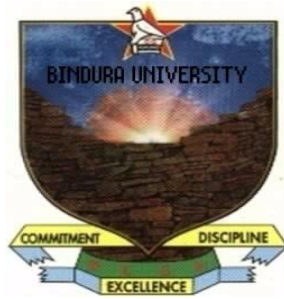


BINDURA UNIVERSITY OF SCIENCE EDUCATION



FACULTY OF COMMERCE

DEPARTMENT OF INTELLIGENCE AND SECURITY

**Impact of a paperless banking system on customer satisfaction. A case of
NBS Harare.**

BY

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B1852878

**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE BACHELOR OF COMMERCE
(HONOURS) DEGREE IN FINANCIAL INTELLIGENCE**

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DEDICATIONS

This research report is dedicated to my family and friends for their steadfast support throughout my academic career. Also, I cannot forget my parents' words of wisdom and inspiration, which served as a pillar of support for me during the four academic years.

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List of acronyms

ICT	Information communication and technology
ATM	Automated Teller Machines
POS	Point of Sale
ZIPIT	Zimswitch Instant Payment Interchange Technology
SWIFT	Society of Worldwide Interbank Financial Technology
EFT	Electronic Funds Transfer
USSD	Unstructured Supplementary Service Data
RTGS	Real Time Gross Settlement
TAM	Technology Acceptance Model
NBS	National Building Society

ABSTRACT

The aim of this research was to examine the impact of paperless banking on customer satisfaction in Harare. The study's objectives were to determine the forms of paperless banking, impact of paperless banking on customer satisfaction, to determine the benefits and challenges connected with paperless banking. To gain a thorough understanding of the aforementioned topic, the researcher employed both an exploratory and a descriptive research design, collecting both qualitative and quantitative data. The researcher employed non-probability sampling in the form of convenience sampling. A total of 80 respondents were drawn from two NBS branches in Harare, SSC and Samora Machael. Questionnaires and interviews were used as the primary data sources whilst textbooks, journals, the internet and documentations were used as the secondary data. The researcher presented data in the form of tables, charts and graphs using Ms Excel 2013. The study identified ATM's, Internet banking, mobile banking and ZIPIT as the widely used forms of paperless banking with internet banking being the commonly used. Furthermore, a high proportion of paperless banking users agreed that there is a link between paperless banking and customer satisfaction. The advantages of paperless banking were noted as simplicity of use, convenience, enhanced account management, accessibility, speed, and accuracy. However, the study noted obstacles connected with paperless banking, such as system and network problems, power shortages, and a failure to comprehend how to use e-banking, as well as the possibility of fraud and a cumbersome registration process. The study noted that, paperless banking consumers are now frequent users of the new mode of banking, with the majority willing to continue using it. The study concluded that paperless banking has a positive impact on customer satisfaction. Additionally the study noted that convenience, transaction speed, ease of use and security have an impact on customer satisfaction with e-banking. The study then recommended the banking industry to develop a long-term solution to the system and network difficulties. Additionally in order to attract a wider customer base, the banking sector must also upgrade its technology infrastructure by focusing more on paperless financial services.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

The purpose of this study is to look into the impact of a paperless banking system on customer satisfaction with a particular focus on NBS Harare. This chapter is an introduction to the research and it serves as the foundation of the study. In this chapter the researcher focuses on the background of the study, statement of the problem, research objectives and questions, significance of the study, assumptions, and scope of the study, delimitations and limitations of the study.

1.1 Background to the study:

Technology revolution has transformed the twenty-first century, making it the age of globalization. Internet has a significant impact on every part of business. Electronic commerce is no longer an option for business in the twenty-first century, it is a need (George, 2011). Electronic banking has recently been implemented in a variety of business operations, increasing services such as buying and selling via internet networks (Mambi, 2010). All banks, especially the large banks and mutual banks, have gradually increased their number of Internet banking services available to customers over the past decades (Momeni, 2013)

The emergence of paperless banking system is due to recent advancements in information technology (IT). Banks have subsequently transitioned from old banking procedures that entailed a lot of paperwork to a new paperless approach, which means that banking is now done electronically. Despite the risks involved with this technology, the urge to make the world a village has compelled commercial and financial organizations to use electronic banking in order to link banking activities or affairs more easily than in the past (Ballali, 2011). More so the world have been hit hard by Covid 19 Zimbabwe is not an exception ,Zimbabwe recorded its first Covid 19 case in 2020 from there the country was put under covid-19 induced lockdowns of different magnitude .The coming in of the deadly Delta variant of Covid 19 in

Zimbabwe in 2021 forced the country into a total lockdown meaning that people were not allowed to move without exception letters, businesses including banks were opening from 8 am to 3pm .The imposition of lockdown in the world and Zimbabwe in particular increased the use of online banking ,customers were not allowed to get in town without exception letters they were left without any option than to adopt e-banking .

This new approach is known by a variety of names, including paperless banking, green banking, electronic banking, and internet banking. Alsajja and Dennis (2010) defined internet banking as the process of providing banking services through technology without using physical resources of banks. This definition reveals that internet banking uses fewer resources of banks and customers. This has ushered in a new era in banking, one marked by rapid technical breakthroughs, increasing knowledge intensity across all aspects of banking and finance, improved customer delivery, which has resulted to higher client satisfaction, as well as fresh product ideas from bankers. In order for the banking sector to remain competitive locally and globally, ICT must now be used. This necessitates that banks provide online customer service. Electronic banking (E-banking) has improved as well as changed the aspect of commercial banking through linking and connecting geographical, industrial and regulatory gaps and creating innovative products as well as services for both banks and customers (Khan & Karim, 2010)

Modern clients are progressively seeking more value, convenience, and services tailored to their own needs, all at low tariff rates, this is possible through internet banking. Customers' lives have been made considerably easier as a result of this new banking facility, since they prefer online services that can be completed from the comfort of one's own home if one has internet access. The paperless banking system is commonly employed in industrialized countries such as the United Kingdom for all transactions, and they experience few to no problems in doing so. This could be because they are early adopters of the new financial system, as opposed to underdeveloped countries, who have been slow to implement the new system, and Zimbabwe is no exception. This is reflected in the delayed adoption of electronic banking and the challenges it poses to customers and bankers. The implementation of internet banking in Zimbabwe was primarily motivated by the country's liquidity crisis. The country faced cash shortages making life difficult for ordinary citizens. Electronic banking was then introduced to minimize the effects of cash shortages and reduce liquidity crisis in the economy. In 2016, the National Building Society invited its customers to sign up for online and mobile banking because they were now moving away from traditional banking techniques and toward paperless

transactions. Most NBS clients are pensioners hence old aged they faced tough times to register for internet banking, other clients faced difficulties in registering internet banking as a result of poor network connection and system constraints, sometimes the system freezes customers' accounts, preventing them from using their cards.

The purpose of this study is to determine the effect of a paperless banking system on levels of customer satisfaction in light of the system's ongoing evolution, new product packages that are compatible with it, including ZPAY, ATMs, POS, ZIPIT, SWIFT, and PERAGO, to name a few, as well as all the improvements made to the system to make it more user-friendly. The study has been focused on NBS in order to assess the adoption of the new banking system by examining customer satisfaction levels and provide suggestions as well as recommendations on how to address the system's issues.

1.2 Problem Statement

In today's increasingly competitive and globalized industry, customer contentment is a prized commodity. Customers today are looking for more than price bargains they want helpful, reliable, and dependable technology. Many banks in Zimbabwean have adopted information and communication technologies (ICT) to improve their service delivery. In an effort to enhance digital banking huge sums of money have been invested in the adoption of self-service and online banking services with the goal of enhancing customer service quality.

Traditional banking methods were characterised by long queues in and outside banking halls and sometimes customers leaving without attendance or their queries resolved, a plethora of paperwork especially when opening a new account or a supplement account, use of cash deposit slip when depositing cash and the use of cheque books which were characterised by cheque fraud . As a result, a number of banks in Zimbabwe have embraced e-banking and are creating new product packages to go with it. Financial organizations should focus their strategy on enhancing client loyalty and satisfaction through better services. Green banking makes it easier for customers to monitor their accounts, transfer money, and pay bills. The advent of mobile banking increase customer satisfaction but also had certain problems. Little research has been done to determine how satisfied customers are with paperless banking. In addition, the coming of Covid-19 means that banks have to reduce paperwork so as to reduce chances of spreading the virus. The goal of this research is to determine the impact of a paperless banking system on customer satisfaction with a particular focus on NBS.

1.3 Objectives/Purpose/Aim of the study

The purpose of the study is to determine the impact of a paperless banking system on customer satisfaction. In line with the main objective other aims of the study are:

- To determine the impact of paperless banking system on customer satisfaction.
- To identify the forms of paperless banking
- To determine the benefits of a paperless banking system on customers.
- To identify the challenges associated with the paperless banking system

1.4 Research Questions

The main research question is to determine the impact of a paperless banking system on customers' satisfaction. In order to satisfy the core objectives, the researcher also makes use of the following research questions:

- What is the impact of paperless banking system on customer satisfaction?
- What are the forms of paperless banking used by NBS?
- What are the benefits of a paperless banking system?
- What are the challenges faced by NBS in using paperless banking system?

1.5 Significance of the study

1.5.1 To the organisation of study:

The findings of the study are of great importance to management of commercial banks in Zimbabwe in general and NBS in particular as they can understand the effects of electronic banking on customer satisfaction hence improve profitability of their banks. This research avails customer challenges in regards to paperless banking this act as a work up call to NBS management to develop ways and strategies to solve arising challenges faced by clients as well as modernizing systems.

1.5.2 To the researcher:

The research will help the researcher to become better at researching, which will greatly boost researching skills of the researcher this will go a long way in improving problem solving techniques of the researcher. The researcher acquired knowledge on the determinants of customer satisfaction as far as paperless banking is concerned. It will help the researcher to acquire data collection skills as well as interpretation and analysis of data skills. Linking conceptual framework and theories will help researcher to accomplish the requirements of Bachelor of Commerce (Honors) Degree in Financial Intelligence. The research will help the researcher become better at researching, which will greatly boost the researcher's ability to solve problems.

1.5.3 To the University:

The research will act as base for other researchers and future scholars who would like to research on the effects of paperless banking on customer satisfaction. The research will be an advantage to academicians since there will be suggested recommendations

1.5 Assumptions to the study

- The researcher will have access to the information in time to finish the data analysis
- The targeted population will cooperate as well report back timely and give true and actual views
- The researcher's limitations will not compromise the reliability of the research findings
- Electronic banking system remains in existence at NBS throughout the study

1.6 Delimitations of the study

This research looks at how a paperless banking system affects customer satisfaction, with an emphasis on NBS. The study is limited to National Building Society because it is one of Zimbabwe's leading building societies and has made a significant contribution to the country's banking sector expansion. A sample of customers who bank with National Building Society and reside in Harare will be the primary respondents. The study will cover from 2020 until the present day.

1.7 Limitations of the study

- The study's key restriction was the target population's unwillingness to engage in the study, which resulted in a significant non-response rate. To overcome this obstacle, the researcher reassured respondents that their responses remain anonymous and used scholarly purposes only.
- Some respondents lack complete knowledge of the paperless banking system, some of the information provided by respondents was not correct. Validity and reliability tests were used by the researcher to tackle this difficulty.
- Due to other responsibilities, finding time to collect and analyse data was difficult. To address this, the researcher resorted to a rigorous time budget in order to meet chapter completion deadlines.
- Due to Covid-19 some respondents were not willing to fill in questionnaires.

1.8 Definition of terms

1.8.1 Green banking/Paperless banking-the modern use of technology to deliver banking products as well as services through electronic and interactive communication channels. Paperless banking can be referred to as green banking, electronic banking, and internet banking. Alsajja and Dennis (2010) defined internet banking as the process of providing banking services through technology without using physical resources of banks.

1.8.2 Customer-. A customer is someone who access services from a particular financial institution over a period of time. Based on this study, a customer is as any individual who seek services from a building society or a commercial bank.

1.8.3 Customer satisfaction is described by Philip Kotler (2018) as a person's pleasure or disappointment as a result of comparing a product's perceived performance or outcome to his or her expectations. For the purpose of this study customer satisfaction, is defined as the proportion of customers who report that their experience with a financial institution's product package and services has exceeded their expectations.

1.9 Chapter summary

This chapter highlighted the problem statement, study objectives, and research questions. It also looked at the study's assumptions, justification, delimitations, and limits. The following chapter concentrated on the literature review.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction:

The purpose of this chapter is to review previous studies and theoretical frameworks on the impact of paperless banking on customer satisfaction. This chapter objects to provide a critical evaluation of existing works on the area under examination, as well as the applicable theory that will guide this research. The researcher identified the relationship between current investigations, highlighted the research problem, and identified the literature gap. Taylor (2011) defined literature review as an account of what has previously been published on a topic by recognized scholars and researchers..

2.1 Conceptual frameworks

2.1.1 Paperless banking system

Electronic banking is referred to as the use of the internet as a distant delivery channel for offering services such as opening a deposit account, transferring cash between accounts, and electronic bill presentment and payment. Timothy (2012). Commercial banks have been using paper base financial transaction for centuries they have been suffering in terms of cost, profitability and efficiency due to the time consumption of processing documents, errors and lost documents (Abad-Segura and González-Zamar, 2020). Paperless banking is sometimes known as green banking or electronic banking. It is a generic phrase for the procedure by which a customer conducts financial transactions electronically rather than visiting a physical location. Paperless banking allows a customer to make transactions at the comfort of their homes electronically this improves customer satisfaction. Paperless banking reduces the use of paperwork, banks can deliver customer services and other core services such as remittances and funds transfer through the internet rather than by physically investing the bank premises (Cheung & Lee, 2006).

2.1.2 Customer

A customer is someone who access services from a particular financial institution over a period of time. According to this research, a customer is defined as any individual who seeks services

from a building society or a commercial bank. Adebayo (2013), noted that until one establishes a bank account, he or she is not considered a bank customer.

