank to provide basic information on their services and products. Today the word "Internet banking includes providing services such as access to accounts, transfer funds, and the purchase of financial products or services online."

The authors above combined quantitative and qualitative research designs to make sure that they got in depth results. In spite of their great efforts, the banking sector is one that thrives on customer satisfaction, there focus for some such as Ramani (2007) and (Sachin, 2017) was in line with one of our objectives to look at the impact for such innovation. The gaps of information on service delivery are still huge and thus need to be researched on thus the focus of this study.

A study done by Selvam et al., (2018) whose focus was the challenges of the banking sector on digital innovation, their study was a descriptive study. They concluded that technology has greatly influenced the bank customers encouraging them to conduct banking in an innovative manner. They have good awareness regarding ATMs and credit card whereas it is low in internet and mobile banking. Further, variability of awareness of ATMs is less among bank customers and among the different age, education and income groups whereas for all other e-banking delivery channels, variability of awareness is high among different categories. Adoption of ATMs was highest followed by internet banking, credit card and mobile banking, whereas as droppage rate is high in the case of credit cards followed by mobile banking, internet

banking and ATMs. Further it is revealed that variability of adoption of e-banking products is high among the bank customers where new generation bank customers are ahead of scheduled bank and nationalized bank customers. This study determined the challenges the Indian banks went through leaving room for information gaps in other countries all over the world. In spite of determining the challenges the study like the other authors above, Selvam and colleagues (2018) did not further investigate how the challenges affect consumer satisfaction, thus the need for study justified.

2.1.3 Multi-sector Digital Innovations Challenges

The increasing digitalization of society leads to digital convergence (Yoo et al., 2012; Yoo and Lyytinen, 2010), defined as "the unification of functions, the coming together of previously distinct products which employ digital technologies" (Yoffie, 1997: 33). Through the integration of digital capabilities into physical artifacts, opportunities for novel products and services are created based on the shared infrastructure of digital technologies (Yoo and Lyytinen, 2010). Some of these opportunities arise on account of the generativity of digital technology, which can be defined as "a technology's overall capacity to produce unprompted change driven by large, varied, and uncoordinated audiences" (Zittrain, 2006: 1980).

In the descriptive studies by Henfridsson et al., 2014; Lee and Berente, 2012 on managing Technological change in the digital age. It shows that digital convergence alters the perception of digital product and service innovation. The study highlighted how the unique properties of digital technology enable new types of innovation processes that are distinctively different from the analogy innovation processes of the Industrial Era. The study also explore digital innovation in more detail, challenges in managing digital innovation , explore the unique properties of digital innovation processes and contextualize the phenomenon of digital innovation, providing a number of illustrations. This is particularly evident in the automotive industry, where the ability to, for example, embed digital devices such as in car navigation and infotainment systems creates opportunities for automakers to engage in digital innovation (Svahn et al., 2017a; Yoo et al., 2010b). These studies did not focus on the magnitude to which challenges that may arise from these innovations may be correlated with Business growth, a gap that this study filled. Furthermore there was no focus on the banking sector and customer satisfaction

(Fichman et al. 2014: 334) in his study "***Digital Innovation as a Fundamental and Powerful Concept in the Information Systems Curriculum***" he said that Digital process innovations are

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"significantly new ways of doing things in an organizational setting that are embodied in or enabled by information technology Consequently, organizational process changes or substitutions by digital technology are synonymous with digital process innovation. For example, through digitization of offshore petroleum production, enabled by sensor monitoring technology to allow computer support or automation, digital oil fields emerge (Osterlie, 2012). In addition, digital process innovation transforms socio-technical systems by creating new work practices, as shown in various industries (Boland et al., 2007; Burtch et al., 2010; Yoo et al., 2006). In the section *2.1.2* we see Selvam in his research study on digitization and banking emphasize the point of computer support and automation. In spite all the good the downside and implications of the digital world is not fully explored. Many businesses are adapting to the digitalization but how it has been influenced by the banking sector is not clear. It is easy to state the innovation challenges but after determining them there is needed to establish how they influence the environment they are brought into.

Digital business model innovation refers to "a significantly new way of creating and capturing business value that is embodied in or enabled by information technology" (Fichman et al., 2014: 334). Today, many online companies base their pricing strategies on freemium business models, where the basic content or service is free to use and users are only charged for premium features. For example, Google and Facebook do not charge users for using their primary services but only for their premium services, such as analytics or advertising. Research has sought to quantify the value of these types of digital innovation in terms of indirect financial benefits based on the time spent on the services (Brynjolfsson & McAfee, 2013). Ellonen and Karhu (2006), for example, identify non measurable values such as "keeping the company on top of trends and market developments, communicating a modern image and learning more about the market, the customers and the competitors" (Ellonen and Karhu, 2006: 92). Other organizations look to the external environment in attempts to create and capture business value through digital innovation by entering into relationships with new partners (Selander et al., 2010; Svahn and Henfridsson, 2012). By integrating digital business processes across innovation ecosystems, new forms of digital innovation emerge (Rao and Jimenez, 2011; Selander et al., 2010).

2.1.4 Digital Transformation and Organizational Culture

In the research conducted by Veera Tuukkanen et al., (2022) on the Cultural Values in Digital Transformation in a Small Company. The aim of the study was to instigating and analyses the

important cultural values in digital transformation in a small company operating in the IT industry. The findings of the study are nine organizational values, from which eight values show similarities to the existing research. In contrast, the organizational value entitled "affinity towards the organization" has been identified as a new organizational value in digital transformation in small companies. The identified cultural values can raise the awareness of organizations' management planning or currently engaged in a digital transformation and help organizations recognize cultural values that can contribute to digital transformation initiatives' success or failure. The findings of this study helped our study have a baseline of how digitization can impact a business entity or organization. Culture is an important aspect of considering in digitization and its impact. Our study explored this aspect of culture to analyze the impact of digitizing the banking systems.

The study looked at the Cultural Values in Digital Transformation in a Small Company but this research is on the customer satisfaction of digital innovation services and No policy measures were identified in the study, hence forth this research did so.

Digital transformation distinguishes itself from previous information technology enabled business transformations in terms of velocity and its holistic nature (Porter, 2001). Digital technologies radically increase the speed of innovation, disruption and competitive dynamics of a firms' environment (Lee and Berente, 2019). To cope with the rapidly changing environmental conditions and the increased pace of these changes due to technology innovation, organizations need to fundamentally transform and restructure their organizations in order to survive in a disrupted environment (Muller and Nielsen, 2013; Nambisan, Lyytinen, Majchrzak & Song, 2017). Digital transformation therefore exceeds the mere digitalization of products and services and companies need to redefine their industries and value propositions. Thus, digital transformation is defined as the information technology enabled change in organizations through digitalization of products, services, core processes, customer touch points and business models (Fichman et al. 2014).

In order to accomplish such fundamental business transformations, organizations must formulate digital transformation strategies, establish digitalization initiatives and implement information technology in order to survive disruption and to seize emerging opportunities opened up by new technologies (Nambisan et al., 2017). Scholars from various disciplines and research fields agree that culture essentially impacts the success of business transformations, or as Selander, Henfridsson & Svahn (2013: 65) put it "business transformation is about

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bringing radical changes in organizational culture in terms of structure, processes and above all, people's attitudes, beliefs and behaviours". Following Swanson's (1994) proposition, that organizational and cultural transformation is essential to fully exploit the benefits from new information technology deployment, the establishment of a digital mind-set and a change of culture is therefore considered essential for successful digital transformation and innovation (Fichman et al. 2014).

Although prior literature acknowledges the role of culture in facilitating and managing organizational transformation (e.g., Shih and Huang, 2010), early academic contributions on information technology enabled business transformation already pointed out the necessity of cultural transformation (Swanson, 1994), culture has surprisingly only played a minor role in digital transformation research. Taking a closer look at research on digital transformation, most articles only briefly touch upon culture within their actual research topic and lack a clear definition of and approach to culture. Single values and generalized cultural attributes were sporadically proposed to foster digital transformation success, such as innovativeness (e.g., Fichman et al., 2014), risk affinity (e.g., Neyer et al., 2010), collaborative working environments (e.g., Svahn et al., 2017a), trial or error mentality (e.g., Muller et al. 2014), or agility (e.g., Lyytinen et al. 2016). But despite the importance of organizational culture for a successful digital transformation and call for cultural change, no empirical approach has been made to holistically analyse, which organizational values support digital transformation. Therefore, a normative approach and aim to specify an ideal target culture for successful digital transformation should be taken by specifically identifying cultural values that are crucial for the success of digital transformation.

Natalia et al., (2020) studied Digital Transformation of Organizational Culture under Conditions of the Information Economy, First, the authors present the methodological approach, using the analytic hierarchy process, to evaluate the optimal scenario choice for developing the organizational culture of enterprises based on the twelve most important criteria and their systematization into four groups (adaptability, mission, consistency, and involvement). Second, they test a hypothesis that the optimal direction of transforming organizational culture depends on digital transformation which includes introducing digital technologies, information-powered enterprise ecosystems, innovative business models, and efficiency in B2B and P2P communications. Third, they argue that the key barriers hindering the effective development of organizational culture could be provisionally classified into seven

groups: personnel, information, organization, marketing, education, technology, and investment-financial. Fourth, the authors evaluate the expediency of applying an integrated approach as a symbiosis and a constant inter-relation of influencing factors, constituent elements, digital competencies and skills, and information technologies. According to Natalia and Colleagues (2020) their findings can gave us a guide as to how culture in an organization is dependent on digitalization. With that understanding, banks all over the world have a particular work culture that has been adopted in order to deliver quality services, it paves way for the study to consider the relationship between culture and digitalization to better investigate the implications of the challenges of digitalization on consumer satisfaction. Although the study was full of insight the research study by Natalie et al., (2020) did not use a research approach feasible enough for our study, furthermore their focus was on interdependency of culture and digital transformation without considering the challenges and their implications on the general population. Our study focuses on the challenges of digital innovations and their implications of consumer satisfaction.

A rich body of management research (e.g., Svahn et al., 2017b; Tumbas et al., 2015; West and Farr, 1992) have investigated the relationship between technological innovation and radical change. To this end, new technologies can profoundly challenge existing markets. However, the competencies of established firms actually stand in the way of innovating (Chesbrough, 2003). Scholars have elaborated on macro-level strategic models that can enable firms to overcome this dilemma. For example, it is argued that firms can learn how to deal with radical and incremental innovation simultaneously by building ambidextrous structures and accumulating dynamic capabilities (Boland et al., 2007).