2.1.3 Customer satisfaction

Philip Kotler (2018) defined customer satisfaction as a person's feeling of pleasure or disappointment, which resulted from comparing a product's perceived performance or outcome against his/her expectations. Customer satisfaction, according to this survey, is defined as the percentage of customers who report that their encounter with a commercial organization's product package and operations has exceeded their expectations. In other words, it is customer happiness with the services and products of a financial institution in comparison to the customer expectations. Customer satisfaction increases customer loyalty.

2.1.2 Forms of paperless banking

2.1.2.1 Internet banking

Internet banking is a type of banking service that allows users to access and conduct financial transactions on their bank accounts using computers connected to the Internet Ongkasuwan and Tantichattanont (2002). Arunachalam and Sivasubramanian (2007) defines Internet banking as a process where customer can access his or her bank account via the internet using PC or mobile phone and web-browser. According to Burnham (2008) internet banking is a system that allows consumers to acquire general information about the bank's products and services, assess their accounts, and complete a variety of banking operations via the internet. It ensures 24-hour secure access to accounts as long as internet connection is available. For a customer to access internet banking facilities the customer needs to first register through creating internet banking portal which will be linked to the customer account and will be secured by personal identification number (PIN) or passwords for verification whenever the customer wants to transact. Internet banking gives a customer an opportunity to access his /her account through the internet and initiate transactions without necessarily visiting the banking hall.

2.1.2.2 Real Time Gross Settlement (RTGS)

According to Nzaro & Magidi, (2014) RTGS is a funds transfer system where the transfer of money or securities takes place from one bank to another on a real time and on a gross basis.

It allows transactions to be processed instantly, without delays money will reflect to the receiver instantly. 'Real time' means payment transaction is not subjected to any waiting period and 'gross settlement' means the transaction is settled on one on one bunching or netting with any other transaction (Nzaro & Magidi, 2014). RTGS provides transaction reference numbers which will make the transaction traceable if need arise this makes RTGS the most suitable payment method for high value transactions. In Zimbabwe RTGS are controlled and monitored by Reserve Bank of Zimbabwe (RBZ), RBZ sets maximum amount to be processed through RTGS.

2.1.2.3 Mobile banking

Tiwari, Buse, and Herstatt (2006) define mobile banking as the transfer of ownership or rights to use goods or services that is initiated or completed through the use of mobile access to computer-mediated networks via an electronic device. Mobile banking according to Radu (2003), is the connection between a mobile phone and a personal or business bank account. Using mobile banking one can check account balance, buy airtime, pay electricity and get a statement (that's a reflection of transaction done by a client), on the mobile phone among other services. Literally this is banking conducted through the use of a mobile phone. A mobile banking transaction can be an account inquiry that does not involve a payment such as checking account balance, checking credit limit, looking up transaction history or that involve payment transaction such as a mobile payment, a mobile purchase, a mobile money transfer (Karthikeyan et al., 2017). In general, mobile banking allows consumers to access their bank accounts at any time and from any location. Almost every bank in Zimbabwe has adopted mobile banking for the convenience of their customers.

2.1.2.4 Automated Teller Machines (ATM)

Customers use ATM cards, which are machine-readable plastic cards, to withdraw money from their bank accounts, transfer money, or receive deposits. Wafula (2014). ATM cards are secured by personal identification number PIN which is a four-digit security pin provided by the client upon issuance and can be changed at the request of the customer anytime. According to Loverock (2011), Automated Teller Machines (ATM) reduces the workload of bank's staff – ATMs reduce the work pressure on bank's staff and avoid queues in bank premises. This improves customer satisfaction and allows banking staff to focus on other important matters. There is no human error as far as ATMs are concerned (Pandian et al, 2011). Using ATM, a

customer can withdraw cash up to a certain limit during any time of the day or night (Akrani, 2011). They are mostly situated outside banking premises they operate even after stipulated working hours.

2.1.2.5 Point of Sale (POS)

POS is a platform where customers can make payments for goods and services using their cards by swiping on the POS machine. POS machines allows the transfer of money from the buyer to the seller and payments can be done instantly. Many traders are adopting the use of POS due to the increase in use of plastic money in Zimbabwe. In Zimbabwe POS transactions are facilitated by ZIMSWITCH. POS are also used by commercial banks for cash withdrawals.

2.1.2.6 Society of Worldwide Interbank Financial Telecommunication (SWIFT) Payments Systems

This is an international payment system that provides a secure network that permits inter-bank payment orders between financial institutions using SWIFT codes, which are unique codes used by financial institutions and each institution has its own unique code that differs from others. i.e NBS swift code NABYZWHA . The SWIFT network communicates a payment instruction through a unique language which makes it secure. SWIFT is usually used for international payments.

2.1.2.7 Zim-Switch Instant Payment Interchange Technology (ZIPIT)

ZIPIT is a Zimbabwean financial services system that enables individuals to electronically transfer funds from one Zim-Switch connected bank account to another via the bank's mobile banking platform. ZIPIT is a financial system that allow clients to transfer money from one account to another instantly. ZIPIT allows Zim-Switch connected services providers to transact instantly for instance sending money from NBS to ZB and funds reflect instantly, ZIPIT have got a maximum transaction amount which is determined from time to time. NBS ZIPIT USSD code *202#.

2.1.2.8 ZIPIT smart

ZIPIT smart refers to a platform where customers can make payment to ZIPIT merchants and the payment reflect instantly. Recently Zimswitch introduced ZIPIT smart, individuals can

transact, pay for goods and services without using bank cards. ZIPIT smart requires a PIN before confirming a transaction this makes it secure. It is available 24/7 as long as there is network coverage. NBS ZIPIT USSD code *202# option

2.1.3 Overview of paperless banking

Paperless banking, also known as electronic banking or green banking, is the use of the Internet as a remote delivery channel for offering services such as opening a deposit account, transferring cash between accounts, and electronic bill presentation and payment. Timothy (2012). Ongkasuwan and Tantichattanont (2002), defined paperless banking as a service that enables clients to view and conduct financial transactions on their accounts from web-enabled PCs with internet connections. Paperless banking allows customer to enquire balance, transact, pay bills and access their accounts without visiting the bank. Globalization brought about competition and in order to sustain competition commercial banks introduced innovative ways of banking to enhance customer satisfaction thus attracting customer and retain existing customers. It's essential for banks to implement a solution that would reduce their costs, improve profitability and efficiency while enhancing customer relationship (Abad-Segura and González-Zamar, 2020).

2.1.3.1 Services offered by E-Banking

Timothy (2012) noted that electronic banking uses the internet as a distant delivery channel to provide services such account opening, inter-account funds transfer, and electronic bill presentment and payment. Chou, 2000 penned five points

- Balance and transaction history enquiry
- Paying bills
- Inter account funds transfer
- Credit card advances request
- Ordering checks for faster services that can be provided by domestic and foreign banks

2.1.4 Benefits of a paperless banking

Going paperless has numerous benefits, including increased efficiency, reduced paper usage, printing expenses, storage costs, environmental benefits, and efficient retrieval of data and information while improving customer service and improve customer loyalty.

2.1.4.1 Security

Traditionally financial transactions were characterised by the use of papers such as cheques, recordings and receipts which increased risk of information access by third part thus the chances of information access by any third part was higher. As noted by (Karunaratne and Wanninayake. 2019) Paperless banking transactions limit the chances of information going to third parties. Paperless environment mean that information is encrypted meaning it can't be accessed by a third part therefor preventing any information breaches thus providing security to the user. Recently they have been the introduction of chip and pin cards by many banks this technology provides hybrid security and avoid card clowning. Paperless environment would mean that all information is encrypted and prevents any information breaches. On account opening customers are issued with PIN (Personal Identification Number) which works as the customer's secret number required to authorize card transaction additionally e banking customers use secret password to protect unauthorised access to their e banking portals, password is made up of a combination of unique special features words as well as numbers to make a strong password which cannot be guessed by intruders. Paperless banking has eliminated the carrying of huge sums of money providing plastic money which is more secure. There is no need for customers to carry hard cash for shopping and bill payments since they is now an option for plastic money which is now the most common method of payment.

2.1.4.2 24/7 Access to account

Customers can now view, transact as well as pay bills anytime of the day as long as they have network coverage this is done at the comfort of their homes .Internet banking have been more useful especially to business customers they can now make payments to their supplies ,extract bank statements for reconciliation purposes as well as process salaries without even visiting the bank .Business can access their account activities online and reconcile their books anytime this helps them to spot any fraudulent activities quickly. Accessing accounts 24/7 helps customers to manage their finances more conveniently.

2.1.4.3 Reduced costs

Paperless banking saves travelling costs for customers they can transact,access their accounts ,apply for loans without visiting the banking hall thus saving them travelling costs to the bank. Through internet banking customers can access their bank statements free of charge in most

banks such as NBS, this is cost effective because accessing the same bank statement at the banking hall costs 200 RTGS. More so customers transacting using internet banking enjoy reduced cost.

2.1.4.4 Timely services to the customer

Paperless banking saves time customers can access their required service be it transacting bill, payment, balance enquiry etc without queuing for the service thus saving time.

2.1.4.5 Swift and exact amenities to the customer

E banking is done online this means that it delivers swift services as long as the user have strong internet base and feedback is swift. Paperless banking reduces human error there is less involvement of manual work from the banking staff thus there are reductions in human error this mean that service provided are accurate.

2.1.5 Challenges of paperless banking

Paperless banking has many benefits which improves customer satisfaction but there are challenges which arise from the use of this new banking method.

2.1.5.1 Technical challenges

Paperless banking relies on online platforms for its operations any glitch or crash of this systems will cause financial loses, data lose as well as inconveniencing customers. A single system technical glitch that might cause banking support systems to be down might cost a bank millions of dollars in losses and bad will. It can inconvenience customers who may fail to make payments or transact during the system break down .For instance in 2019 Ecocash system went down for the whole day many customers were inconvenienced some intended to pay bus fares using eco cash but they couldn't due to the system challenge ,this caused loses worth millions and a lot of customers were inconvenienced the system created a reconciliation problem on Eco cash side as well as NBS and other financial institutions who use Ecocash services .Additionally many banks run their system end of day late at night and during this period the system will be down and any customer who tries to transact during this period may fail to do so or experience double deductions.

2.1.5.2 High setup costs

The high cost of buying technologies such as ATMs that supports paperless banking leaves majority of banks failing to fully implement paperless banking. Green banking requires technology and expects that are costly for instance many banks in Zimbabwe depend on Indian Vendors for supply of systems and expects hired for systems maintenance are costly. In addition to this cost banks will also suffer training and development costs, there is need to train staff on new systems and new digital innovations.

2.1.5.3 Strategic risk

Strategic risk associated with financial institutions can be increased by a lack of careful planning and investment in e-banking, which demands ongoing innovation. (Daft & Richard (1982). Strategic risks are risks associated with adopting an unsuccessful company plan.

2.1.5.4 Difficult for first time users

ATMs are difficult to use and sometimes customers might end up locking their cards inside the ATM due to failure to use them. Some banks don't offer assistance to customers using ATMs and for security reasons some customers might decide not to ask for assistance. In addition, first time user of both mobile and internet banking might face serious challenges which might make it difficult for customers to use this banking services.

2.1.5.5 Limited access

Mobile banking and internet banking use network coverage and internet access respectively in order for one to access internet banking one have to be connect on the internet, this provides limited access to customers who have limited internet access. On the other hand, customers without network coverage can't access mobile banking thus without network coverage mobile banking will be useless.

2.1.5.6 Fraud and theft

Using internet means that if anyone finds access to client's login details (password and identity), he or she can access the account. Recently they have been an increase in ATM card clowning and many people have lost huge sums of money as a result of card clowning.

2.2.0 Impact of paperless banking on customer satisfaction.

The origins of the idea of customer satisfaction has traditionally been described as a post-purchase evaluative judgment on a specific purchase decision. Most academics believe that satisfaction is an attitude or judgment created by a consumer comparing their pre-purchase expectations of the product's performance to their subjective experience of the performance they actually received. A person's feelings of pleasure or disappointment as a result of comparing a product's perceived performance or outcome to his or her expectations are referred to as satisfaction (Kotler 2000). Customer satisfaction is the sum of a customer's views, evaluations, and psychological reactions to a product or service's consuming experience. One of the most important components of a bank's competitive advantage is customer's satisfaction. One of the most important factors of consumer loyalty is value. Customers can perceive products or service's values and advantages based on its level of satisfaction.

Convenience, simplicity of use, relative advantage, risk perception, user lifestyle, and current demands are all factors that influence customer satisfaction with green banking. In order to measure the impact of paperless banking on consumer happiness, Jannat and Ahmed (2011) identified parameters that influence customer satisfaction with paperless banking. Customer satisfaction is influenced by transaction service quality, speed, security, and privacy, as well as simplicity of use, convenience, and cost efficiency, according to the researchers. There is a significant correlation between customer satisfaction and the independent elements. Consumer satisfaction is affected by each independent variable. Virtual service availability, trust, and value are mentioned as some of the aspects that impact customer satisfaction with paperless banking.

2.2.1 Service Quality

When customers compare their pre-service expectations to their real service expectations and their actual service experience, service quality is developed (Naik et al., 2010). E-service quality is crucial to banks in e-banking since it impacts customer satisfaction. The nine aspects of e-service excellence were identified by Zhao and Saha (2005). Nupur (2010) claims that a portion of the service quality dimension has a substantial link with customer satisfaction. Customer satisfaction with paperless banking is related to service quality.

2.2.2 Security and Privacy

Security may be described as a type of protection that ensures the safety of clients while also preventing hackers from breaching their privacy (Dixit and Datta, 2010). Security has a major impact on consumer satisfaction, according to Ahmad and Al-Zu'bi (2011). Another important factor that clients are usually concerned about is privacy. Customers expect banks to protect their personal and financial data, especially when transacting via the Internet. According to Zhao and Saha (2005), consumer satisfaction is strongly influenced by privacy. Customer satisfaction with paperless banking is linked to security and privacy.

2.2.3 Convenience

Customers who use e-banking are primarily interested in convenience (Shariq, 2006). The majority of customers were concerned with the convenience of using internet banking (Lallmahamood, 2007). Because of the benefits to both banks and customers, paperless banking is gaining a lot of traction in several countries. According to Adapa & Rindfleish (2013), developed countries adopt technological innovations at a faster rate, and many shoppers use internet banking. Convenience and overall satisfaction have been found to have a strong relationship.

2.2.4 Ease of use

Customer satisfaction was positively related to ease of use, according to Kassim and Abdullah (2010). Customers who use paperless banking are more concerned with the ease of use of banking transactions (Ainin et al., 2005). The world of financial institutions has been overrun by rapidly evolving and dynamically changed technology. These advancements have improved the delivery of bank services and have had a significant impact on the creation of more flexible payment options and user-friendly banking services (Dixit & Datta, 2010). Customers and staff can both benefit from technological advancements in terms of obtaining and giving services. Customers can serve themselves more effectively with self-service technologies (Wilson et al., 2016). Customers can, for example, use internet banking to access their accounts, request for loans, check balances, transfer money between accounts, and manage their banking operations without the aid of bank workers (Ismail & Osman, 2012), this impacts consumer satisfaction.

2.2.5 Transaction Speed

The frequency of network connection failure, the time it takes to browse and initiate a transaction, and the time it takes to complete the transaction are all factors that affect transaction speed. Customers' satisfaction is enhanced by the amount of time they spend waiting for transaction responses and the speed with which banks respond to customer complaints (Ahmad and Al-Zu' bi, 2011). In order to be successful in e-banking, speed was critical (Haque et al., 2009). Customer satisfaction was positively influenced by speed (Ahmad and Al-Zu' bi, 2011).

2.2.6 Cost effectiveness

Customers are willing to pay for banking services at a modest cost. Customers want bank transactions whose volume is determined by the whole cost of the transaction. Customers must pay full pricing in three ways: value, technology choices, and the distance travelled to undertake a collective action (Reynold et al., 2011). Paperless banking reduces transportation costs, and transaction costs affect satisfaction levels.

2.3.0 Theoretical literature review

Zimbabwean banks are now thriving to boost customer satisfaction to cope with rising competition brought on by globalization. There are ways, banks can adopt to improve customer satisfaction thus there are theories that can be put into practice to improve customer satisfaction. Theories such as the Customer Journey Model, Technology Acceptance Model (TAM), and Disconfirmation theory can be used to explain customer satisfaction.

2.3.1 Disconfirmation Theory

Expectation theory (also commonly known as Expectancy-Disconfirmation Theory) is the most widely accepted theory concerning customer satisfaction processes. The theory holds that satisfaction/dissatisfaction results from a customer's comparison of performance (of a product or service) with predetermined standards of performance. According to the view, the predetermined standards are the customer's predictive expectations. Three possible outcomes of the comparison are possible. Positive disconfirmation occurs when performance is perceived to be better than the predetermined expectations. In this scenario, customer is delighted. Zero disconfirmation occurs when performance is perceived to be exactly equal to expectations- customers are likely to be satisfied. Finally, negative disconfirmation occurs when performance

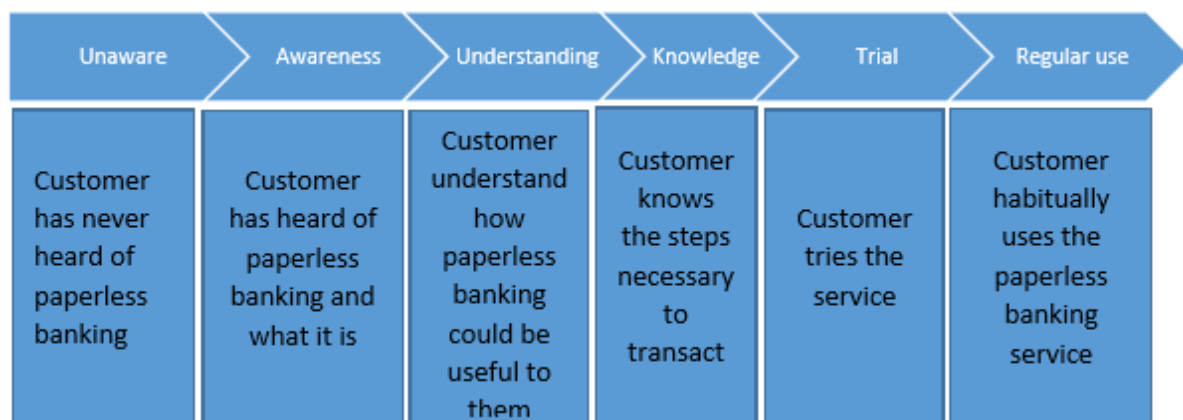
is lower than expectations. Of course, negative disconfirmation leads to dissatisfied or unhappy customers. The need to achieve positive disconfirmation has been popularized...

2.3.2 The technology acceptance model (TAM)

(Bagozzi, Davis, and Warshaw 1992) proposed the Technology Acceptance Model, which has been widely adopted by most studies to characterize factors affecting the application of new technology. TAM enables us to forecast how new technology will be used by people. The model has two variables that determine a customer's willingness to accept an information system, which are perceived usefulness and perceived ease of use of technology. Perceived usefulness and perceived ease of use of technology play a critical role in determining personal attitude toward an innovation, so the complexity of using a technology is crucial. According to (Bankole, et al., 2011) perceived usefulness and ease of use are fundamental determinants of system adoption and usage. Additionally, TAM also assumes that potential customers are unrestricted in their actions and decisions. Surendran (2012) suggested that perceived usefulness is the magnitude to which an individual using information systems will enhance their performance for instance swift and reliable electronic banking services. Perceived ease of use, on the other hand, is the degree to which a person believes that a certain system, in this case, the paperless banking system, is easily accessible, simple to use, and user friendly.

2.3.3 The Customer Journey Model

Customer Journey Model is a concept used by operators to create a customer journey from their first use of the system to a point where they can use the system with least amount of challenges in operating the system.



Source: Davidson & MacCarthy (2011)

Fig 2.1 The Customer Journey Model

Fig2.1 depicts a customer's journey from being unaware of the presence of electronic banking to being a frequent user of the system. According to Davidson and MacCarthy (2011), the customer is initially unaware of the existence of electronic banking and its purpose, but later becomes aware and understands the purpose of it. Once the customer is informed, awareness initiatives are necessary to foster understanding. The customer will be in a better position to transact if they have grasped the concept and can see how it can benefit them. Transactions can only take place once they have been educated by a banker or simply by a customer assisting another customer in transacting or by following the platform's instructions. The customer will now be satisfied with the banking system as a result of transacting and will thus become a frequent user.

2.4.0 Empirical Literature Review

Empirical literature review examines past research conducted by various scholars and authors on the impact of a paperless banking system on consumer satisfaction.

2.4.0 Impact of paperless banking system on customer satisfaction

(Raji et al., 2021) investigated the influence of electronic banking on customer satisfaction in Nigeria, with a focus on Kwara State banks. The influence of e-banking on customer satisfaction was investigated using correlation and regression analysis. A total of 390 people were polled for the study. Security, dependability, simplicity of use and user-friendliness, transactional speed, and responsiveness were all independent criteria in the study, while customer satisfaction was the dependent variable. Furthermore, there is a positive correlation between customer satisfaction and all of the independent factors. According to the regression analysis security, transactional speed, ease of use, reliability, and responsiveness all have a positive and significant impact on customer satisfaction. (Raji et al., 2021).

In order to correctly depict the characteristics of green banking operations and their impact on total customer satisfaction, Herath & Herath (2019) performed a research in Sri Lanka. Security and trust features, convenience and ease of use features, value creation features, transparency, reliability, safety and privacy, speed of transaction, congestion free, ease of contact, easy accessibility, and customer friendly websites were used as dependent variables and customer satisfaction as a dependent variable . According to the study consumer satisfaction with the

aforementioned criteria has a significant impact on overall customer satisfaction with e-banking. Customer satisfaction with security, on the other hand, had the biggest impact on total e-banking satisfaction, while customer satisfaction with value proposition had the least. (Herath & Herath 2019)

GM Ling (2016) conducted a study In Malacca to determine the factors that influence customer satisfaction with Internet banking. They discovered a number of factors that impacts customer satisfaction with online banking. Service quality, web design and content, security and privacy, convenience and speed were identified as factors which impacts internet banking. The study was conducted using a sample size of 200 working adults. The results of this research showed that web design and content, convenience and speed impacts customer satisfaction toward Internet banking. (GM Ling 2016)

Jannatul Mawa Nupur (2010) performed study in Bangladesh to determine the impact of e-banking factors on customer satisfaction. A total of 250 clients were utilized in the investigation. Customer satisfaction in e-banking is influenced by dependability, responsiveness, certainty, empathy, and tangibles, according to the research. The study also finds that dependability, responsiveness, and assurance all play a role in satisfying e-banking customers in Bangladesh. (Jannatul Mawa Nupur 2010).

Thabit Altobishi et al. (2018) did research In Jordan to see how E-Banking impacts customer satisfaction. The goal of the study was to see how electronic banking services affects consumer satisfaction. A total of 175 Jordanian customers were employed in the investigation. Convenience, privacy, cost, ease of use, personalization and customization, and security are six indicators that affect customer satisfaction with E-Banking. The survey questions and statistical data for these six variables reveal a positive association between customer satisfaction and E-Banking usage among consumers. There is a link between five indicators and customer satisfaction as well as the use of E-Banking. The study also noted that privacy has no impact on customer satisfaction. (Thabit Altobishi et al 2018)

Maseke (2018) conducted a survey to determine the impact of mobile banking on consumer satisfaction, focusing on Commercial banks in Namibia, specifically Keetmanshoop . The study polled sixty customers who used mobile banking at each of the four commercial banks involved in the survey. According to the study majority mobile banking users are adults aged 25 and under, more so the study found that airtime purchases were the most popular service, while fund allocation was the least popular. They signed up for mobile banking after being

swayed by mobile banking marketing thus adverts and other marketing strategies. Customer satisfaction rate was 75% indicating that mobile banking is efficient, dependable, cost effective, as well as available on multiple mobile networks and usable with mobile devices. However, customers were facing some challenges in reversing or cancelling funds transferred to wrong account numbers and mobile banking was not supporting electricity purchase for Keetmanshoop municipality. (Maseke 2018).

2.4.1 Benefits of paperless banking

Ndlovu and Sigola (2013), conducted a study on benefits and risks of electronic banking in Zimbabwe. The goal of this study was to look at the benefits and dangers of electronic banking for Zimbabwean commercial banks. The study's aims and hypotheses were addressed through a cross-sectional survey and the study identified five benefits of e-banking in Zimbabwe which are decreased costs, increase customer loyalty, provide convenience, boost profitability, and competitive in marketing. According to the report, the main advantages of e-banking are increased consumer convenience and cost savings. (Ndlovu and Sigola 2013)

Endale Genie Tiruneh (2015) conducted a survey on barriers and benefits of adopting e-banking system in Ethiopia .He noted that customers benefit from E-Banking because of the convenience, time savings, and simple access to banking services. The customer can transact at any time and from anywhere in the country or abroad. There are no restrictions on time or location. Additionally customers have no need to stand in long lines this means that they can save time. Customers can access banking services at any time 24/7 more so customers will benefit from the ease of access to banks provided through E-Banking. (Endale Genie Tiruneh 2015).

Dr. Hajera Fatima Khan (2017) conducted a research on E-Banking: Benefits and Issues in Saudi Arabia the study identified benefits of using e-banking systems. The identified benefits are better cash management, speed, funds management, swift movement of funds domestically and across borders, time management, easily accessible anywhere to a PC, PDA, mobile device, with an internet connection. E-banking provide a 24 hour link to account information and allows customers to view financial transactions anytime. (Dr. Hajera Fatima Khan 2017)

Bojan Daniela et al (2010) conducted a research in Romania on electronic banking – advantages for financial services delivery. The paper examines some of the advantages of electronic banking products .The study concluded that E-banking is a fully automatic service

for traditionally banking customer's products based on information technology platforms. The study also identified access to accounts, the ability to move their money between different accounts or making payments via e-channels, low error rates and quicker delivery of financial service as major advantages of e banking. (Bojan Daniela et al 2010)

(Kazmi & Hashim, 2015) conducted a survey on E banking in Pakistan: Issues and Challenges .He identified the following benefits of E-Banking, electronic banking is available services 24/, there is no need to wait in long lines. Clients have easy access to their accounts, Electronic banking is a service that saves time. ATMs make it simple to obtain cash. Client information is more accessible and faster. All of the services are available on the bank's website. Clients can readily see their fund management history information. (Kazmi & Hashim, 2015).

(<https://www.paisabazaar.com>) identified forms of paperless banking in India and their use. They identified five forms namely online banking, ATM and debit card, Phone banking, SMS banking, mobile banking they further highlighted that Online banking services make transactions simple and secure. Customers can get cash quickly via ATM and debit card services. Customers will profit from the phone banking service because it will save them time. Customers will receive alerts and information via SMS banking. Mobile banking enables customers to do transactions utilizing their mobile phones with simplicity. (<https://www.paisabazaar.com>).

2.4.2 Challenges of Paperless Banking

Anju Dagar et al (2014) conducted a study on Online Banking Benefits and Related Issues. The study's main goal was to uncover the advantages and disadvantages of using online banking. According to the report, there are many complex transactions that cannot be resolved without a face-to-face interaction with bank workers, which is not possible with internet banking this being one of the major drawbacks of paperless banking. Furthermore, one of the most serious drawbacks of internet banking is security concerns. In the cyber realm, there is always the possibility of hacking. On the internet, hacker attacks, phishing, malware are frequent. Anju Dagar et al (2014).