While these established strategic models for technological innovation management are useful, recent studies utilize new digital technologies, such as digital cameras, as objects of research. Still, the distinct and unique characteristics of digital technology tend to fade into the background (Brown, 2008). To this end, present research on digital technology and organizations suffers from two limitations: 1. It tends to not fully open up the black box of technology. When working toward managing digital innovation, this is an important first step to take; firms that seek to innovate their product and service offerings with digital technology need managers well experienced in the specific nature of digital technology. 2. Research on technological innovation tends to adopt a macro-level perspective on its object of study, often resulting in high-level descriptions of strategic recommendations. To address this gap, attention

should be turned to the key areas to be addressed when managing digital innovation processes as they unfold in practice (Birkholm and Hansen, 2015). The gaps can be addressed by starting with a research like ours which focussed on the banking sector in Zambia. Whatever loop holes our findings leave, other researchers can pick it up from there.

Hoyrup, Hasse, Bonnafous-Boucher, Moller and Lotz (2012) conducted a case study in a mainstream media industry illustrating how Scandinavia's largest incumbent publishing firm revitalized its core business by designing digital tablet-based versions of its magazines while somewhat serendipitously becoming an innovator in digital publishing platforms. Another example of such digital portfolio expansion is Apple by effectively becoming a music distributor with iTunes. Along with new entrant Spotify, Apple contributed to energizing the business ecosystem in the music industry through digital service innovation. Although the internet once seemed hopeless as an arena for paid content, Netflix rebutted such notions while invigorating the film and television industries. To this end, Netflix took digital service innovation a step further by not only distributing digital content, but also producing it. Going back to the music industry, additional links in the value chain were eventually reconfigured due to digital innovation; for example, software such as Garage band enables cheaper and highly mobile music production, while free of charge alternatives such as Sound Cloud illustrate that iTunes and Spotify are not the only gateways. Unlike Hoyrup, Hasse, Bonnafous-Boucher, Moller and Lotz (2012) our study focussed on the banking sector with hope that the findings would be able to aid the necessary authorities in their decision making to improve customer services.

As firms engage in digital innovation, they face a number of uncertainties. For example, questions arise about what factors govern the adoption of digital products and services. In addition to defining the boundaries between different products and services, firms need to consider how each product and service can generate revenue in different ways through balancing free and premium components. Firms are also challenged to constantly keep up to date with how new digital technologies relate to their business and to identify new opportunities for innovation. In organizing their digital innovation efforts, firms need to cultivate and source new skills both internally and externally while coordinating improvisational efforts in multiple digital innovation projects (Fichman et al., 2014).

The rapid pace of digital innovation processes suggests that current forms of organizing innovation work need to be transformed. As noted by Yoffie (1997), the core competencies of

incumbent firms can actually stand in the way of innovating when entering new markets. This is also a challenge in digital innovation, but as production of quality products and content remains key, digital innovation requires new skills without making all existing skills obsolete. Three main elements should be measured when evaluating the firm's digital innovation skills. First, Industrial era firms should seek to leverage and translate skills obtained from developing analogy products. Measuring this key area involves taking stock of the ways in which learning is supported and promoted throughout the organization. Digital innovation involves continuous learning whereby new digital technologies are explored in order to create an understanding of their unique properties. This can involve establishing conditions for retraining and incentives for existing staff to acquire digital skills. To this end, it is critical to acknowledge organizational members' spontaneous digital innovation initiatives throughout the firm (Badinelli et al., 2012).

Therefore, firms should be alert and identify organizational members that are drifting from their established roles toward improvising with digital technologies. Such talent is important to pick up in order to secure the appropriate skillsets for future projects, ultimately achieving sustainable digital innovation management. While new roles can emerge from within the organization, firms may necessarily recruit externally for specialized digital roles that complement existing roles (Boudreau, 2010). In combining such roles, it is a key challenge for managers to assess the current status of organizational members' skills, ensuring that they can be fruitfully assembled in dynamic innovation teams with the right combination of skills for each project.

Therefore, firms need to carefully consider the balance between carrying out digital innovation projects in house and engaging specialized external consultants. While managers may prioritize involving leading consultants to achieve supreme digital service designs in individual projects, developing in house skills ensures the agility needed to handle the rapid pace of digital innovation processes. The literature reviewed largely or in part have researched how large firms use sourcing and combining resources and skills from multiple countries and divisions within the firm. Guided by the composite measure on this key area, managers have organized their digital innovation teams to address the rapid unfolding of digital innovation processes according to the research reviewed. This study however used a different method by first understanding the aspects of digital innovation that may cause dissatisfaction to customers and

later reviewed recommendations on how to address those challenges in order to improve customer satisfaction and bank productivity.

2.1.5 Digital Innovation of Workplaces

In an article by Brigid Trenerry (2021) on Preparing Workplaces for Digital Transformation: An Integrative Review and Framework of Multi-Level Factors. In the paper, the aim was to provide fresh theoretical understanding of digital transformation as a topic that has received considerable attention in practice, yet lacks conceptual clarity, particularly as it relates to workplace factors rather than business or strategic processes. By reviewing literature across multiple disciplines and examining factors that may support or inhibit digital transformation across different organizational levels.

In voluntary settings, perceptions of the technology and subjective norms will influence adoption intentions and resultant technology use. However, in mandatory settings, technology adoption occurs regardless, but these perceptions will affect attitudes toward technology and may be more profound, with broader organizational impacts (Brown et al., 2002). In particular, male employees were more comfortable operating IT at work, while female employees were more encouraging of IT changes, especially those with longer work experience. Employees who had served longer in the organization (more than 30 years) were more anxious about working with IT but generally accepted IT due to peer and social pressure. Interestingly, older employees with longer work experience (i.e., about 20–30 years) were highly satisfied with IT usage. The paper also focused on leadership as another essential factor that is likely to shape digital transformation processes and outcomes in work teams and organizations and describes a leader's ability to motivate and influence others to engage in collective activities and accomplish shared goals. In the workplace, the quality of team collaboration can be assessed according to five key dimensions, namely people, process, leadership/management, information, and technology (Boughzala et al., 2012)

In contrast, Brigid Trenerry (2021) did not discover the challenges faced by customers with digital innovations implemented. This study will uncover the challenges of digital innovation faced both internal and external customers.

Companies are realizing the importance of workplace transformation which reflects modern work styles, user preferences and maturing technologies. A large portion of work today is "Information Work" work that requires information to be executed, and in which information often determines the outcome of the work (Ciriello, 2017). Many enterprises do not consider

information as an organizational resource and therefore do not manage it as such. It is erroneously assumed that information is managed automatically through technology. This mistreatment of information often times has immense effects on employee productivity, efficiency, effectiveness and profitability. On the other hand, the proper treatment of information as an important organizational resource is key in gaining a competitive advantage in a globalized economy. According to widespread research, quality and productivity are affected by employees not having access to the right information, such as where, when, and which information is required for the respective tasks (Huang et al., 2017). A meta-analysis of 9 studies on wasted employee time found that an average of 1.1 hours per day was lost on unproductive information searches. This is a tremendous waste of time and productivity, considering that 1.1 hours per day is more than 12 percent of total work time summing up to more than 30 work days per year per person (Desouza, 2011).

A study done by Attaran et al., (2019) also found that employees waste 25 percent of their time dealing with information overload related interruptions and distractions. Reducing the time wasted by 15% could save a company with 500 employees more than $2 million a year. According to this study, a large percentage of managers and business leaders are also affected by information overload. They do not have sufficient information across their organization to do their jobs. Over 40 percent of surveyed managers said they use incorrect information at least weekly and had the information they needed less than 75% of the time. A mature digital workplace has the potential to revolutionize the way information is treated in the organization and the way work gets done (De Reuver, Sorensen & Basole, 2018).

Therefore, the study focused on the information overload at workplaces using technology. This study will look at the Digital innovation challenges faced by customer in Stanbic bank Zambia and the magnitude to which the digital challenges are correlated with Business growth among customers at Stanbic Bank Zambia.

Today's workplaces characteristics are also changing, a recent study by Dolata & Schwabe (2016) conducted 3801 online interviews of adults who work more than 35 hours a week across nine different markets. The report analysed adults who work in one of seven target industries: Education, Government, Financial Services, Healthcare, Manufacturing, Media & Entertainment, and Retail (Dolata & Schwabe, 2016). The report found that the global workforce is at a tipping point. 44 percent of employees worldwide feel that their workspace is not smart enough, while more than half expect to be working in a smart office within the

next five years. This study also revealed that half of global employees currently work remotely at least a few times a week. 50 to 60 percent of the time, employees of Fortune 1000 companies around the globe are not at their desks. More than 30 percent said that the biggest time wasters at their jobs were tech-related (slow, glitch software or devices) and that the technology they had available in their homes was more cutting-edge than what was available at their place of work (Dolata & Schwabe, 2016).

Additionally, a study by Wainhouse Research revealed that the vast majority of meeting rooms have little or no teleconferencing and collaboration technologies in place and that 34 percent of office meetings start late because of technical difficulty. A 2011 study by Price Waterhouse Coopers, identified that by 2020, Millennials (22-37 years old) and Generation X (38-53 years old) will be 50 percent of the global workforce by 2020 and are reshaping the workplace (Bresnahan and Greenstein, 2014). Millennials are more willing to embrace workplace technology and are more likely to quit a job with substandard workplace technology. These changes in technology and workforce require a workplace that boosts competitiveness, collaboration, and agility, and that also reduces the cost of both information technology and business operations (Dolata & Schwabe, 2016). It still stands that the literature presented still has gaps, yes it is true that many organizations are looking to become more efficient through digitalization, authors Wainhouse (2020); Price Waterhouse Coopers (2020) did not research on the challenges of the digital innovation in workplaces but rather looked at how many organizations are considering digital transformation during the COVID 19 pandemic. Our research thus focused on what challenges the digital innovations bring and what they impact.

Businesses are struggling to find, filter and forward information to the right workers at the right time. For example, declining customer satisfaction resulting from an inability of customer service agents to access the requisite information to solve their challenge is very high. In a survey conducted by IDC and sponsored by Xerox, 40 percent of those surveyed said they had the information they needed less than 75 percent of the time. A survey conducted by Omega Management Group Corp. and Coveo found out that 70 percent of customer service agents are facing significant challenges as a result of not being able to find necessary customer information. 73 percent of respondents identified improving information access and quality along with knowledge management as areas they are investing to improve customer care (De Reuver, Sorensen & Basole, 2018).

Effectively planned, communicated, and implemented, digital workplaces reduce costs and delivers compelling benefits. Integrating workplace technologies like mobile, cloud, analytics and social tools into workplace will empower employees to work faster and communicate more easily at anytime, anywhere. In 2015, Wakefield Research surveyed 500 global C-level executives and information technology decision makers across seven countries regarding the advantages of a truly digital workplace. The results were clear and compelling: reduced costs, improved productivity, increased innovation, revenue growth, and employee engagement. The digital workplace addresses existing challenges and provides measurable business value. For example, one company saved 43 minutes each month per manager with improved digital workspace. The company estimated an annual saving of $12 million (Ciriello, Richter and Schwabe, 2017).

A 2011 New Ways of Working survey, which included more than 100 Fortune 500 respondents, found that between 2008 and 2011, alternative workplace programs resulted in improved employee productivity, increased business agility, increased employee attraction and retention, improved collaboration, faster access to customers and co-workers, and business continuity. Furthermore, a survey of human resource professionals by the Society for Human Resource Management showed that the majority of respondents thought that flexible work arrangements and digital workplaces had a positive impact on absenteeism including fewer minor health problems, fewer signs of depression, fewer sleep problems, and reduced stress levels (Bohmann, Leimeister and Moeslein, 2014).

According to several recent studies, a digital workplace in a modern enterprise provides many advantages for employees and business including increased staff satisfaction, improved employee experience, closer collaboration, reduced operational costs, enhanced innovation, improved customer experience, and increased revenue (Fichter, 2009). Thus, today's workplace should provide employees with consistent, consumer like user experience, one that is wholly aligned with the way people work today. Business leaders expect their digital workplace solutions to raise employee engagement, enable employees to achieve business outcomes faster, and empower employees to reduce cost and increase efficiency. These leaders desire a robust information technology service that is aligned with the way people work today, regardless of platform and location. Employees now expect a digitally driven work experience that is personal, real-time, mobile enabled, collaborative, and that exploits consumer-oriented styles and technologies (Marchand and Bochukova, 2014).

A study conducted by Deloitte on Digital revolution in India shows that the India Stack and Aadhaar digital biometric identification programs are being championed by the government and information communication technology (ICT) financial systems regulators to promote a country wide digital financial service (Confederation of Indian Industry, 2016). India had their fair challenges of Digital Financial System's ICT infrastructure as highlighted by MD. Shakir Ali, MD. Wasim Akhtar and K. Safiuddin in their publication the ''Digital Payments for Rural India - Challenges and Opportunities'' of June 2017. As a continuation of policy evolution of telecom within the country and the international arena in the context of Millennium Development Goals, a National Optical Fibre Network (NOFN) was being implemented, largely by the public sector organizations using the universal service obligation fund. The NOFN connected 250,000-gram panchayats, a local administrative region for group of villages and aims to deliver information communication technology-based goods and services to the rural households in partnership with private service providers in December 2012. The pilot implementation of the project was able to connect only the government offices, and private service players actively participated in the later years (Confederation of Indian Industry, 2016).

Another study by State Bank of Pakistan (2014) looked at Pakistan's nearly decade old experience with regulating digital financial services. It is referred to in the local context as branchless banking and constitutes of institutions providing microfinance services in Pakistan including microfinance banks (MFBs), microfinance NGOs, and commercial banks, along with government-supported Rural Support Programs (RSPs). MFBs and commercial banks are regulated by the State Bank of Pakistan (SBP) Microfinance NGOs and RSPs, neither of which can accept deposits (State Bank of Pakistan, 2014). They are registered by either the Securities and Exchange Commission of Pakistan or provincial authorities. Pakistan has a specialized law for MFBs, the Microfinance Institutions Ordinance, and prudential regulations for MFBs. There are also specific guidelines on Islamic microfinance issued by the SBP. A pilot Microfinance-Credit Information Bureau developed through a public-private partnership among the SBP, the microfinance industry and a private sector credit bureau was launched in May 2010 in Lahore. The Pakistan government also regulates the National Financial Switch which now provides the lowest ATM rates in the world enhancing the provision of digital financial services (Transfer Wise, 2014).

## 2.2 Regional Perspective

Mayowa et al., (2019) in Nigera investigated how digitalization enhances the performance of commercial banks adopting the purposive method and simple random sampling selecting 370 non managerial employees from a commercial bank. A self-structured questionnaire was used as the major instrument for data collection and was analysed using SPSS version 25. From the result, it was discovered that there was a mild significant and positive relationship between the digitalization process and commercial bank performance ($r = 0.114*$ ; $p< .05$). Also, there is a positive significant relationship between product innovation and performance of commercial banks in Nigeria ($r = 0.186$; $p< 0.001$). The study recommends that digitalization processes if adequately and correctly implemented, will have a significant positive relationship on the performance of commercial banks in Nigeria ceteris paribus. Mayowa et al., (2019) used a suitable method that we may have applied in our study, although that being said, their focus was assessing the performance of commercial banks based on the enhancement of digitalization. Their study did not look at any challenge of the digital innovations, thus the need for this study.

Similarly, a World Bank study in Ghana discovered that digital financial services improve national payment systems (Financial Sector Deepening (FSD) Ghana, 2013). It also showed how an enabling legislative environment has a significant impact on the adoption and active use of digital financial services, allowing for the purchase of Treasury bills, as well as savings and insurance purchases, using mobile money. In just three years, changes in the rules have contributed in the turnaround of mobile banking and money in Ghana. The study does not directly relate to our study but highlights the facts that digitization improves payment systems, which leads to customer satisfaction. Research still needs to be done centred on customer satisfaction and how the challenges of digitization affects them that is why this study is being conducted.

While the South African banking sector could be considered a digital laggard in comparison to its international counterparts, digitalisation (and technology and analytics) is recognised as a strategic focus area for the sector and is one of the BankSETA's five strategic priorities (BankSETA, 2018) (to which this research responds). This correlates well with the country's readiness to realise a digital transition, with a report by Siemens (2017) on African digitalisation maturity suggesting that South Africa emerges as the country with the highest potential to realise digital maturity, followed by Kenya, Nigeria and Ethiopia. In addition, the

South African banking sector has embraced and embedded digital mechanisms such as block chain, digital wallets, cryptocurrency, online and mobile banking – all of which are transforming the South African banking landscape. The emergence of Fintech companies further disrupts and challenges traditional banks, resulting in a competitive and intensified digital transformation (Mandela, 2018). Nedbank's Chief Operating Officer, Mfundo Nkuhlu, acknowledged the Fourth Industrial Revolution had disrupted the industry in a way that was well known in business today: "we are all challenged to revisit our business models," he said (Cassidy, 2016).

Studies in Tanzania further affirmed that government-driven approaches have fostered private digital financial services innovation due to open regulation (Butt and Mirzoyants-McKnight, 2014). The service is interoperability and has made a difference to a market that has almost become saturated from a growth perspective. In the case of Kenya, the poster country for digital and mobile financial services on the globe studies show a positive impact on the business performance of banks in the country due to digital innovation. Kenya, offers lessons to policy makers on both the conditions and policies that have allowed for an innovative information communication technology based financial service to scale, with positive effects on the rest of the financial services system. Several studies postulates that the Central Bank of Kenya (CBK) was willing to support a mobile money pilot and found a balance between regulations, oversight, and flexibility for the mobile operators to experiment and be allowed to fail or thrive which led to the success of the famous M-Pesa since its inception in 2007 (Digitized payments in Kenya, 2015).

In building the digitized bank of the future, it will be critical to devise a new strategy for satisfying customers providing them with customized personal, financial, and social experiences and to implement a different operating model that can continuously seek out new customer needs. All types of digital banking must have user friendly appearance, so this quality makes it easier to use for customer, that's why customer has positive feeling towards them (Khare, 2011). The indicators or items included in this dimension are: I can complete online transactions easily, I can log in this portal easily, it is easy to understand which button to be clicked for the next step, and this internet portal enables me to complete a transaction quickly. Michael (2015) adds that, online accounts must be easy to set up and require no more information than a traditional bank account. Many offer the option of inputting your data online or downloading the forms and mailing them in. If you run into a problem, you have the option

of calling or emailing the bank directly. One advantage of using online checks is that the payee's information is retained, which eliminates having to re-enter information on subsequent checks to the same payee. Online banking is also environmentally friendly.

Electronic transmissions require no paper, reduce vehicle traffic and are virtually pollution-free. While internet banking is a relatively new service much has been written on the factor affecting the usage of this new product. According to research conducted by Williamson and Lichtenstein (2006) to assess understanding of consumer adoption of internet banking in Australian banking context findings reveal that convenience is the most important factor that influence consumer to use internet banking. However, convenience means much more for consumer than simply 24/7 hours access. Convenience was mainly described as personal safety, not having to travel, not having to wait and saved time. Relative time saving dominates banking channel convenience perception. Sustaining this finding, a recent survey found that many Australian internet users neglect risk in favour of convenience of internet banking ACNielsen (2005).

Khidhir (2014) notes that following the rapid expansion of smart phones and tablet devices, bank customers today are highly informed, relying on reviews and information published across social media channels, and do banking online 24/7. Customers can be reluctant to visit branches, and it is more likely than ever that these customers will switch their main banking relationship. To cope with this change, banks today are striving to provide a strong digital channel offering.

DeLaCastro et al (2014), note that many customers choose and switch banks based on convenience and quality of service rather than on product and service features. In some countries, government regulations are encouraging additional churn. In the UK, where banking rules made it difficult for customers to switch providers, the enactment of new rules now makes it easy for customers to change banks and even take their account numbers with them. Customers are now looking for multiple delivery channels and flexible as well as convenient working hours neither the clock nor the geographical locations are constraints (Shrotriya, 2007 and Kumbhar, 2009).

Marous (2014) notes that with Mobile Payments, consumers are becoming accustomed to using mobility to place orders in advance, avoid lines, and pay — all with a few swipes on their mobile device. This capability is expected from banking relationships as well. While there are

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many reasons why many people in Africa could still be unbanked as noted by Comninos et, al (2008), potential and existing customers do not like bureaucracy and prefer simple procedures that are easy to follow and use. PwC's research found that customers are willing to pay for digital banking when they believe it offers convenience and value. For example, social media notifications, an e-wallet for loyalty cards and financial tools provided by banks, are seen as added value and could be charged to customers (Villers, 2012).