Sohail and Shanmugham (2002) conducted an e-banking research in Malaysia and discovered that internet banking, like any other business, is subject to fraud. The most commonly found

type of fraud is the use of fake bank website. These are clone sites that appear exactly like your online banking site. They usually appear when a client's bank website address is misspelled slightly. If caution is not exercised, a customer may enter his username and password before realizing he is not linked to his own bank. (Sohail and Shanmugham 2002).

Difficulties & Challenges in Mobile Banking: A Customers' Perspective was conducted by Prerna Sharma Bamoriya (2011) carried out a study in India on Issues & Challenges in Mobile Banking: A Customers' Perspective, to assess issues in mobile banking from both mobile banking users and non-users. The survey discovered that mobile device operability, security/privacy, system challenges and service standardization are the most pressing challenges that mobile banking consumers confront.

Arun Ingle and Rajendrasingh Pardeshi (2012) conducted a research on challenges of internet banking in India the study found out that most internet banking users face challenges on learning to use it ,start-up may take time as well as bank sites changes and trust factor. Start-up May Take Time In order to register for bank's online program, customers will probably have to provide ID and sign a form at a bank branch. If a customer and their spouse wish to view and manage assets together online, one of them may have to sign a durable power of attorney before the bank will display all of their holdings together. Additionally learning curve for banking sites can be difficult to navigate at first. Bank site changes even the largest banks periodically upgrade their online programs, adding new features in unfamiliar places. In some cases, customers may have to re-enter account information. The biggest hurdle to online banking is learning to trust it. Customers usually ask the following questions when using internet banking did transaction go through? Did I push the transfer button once or twice? (Arun Ingle and Rajendrasingh Pardeshi (2012))

In order to assess the problems of online banking in underdeveloped nations, Adewuyi I.D. (2005) conducted a study in Nigeria. The paper examines, the benefit of internet banking and challenges of internet banking. Accessibility and security are important downsides of internet banking in underdeveloped nations, according to the report. Even in nations where online banking has long been established, one of the most critical factors is the security of financial transactions via the Internet, according to the survey. Accessibility is another issue. The capacity to connect to the internet is necessary and a precondition for using internet banking. The more people who have access to computers and the Internet, the more likely they are to utilize Internet banking. (Adewuyi I.D 2005)

2.4.2 Forms of Paperless banking

Kirti Takkar (2019) investigated the challenges and opportunities of e-banking in India in this study he notes seven forms of green banking services offered by Indian banks he noted Automatic Teller Machines (ATMs), Internet banking, Mobile banking, phone banking, debit and credit cards, NEFT and RTGS transactions and Smart cards .The study concluded that Internet banking and mobile banking is the widely used form of banking in India and ATMs are the least used (Kirti Takkar 2019).

Drigă I, Isac C (2014) conducted a survey in Romania on E-banking services, features, challenges and benefits. He identified four forms of e banking namely Home banking, PC banking, Internet banking and Mobile banking. He defined home banking as the practice of completing banking transactions from the comfort of one's own home .Additionally e-banking allows consumers to get information about their personal accounts via the phone, data is accessed through a phone connection, and clients can transfer money and check their balance, among other things. PC banking is a type of banking that allows clients to conduct bank transactions using a computer by giving a proprietary financial software package that allows the consumer to conduct financial transactions using a modem from his or her personal computer. Internet banking, also known as online banking, is a more developed service, a system that allows bank users to browse through accounts and general information on bank products and services, as well as perform account transactions directly with the bank using the internet as the delivery channel, through a personal computer. On mobile banking he indicated that mobile banking is a method that allows bank customers to execute various financial transactions using their smartphones. The study concluded that mobile banking and internet banking is the widely used form of paperless banking (Drigă I, Isac C 2014).

(Virender Kaushal et al 2016) conducted a research in India on e- banking: challenges and issues .The study noted paperless banking forms used in India they identified Online, internet, virtual, phone banking and ATMs as the widely used forms of paperless banking in India. (Virender Kaushal et al 2016)

Dr. Hajera Fatima Khan (2017) did research on E-Banking: Benefits and Issues in Saudi Arabia. The study's goal was to identify e-banking forms, benefits, and concerns. Personal computer (PC) banking, Internet banking, virtual banking, online banking, home banking, and remote electronic-banking are the most extensively utilized kinds of paperless banking in Saudi

Arabia, according to the study. E-banking also includes phone banking and the usage of automated teller machines, according to the study. (Dr. Hajera Fatima Khan 2017)

Ing. Adriana Chovanová, (2006) conducted a study on forms of electronic banking .She identified phone banking, SMS banking, home banking, Internet banking and mail banking. (Ing. Adriana Chovanová, 2006).

2.5.0 Knowledge Gap

Many researchers have been drawn to the topic of electronic banking, and many studies have been conducted in various countries, focusing on various aspects such as acceptance, technology, and customer service, among others. The majority of customer satisfaction studies have been conducted in nations with exceptional technical breakthroughs and macroeconomic variables outside of Zimbabwe. In comparison to other countries, Zimbabweans are sluggish to absorb technology. In Zimbabwe, little has been done to address the impact of paperless banking on customer satisfaction. Maseke (2018) conducted a survey to determine the impact of mobile banking on consumer satisfaction, focusing on commercial banks in Namibia the study was conducted in Namibia ,results might be different in Zimbabwe additionally the study focused on mobile banking there is need to focus on the other forms of paperless banking.

Thabit Altobishi et al. (2018) conducted a research in Jordan to determine the impacts of e-banking on customer satisfaction the survey was conducted using Jordanian customers the results may vary from the Zimbabwean context due to various factors such as technology, and other variables that might be different. More so the study focused on only six variables there is need to focus on other variables that impacts customer satisfaction.

GM Ling (2016) conducted a research to determine the impact of internet banking on customer satisfaction in Malacca .The study focused on one form of paperless banking which is internet banking there is need to focus on other forms of paperless banking to determine their impacts on customer satisfaction .Additionally the study used a sample size of 200 working adults which are not necessarily users of paperless banking. More so paperless banking is dynamic and the study was carried seven years ago meaning to say the findings might be outdated in some way so there is need to carry out a recent study. The study only looked at internet banking satisfaction features. In comparison to other studies, this one focused on internet banking features rather than e-banking factors.

Herath & Herath (2019) performed a research in Sri Lanka to depict the characteristics of green banking operations and their impact on total customer satisfaction the study used Security and trust features, convenience and ease of use features, value creation features, transparency, reliability, safety and privacy, speed of transaction, congestion free, ease of contact, easy accessibility, and customer friendly websites as variables there is need to focus on other variables of paperless banking that impacts customer satisfaction .

Ndlovu and Sigola (2013), conducted a study on benefits and risks of electronic banking in Zimbabwe. The study focused more on paperless banking benefits on the side of banks and less on the side of customers' .Additionally the study was carried out in 2013 and during this time paperless banking was still new in Zimbabwe there is need to carry a more recent study.

Endale Genie Tiruneh (2015) conducted a survey on barriers and benefits of adopting e-banking system in Ethiopia .The benefits noted varies from country to country and the study was carried in Ethiopia and benefits of paperless banking depends mostly on the competence of systems used by banks to support paperless banking .

(Kazmi & Hashim, 2015) conducted a survey on E banking in Pakistan: Issues and Challenges he identified paperless banking benefits the study was carried in Pakistan which have a different technology as well as economic and political environment from Zimbabwe banks in Pakistan they use different technologies from Zimbabwean banks this affects benefits and satisfaction levels on customer ,to add on (Kazmi & Hashim, 2015) noted that one of the benefits of paperless banking is that ATMs make it simple to obtain cash this doesn't apply in Zimbabwean context because people hardly get cash on ATMs they are not commonly used.

Additionally Hajera Fatima Khan (2021) in her study she noted benefits of e-banking the study was carried in Saudi Arabia, banks in Saudi use different technology with Zimbabwean banks since paperless banking is technology centred benefits enjoyed by Zimbabwean clients might be different from those enjoyed by e banking users

Bojan Daniela et al (2010) conducted a research in Romania on electronic banking – advantages for financial services delivery. The paper examines some of the advantages of electronic banking products. Paperless banking is dynamic the study was carried out in 2010 meaning to say its outdated in some way there is need to carry out a more recent study.

Sohail and Shanmugham (2002) conducted a research in Malaysia to determine challenges associated with the use of internet banking. The study focused on one form of paperless banking there is need to focus on challenges associated on other forms of paper less banking. More so the study was carried twenty years ago making it outdated.

Anju Dagar et al (2014) conducted a study on Online Banking Benefits and related Issues in their study they cited disadvantages of using online banking the study focused on internet they is need to focus on disadvantages of the remaining forms of e-banking .

(Drigă I, Isac C 2014) and researched on forms of paperless banking most of the forms they outlined are not common in Zimbabwe some are not even in use in Zimbabwe for instance PC banking noted by (Drigă I, Isac C 2014) they are not common in Zimbabwe, little have been done to study forms of paperless banking in the Zimbabwean context.

Ing. Adriana Chovanová, (2006) conducted a study on forms of electronic banking .The study was carried out in 2006 and some of the forms of paperless banking were not yet introduced and some were not common.

As a result, this study fills the gap by examining whether or not paperless banking in Zimbabwe's banking sector provides satisfaction to customers.

2.6.0 Chapter Summary

From a theoretical perspective, this chapter covered paperless banking and customer satisfaction. It also examined the theoretical underpinnings of paperless banking and customer satisfaction. Practical research carried out by earlier academics has confirmed the impact on customer satisfaction. The study's methodology will be covered in the following chapter.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter focuses on the methodology for completing this research project, as well as the approach that have been employed in data collection, analysis, and methodology. This chapter focused on the methods and strategies that will be utilized to gather data on the impact of paperless banking on customer satisfaction. The chapter also focuses on research design, target population, sampling design, data collection and data analysis.

3.1 Research design

According to Polit & Beck, (2006), a research design contains a summary of the steps the researcher will take, from detaching the hypothesis or research questions from their practical applications to the data analysis itself. The researcher employed both a descriptive and an exploratory research approach for this study.

3.1.1 Exploratory research

Bless and Hingson-Smith (2010) suggested that an exploratory research study is one that examines a specific phenomenon with the primary goal of comprehending the situation. The goal of exploratory research is to acquire basic data that was utilized as a backdrop in defining the problem statement. Therefore for the purpose of this research the researcher was aided by previously discovered information in identifying the problem and ensuring that the research's final goal was reached. The researcher looked for information on the internet, in documents, and in newspaper articles, as well as consulting with specialists in the field of electronic banking.

3.1.2 Descriptive research

Descriptive research is used to accurately depict the characteristics of the people, occasions, or circumstances being studied. It is also intended to provide readers a picture of the situation as it develops. (Gray & Sutherland, 2013). According to Kumar (2011), descriptive research is a description of problems or conditions that exist. Descriptive study uses both qualitative and quantitative data to acquire a thorough knowledge on the impact of paperless banking on

consumer satisfaction. A descriptive survey enabled the researcher to collect first-hand information on the effectiveness of paperless banking on customer satisfaction. Descriptive research design, helped the researcher to describe, tabulated as well as depicted data using visual aids such as pie charts and graphs. The design allowed the researcher to present an account of data and information gathered as well as describing the effectiveness of paperless banking on customer level satisfaction.

3.2 Target population

A population is the entire group of persons or set of objects and events the researcher does a research (Collins and Hussey, 2000). Singh (2006) also noted that target population is a group of items which have the same characteristics. For the purpose of this study a target population refers to all e banking users in Harare. A total of two branches was used namely SSC branch and Samora Macheal Branch all in Harare. A total population of 120 was used comprising of NBS paperless banking customers thus forming the basis for this study. Table 3.1 below indicates the distribution of the total sample size among the targeted electronic banking customers.

Table 3. 1 The target population of the study

Name of branch	Target population
Samora Macheal	75
SSC branch	45
Total	130

Source: Researcher's raw data

3.3 Sampling techniques

Sampling is used to determine conclusions about the entire population by selecting some elements from the entire population. For the purpose of this study the research used non-probability sampling technique that's convenient sampling method. Non-probability sampling is also known as intentional sampling or purposive sampling, and it is a technique in which the researcher selects a sample deliberately (Cooper & Schindler, 2003). The purpose of this technique was to reduce cost and to save time. The researcher selected respondents which are

easily accessible to him, that is, those who were nearest. Therefore, most of the respondents were from NBS Samora Macheal than SSC.

3.4 Sample size

Douglas (2006) defined a sample as a list or other devices used to define a researcher's population of interest. Kumar (2011) refers to a sample as a selected subgroup of the population which the researcher is interested in. The population of interest is too large to attempt to survey all of its members so sampling will reduce the cost and time spent on the research. The sample size will be derived from the study population using convenient sampling.

The following formula will be used to determine the sample size

$$n^* = \frac{n}{[1 + (n/N)]}$$

Where:

n^* = the necessary size

n = a desired sample size

N = an estimated population size

n/N = sampling fraction

Source: Mutambirwa (2002)

Using the above statistical formula, a total of 90 inclusive of NBS, Samora Macheal customers and SSC, out of the 120 were selected for the study. This sample approximately represented 75% in Harare.

Table 2.2 Sample size

Branch respondents	Population	Sample	Sample as a % of Branch's Population
Samora Macheal	75	63	84%
SSC branch	45	27	60%
Total	120	90	75%

Source: Researcher's raw data

3.5 Data collection techniques

Data collection means gathering information to address those critical research questions. The researcher used both primary and secondary data. Secondary data was gathered from all NBS branches in Harare. The researcher collected data from customers who are registered for e banking as well as opinions from customers pertaining paperless banking.

3.6 Data sources

3.6.1 Primary data

Since primary data is gathered for the first time, it is unique in nature and serves the intended purpose (Saunders, et al, 2009). Primary data consist of information gathered to address a specific issue or problem at hand, Evans and Berman (2005). Primary data is collected from original sources thus direct from the field of study. In this research primary data was collected from NBS customers in Harare. The researcher designed questionnaires and distribute them for completion by customers using e banking. Both closed and open-ended questions was used to gather data for this research.