Disend (2013) highlights the fact that people are going online to buy products and services, conduct pre-purchase research, interact through social media, watch videos and listen to music, and yes, do their banking. Recent and still-to-come innovations in mobile communications and commerce are further transforming how people live, work, play and shop, as anyone who's fallen under the spell of a smart phone or tablet will testify. Banks of nearly every size now offer customers online and mobile services, including balance viewing, statement downloading, funds transfers, investment transactions and bill payment. Online-only banks, while still only a small slice of the industry, have seen deposits rise 32 percent since 20101. And banking via mobile devices has experienced explosive growth, with an estimated 530 million users globally in 2013; up from 300 million in 2011. Kenya for instance, mobile phone banking is taking services to remote areas where conventional banks have been physically absent. Subscribers can now open accounts, check their balances, pay their bills, transfer money, and cater for their daily basic needs. This basically means the digital banking applications must be easy to use. (Ondiege, 2010)

The emergence of M-PESA service, a Text messaging (SMS) provided the solution to small businesses" banking needs for the majority of the Kenyan population, because the majority don't hold bank accounts but they do have the services of a mobile phone, hence they could settle bills by building up credit on the mobile phones and then sending a text (SMS) to make a payment. The leading 23 mobile service providers in Kenya have introduced some money transfer services whose objective is to enable Kenyans to make 'micro payments' using their mobile phones. These services are supposed to provide an e-commerce platform of choice in a country where credit cards have struggled to reach most the population without the bank accounts (Hughes & Lonie 2007, Chogi 2005).

Gaitungu (2010) notes that in the world of banking, the development in information technology has enormous effect on development of more flexible payments method, more user-friendly banking services resulting to a more efficient banking system hence a satisfied customer

Bungoma county potential remains high as far as the rural unbanked is concerned as well as the dissatisfied bank customers. With several commercial banks and Micro finance firms, adaptability to the needs of the potential remains critical, in order to attract the unbanked and even retain the banking population. This is where digitization in this study comes in to fill the gaps resulting from customer dissatisfaction.

## 2.3 Local Perspective

The digital financial services industry in Zambia experienced significant growth in terms of the number of active customers, agents and digital financial services providers. The industry went from having only 2% active digital financial services accounts from four providers in 2014 to 44% active digital financial services accounts from 18 providers in 2018. Between December 2017 and December 2018, active digital financial services accounts grew by 89%. Responding to the rise in active customers, the number of active agents grew from 22,965 to 46,747 in the same period. With greater trust in digital financial services, demonstrated by the increase in active customers, there was also an expansion in use cases and partnerships between financial service providers and non-financial service providers in 2018 (e.g., microloans and savings, bank-to-wallet and wallet-to-bank and pay-as-you-go solar services) (UNCDF and Bank of Zambia, 2019).

As evidenced in a number of digital financial services markets through digital innovation around the world, there are also developments in the Zambian financial technology sector. The financial technology industry, which is mainly focused on financial services for education, agriculture and health, continued to grow, with increased demand for partnerships with key digital financial services stakeholders (including financial service providers, development partners and regulators to create an enabling environment for innovation). Zambia's environment of financial technology start-ups is growing. A 2018 survey by United Nations Capital Development Fund (UNCDF) counted 25 financial technology firms operating in the market (UNCDF and Bank of Zambia, 2019). These financial technology firms are developing innovative products and services for digital credit and insurance, pay-as-you-go, energy, payments and transfers, and the aggregation of payments. Financial technology firms are anticipated to expand partnerships with other digital enterprises to support solutions in health care, agritech, group savings, and small and medium enterprise (SME) business. For example, one financial technology firm, Zambia Point of Sale Services (ZPOS) has developed a platform to support SME transactions, which can be used to create financial profiles for financial service

providers to use when assessing creditworthiness and extending financing (Bank of Zambia, 2018).

Several banks have already digitized their services to varying degrees, some banks, including FINCA, Stanbic, Investrust, FNB, and Atlas Mara, are offering mobile banking with smartphone applications available to customers for account management, although most of these target the already banked population. Zanaco is an exception- it launched its own mobile wallet (a transactional account with light know-your-customer procedures) and aims to extend services to the lower-income segment and into rural areas with its own agent network. Others are creating bilateral partnerships with mobile network operators to link bank accounts with mobile wallets for push-pull functionality (that is, bank-to-wallet), which enables customers to get cash out at bank ATMs without cards, and cash-in or out at mobile money agents. However, agency banking has yet to become widespread. Agency banking could offer a range of banking services beyond cash-in-cash-out services provided by mobile money agents in locations that remain underserved or underserved and where brick-and-mortar branches are not viable. The recent rapid growth in the number of mobile money agents' offers potential for some of them to become banking agents. Furthermore, the increased potential for profitability can attract new entities to this business segment (UNCDF and Bank of Zambia, 2019).

The Bank of Zambia has played a key role in facilitating the growth of digital financial services. A key action taken was the publication of the National Payment Systems Directives on Electronic Money Issuance, issued in 2015 and updated in 2018 (Bank of Zambia 2018). These directives allow for providers other than commercial banks to offer services issuing e-money and distributing or redeeming e-money through a distributor or agent. These directives also allow simpler know-your customer requirements for e-money accounts. Full operationalization of the national payment switch (NPS) is expected to play a key role in improving the enabling environment for the growth of digital financial services. The NPS project, managed by the Zambia Electronic Clearing House (ZECH) and overseen by the Bank of Zambia, achieved a key milestone in June 2019 when it enabled the interoperability of all domestic ATM transactions. However, the interoperability of point-of-sale services and mobile money transactions was delayed and achieved in June 2020 when key elements of the credit infrastructure necessary for the growth of digital credit for individuals and enterprises were established (World Bank, 2020).

These include the Moveable Property (Security Interest) Act No. 3 of 2016, a web-based collateral registry for moveable assets in 2017, and the enactment of the Credit Reporting Act of 2018. Banks and microfinance institutions also report to a functioning private credit bureau (TransUnion). However, the functionality of both the moveable collateral registry and the credit reporting system is still limited and needs to be strengthened for the full benefits to digital financial services to be realized. A key enhancement to the credit reporting system that can benefit digital financial services users is the feeding of utility bill payment data into the credit information system. Key actions being taken to strengthen financial consumer protection and financial capability would also strengthen the enabling environment for digital financial services. The three financial sector regulators; the Bank of Zambia, the Pensions and Insurance Authority, and the Securities and Exchange Commission and the Competition and Consumer Protection Commission (CCPC) signed a memorandum of understanding in early 2019 to align their approaches to financial consumer protection. In a measure to protect consumers from fees deemed unwarranted, the Bank of Zambia also issued a directive in 2018 banning several bank charges and fees (UNCDF and Bank of Zambia, 2019).

Multiple other initiatives are also contributing to the development of an enabling environment for the digital financial services sector through established forums for dialogue, knowledge sharing, and the promotion of professional standards. The Payment Association of Zambia, formed in early 2019, is expected to serve as a payment system industry association with a mandate derived from the National Payment Systems Act of 2007 and with authorization from the Bank of Zambia. The NFIS working group on delivery channels and digital payments, which includes a broader set of actors, also provides opportunities to advance issues relevant to the digital financial service sector. Market research, professional development, and industry development initiatives by key entities such as Financial Sector Deepening Zambia (FSD Zambia) and United Nations Capital Development Fund (UNCDF's Mobile Money for the Poor program are making critical contributions to strengthening the enabling environment for digital financial services in Zambia (World Bank Group, 2019).

Most existing information management systems deliver only limited value to their organizations. These systems are products of many years of organic growth and change. They often create as many new problems as they solve existing ones. These systems largely exist in isolation from each other. They are mostly static and passive, dated and primitive, and they set an expectation with employees that the organization need not be efficient. An effective digital

workplace cannot be merely a combination of existing tools. The workplace must be enhanced by context, structured and unstructured information, and consistent coverage of information flows. In addition, the lack of a clear distinction between tools and business needs can also make an information management system ineffective. Without a proper business case, business need, and goal, technology delivers only limited value. An ongoing employee education on the proper usage of workplace technology is a necessary foundation for productivity and quality improvements.

There are numerous challenges in applying digital workplace solutions for businesses in a way that allows for its significant and rapid growth. For example, the 2017 state of the cloud survey conducted by Right scale identified the following as the most important challenges facing businesses (Ciriello, 2017). Lack of sufficient internal resources (lack of training and expertise), Lack of time to implement new initiatives, Difficulty of managing costs (governance and control), Security concerns (service traffic hijacking, phishing, buffer overflow attacks, and loss of passwords).

Unlike the studies reviewed in this chapter, this study focused on the ease with which customers were able to access digital banking as a measure of customer satisfaction. The reviewed studies did not focus on the magnitude to which challenges that may arise from these innovations may be correlated with Business growth, a gap that this study filled. This study also used a different method by first understanding the aspects of digital innovation that may cause dissatisfaction to customers and later reviewed recommendations on how to address those challenges in order to improve customer satisfaction and bank productivity.

**2.4 summary**

The data on digitization in the banking sector in Zambia and the world at large is very scanty, the need for study is based on the fact that many authors focused on only determining digitization and its influences or rather evaluating its effectiveness, in their settings and did not research on the challenges and their impacts on customers and workplace environments.

# CHAPTER THREE

# RESEARCH METHODOLOGY

**3.0 OVERVIEW**

This chapter describes the methodology that was used for the study. The main issues to be discussed here are; research design, study population, study sample and sampling technique, source of data and data collection methods, method of data analysis and ethical consideration.

**3.1 RESEARCH DESIGN**

The study used descriptive survey design Kinnear and Gray (1992) describes the survey design as a method that involves collecting information from members of a target population by considering the current status of that population with respect to one or more variables. The researcher used a descriptive survey design because it is concerned with describing the characteristics of a particular group and can't manipulate the independent variables with the view to determine their effect on dependent variables thus their relationship is determined retrospectively. It involved collection of Information by administering survey questionnaires to customers considering respondents' current status without any manipulation.

**3.2 STUDY AREA**

This study was conducted at Stanbic Bank Zambia Limited Office which is situated in the central business district of Lusaka, Zambia. Stanbic Bank Zambia Limited has centralised system of management and organizational structure and most of the major decisions for all other branches for the bank are made at head office hence the reasons for conducting the study at head office.

Further, the head office was chosen as the study area because of the limitations in transportation and finance. Stanbic Bank Zambia Limited head office has approximately 150 employees across all departments. The target population for this study comprised of different categories of employees and customers of the bank that use digital banking platforms of the bank.

**3.3 STUDY POPULATION**

Welsh (2002) defines population to be the entire aggregation of cases that meet a designated set of criteria. That is the group about which the researcher is interested in soliciting for information from them. The population for this study consisted of all customers and employees

from all the bank departments at head office. The bank has approximately 150 employees across all departments at its head office in Lusaka, and over 5000 customers.

## 3.4 STUDY SAMPLE AND SAMPLING PROCEDURES

According to Mugenda and Mugenda (2003) sampling is a procedure, process or technique of choosing a sub-group from a population to participate in the study. It is the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected. A sample is a smaller group or sub-group obtained from the accessible population. The study sampled 50 customers and 15 bank stuffs.

A sample of 50 customers was selected using convenience sampling technique to reach these customers who were representative of the entire population. Convenience sampling was used by the researcher because; customers come in to the bank or ATM lobby in any order and it was to the interest of the researcher to ensure she got as many customers as possible.

## 3.5 DATA COLLECTION INSTRUMENTS

A triangulation of research instruments was used in collection of data. These include questionnaires, and the use of bank documents. According to Mugenda and Mugenda (2003) questionnaires give a detailed answer to complex problems. Additionally, questionnaires are also a popular method for data collection in deduction because of the relative ease and cost-effectiveness with which they are constructed and administered. Questionnaires give a relatively objective data and therefore, are most effective. In this study, Questionnaires were used as the main instrument of data collection from the Customers.

Last but not least the researcher also used documents to gather secondary data. According to Sixsmith and Murray (2001) Documentary Analysis is the detailed examination of documents produced across a wide range of social practices, taking a variety of forms from the written word to the visual image. Documentary analysis was used to gather relevant data pertaining to the use of digital banking channels. These included records or registers for various digital banking channels.

## 3.6 PRE-TESTING

Reliability is a statistical measure of how replicable the survey instrument data are and the explanation of its accuracy. The instruments will first be pilot tested on few bank employees from other Stanbic Bank branches. Yin (2017) argues that validity is about determining

whether the research truthfully measures that for which it was intended to measure or how truthful the research results are. The instruments will then be given to the supervisor and other colleagues to ascertain its face and construct validity.

### 3.7 VALIDITY OF THE INSTRUMENTS

According to Best and Kahn (2003) an instrument is valid when it measures what it claims to measure. That is, validity refers to the extent to which an instrument measures what it purports to measure. From the data collected from piloting of the study instruments the researcher was able to evaluate and rate on the validity of instruments with the help of supervisors and experts. The feedback from the supervisors and the experts helped in modifying the instruments.

### 3.7 DATA COLLECTION PROCEDURES

Viswanathan (2005) says that data collection procedure is the plan for the activities that are involved in a given study. For this study, after approval of the proposal the researcher sought authority from the University and Bank management to conduct the study. The researcher then used survey questionnaire, and documents as data collection instruments to collect relevant data. A cover letter accompanied the survey questionnaire before it was administered upon approval by management of the bank. This was to help the respondents familiarize with the exercise.

Questionnaires were administered with the help of research assistants. The survey questionnaire was divided in three sections. Section A gathered demographic data regarding respondents such as gender, age, and academic qualification. Section B, C, D, E and F subsequently gathered information basing on the five variables of the study.

The research was facilitated by the researcher personally to ensure clarity of the questions to be answered by the respondents and where necessary sought in depth information as it pertains to the questions to be asked.

Documentary Analysis was conducted by the researcher upon approval by Bank management with the guidance of heads of the relevant departments.

### 3.8 DATA ANALYSIS

Cross checking of the survey questionnaires and responses to ensure that the questions were answered well was conducted. Quantitative data collected was coded and fed into a computer

statistical software SPSS (Statistical Package for Social sciences) to run the analyses. Descriptive data analysis entailed counts, percentages, cross tabulations and measures of central tendencies. Correlation analysis was used to check on the relationship between dependent and independent variables. Qualitative data from the research entailed use of thematic analysis techniques. The results were interpreted and data presented in a table for uniformity and ease of interpretation. Conclusions and recommendations were made basing on the interpreted data.

## 3.9 ETHICAL CONSIDERATION

By Ethical consideration the researcher refers to moral standing that should be held and practiced during the research process. When conducting the research, the researcher was fully aware that the banking environment is very competitive and therefore some respondents withheld some crucial information. The respondents were assured that strict confidentiality would be maintained in dealing with their identities by not writing their names.

The researcher sought approval from the Research Ethics Committee at the University of Zambia. Further, informed consent of the respondents and participants was also sought as well as ensuring confidentiality and anonymity.

Participants were given the freedom to withdraw from the research if they felt uncomfortable with the process at any time without any penalty. No participant was promised any form of reward. The participants were pre-informed that the report of the research will be made public and could be accessed by anyone once approved by the University Research Committee.

# CHAPTER FOUR

## PRESENTATION OF FINDINGS AND INTERPRETATIONS

### 4.0 OVERVIEW

The results of the data analysis on the Stanbic Zambia's digital innovation challenges on customer satisfaction among the bank's customers are presented in this chapter. Qualitative and quantitative analysis was performed. Where descriptive analysis entailed using measures of central tendencies, frequencies, and counts while correlation statistics employed checking on the level of association between the variables. Qualitative data has been summarized in themes. The findings have been presented in tables and figures followed by interpretation and discussion of the same.

### 4.1 DEMOGRAPHICS AND BACKGROUND INFORMATION

*4.1.1 Gender*

*Table 1: Gender*

| Gender | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Male | 28 | 60.9 | 60.9 | 60.9 |
| | Female | 18 | 39.1 | 39.1 | 100.0 |
| | Total | 46 | 100.0 | 100.0 | |

Source: Field data,2021

From Table 2 above, it can be seen that about 61%, represented by 28 people, of the respondents, were male and 39%, represented by 18 were female; making men the majority of respondents.

*4.1.2 Age Groups*

*Table 2: Age Group*

| Age Group (years) | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 20-25 Years | 4 | 8.7 | 8.7 | 8.7 |
| | 26-30 Years | 11 | 23.9 | 23.9 | 32.6 |
| | 31-35 Years | 15 | 32.6 | 32.6 | 65.2 |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| | 36-40 Years | 9 | 19.6 | 19.6 | 84.8 |
| | 41-45 Years | 7 | 15.2 | 15.2 | 100.0 |
| | Total | 46 | 100.0 | 100.0 | |

Source: Field data,2021

Table 3 above shows that out of the valid 46 responses on age groups, 4, 9% were aged between 20-25 Years; 11, 14% were aged between 26-30 Years; 15, 33% were aged between 31-35 Years; 9, 20% were aged between 36-40 Years; and 7, 15% were aged between 41-45 Years, at the time of the study. The Table 3 confirms that out of the 46 respondents, the majority were people aged between 31-35 years old, representing 32.6% of the study, and the least were aged between 20-25 years, represented by only 8.7%.

*4.1.3 Marital Status*

*Table 3: Marital Status*

| Marital Status of Participant | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Single | 13 | 28.3 | 28.3 | 28.3 |
| | Married | 26 | 56.5 | 56.5 | 84.8 |
| | Separated | 4 | 8.7 | 8.7 | 93.5 |
| | Divorced | 3 | 6.5 | 6.5 | 100.0 |
| | Total | 46 | 100.0 | 100.0 | |

Source: Field data,2021

Table 4 above shows that when asked about their marital status, 13, 28% of respondents were single; 26, 57% were married; 4, 9% were separated; and 3, 7% were divorced, at the time the study was taken. Therefore, the table shows that the majority of those who participated in the study were married, represented by 56.5%.

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*4.1.4 Education*

*Table 4: Highest Education Attainment*

| Highest Education Attainment | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Certificate | 3 | 6.5 | 6.7 | 6.7 |
| | Diploma | 16 | 34.8 | 35.6 | 42.2 |
| | Bachelor's Degree | 22 | 47.8 | 48.9 | 91.1 |
| | Master's Degree | 4 | 8.7 | 8.9 | 100.0 |
| | Total | 45 | 97.8 | 100.0 | |
| Missing | 999 | 1 | 2.2 | | |
| Total | | 46 | 100.0 | | |

Source: Field data,2021

When asked what their highest educational attainment was, the respondents gave responses recorded in table 4 above. Showing; 3, 6% with certificates; 16, 35% with diplomas, 22, 48 with bachelor's degree; and 4, 9% with master's degrees. Therefore, in the Table above, it can be seen that the majority of the respondents were holders of a bachelor's degree.

*4.1.5 Tenure of Banking with Stanbic*

*Table 5: Years of banking with Stanbic*

| Tenure of Banking with Stanbic (years) | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 1-5 Years | 20 | 43.5 | 44.4 | 44.4 |
| | 6-10 Years | 15 | 32.6 | 33.3 | 77.8 |
| | 11-15 Years | 8 | 17.4 | 17.8 | 95.6 |
| | 21-25 Years | 1 | 2.2 | 2.2 | 97.8 |
| | 26 Years and Above | 1 | 2.2 | 2.2 | 100.0 |
| | Total | 45 | 97.8 | 100.0 | |
| Missing | 999 | 1 | 2.2 | | |
| Total | | 46 | 100.0 | | |

Source: Field data,2021

Table 6 above shows the number of years the customers had banked with Stanbic Bank Zambia until the date the data was collected. 20, 44% had banked for a period of 1-5 years; 15, 33% had banked with Stanbic for 6-10 years; 8, 17% had banked for about 11-15 years; and only 1, 2% had banked with Stanbic for more than 26 years. Therefore, it can be seen that the majority

of the respondents had only banked with the bank for a short period from 1-5 years, represented by 43.5%.

*Table 6: Gender and Tenure in Banking*

| Gender * Tenure of Banking with Stanbic (years) Crosstabulation | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Tenure of Banking with Stanbic (years) | | | | | Total |
| | | 1-5 Years | 6-10 Years | 11-15 Years | 21-25 Years | 26 Years and Above | |
| Gender | Male | 16 | 5 | 5 | 1 | 0 | 27 |
| | Female | 4 | 10 | 3 | 0 | 1 | 18 |
| Total | | 20 | 15 | 8 | 1 | 1 | 45 |

Source: Field data,2021

Table 7 above shows that, a Cross-Variate analysis of gender and the number of years the customers banked with Stanbic Bank Zambia shows that the majority of the male customers interacted with, 16 have only banked for a short period of 1-5 years; While the majority of female customers interacted with, 10 have banked with the bank for a slightly longer period of 6-10 years.

**4.2 CHALLENGES IN DIGITAL INNOVATIONS**

*Table 7: Challenges in Digital Innovations*

| Challenges | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Using the right Device for Online Banking | | System_Timeout | | Loan_Application_Ease | | TOTAL | |
| | F | % | F | % | F | % | F | % |
| Strongly Disagree | 1 | 2 | | | 2 | 4 | 3 | 2.2 |
| Disagree | | | 19 | 41 | 17 | 37 | 36 | 26 |
| Indifferent | | | 20 | 44 | 23 | 50 | 43 | 31.2 |
| Agree | 12 | 26 | 5 | 11 | 4 | 9 | 21 | 15.2 |
| Strongly Agree | 33 | 72 | 2 | 4 | | | 35 | 25.4 |

Source: Field data,2021

When asked if respondents have the right device to use for online banking platforms, 1, 2% strongly disagreed; 12, 26% agreed; 33, 72% Strongly Agreed according to Table 7 above. Meaning the majority of the respondents had devices that could access online banking.