3.6.2 Secondary data

Collins and Hussey (2008) noted that the use of secondary data is a vital exploratory that enables the researcher to find out what is already known on the topic, identify gaps and develop new ideas. According to Kumor (2009) secondary data refers to the available data that was collected for some other purposes other than solving the current problem. For the purpose of this study secondary sources of data was used to obtain some additional information about the topic. The study relied on both unpublished and published data, such as journal papers and the internet that is relevant to the topic. Secondary data is less expensive to obtain and time efficient, reducing the time it takes to finish the study. Secondary data also supplemented primary data and serve as the foundation for comparisons.

3.7 Research instruments

These are the tools that was utilized to obtain primary data. Questionnaires and interviews was used as research instruments by the researcher.

3.7.1 Questionnaires

Best and Khan (1993) defined questionnaires as any document containing questions designed to implore data for analysis. Aakker (1995) added that questionnaires are a set of questions presented to respondents in order to attain their views regarding the area under study. Questionnaires were used to gather information from respondents while respecting their privacy. For the purpose of this study the researcher gave questioners to respondents and allowed them to respond without the researcher's help. After receiving authorization from the bank, the researcher physically distributed the questionnaires to the respondents. Both open and close ended questions were included in the questionnaire. In order for the researcher to give ample time to the respondents to respond the researcher gave questionnaires to respondents and collected them later. Using questionnaires came with a lot of advantages which include that respondents answered questions at their own pace and they were given ample time to respond ,they heard time to think before responding hence improving the quality of response. Questioners allowed the researcher to collect relevant information necessary to address the problem. Data collected using questionnaire was easy to process. Data collected using questionnaires was uniform and comparable since the questioners were designed in the same manner, everyone is asked the same questions making the response standard and easy to process.

However, the effectiveness of questionnaire depended with response rate. More so since the questioners were responded in the absence of the researcher some respondents failed to understand some questions hence answers provided were not correct. Additionally several responders took time to complete the questionnaire, causing delays on data analysis.

3.7.2 Interviews

According to Collins and Hussey (1993) an interview is a method of collecting data in which selected participants are asked questions in order to find out what they do, think or feel in the context of a chosen aspect of inquiry. According to Leedy (2010), interviews are a technique for gathering data in which researchers ask participants essentially open-ended questions on the subject at hand. Interview subjects were chosen at random from the general sample for the purpose of this study's personal interviews.

There are many advantages of interviews firstly the researcher was able to clarify questions to the respondents this allowed informed responds. Using Interviews decreased missing information unlike questionnaires where some questions were not responded. Additionally the interviewer was able to further ask questions and seek clarification. More so using interviews allowed the research to see facial expressions of respondents.

However, some interviewees were unwilling to give up their time. Additionally some of the responses and comments were inconsistent, therefore analysing the findings of interviews was difficult.

3.8 Data collection procedure

The researcher used emails and phone calls to schedule meetings with those who were willing to participate. Some respondents were provided with questionnaires via email, making collection easier because they were returned via email. All questionnaires were self-administered to the respondents. They were collected after the participants had completed their responses. Customers and employees of the society were also interviewed. During the interviews, the researcher took notes on the respondents' thoughts and opinions.

3.9 Data analysis

The researcher made use of primary and secondary data. Data analysis is the process of reviewing data acquired in the field, also known as primary data, or through experiments, as well as drawing conclusions and judgments. This entails examining acquired data and drawing inferences, as well as formulating conclusions and extracting critical variables.

3.10 Validity and reliability of data

According to Leedy (2010), validity refers to the degree to which the research instruments are intended to measure the outcome. Primary data was collected from respondents via structured questionnaires that's includes both closed and open-ended questions. Validity ensures that findings from the study are genuine and credible. Kumer (2005) notes that validity means that correct procedures have been applied to find answers to research questions. Questionnaires are used to guarantee that data is accurate and valid. Validity, according to Weiner (2007), is the degree to which a measurement tool or approach that succeeds in describing or quantifying that which is designed to be measured whereas, dependability refers to the degree to which a

measurement technique can be relied on to produce consistent results when used repeatedly. . In order to ensure the study's reliability and validity, the researcher conducted a pilot study in order to uncover the questionnaire's flaws before distributing it to the respondents. This procedure helped to identify questionnaire errors, ensure usability, and reduce the risk of misinterpretation. . Thus, fine tuning the questionnaire hence improving quality of data to be collected from the field. A small group of fifteen people, largely relatives and friends of the researcher, was used during the pilot study but were not involved during the initial study. Following the pilot study, a number of improvements were made to the questionnaire.

3.11 Data presentation and analysis

Bell (2006) correctly argued that raw data taken from questionnaires and interviews needs to be recorded, analysed and interpreted. According to Shamoo and Resnik (2006) various analytical procedures provide a way of drawing inductive conclusion from data and distinguish the phenomenon of interest from the statistical fluctuations present in the data. To obtain relevant results, collected data from questionnaires and interviews was organized, analysed, and presented. Pie charts, tables, and bar graphs will be used to illustrate the data. The data will be analysed using Microsoft Excel.

3.12 Ethical considerations

Hatch (2002) recommends that a study needs to be sensitive to vulnerable respondents and respect the power inequalities by eluding placing the respondents at risk. Hatch (2002) recommends that a study needs to be sensitive to vulnerable respondents and respect the power inequalities by eluding placing the respondents at risk. Ethics refers to a code or set of principles that guide the research process. To ensure that the research maintains ethical considerations the researcher will collect data with informed consent. To ensure confidentiality the researcher will ask respondents not to write their names on questioners.

3.13 Chapter summary

This chapter focused on the selection of an appropriate research design in line with the nature of the problem. The chapter also focus on sample size, target population, sampling techniques, the research instruments, data validity and reliability and a method of presenting data, analysis procedures. The next chapter will focus on data presentation and analysis.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS & DISCUSSION

4.0 Introduction

The purpose of this chapter is to provide a full explanation of the study and interpretation of the findings in accordance with the particular objectives, which are to examine the impact of paperless banking on customer satisfaction based on the findings of the field survey. In order to meet the research objectives, the researcher used questionnaires, interviews, as well as secondary data sources to collect data. Tables, charts, graphs, and figures are used to exhibit and discuss the collected data. The researcher used Tables, charts, graphs, and figures to exhibit and discuss the collected data.

4.1 Response rate

4.1.1 Questionnaire response rate

The researcher handed 90 questionnaires but got 80 responses. Some respondents did not complete the questionnaire and returned them uncompleted, presumably due to a lack of time or interest. 11.1% of the questionnaires were returned incomplete. Table 4.1 below shows the number of questionnaires distributed and the response rate.

Table 4.1 Response rate of questionnaire

Sample site	Number distributed	Number returned	Percentage of returned	Number of not returned	Percentage of not returned
<u>Samora Macheal</u> Branch	63	55	87	8	13%
SSC Branch	27	25	93%	2	7%
Total	90	80	89%	10	11%

Source: Primary data

Of the 90 questionnaires, the researcher distributed 63 questionnaires at Samora Macheal branch and got a response rate of 87% .The response rate at SSC branch was 93%..

The response rate was 86 percent when the total number of questionnaires distributed was compared to the total number of questionnaires returned. As a result, the researcher deems this a fair and trustworthy representation of the entire population, as noted by Bryman & Bell (2003), who state that when the sample response rate exceeds 85%, the results are considered excellent and may be applied to the entire population.

4.1.2 Interview response rate

The researcher also interviewed 11 customers out of the intended 15 customer's .Table 4.2 below shows interview response rate.

Table 4.2 Interview response rate

Interviewees	Responses	Percentage response rate	
Samora Macheal branch Customers	7	78%	
SSC branch customers	4	67%	
Total	11	73%	n=80

Source: Primary data

Only 11 of the 15 planned interviews were carried out, with a response rate of 73% percent. Four 4 interviews were cancelled due to respondents' hectic schedules and a lack of time. The overall response rate was sufficient to validate the research findings.

4.2 Research findings

This section present, interpret, and analyse the research findings gathered during data gathering.

4.2.1 Demographic data of respondents

Table 4.3 Demographics of customers

Demographic characteristics	Frequency	Percentage%
Gender		
Male	52	65%
Female	28	35%
Total	80	100%
Age (years)		
Below 20 years	15	19%
21 to 30 years	27	34%
31 to 40 years	20	25%
41 years and above	18	22%
Total	80	100%
Level of education		
No formal education	0	0
Secondary level	9	11.25%
Undergraduate	24	30%
Degree+	47	58.75%%
Total	80	100%
Level of Income		
Less than 10000	14	17.5%
11000-20000	18	22.5%
21000-30000	20	25%
31000-40000	12	15%
More than 41000	16	20%
Total	80	100%

(n=80)

Source: Primary data

Table 4.3 shows that males made up 65% of the total participants, while females made up 35%. Males make up a bigger percentage of participants than females. As a result, the study shows that men are the most frequent consumers of paperless banking. The findings are comparable to those of Cheng et al (2006), who reported that males had a 72 percent response rate for internet banking, whereas females had a 28 percent response rate.

It can be noted that respondents aged 20 and under made up 19% of the total, while those aged 21 to 30 made up 34%. The age group of 31 to 40 years old accounted for 25% of the total, while those aged 41 and up accounted for 22%. The majority of those who responded were between the ages of 21 and 40, according to the data. The findings show that the most active users of paperless banking are still-working youths, students, and are IT-savvy. Most of NBS customers are pensioners and from the result it shows that despite them being the majority customers of NBS there are not the majority active users of paperless banking. This is

consistent with Fochamnyo's (2013) findings, which found that youths are the most active consumers of electronic banking.

To add on table 4.3 shows that majority of respondents (58.75%) had a bachelor's degree, followed by undergraduates (30%), secondary school students (11.25%), and no one with no formal education. As a result of the research findings, it was discovered that paperless banking users have varying levels of education, with the more educated being the most frequent users of electronic banking. This is due to the fact that they are educated and hence grasp the concept on how to use e-banking services. This is similar to a study by Fochamnyo (2013), which found that client attitudes towards internet banking are influenced by education.

According to the table 4.3, the majority of respondents earn between 21000 to 30000 per month, resulting in 25%. The remaining 22.5% of respondents earn between 11000 to 20000 , while the remaining 20% earn more than 41000 , 17.5% earn less than 10000 and the remaining 15% earn between 31000 to 40000. The majority of paperless banking users are in the middle income bracket, according to the findings. The researcher discovered that the customers' monthly income has no bearing on their levels of satisfaction. Furthermore, paperless banking requires only a good internet connection, a competent smart phone or personal computer, and has nothing to do with the consumers' income levels. When compared to a high-income earner who may have a negative attitude about paperless banking and poor satisfaction levels, a low-income earner can have a positive attitude and high satisfaction levels. The findings contradict those of Fochamnyo (2013), who indicated that high-income earners utilize e-banking frequently.

4.3.0 Years of e-banking services

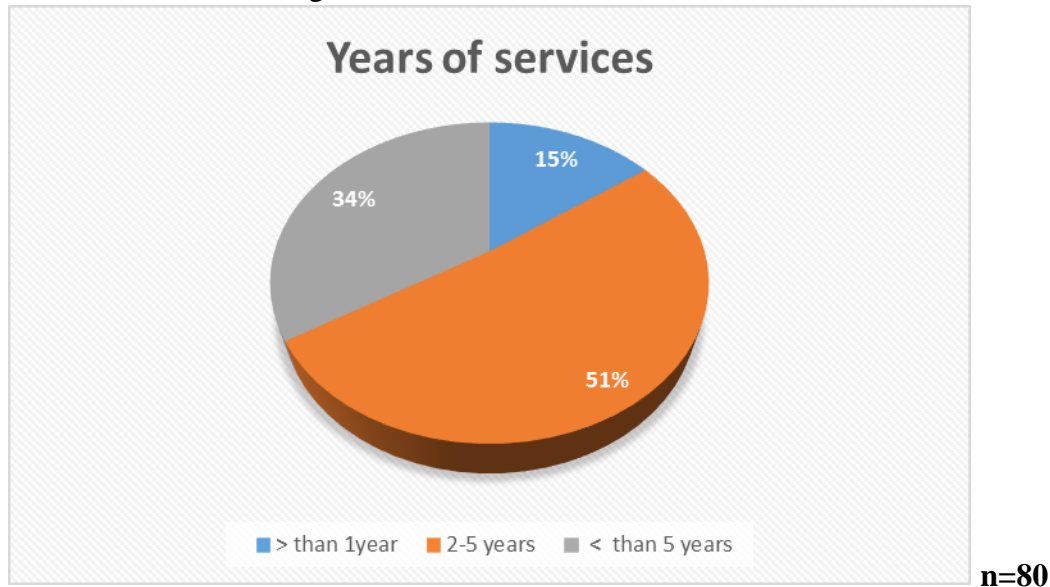


Figure 4.1 Distribution of respondents based on the years of e-banking services

Source: Primary data

Customers have been banking with NBS for a long time, as shown in Figure 4.4. According to the findings, 15% of respondents have been customers for less than a year, 34% have been customers for more than 5 years and 51% have been customers for 2 to 5 years. NBS switched from traditional banking era to paperless banking in 2016 and the findings shows that ever since its switch to paperless banking 34% have been using paperless banking and 51% adopted paperless banking a year later, since the early years of its adoption, these two ranges show high customer loyalty and use of paperless banking.