Table 7 also shows results about the reactions if the banking online system times out when processing transactions. 19, 41% Disagreed; 20, 44% neither agreed nor disagreed; 5, 11% agreed; 2, 4% strongly agreed. Meaning that the majority of the respondents were indifferent about whether the system times out or not when processing an application.

Table 7 above also shows the results when the respondents were asked if it was difficult to apply for loans using online banking platforms. 2, 4% strongly agreed; 17, 37% disagreed; 23, 50% were indifferent; and 4, 9% agreed, at the time of the study. Implying that, the majority of respondents, 23, 50% neither agreed nor disagreed with the assertion that it is difficult to apply for a loan using online banking platforms of the bank.

4.2.1 Other Challenges in Digital Innovations

*Table 8: Digital Innovation Challenges*

| Digital Innovation Challenges | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| **Valid** | Network Problems | 3 | 6.5 | 23.1 | 23.1 |
| | Reversals of unprocessed transactions take long | 3 | 6.5 | 23.1 | 46.2 |
| | No Customer Service on the platforms | 3 | 6.5 | 23.1 | 69.2 |
| | Unreliable System | 3 | 6.5 | 23.1 | 92.3 |
| | Have no idea how to use Digital Banking | 1 | 2.2 | 7.7 | 100.0 |
| | Total | 13 | 28.3 | 100.0 | |
| **Missing** | 999 | 33 | 71.7 | | |
| **Total** | | 46 | 100.0 | | |
| | | | | | |

Source: Field data,2021

Table 14 above shows the challenges that respondents cited for online banking platforms. Among the challenges was that; there are usually network problems when reaching the sites; When transactions don't go through, reversals take too long to be processed; and some respondents stated that the system can be unreliable at times.

*Table 9: Overall Challenges*

| Overall_Challenges | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| **Valid** | Strongly Disagree | 1 | 2.2 | 2.2 | 2.2 |
| | Indifferent | 20 | 43.5 | 43.5 | 45.7 |
| | Agree | 25 | 54.3 | 54.3 | 100.0 |
| | Total | 46 | 100.0 | 100.0 | |

Table 9 above shows the average score of the combined digital banking challenges (i.e. Using the right Device for Online Banking, System_Timeout and Loan_Application_Ease).

The table illustrates the overall Score for the respondents on the perception on the overall challenges faced by customers at Stanbic bank Zambia. Four dimensions were used to assess overall Digital innovation challenges and these are Using the right devices, System time out, Loan application ease, network challenges etc on customer service. 1, 2.2% strongly disagreed the presence of challenges in digital banking; 20, 43.5% were indifferent; and 25, 54.3% agreed that they were challenges in digital banking. Therefore, the results of the transformation table above show that the majority, or 54.3 percent of the respondents faced digital banking challenges at the time of study

## 4.3 CUSTOMER SATISFACTION

*Table 10: Online Banking Satisfaction*

| Customer Satisfaction | | | | | | | | Totals | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | Online_Banking_Satisfaction | | Able to access the account without challenges | | Customer_Satisfaction | | | |
| **Frequency** | Strongly Disagree | 1 | 2% | 1 | 2% | 7 | 15% | 9 | 6.5% |
| | Disagree | 6 | 13% | 8 | 17% | 5 | 11% | 19 | 13.8% |
| | Indifferent | 7 | 15% | 11 | 24% | 8 | 17% | 26 | 18.8% |
| | Agree | 25 | 54% | 18 | 39% | 19 | 41% | 62 | 44.9% |
| | Strongly Agree | 7 | 15% | 8 | 17% | 7 | 15% | 22 | 15.9% |
| | Total | 46 | 100% | 46 | 100% | 46 | 100% | | |

From the table, the mode of the respondents was 62 agreements, representing 44.9% of the sample; 22 strong agreements, representing 15.9% of the sample; 26 indifferent, representing 18.8% of the sample; 19 disagreements, representing 13.8% of the sample; 9 strong disagreements, representing 6.5% of the sample.

When assessing customer satisfaction, customers were asked if they were satisfied to register for Stanbic online banking platforms. Table 10 above has the recorded answers. 1, 2% strongly disagreed; 6, 13% disagreed; 7, 15% were indifferent; 25, 54% agreed; and 7, 15% strongly agreed. Implying that the majority of respondents, 54.3% were satisfied with the online banking platform provided by Stanbic Bank Zambia.

Table 10 shows whether the respondents were able to use digital banking apps by accessing their account balance, paying bills, transferring money, and applying for a loan without any digital challenges. 1, 2% strongly agreed; 8, 17% disagreed; 11, 24% were indifferent; 18, 39%

agreed; and 8, 17%. Implying that the majority of respondents, 39.1% agreed that they were able to use online banking platforms without challenges.

When asked if the digital banking platform has a self-service functionality that can solve their problems and ease their daily life in pleasant ways, the responses are recorded in Table 9 above. 7, 15% strongly disagreed; 5, 11% disagreed; 19, 41% agreed; and 7, 15% strongly agreed. Meaning that the majority of the respondents were satisfied with the online banking platforms given by Stanbic Bank Zambia.

*Table 11: Overall Satisfaction*

| Overall Satisfaction | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| **Valid** | Strongly Disagree | 1 | 2.2 | 2.2 | 2.2 |
| | Disagree | 8 | 17.4 | 17.4 | 19.6 |
| | Indifferent | 12 | 26.1 | 26.1 | 45.7 |
| | Agree | 21 | 45.7 | 45.7 | 91.3 |
| | Strongly Agree | 4 | 8.7 | 8.7 | 100.0 |
| | Total | 46 | 100.0 | 100.0 | |

Table 11 above shows the average score of the combined overall customer satisfaction. The result of the transformation table above shows that the majority, or 45.7 percent of the respondents agreed that they were satisfied at the time of study.

## 4.4 CORRELATION RESULTS

*Table 12: Correlation Results*

| Correlations | | | |
|---|---|---|---|
| | | Overall Satisfaction | Overall Challenges |
| Overall_Satisfaction | Pearson Correlation | 1 | -.205 |
| | Sig. (2-tailed) | | .172 |
| | N | 46 | 46 |
| Overall_Challenges | Pearson Correlation | -.205 | 1 |
| | Sig. (2-tailed) | .172 | |
| | N | 46 | 46 |

The table 12 above shows the correlation results between customers overall satisfaction and the overall challenges faced. There was a negative correlation between the two.

## 4.5 REGRESSION RESULTS

*Table 13: Regression Model Summary*

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .205ᵃ | .042 | .020 | .947 |

a. Predictors: (Constant), Overall_Challenges

The regression model summary above in Table 12, shows; R-squared is a goodness-of-fit measure for a linear regression models. The R-squared of 0.042 indicates the percentage of the variance in the dependent variable that the Overall Challenges, and other digital banking challenges, explain collectively. Therefore, the strength of the relationship between the model and the Overall Satisfaction is 4.2%.

The standard error of the regression provides the absolute measure of the typical distance that the data points fall from the regression line. S is 0.947, which tells us that the average distance of the data points from the fitted line is about 94.7% Digital Innovation Challenges.

*Table 14: Regression Coefficients*

**Coefficientsᵃ**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 4.513 | .804 | | 5.612 | .000 |
| | Overall_Challenges | -.314 | .226 | -.205 | -1.389 | .172 |

a. Dependent Variable: Overall_Satisfaction

Table 13 above shows the coefficient results in the regression. The predicted equation is therefore;

Overall_Satisfaction = 4.513 – 0.314 * Overall_Challenges

## 4.6 SUMMARY OF FINDINGS

The majority of respondents in this study were males, represented by 61%, and only 39%, represented females. The majority of people were aged between 31-35 years old, representing 32.6% of the study. The study also found that the majority of those who participated in the study were married, represented by 56.5%, and were bachelor's degree holders. Additionally, the majority, 43.5% of the respondents had only banked with the bank for a short period from 1-5 years.

On the Challenges of digital banking, the study found that the majority of the respondents had devices that could access online banking. These customers were found to be indifferent about whether the system times out or not when processing an application. The study also found, that the majority of respondents, 50% neither agreed nor disagreed with the assertion that it is difficult to apply for a loan using online banking platforms of the bank. Among other challenges to accessing digital banking mentioned by the customers is that; there are usually network problems when reaching the sites; When transactions don't go through, reversals take too long to be processed; and some respondents stated that the system can be unreliable at times.

When asked about access to online digital banking facilities, the majority of respondents, 39.1% agreed that they were able to use online banking platforms without challenges. Furthermore, the majority of the respondents agreed that they were satisfied with digital banking platforms at the time of study.

The correlation results between customers overall satisfaction and the overall challenges faced showed a negative correlation between the two. Meaning that, if challenges faced by customers increased, the level of satisfaction by customers using online digital banking platforms dropped in response.

The predicted equation was;

Overall_Satisfaction = 4.513 – 0.314 * Overall_Challenges

# CHAPTER FIVE

# DISCUSSION OF FINDINGS

**5.0 OVERVIEW**

This chapter discusses the findings from chapter four and provides a critical analysis. The focus of this chapter is to analyse the research findings in order to provide an answered to the research questions.

**5.1 DISCUSSIONS OF FINDINGS**

The response rate for the study was 92% which according to Richardson (2005) any response rate of 50% and above is considered adequate and capable of generalization to other studies. The background information indicated the number of males, 61%, exceeded that of females thus continued marginalization of women where their low incomes and salaries are used in domestic and household budgets hence most of them do not use the banking facility. Most other studies also indicated that the percentage of women using banking facilities is minimal (Culpan, Akdag & Cindogvlu, 2002; Morgan, Schor and Martin, 2013).

**5.1.1 The challenges of digital innovations faced by customers at Stanbic Bank Zambia.**

In today's digital era, Zambian bank managers need to understand what criteria are being used by customers to evaluate their services as consumer behaviour patterns are changing due to the current digital trend. The current research makes important contributions to the field of banking services by identifying the major challenges of Stanbic bank Zambia's digital innovation services on customer satisfaction. These challenges are discussed below:

5.1.1.1 Using the right Device for Online Banking

The failure to use the right device hinders customer ability to access digital banking platforms of the bank. However, the study found that the majority of the respondents, 72% had devices that could access online banking. Therefore, it was not difficult for them to access the online banking platforms of the bank. A similar study by DeLaCastro et al. (2014) in the UK, agrees with these findings that access to digital devices is very effective for digital banking.