4.4.0 Forms of paperless banking

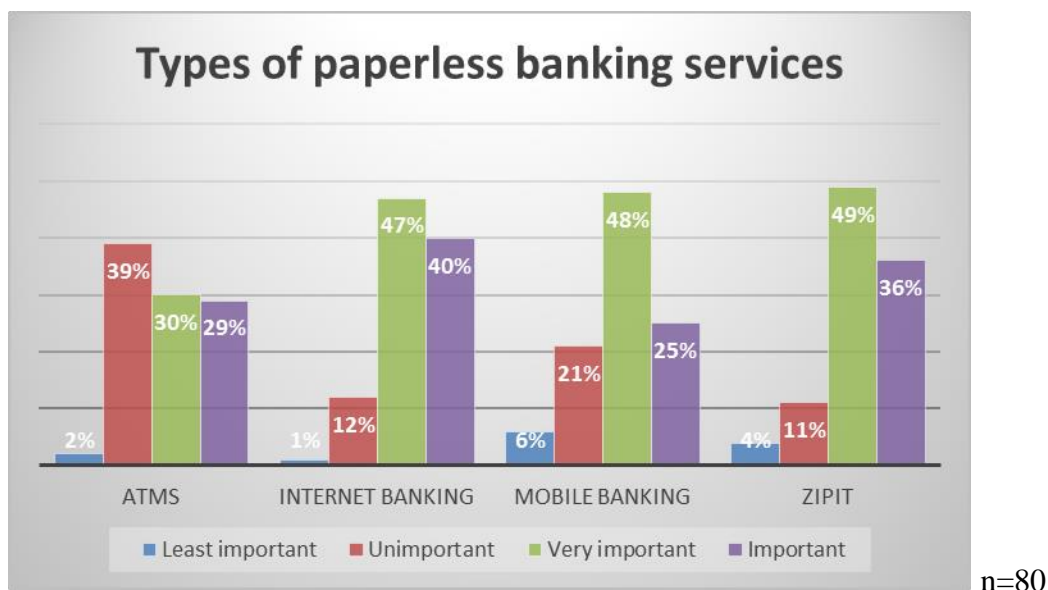


Figure 4.2 Responses for the types of paperless banking

Source: Primary data

Fig 4.2 shows the forms of paperless banking and their importance to customers. According to the findings, Internet banking, mobile banking, and ZIPIT have the highest response rates, making them the most essential in the eyes of customers. The importance of internet banking is 87 percent, mobile banking is 73 percent, and ZIPIT is 85 percent. This is because they are the most generally used sorts of paperless banking services. The findings are in line with Kirti Takkar (2019)'s findings who in his research noted that Internet banking and mobile banking are the widely used form of paperless banking in India and ATMs are the least used. The findings also contradicts those of (Virender Kaushal et al 2016) who indicated that ATMs are one of the most widely used form of paperless banking in India. In Zimbabwe due to cash shortage and general preference of plastic money ATM's are not commonly used form of paperless banking and most banks have suspended the use of ATM's due to cash shortages in the country.

4.4.0 Impact of paperless banking

The survey sought to determine whether paperless banking impacts customers positively or negatively .Below are the results.

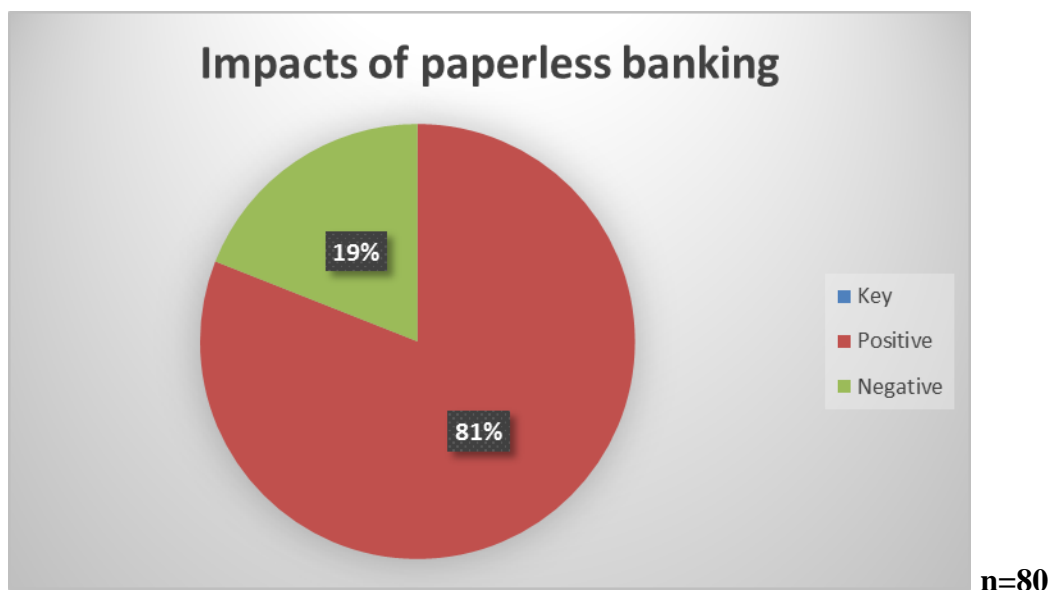


Figure 4.3 Distribution of respondents based on the impacts of customer satisfaction

Source: Primary data

The respondents were also questioned on whether paperless banking impacts them positively or negatively. The data revealed that 81 percent of respondents believed that paperless banking have a positive impact on customer satisfaction level, while 19 percent disagreed. Paperless banking provides many benefits such as ease of use, convenience and cost reduction that positively impacts customers on their satisfaction levels, e-banking also have its challenges such as risk of fraud, system challenges among others that have a negative impact on customers' satisfaction level. The findings are comparable to those of Mas and Radcliffe (2010) who noted that paperless banking have a positive impact on customer satisfaction. The findings are in contradiction to (Dogarawa Ahmad Bello 2005) who noted that electronic banking in Nigeria have a negative impact on customer satisfaction.

4.4.1 Factors impacting customer satisfaction with e-banking

This section displays factors that affect customer satisfaction levels with e-banking services. The researcher considered the following variables, convenience, transaction speed, reliability, ease of use and security are among the aspects examined. The table below provides a descriptive analysis of the Likert scale data.

Table 4.4 Distribution of respondents based on factors that influence customer satisfaction level

Table 4.4 Distribution of respondents based on factors that influence customer satisfaction levels

Factor	Agree		Strongly agree		Disagree		Strongly Disagree	
	%	(n)	%	(n)	%	(n)	%	(n)
Convenience have an impact on satisfaction with e-banking	40	(32)	15	(12)	36	(29)	9	(7)
Transaction speed have an impact on satisfaction with e-banking	35	(28)	21	(17)	24	(19)	20	(16)
Reliability have an impact on satisfaction with e-banking	25	(13)	18	(14)	38	(30)	19	(23)
Ease of use have an impact on satisfaction with e-banking	42	(34)	25	(20)	13	(10)	20	(16)
Security have an impact on satisfaction with e-banking	51	(41)	28	(22)	14	(11)	7	(6)

Source: Primary data

The majority 89% indicated that convenience have a positive impact on their satisfaction with paperless banking. The results means that convenience offered by paperless banking have a positive impact on the satisfaction levels. Table 4.4 shows that paperless banking is convenient with 89% of respondents agreeing this means that's since paperless banking have an impact on their satisfaction, customers are generally satisfied with convenience offered by e-banking. This is in line with (Shariq, 2006) who found out that customers that utilize e-banking are mostly motivated by convenience. According to previous study, the majority of clients prioritized the convenience of e-banking (Lallmahamood, 2007).The findings were also echoed by (Ainin et al., 2005) who noted that customers who utilized e-banking were more concerned with the convenience of financial transactions .All this findings shows that convenience have a positive impact on customer satisfaction .

According to the study 56% agreed that transaction speed have an impact on their satisfaction level .E-banking is positively related to speed, customer consider transaction speed to have an impact on their satisfaction this means that in order to increase customer satisfaction banks can increase transaction speed. The findings are similar to those of Shariq (2006) who discovered a link between customer satisfaction and transaction speed on internet banking. Furthermore the results were also echoed by the findings of (Raji et al., 2021) who determined using a regression analysis that transaction speed have a positive and significant impact on customer satisfaction. Using the TAM Surendran (2012) noted that perceived advantages such as transaction speed impacts the usage of technology he also noted that perceived usefulness is

the magnitude to which an individual using information systems will enhance their performance.

Another factor considered is reliability, according to the study reliability have no impact on customer satisfaction, according to the results the majority 57% disagree that reliability have an impact on customer satisfaction with e-banking. The findings contradicts those of (Herath & Herath 2019) who found out that reliability impacts customer satisfaction.

On ease of use the majority 67% of the respondents indicated that ease of use have a positive impact on their satisfaction with paperless .The findings revealed that customer satisfaction with e-banking is linked to ease of use. The level of customer satisfaction will rise as the degree of ease of use increase. The findings are similar to those of (Kassim and Abdullah 2010) who found that ease of use was positively related to customer satisfaction. Customers who used e-banking were more focused on the easier ways to conduct banking transactions (Ainin et al., 2005).Using TAM perceived ease of use determine the adoption of new technology by customers meaning if a customer perceive that a new technology might be ease to use that will impact his decision to adopt and use new technology .

The majority of 79% agreed that security impacts customer satisfaction. Security may be described as a sort of security that ensures the safety of clients while also preventing hackers from breaching their privacy (Dixit and Datta, 2010).The findings are in line with (Ahmad and Al-Zu' bi 2011) who noted that security has a major impact on consumer satisfaction. The findings echoed those of (Herath & Herath 2019) who found out that customer satisfaction with security, had the biggest impact on total e-banking satisfaction.

4.5.0 Usefulness of paperless banking

The participants were asked if they considered paperless banking as useful new banking approach. The following are the responses to this question:

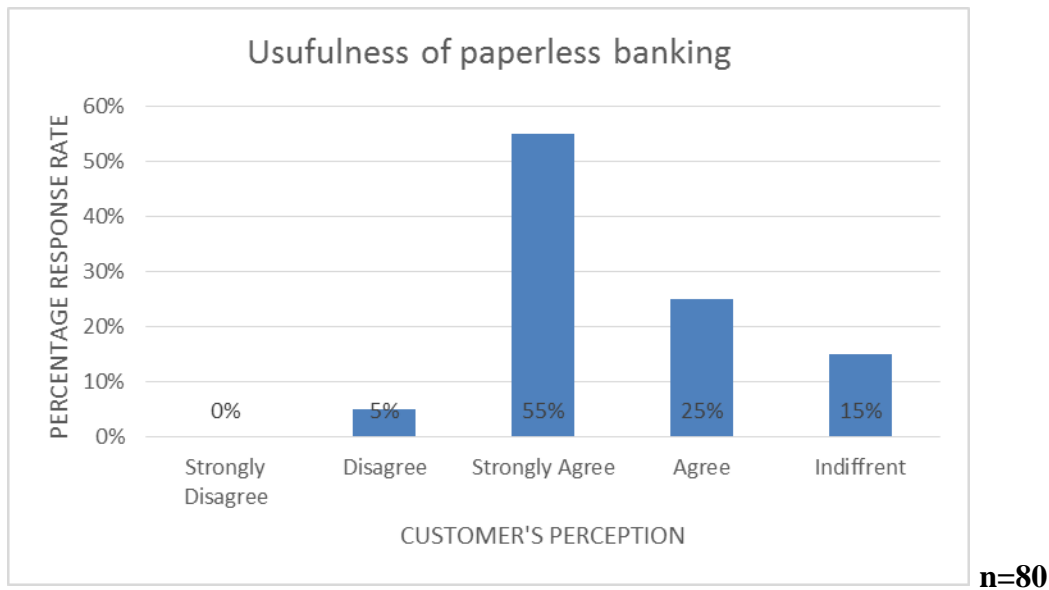


Figure 4.4 Usefulness of paperless banking

Source: Primary data

According to the data 80% of respondents agreed that paperless banking is beneficial and 5% disagreed whilst indifferent responses made up 15% of the total. As a result, the majority of respondents considered paperless banking to be beneficial. The findings are consistent with the findings of Baadah (2010), who found that perceived usefulness has a significant impact on internet banking adoption and attitude, which can lead to satisfaction.

4.6.0 Insecurities associated with paperless banking

The survey sought to determine whether paperless banking has any security concerns. The following are the results:

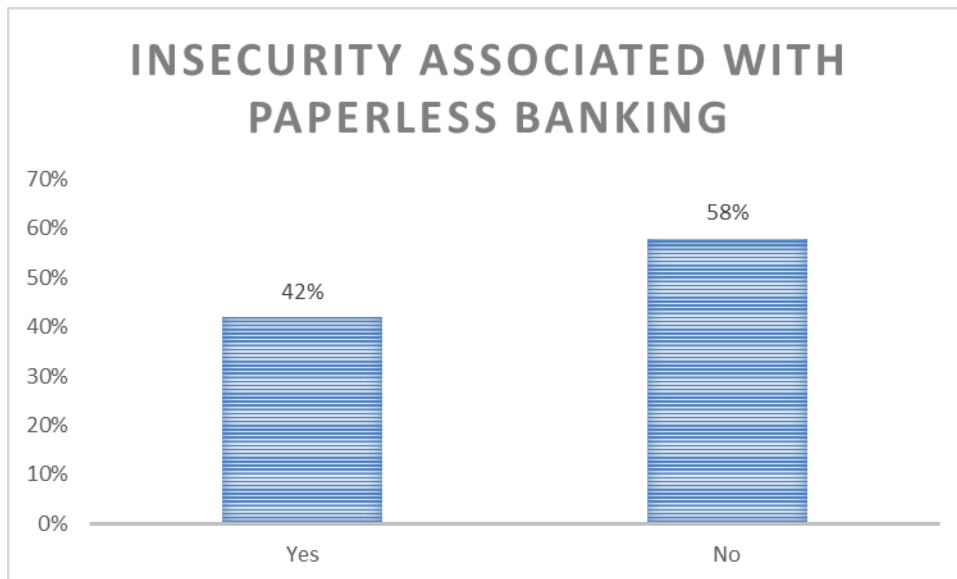


Figure 4.5 Responses for insecurities associated with paperless banking

Source: Primary data

According to the results shown in Figure 4.5 the majority 58 percent disagree that paperless banking is associated with insecurity. The study concluded that paperless banking provides users with security. Security impacts adoption of paperless banking, improving e-banking security have been at the core of banks. Significant strides have been made to ensure that e-banking is secure. The results are in contradiction with Prerna Sharma Bamoriya (2011) findings who noted that paperless banking is associated with security breaches.

4.7.0 Benefits of paperless banking

This question looked into the advantages of users embracing paperless banking. Customers were asked to rank these benefits on a Likert scale based on their importance as shown on the graph below fig 4.6

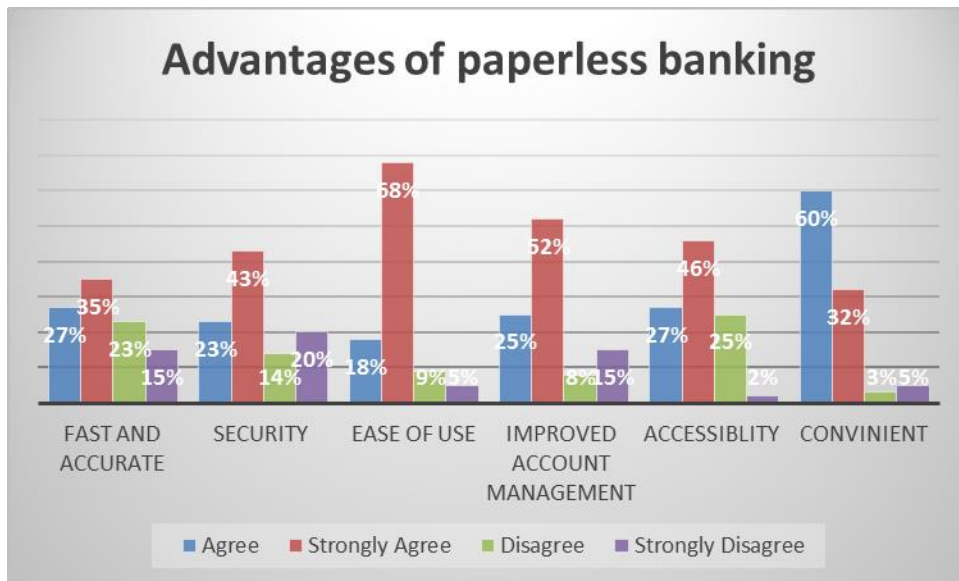


Figure 4.6 Responses to the benefits of paperless banking

Source: Primary data

According to the findings, customers are generally pleased with transaction speed and accuracy. 62% agreed with the advantage, while 38% disagreed. This implies that NBS assures a continuous flow of payments with maximum speed and accuracy, enabling immediate transfers of funds across all local banks. According to Uppal (2010), E-channels enable a large network of banks and their consumers, enhancing customer loyalty and satisfaction because the services are tailored to be more accurate and convenient.

The results for security as an advantage of paperless banking were as follows: 66% agreed whilst 20% disagreed. When it comes to paperless banking, security is crucial since it protects a customer's accounts from hackers and fraudsters. NBS and most banks generally are working on improving security on paperless banking with the recent introduction of chip and pin replacing magnetic strip ATM cards chip and pin provide customers with improved security against card cloning. The findings are in line with (Ndlovu and Sigola 2013) who noted that paperless banking provide customers with enhanced security.

Another advantage of paperless banking is its simplicity. 86% of the respondents agreed that paperless banking is simple to use whilst 14% disagree. Ease of use influences both the ambition to go paperless and customer happiness. This is because if a system becomes too difficult to use, it would attract no customer thus the more a system becomes usable the more it satisfy customers. According to Rosenberg (2011), perceived ease of use describes the extent to which customers believe that using a technology system will be effortless.

The results for improved account management as an advantage was 77% agreed whilst 23% disagreed. From this results the researcher found out that paperless banking gives users better account management. This is because a customer may manage his or her account from the comfort of his or her own home using a personal computer or smart phone, eliminating the need to visit a bank branch. Additionally through paperless banking customers can get notification regarding to transactions in their account and notification of available balance is send after every transaction .More so all of the necessary options are available on the online banking application. Paperless banking allows customers to access their transaction history at home hence they can reconcile their accounts and monitor activities in their accounts. This is similar to (Kazmi & Hashim, 2015) findings who noted that with paperless banking customers can readily see their fund management history information.

Customers benefit from lower transaction costs with paperless banking. According to the data 52 percent of respondents agree with the statement, while 48 percent disagree. The cost of transacting is lower for instance customers can view their balance using internet banking for free but enquiring balance at the bank attract a fee this means that with paperless banking customers can save cost, however because of the current economic situation, the cost is determined by the quantity of money a customer wishes to move. However with the continuous tax increase by the government on plastic money e-banking transaction cost might increase .The findings echo that of (Ndlovu and Sigola 2013) who in their study concluded that the main advantages of e-banking are increased consumer convenience and cost savings as well as that paperless banking lowers transaction costs.

Another benefit mentioned in the study was accessibility. Customers can use the services at any time and from any location, which makes their life much easier. Because 73 percent of respondents agreed to the benefit and 27% disagree, the researcher concluded that accessibility to paperless banking is a factor that contributes to customer satisfaction. The findings echo those of (Endale Genie Tiruneh 2015) who noted that through e-banking customers can access banking services at any time 24/7 and customers benefit from the ease of access.

The last accessed benefit is convenience. The findings shows that 92% agreed and 8% disagreed. Paperless banking allows customers to conduct business wherever they are, whether at work or at home, allowing them to transact easily in their own homes without having to visit the bank. Customers can make payments, pay fees, and buy airtime among others without visiting the bank and at the comfort of their homes. Convenience boosts customer satisfaction,

and the findings are similar to Levin's (2013) study, which revealed that mobile banking provides better convenience to the unbanked population. (Ndlovu and Sigola 2013) share the same view in his study he noted that the main advantages of e-banking are increased consumer convenience and cost savings.

4.8.0 Distribution of the respondents based on the satisfaction levels

This section displays customer satisfaction levels with e-banking services. The researcher considered the following variables, satisfaction with services provided, availability of information in regards to paperless banking, customer needs as well as expectations being met, security, accessibility and continuous usage of paperless banking are among the aspects examined. The table below provides a descriptive analysis of the Likert scale data.

Table 4.5 Distribution of respondents based on the satisfaction levels of the customers

Variable	Strongly Disagree		Disagree		Agree		Strongly agree	
	%	(n)	%	(n)	%	(n)	%	(n)
Are you satisfied with services offered?	3	(2)	28	(22)	53	(42)	18	(14)
Are you satisfied with the information about e-banking and is it available?	6	(5)	38	(30)	43	(34)	14	(11)
Are the customer needs and expectations being met?	8	(6)	20	(16)	58	(46)	15	(12)
Are you satisfied with the security associated with e-banking?	4	(3)	18	(14)	48	(38)	32	(25)
Are you able to access services at any time?	10	(8)	35	(28)	38	(30)	18	(14)
Due to services offered, are you willing to continue using e-banking services?	9	(7)	13	(10)	56	(45)	23	(18)

n=80

Source: Primary data

The respondents' responses indicated that 71% are satisfied with services offered by paperless banking. Paperless banking offer various services the results shows that customers are generally satisfied with this services. The findings are in line with (Thabit Altobishi et al 2018) findings who noted that paperless banking services satisfy customers.

To add on the above, the majority 57% agreed that information on paperless banking is available. This shows that banks are offering adequate information to customers on e-banking, NBS use advertisement and other methods to inform customers on information relating to paperless banking. The results shows that customers have information regarding paperless banking.

The majority 73% of respondents agree that their needs are being met through paperless banking services. Due to globalisation meeting customer needs is at the core of every bank in Zimbabwe they strive to meet customer needs.

The majority 80% agreed that paperless banking is secure and there are satisfied with security provided by paperless banking .The findings are in line with (Ahmad and Al-Zu' bi 2011) who noted that security has a major impact on consumer satisfaction. Since security have an impact on customer satisfaction banks have invested heavily on improving security of e-banking recently NBS moved from magnetic strip to chip and pin to enhance security. The findings of the study shows that customers are satisfied with security offered by e-banking.

Additionally 56% agreed that paperless banking is accessible at any time with meaning that paperless banking services are available 24/7. The findings are similar to those of Endale Genie Tiruneh (2015) who noted that paperless banking is accessible and customers can access banking services at any time 24/7.

The majority 80 percent are willing to keep utilizing paperless banking, the study findings are similar to those of Toor et al (2016) and Maseke (2018) who noted that their respondents were extremely satisfied with electronic banking. In a nutshell, Simon and Thomas (2016) discovered that there is a substantial link between paperless banking services and consumer satisfaction. Using the disconfirmation theory NBS customers have a positive disconfirmation meaning that the society's performance is perceived to be better than the predetermined expectations. In this scenario, customer are delighted hence the continuous use paperless banking services. Additionally using customer journey model the results showed that 80% of the respondents are now regular users using the customer journey model thus customer will now be satisfied with the banking system as a result of transacting and will desire to keep using the system.

4.8.0 Challenges associated with paperless banking

4.8.1 Are there any challenges associated with paperless banking?

Customers were asked if there were any difficulties with going paperless and to describe those difficulties. The findings revealed that there are undoubtedly difficulties that individuals encounter when using paperless banking. 64 percent of the respondents said yes, while the remaining said no. Figure 4.17 demonstrates:

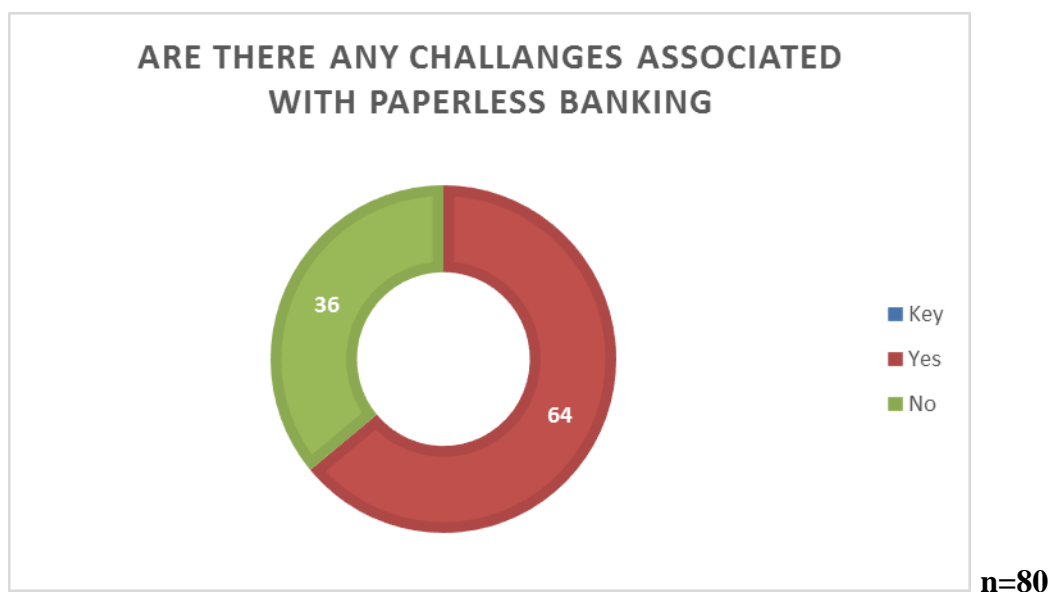


Figure 4.7 Responses for challenges associated with paperless banking

Source: Primary data

It can be seen from the above that 64 percent of the respondents said yes to the question and 36 % said no. The majority of the respondents mentioned network issues and system failures as major challenges ,NBS run its system end of day at around 7pm and the system will be down this means that any transaction performed during this time will fail some will do double transaction as a result of system failure this has been a major challenge. Network challenges also disrupt transaction flow, customers can go for shopping and find out that network is down hence they can't perform transaction thereby making it a challenge. Paperless banking is still in its infancy in Zimbabwe, as it required time for the country's banks to adopt it as well as purchase all of the essential equipment, most Zimbabwean banks use imported systems from India and in the event that there is a system breakdown they have to conduct system vendors to repair the system which might be time consuming.

4.8.2 Descriptive results of the Likert scale on the challenges of paperless banking

Table 4.6 below illustrates the results from the Likert scale

Table 4.6 Responses for the challenges associated with paperless banking

Challenges	Strongly Disagree		Disagree		Strongly Agree		Agree	
	%	(n)	%	(n)	%	(n)	%	(n)
Failure to understand how to transact using e-banking	20	(10)	32	(26)	40	(38)	8	(6)
System and network problems resulting in slow confirmation or transacting	15	(12)	20	(16)	43	(34)	22	(18)
Power shortages	20	(16)	15	(12)	33	(26)	32	(26)
High risk of fraud	14	(11)	25	(20)	32	(26)	29	(23)
Registration process is too complex, leading to time wastages	42	(34)	28	(22)	25	(20)	5	(4)

n=80

Source: Primary data

The majority respondents 52 percent disagreed that failure to understand how to transact using e-banking was a challenge. The majority of people have figured out how to use e-banking. The results support the findings on table 4.9 which indicated that customer are satisfied with the availability of information on paperless banking. This means that information regarding paperless banking is available hence few customers face challenges when using e-banking. The findings are in contradictions with Sadeghi and Hanzae (2010) who noted that many customers in developing countries face challenges in adopting paperless banking. This was also echoed by the findings of Arun Ingle and Rajendrasingh Pardeshi (2012) who noted that most internet banking users face challenges on learning to use it.

In addition, majority of respondents 65% agreed that system and network issues present a challenge when using e-banking. Whenever there is a system or network challenge transactions fail and sometimes customers lose money and most of the times they fail to recover their money after restoration of system problems. When a system or network failure occurs, all transactions are halted, and confirmation of those that would have been accepted by the system before the

problem occurred are delayed. NBS like many other banks use systems from foreign vendors and in the event of a system challenge sometimes they have to wait for the vendor to restore the system back to normal, this might take time and during the process customers will not be able to transact. When using e-banking network is a requirement and sometimes POS usually face network challenges. Customers may want to make a payment using a POS machine and most of the time this POS will be facing network and or system challenges both individual customers and business customers are inconvenienced by this challenge. Business customers will lose revenue when POS machines face network and system challenges and individual customers will fail to make transactions. The findings are comparable to those of Prerna Sharma Bamoriya (2011) who noted that paperless banking is largely affected by system errors and breakdown.