**5.1.1.2 System Timeout**

The majority of customers, 44% interviewed were found to be indifferent about whether the system times out or not when processing an application. The study found that the system time outs were prominent around the time when most people get paid and that the system is stable

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on other days of the month. System downtime can be a challenge as not only are users unable to make payments or conduct transactions but concerns about data and fund security also start to emerge just like the study by Khare (2011), established. In another study by Michael (2015), the system instability when transacting was a major hinderance to digital banking in Tanzania. The difference in the results can be attributed to the fact that, Michael's study was conducted in a rural area were few people have digital banking capable devices while this study was conducted in Lusaka, an urban area.

### 5.1.1.3 Loan Application Ease

Studies by Boland et al., (2007); Burtch et al., (2010); and Yoo et al., (2006) found that when bank customers found it difficult to apply for bank loans on their digital banking platforms, they were not incentivised to continue using those banking platforms. This study found that the majority of respondents, 50% neither agreed nor disagreed with the assertion that it is difficult to apply for a loan using online banking platforms of Stanbic bank. This according to one customer response "Made her feel the need to keep using the banking app as it was very convenient for her to get funds" (Field Data, 2021).

### 5.1.1.4 Network Problems

The other challenge found by the researcher in this study was the occurrence of network problems when reaching the banking sites. This made most bank customers dissatisfied with digital banking platforms. The study reviewed that Network problems according to customers is frustrating, and if left unattended, can have disastrous consequences for the bank business. These study findings are in line with the studies conducted by Altimeter Group, and Adobe, surveyed enterprises regarding status of their digital workplace and mobile apps usage and found that Two-thirds of employees rarely use their enterprise mobile apps because of network challenges in their residence.

### 5.1.1.5 Reversals of unprocessed transactions take long

Another challenge that was identified by the banks customers was that when transactions don't go through on the banks' app, reversals take too long to be processed; and some respondents stated that this makes the system very unreliable at times. As much as they might prefer otherwise, most customers had to deal with payment reversals now and then. Mistakes happen, and when a bank fails to deliver what the customer paid for, it's their duty to provide a refund. In other cases, banks may choose to reverse a payment after an error in processing, or simply to satisfy an unhappy customer. The study reviewed that many customers feel inconvenienced

by the length of time that these reversals take and end up unsatisfied by internet banking procedures. These findings agree with what Marous (2014), and DeLaCastro et al. (2014) found to be a challenge of digital banking challenge.

### 5.1.1.6 Unreliable System

23% of respondents felt that the digital banking platform offered by the bank were unreliable, because they felt they could only access banking services to a moderate extent. These customers recommended that there is a need to improve on banking services in order for the customers to be able to access the services and improve on their banking experience thus improved satisfaction. This is in line with Njiru (2014) who argued that there has been a rapid increase in access points to technological innovations, but there is need for improvement in order for the bank customers to access banking services to a large extent.

### 5.1.1.7 Summary of Challenges

When asked about access to online digital banking facilities, the majority of respondents, 39.1% agreed that they were able to use online banking platforms without challenges. Furthermore, the majority, 60.8% of the respondents either or strongly agreed that, overall, they were satisfied with digital banking platforms offered at Stanbic bank at the time of study. This is as envisaged by Okiro and Ndungu (2013) and Villers (2012), that banking customers in Nigeria and Tanzania respectively, are satisfied with existing digital banking platforms, but the banks need to improve their offered services to increase accessibility and reduce the challenges in using those platforms.

### 5.1.2 The magnitude to which the digital challenges are correlated with Business growth among customers at Stanbic Bank Zambia.

The correlation results between customers overall satisfaction and the overall challenges faced in this study showed a negative correlation between the two. Meaning that, if challenges faced by customers increased, the level of satisfaction by customers using online digital banking platforms dropped in response.

The predicted equation was;

Overall_Satisfaction = 4.513 – 0.314 * Overall_Challenges

A similar study by Muluka (2015) in Kenya found a correlation value between digital banking accessibility and customer satisfaction of (r=0.865, p< 0.01), showing a positive strong

correlation between customer satisfaction and digital banking accessibility. Implying that as accessibility increases customer satisfaction also increases.

This study however studied the relationship between digital banking challenges and customer satisfaction. The outcome of the regression analysis indicated that customer satisfaction is inversely related to digital innovation challenges ($R^2 = .042$, $F(2,71) = 1.929$, $p = 0.172$). The β coefficient for this relationship is ($\beta = -0.314$, $p < 0.172$), which implies that digital banking challenges was not a strong predictor of customer satisfaction in this study.

**5.1.3 To ascertain Stanbic Bank policy measures aimed at reducing digital innovation challenges and enhancing digital online services and customer service delivery.**

5.1.3.1 Customer centricity

Stanbic bank has empowered customers to open additional operating bank account from their comfort of their home using Android device connected to the internet. More intelligent self-service bulk cash accepting machines thereby aiding client who generates high volume of cash to make cash deposits any time without having to walk into a physical branch. Business banking customer who meet set credit scoring criteria are enabled to also instantly obtain unsecured loans at a clink of a button using any internet connection device via Enterprise online platform. Contactless cards on ATM and POS machines enabled; The Bank also introduced the capability for customers to make additional loan repayments should they wish to use Internet Banking and USSD platforms. Credit card view on Internet Banking platform thus providing customers with a 360-degree view of their accounts was introduced. Furthermore, clients are provided with an option to pay into their credit card account by transferring funds from their operating account. Significant investments were made in deploying a new state of the art Vehicle and Asset Financing (VAF) engine dubbed as "Finacle Leasing.". As part of its aspirations to become a universal financial services organisation, the bank partnered with some MNOs by interchangeably linking some MNOs e-Wallet to Stanbic Bank account enabling movement of funds between the two entities and increasing financial inclusion and points where customers can access financial services.

5.1.3.2 Cyber Security Concerns

As the world digitizes and services become virtualised, cyber risks are also amplifying. Therefore, the bank has continued investing in securing the IT Infrastructure from cyber threats by fortifying its network using various interventions; they once again concluded that these

measures are inadequate without investing in customer awareness. Consequently, Stanbic Bank also focused on contributing to ensuring that through marketing and communications division, customers are being reminded to also remain vigilant as they transact online to guard against card cloning or any phishing attempts from impostors.

### 5.1.3.3 IT Governance & Future Readiness

Technology is providing convergence across all spheres of human existence propelled by Neurotechnology, Genetic Engineering, Autonomous Cars, 3 D Printing, Artificial Intelligence, Big Data, Blockchain Technology and Robotics all wrapped together in the ecosystem of Internet of Things (IOTs).

In the scheme of IOTs, needs and wants of customers are speedily being gratified using digital options. To this end, the Bank has positioned itself by taking a strategic decision to convert into a digital platform business by becoming an echo-system orchestrator. By partnering with Salesforce and using Salesforce Cloud technology platform, the Bank would link scribes to the platform to an interconnected marketplace. In this matrix, the business of banking becomes an underlying outcome of providing platform services. To be ready for the future, it's staff continued being trained to acquire new skills related to the foregoing demands such as Data Science and Portfolio Management; Large Scale AI and Robotics, Behavioural Economics, Enterprise Ecosystems and Salesforce Trailhead Challenge programs. Naturally, advancements in IT governance kept following these emerging trends, by reviewing policies along the lines of; data privacy and cyber security, cloud computing and big data standards i.e. data curation, data analytics, customization and data monetization; the changes in rolling out IT projects from traditional waterfall to ways of work, delivering changes continuously using agile cross functional feature teams by releasing minimum viable products (MVP) thereby significantly pacing the speed at which customers are introduced to new IT products and services. And on the other end of the spectrum, recognition of Artificial Intelligence (AI), machine learning and Robotics as they increasingly become alternatives to delivering banking services.

As much as these digital bank platform policies are implemented there still bank customers with no information on what services are offered on the digital banking platform and some customers feel they could only access banking services to a moderate extent which implied there is a need to improve on banking services in order for the customers to be able to access the services and improve on their banking experience thus improved satisfaction. Much as Njiru (2014) argue that there has been a rapid increase in access points to technological

innovations, thus there is need for improvement in order for the bank customers to access banking services to a large extent.

# CHAPTER SIX

# CONCLUSION AND RECOMMENDATIONS

## 6.0 OVERVIEW

This chapter discusses the Study Conclusion, Recommendations and what the researcher suggests can be taken into consideration for future research to widen the knowledge gap.

## 6.1 CONCLUSIONS

This study critically reviewed the digital innovations challenges on customer satisfaction among financial institutions in Zambia. A case study of Stanbic bank Zambia, Lusaka. Out of the bank's population of customers, it sampled 50 customers and collected data using questionnaires. In conducting this research, the emphasis was on the effects of digital innovations on customer satisfaction in a financial institution, using Stanbic Bank Zambia, Lusaka as a case study. Data on digital innovation challenges and customer satisfaction relevant to the study was collected and analysed and discussed.

The researcher used a descriptive survey design because it is concerned with describing the characteristics of a particular group and can't manipulate the independent variables with the view to determine their effect on dependent variables thus their relationship is determined retrospectively. Cross-checking of the survey questionnaires and responses to ensure that the questions were answered well was conducted. Quantitative data collected was coded and fed into a computer statistical software SPSS (Statistical Package for Social sciences) to run the analyses. Descriptive data analysis entailed counts, percentages, cross-tabulations, and measures of central tendencies. Correlation analysis was used to check the relationship between dependent and independent variables. The results were interpreted and data were presented in tables for uniformity and ease of interpretation.

### 6.1.1 The challenges of digital innovations faced by customers at Stanbic Bank Zambia.

The study found that the system time outs were prominent around the time when most people get paid and that the system is stable on other days of the month. The other challenge found by the study was the occurrence of network problems when reaching the banking sites. This made most bank customers dissatisfied with digital banking platforms. Additionally, when

transactions don't go through on the banks' app, reversals take too long to be processed; and some respondents stated that this makes the system very unreliable at times.

When asked about access to online digital banking facilities, the study however, concluded that, the majority of respondents were able to use online banking platforms without challenges.

### 6.1.2 The magnitude to which the digital challenges are correlated with Business growth among customers at Stanbic Bank Zambia.

With a negative correlation of -.205 between Customer Satisfaction and Digital banking Challenges, the study concluded that, if challenges faced by customers increased, the level of satisfaction by customers using online digital banking platforms dropped in response.