The majority of respondents 65% agreed that power shortages is a significant challenge to paperless banking, the results demonstrated that power outages are a barrier to using electronic banking. Power outages are usually characterised by network breakdown and some customers use Wi-Fi connections to connect to the internet this becomes impossible when there are power cuts. Additionally some laptops and mobile phones can't go for a long time without being charged making electronic banking nearly impossible. The findings are similar to those of (Adewuyi I.D 2005) who noted that the capacity to connect to the internet is necessary and a precondition for using internet banking.

There are considerable dangers of fraud from internet hackers and recently fraudsters who clone ATM cards causing customers to lose large sums of money, hence it is a difficulty. 61% agreed and 39% disagreed the results shows that high risk of fraud is still a major challenge to paperless banking despite efforts to minimize this risk through for instance introduction of chip and pin cards replacing the magnetic strip cards in order to minimize card cloning. The findings are similar to those of Anju Dagar et al (2014) who noted that risk of fraud is a major drawback to e-banking.

Furthermore, with paperless banking, the registration process is overly complicated, resulting in time waste. A total of 70 percent of respondents disagreed, indicating that they do not consider paperless banking to be a complex operation this might be because the system provides clear guidelines for registration process and it can be done at the customer's convenient location and time without the need to visit the local bank branch. Using the customer journey model the results shows that most NBS customers are at the knowledge stage where they face minimal

challenges in using paperless banking. The findings are in contradictions with Arun Ingle and Rajendrasingh Pardeshi (2012) who noted that internet banking is difficult to use and navigate for some users.

The findings above are consistent with Earl's (2000) identification of the challenges that customers face when using electronic banking, which include network and system errors, fraud risk, and other unanticipated events. The findings are also comparable to those of Dube et al. (2008), who noted issues such as implementation costs and security concerns as barriers to banks embracing internet banking.

4.9.0 Customer satisfaction and paperless banking

4.9.1 Connection between paperless banking and customer satisfaction

Table 4.7 Distribution of respondents based on the connection between paperless banking and customer satisfaction

	Frequency	Percentage	
Yes	68	85%	
No	12	15%	
Total	80	100%	n=80

Source: Primary data

According to the respondents, 85 percent agreed that there is a link between paperless banking and customer satisfaction, while 15 percent disagreed. This is due to the fact that people who use paperless banking feel a close link between the two. As a result, we may infer that 85% are satisfied. The findings are comparable to those of Mchomba (2018), who determined that there is a link between electronic banking and consumer satisfaction. The findings was also echoed by (Simon and Thomas 2016) who noted that there is a substantial link between paperless banking services and consumer satisfaction.

4.10 Chapter summary

The research findings were provided in this chapter. The chapter demonstrated customer satisfaction through paperless banking, its adoption, benefits, its impact on customer satisfaction levels and challenges. The information presented in the tables, charts, and figures above is interpreted in light of the research questions and objectives. The study's summary, conclusions, and suggestions are presented in the next chapter.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter aims to present a detailed summary of the research on the influence of paperless banking on customer satisfaction, using NBS Harare as a case. This chapter will summarize the study's findings before drawing conclusions and recommendations as well as proposals for future research based on the research findings.

5.1 Summary of the major findings

The study sought to determine the impact of paperless banking system on customer satisfaction. The study was guided by the following objectives

- To determine the impact of paperless banking system on customer satisfaction.
- To identify the forms of paperless banking
- To determine the benefits of a paperless banking system on customers.
- To identify the challenges associated with the paperless banking system

The study identified ATM's, Internet banking, mobile banking and ZIPIT as forms of paperless banking .The study noted that internet banking is the commonly used form of paperless banking.

According to the study paperless banking have a positive impact on customer satisfaction. The researcher also discovered that convenience, transaction speed, reliability, ease of use, security have an impact, with security having a great impact on customer satisfaction with paperless banking. The positive impacts of paperless banking are fast and accurateness, security, ease of use, improved account management, accessibility and convenience. On the other side the negative impacts of paperless banking are power shortages, high risk, complex registration process, system and network challenges as well as failure to understand the whole e-banking processes.

According to the findings customers benefit from paperless banking and the benefits positively impacts customer satisfaction on paperless banking .The majority argues that fast and accurateness, security, ease of use, improved account management, accessibility and

convenience are the benefits of paperless banking with convenience being the major benefit enjoyed by customers.

The study noted that there is a link between paperless banking and customer satisfaction. The findings also revealed that the majority of respondents are satisfied with paperless banking system. The researcher also noted that customers are satisfied with paperless banking due to aspects such as security, requirements and expectations being met, accessibility as well as information availability. The study found that customers consider paperless banking to be useful and the majority of customers are willing to continue using paperless banking.

The study found out that customer's faces challenges which are associated with paperless banking such as the danger of fraud, power shortages, system and network problems, complex registration process, failure to transact using e-banking with system and network problems being the major challenge experienced by customers.

5.3 Conclusion

Results revealed that paperless banking has a positive impact on customer satisfaction and there are willing to continue using paperless banking services. Results also revealed that paperless banking is useful. Customers are pleased with paperless banking and enthusiastically support its use, particularly online banking, mobile banking, and ZIPIT. Using Customer Journey Model (Fig 2.1), the Zimbabwean electronic banking use is in the final stage, where customers use electronic/paperless banking services on a regular basis.

The findings confirmed that elderly users have a negative attitude toward technology, in contrast to today's younger generations, who are drawn to it. The majority of respondents were men, and education level has less of an impact on the use of paperless banking services. As a result, using paperless banking does not need any formal knowledge.

Customers benefit from paperless banking for a variety of reasons including convenience, accessibility, security, lower transaction costs, enhanced account management, , simplicity of use, time savings, and speed and accuracy. These characteristics all have a positive impact on customer satisfaction levels since they all impact the majority of consumers' use of paperless banking. However danger of fraud, power shortages, system and network problems, complex registration process, failure to transact using e-banking with system impacts paperless banking

negatively. But generally paperless banking proved to have a positive impact on customer satisfaction.

5.4 Recommendations

Based on the aforementioned data, the following recommendations have been made to the banking sector in order to improve paperless banking services and increase consumer satisfaction. Males outnumber females in terms of paperless banking transactions. As a result, banks must devise an effective strategy for enticing ladies to use their services.

In addition to the foregoing, Zimbabwean banks must aggressively promote internet banking among customers, while policymakers such as the government and the central Bank should increase infrastructure development as well as investments to encourage banks and individuals to adopt internet banking.

NBS should establish a query reporting portal to report queries to do with POS and machine this will help this queries to be solved timely hence reducing loses associated with system breakdown.

Website security is a crucial consideration that must be addressed in order to keep hackers out of the system. Security impacts the adoption of paperless banking, which leads to higher consumer satisfaction.

Banks should run their transactions end of day at around midnight when few customer are still using mobile banking, internet banking and ATM cards this will reduce failed transactions because transactions hardly go through when banks are running their transaction end of day.

There is also a need to upgrade the banking sector's technology infrastructure by focusing more on paperless banking services in order to attract a wider client base.

5.5 Suggestions for further research

More study into the influence of paperless banking on customer satisfaction in rural areas is needed. This is will take into account the unbanked population, as well as to determine how many people have actually signed up for it and whether or not they are pleased with its services.

A study on the influence of paperless banking on bank employees might also be conducted. This is to examine on whether paperless banking will still allow them to maintain their

employment or if they will have to be retrenched since customer can now access their accounts at the comfort of their homes.

Various research analysing the same variables and comparing the impact among other commercial banks in the Zimbabwean economy can be conducted. At least once a year, satisfaction levels should be monitored so that it is possible to determine whether any fundamental breakthrough has occurred among bank customers in the country's use of paperless banking.

5.6 Chapter Summary

This was the last chapter of the investigation into the impact of paperless banking on customer satisfaction. It emphasized the most important findings, conclusions, recommendations, and research questions.

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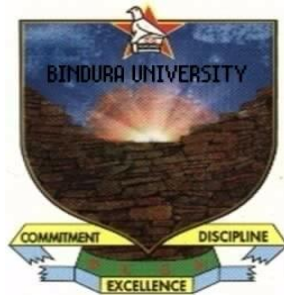
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BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE



Dear respondent

My name is Tapiwa Man'oro, I am a fourth year student at Bindura University of Science education pursuing a Bachelor of Commerce (Honours) in Financial Intelligence. I am currently involved in a research in partial fulfilment of the requirement for the award of an Undergraduate in the degree programme. The focus of the research is concerned with the impact of paperless banking on customer satisfaction.

I am kindly requesting for your assistance in completing the questionnaire below to the best of your knowledge. Please note that your response will be purely used for academic purposes and will be treated with confidentiality. Please ensure that you respond to every question and I would appreciate it if the questionnaire could be returned at your earliest convenience. Your cooperation is greatly appreciated

Thank you for your assistance.

Yours sincerely,

Tapiwa Man'oro

APPENDICES

APPENDIX 1: QUESTIONNAIRE

NB: Please do not write your name on the questionnaire.

May you please answer the following questions ticking the correct response in respective boxes provided?

Section A-Demographic information

1. Please indicate your gender: Male ☐ Female ☐

2. Which age group do you belong to?

Below 20 ☐ 21 to ☐ 31 to 40 ☐ 41 and above ☐

3. Level of education attained

No formal education ☐ Secondary level ☐

Undergraduate ☐ Degree + ☐

4. How much do you earn per month? (RTGS \$)

Less than 10000 ☐ 11000-20000 ☐ 21000-30000 ☐ 31000-40000 ☐

More than 41000 ☐

Section B: E-banking

5. How long have you been a ZB bank customer?

> Than 1 year ☐ 2-5 years ☐ < than 5 years ☐

6. Is e-banking helpful?

Strongly Disagree ☐ Disagree ☐ Agree ☐ Indifferent ☐

Strongly Agree ☐

7. Is it convenient to use e-banking?

Yes ☐ No ☐

8. In your own opinion, do you think there is any connection between e-banking and customer satisfaction?

Yes ☐ No ☐

9. Please indicate the level to which you agree or disagree with the following statements regarding to customer satisfaction on a Likert scale 1 (Strongly disagree) to 4 (strongly agree). Tick (tick) to the appropriate box.

Statement	Strongly disagree	Disagree	Agree	Strongly agree
Are you satisfied with the services offered by the bank?				
Are you satisfied with the information about e-banking and is it available?				
Are the customer needs and expectations being met?				
Are you satisfied with the security associated with e-banking?				
Are you able to access the services any time?				
Due to the services offered, are you willing to continue using the e-banking services?				

Section C: Adoption of E-banking

10. What made you to adopt E-banking services?

Factor which led to e-banking	Yes	No
It is convenient to use		
It is more secure than carrying hard cash		
It removes long winding queues in the bank		
Ease of use and understanding		
It is fast and accurate		
Restrained access to cash		

**11. How do you feel about the following statements relating to the adoption of E-banking?
Please tick (tick) once to your appropriate box.**

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
Poor banking services led to the adoption of e-banking				
Restrained access to hard cash has increased the adoption of e-banking				
The increasing use of the internet has increased the adoption of e-banking				

Section D: Benefits of E-banking

12. Is there any insecurity associated with e-banking?

Yes ☐ No ☐

13. On the following statements, please rank the extent to which you agree with the following advantages of e-banking services based on the level of importance to you on a 4 point Likert scale 1 (strongly disagree) to 4 (strongly agree). Please tick (tick) once to your most appropriate answer.

Advantage	Strongly disagree	Disagree	Agree	Strongly Agree
Fast and accurate services				
Security				
Ease of use				
Improved account management				
Reduced transaction costs				
Accessibility				
Convenient				

14. On the following statements, please rank the extent to which you agree with the following various types of e-banking services based on the level of importance to you. Please tick (tick) once to the most appropriate answer.

Types of e-banking	Least important	Unimportant	Very important	Important
ATMs				
Internet banking				
Mobile banking				
ZIPIT				

Section C: Challenges of e-banking

15. Are there any challenges associated with the use of e-banking services?

Yes ☐ No ☐

16. if you answered yes to question 14 above, please mention the challenges based on your opinion.....

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17. Challenges you face when using e-banking. Please tick (tick) on the most appropriate answer 1 (strongly disagree), 2 (disagree), 3 (agree) and 4 (strongly agree).

Challenges associated with e-banking	Strongly disagree	Disagree	Strongly Agree	Agree
Failure to understand how to transact using e-banking				
Network problems resulting in slow confirmation or transacting				
Power shortages				
High risk of fraud				
Registration process is too complex, leading to time wastages				

Section D: Impact of paperless banking

19. How do you feel about the following statements relating to the impact of E-banking?
Please tick (tick) once to your appropriate box.

Factor	Agree (n) %	Strongly agree (n) %	Disagree (n) %	Strongly Disagree (n) %
Convenience have an impact on satisfaction with e-banking				
Transaction speed have an impact on satisfaction with e-banking				
Reliability have an impact on satisfaction with e-banking				
Ease of use have an impact on satisfaction with e-banking				
Security have an impact on satisfaction with e-banking				

According to the regression analysis security, transactional speed, ease of use, reliability, and responsiveness

Thank you for your participation!!!!

APPENDICES

APPENDIX 1: QUESTIONNAIRE

APPENDIX 2: INTERVIEW GUIDE

- 1. How long have you been a NBS customer?**
- 2. How well do you understand e-banking?**
- 3. Are you satisfied with e-banking services?**
- 4. What factors do you think affect the adoption of e-banking?**
- 5. What do you think is the main barrier in the proper adoption of e-banking?**
- 6. Are the bank staff offering assistance on the use of e-banking and can you safely say they are assisting in the adoption of e-banking?**
- 7. What are the benefits you derive as a customer from the use of e-banking?**
- 8. Are there any challenges you have faced with e-banking services?**