### 6.1.3 To ascertain Stanbic Bank policy measures aimed at reducing digital innovation challenges and enhancing digital online services and customer service delivery.

The study concluded that the bank has very good policy measures at aiming at reducing digital innovation challenges, but these bank policies lack appropriate implementations because less customers have the right information and knowledge that's why we see long queues in the banking halls and at the ATMs. Therefore, providing the best policy measures with the view of enhancing digital online services delivery may result in higher customer satisfaction levels among Zambian banking customers.

### 6.2 RECOMMENDATIONS

Based on the findings as presented in chapter four of this study, the following are recommended:

1. To have faster processes in digital banking, there is a need for banks to invest more in robust reliable systems to reduce incidents of failed transactions and transactional errors in ATMs, Mobile banking, and POS terminals. Banks should further automate most services like loan recovery, loan disbursement and introduce queue management systems.

2. Banks need to come up with an application that can be used to enhance digital banking which will be considered safe and private to boost the operations, availability, and accessibility of digital banking.

3. There is a further need to facilitate ICT skills so that technology can be embraced. Through a joint venture with education institutions, ICT skills can be impacted through banks teaching individuals and cooperating on the changing world of banking technologies.

4. There is a need to carry out customer satisfaction surveys to establish how customers are adapting to technology. Suitable techniques should be devised based on what customers want and not what is convenient for banks.

**6.3 SUGGESTIONS FOR FURTHER RESEARCH**

From the presented findings, it is clear that accessibility of digital banking is undertaken while considering only persons that are deemed physically fit in the society. A study needs to be undertaken to determine the influences of accessibility of digital banking amongst persons living with disabilities.

**6.4 SUMMARY**

This study critically analysed the digital innovations challenges on customer satisfaction among financial institutions in Zambia. A case study of Stanbic bank Zambia, Lusaka**.**

Challenges of Stanbic Zambia's digital innovation services on customer satisfaction among the bank's customers.

Despite the challenges that the banks customers had, the study concluded that, the majority of respondents were able to use online banking platforms without challenges. The study also concluded that, if challenges faced by customers increased, the level of satisfaction by customers using online digital banking platforms dropped in response. The study then recommended that; to have faster processes in digital banking, there is a need for Stanbic bank to invest more in robust reliable systems to reduce incidents of failed transactions on all digital banking platforms.

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# APPENDIX

## THE UNIVERSITY OF ZAMBIA

## INFORMATION SHEET

I am a Masters student currently pursuing a Master of Business Administration (MBA) at the University of Zambia and Zimbabwe Open University. I am conducting a research titled *A Critical Review of Digital Innovation Challenges on Business Performance of Financial Institutions in Zambia. A Case Study of Stanbic Bank Zambia, Lusaka.*

You have been purposively selected as a respondent and therefore, kindly requested to take part in this study and I will be asking sensitive questions and you are free to decline or stop participating at any time.

This is purely an academic research. You are therefore; assured of maximum confidentiality of the information you will give. Hence, you do not need indicate your name. Your response will be used strictly for academic purposes.

Thank You.

Questionnaire Number.............

**UNZA-ZOU**

**THE UNIVERSITY OF ZAMBIA / ZIMBABWE OPEN UNIVERSITY**

**TOPIC: A CRITICAL REVIEW OF DIGITAL INNOVATIONS CHALLENGES ON CUSTOMER SATISFACTION AMONG FINANCIAL INSTITUTIONS IN ZAMBIA.A CASE STUDY OF STANBIC BANK ZAMBIA, LUSAKA.**

**QUESTIONNAIRE FOR BANK CUSTOMERS**

Dear Bank Customer,

I am a Masters student currently pursuing a Master of Business Administration (MBA) at the University of Zambia and Zimbabwe Open University. I am conducting a research titled **A critical review of Digital Innovations Challenges on Customer Satisfaction among Financial Institutions in Zambia. A Case Study of Stanbic Bank Zambia, Lusaka.**

You have been purposively selected as a respondent and therefore, kindly requested to take part in this study by filling in the questionnaire and complete it as accurately as possible.

This is purely an academic research. You are therefore; assured of maximum confidentiality of the information you will give. Hence, you need not to indicate your name. Your response will be used strictly for academic purposes.

**Instructions**

- ❖ Tick in the box for the answers that apply to you according to your view.
- ❖ You are required to give one answer for each question.
- ❖ Do not write anything in the boxes at the far right hand side of the questionnaire, these are for official use only.

Kind Regards,

MBA Student

**SECTION A: BACKGROUND INFORMATION**

1. What is your sex? Tick where applicable.

    1.  Male             [  ]               [  ]

    2.  Female           [  ]

2. How old were you on your last birthday? Tick where applicable.

    1. 20 – 25 Years        [  ]

    2. 26 – 30 Years        [  ]

    3. 31 – 35 Years        [  ]          [  ]

    4. 36 – 40 Years        [  ]

    5. 41 – 45 Years        [  ]

    6. 46 Years and Above   [  ]

3. What is your marital status? Tick where applicable.

    1.  Single           [  ]

    2.  Married         [  ]

    3.  Separated      [  ]          [  ]

    4.  Divorced       [  ]

    5.  Widowed      [  ]

4. What is the level of your education? Tick where applicable.

    1. Certificate          [  ]

    2. Diploma           [  ]          [  ]

    3. Bachelor's Degree   [  ]

    4. Master's Degree     [  ]

5. How long have you been with the bank?

    1. 1 – 5 Years          [  ]

    2. 6 – 10 Years         [  ]

    3. 11 – 15 Years        [  ]          [  ]

    4. 16 – 20 Years        [  ]

    5. 21 – 25 Years        [  ]

    6. 26 Years and Above   [  ]

**WITH RESPECT TO SECTION II AND III, PLEASE INDICATE THE LEVEL OF AGREEMENT WITH EACH STATEMENT:**

| LEVEL OF AGREEMENT | | | | |
|---|---|---|---|---|
| STRONGLY DISAGREE | DISAGREE | NEITHER AGREE NOR DISAGREE | AGREE | STRONGLY AGREE |
| (1) | (2) | (3) | (4) | (5) |

## SECTION II: CHALLEGES OF DIGITAL INNOVATION

| LEVEL OF AGREEMENT - ( Please indicate by a tick in the appropriate box) | | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A. I have the right device to use for online banking platform | | | | | |
| B. The system times out when processing an application. | | | | | |
| C. It is difficult to apply for a loan using online banking platform[[[ | | | | | |

## SECTION III: SECTION III: CUSTOMER SATISFACTION

| LEVEL OF AGREEMENT - ( Please indicate by a tick in the appropriate box) | | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A. Am satisfied to register for Stanbic online banking platform. | | | | | |
| B. I am able to use digital banking apps by accessing my account balances, pay bills, transfer money and apply for a loan without any digital challenges. | | | | | |
| C. The digital Banking platform is a self-service functionality which solves my problems and ease my everyday life in a pleasant and enjoyable ways. | | | | | |

What are other digital innovation challenges do you face as a customer?

..................................................................................................................................

..................................................................................................................................

..................................................................................................................................

..................................................................................................................................

..................................................................................................................................

*Thank you for your time and for participating in this study*

*2020*

| | APRIL '20 | MAY '20 | JUNE '20 | JULY '20 | AUG '20 | SEPT '20 | OCT '20 | NOV '20 | DEC '20 |
|---|---|---|---|---|---|---|---|---|---|
| BACKGROUND READING | ■ | ■ | | | | | | | |
| LITERATURE REVIEW | ■ | ■ | ■ | ■ | ■ | | | | |
| METHODOLOGY AND PLANNING | | | ■ | ■ | ■ | ■ | | | |
| PROPOSAL WRITING | | | | | | ■ | ■ | ■ | ■ |
| DATA COLLECTION | | | | | | | | | |
| DATA ANALYSIS | | | | | | | | | |
| PRESENTATION OF FINDINGS | | | | | | | | | |
| DISCUSSION OF RESULTS | | | | | | | | | |
| CONCLUSION AND RECOMMENDATIONS | | | | | | | | | |
| REPORT DRAFTING AND REVIEW | | | | | | | | | |
| FINAL REPORT DRAFT | | | | | | | | | |
| RESULT PRESANTATION | | | | | | | | | |
| REPORT SUBMISSION | | | | | | | | | |

*2021*

| WORK SCHEDULE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | JAN '21 | FEB '21 | MAR '21 | APRIL '21 | MAY '21 | JUNE '21 | JULY '21 | AUG '21 | SEPT '21 | OCT '21 |
| BACKGROUND READING | | | | | | | | | | |
| LITERATURE REVIEW | | | | | | | | | | |
| METHODOLOGY AND PLANNING | | | | | | | | | | |
| PROPOSAL WRITING | ■ | ■ | | | | | | | | |
| DATA COLLECTION | | | | ■ | ■ | ■ | | | | |
| DATA ANALYSIS | | | | | | ■ | ■ | ■ | | |
| PRESENTATION OF FINDINGS | | | | | | | | ■ | | |
| DISCUSSION OF RESULTS | | | | | | | | ■ | | |
| CONCLUSION AND RECOMMENDATIONS | | | | | | | | | ■ | |
| REPORT DRAFTING AND REVIEW | | | | | | | | | ■ | |
| FINAL REPORT DRAFT | | | | | | | | | | ■ |
| RESULT PRESANTATION | | | | | | | | | | ■ |
| REPORT SUBMISSION | | | | | | | | | | ■ |

APPENDIX 4: BUDGET

| EXPENSES | UNIT COST (K) | UNITS | TOTAL COST (K) |
|---|---|---|---|
| TRAVEL EXPENSES (FUEL) | 600/WEEK | 12 | 7200 |
| INTERNET BUNDLES | 450/MONTH | 19 | 8550 |
| PHONE USAGE CHARGES | 200/MONTH | 19 | 3800 |
| USB DRIVE | 120 | 1 | 120 |
| PENS | 100 | 1 | 100 |
| PAPER | 80 | 2 | 160 |
| DIGITAL RECORDER | 450 | 1 | 450 |
| BATTERIES FOR RECORDER | 20 | 4 | 80 |
| PHOTOCOPIES | 2/PAGE | 300 | 600 |
| PRINTING OF QUESTIONNAIRES | 3/PAGE | 200 | 600 |
| PRINTING OF THESIS | 3/PAGE | 25 | 75 |
| PRINTING FINAL REPORT | 3/PAGE | 70 | 210 |
| BINDING | 100 | 2 | 200 |
| TOTAL | | | **22145** |