

**DECLARATION**

I declare that, the project entitled, “the Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branch from 2021-2023). is original work and has never been submitted to any University or other Institutions of Higher Learning. It is my own research whereby other scholar’s writings were cited and references provided. I thus declare that this work is mine and were completed successfully under the supervision of NKURUNZIZA Andree.

**Sudent signature**

**UWIDUHAYE Gaudance**

**Date:...../...../.....**

**CERTIFICATE**

I, NKURUNZIZA Andree Certified that this project report untitled the Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branch from 2021 - 2023). Is the bonafide work of Ms. UWIDUHAYE Gaudance who carried out the research under my supervision? Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the Supervisor

Mr. NKURUNZIZA Andree

Date:...../...../.....

## **DEDICATION**

To my beloved parents

My brothers and sisters

To all my family and friends

## **ACKNOWLEDGEMENTS**

I highly thank God-Almighty from whom I have benefited all things during our studies and when carrying this research.

This research is a result of collective efforts of many people to whom I would like to express my gratefulness. I would like to express our heat left gratitude to my supervisor Mr. NKURUNZIZA Andree, for his motivation, engagement and supervision all long this work.

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My special thanks go to my families for their moral and financial support, advice, encouragement while doing this research.

I wish also to express my gratitude to my other one who contributed closely through tangible help, advice and encouragements to the running and good completion of my work.

Be blessed

**UWIDUHAYE Gaudance**

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**LIST OF SYMBOLS, ABBREVIATIONS OR NOMENCLATURE**

<b>%:</b>	Percentage
<b>ADB:</b>	African Development Banks
<b>BPR</b>	Banque Populaire du Rwanda
<b>CAS</b>	Computerized accounting system
<b>EADB:</b>	East African development banks
<b>ICT</b>	Information Communication Technologie
<b>LTD</b>	Limited
<b>Ltd:</b>	Limited
<b>NGOs:</b>	No-Government Organization
<b>ULK</b>	Universite Libré de Kigali
<b>WWW:</b>	World Wide Web

## ABSTRACT

The Effect of E banking on customer satisfaction in commercial bank of Rwanda was the researchers' main objective. The research specific objectives were to evaluate the strength of the E- banking system used by PBR Ltd Kinamba- branch. To analyze extent to which Electronic banking affect the performance of bank services in commercial banks especially PBR Ltd Kinamba- branch, to assess the degree of customer satisfaction after using of electronic banking system in BPR Ltd Kinamba- branch.

The researchers started with a statement problem consisting of two questions:

- Does E Banking used effectively by BPR LTD KINAMBA branch?
- Is the use of E banking system has positive effects on satisfaction of customer services of BPR LTD KINAMBA branch?

To test the hypotheses, the researcher used several methods such as analytical, comparative and quantitative methods. The researcher also used several techniques such as documentary, structured interview and questionnaire techniques.

The researchers found that two hypotheses were confirmed. The first hypothesis was proved positively because 100% of respondents said that the E banking system system of BPR Ltd is used effectively in Kinamba-branch.

The second hypothesis was confirmed because all respondents representing 100% agreed that E banking system has positive effects on satisfaction of customer services of BPR LTD KINAMBA branch. At the end of this study, the researcher has tried to formute the conclusion to corform that the title of the study “the Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branch from 2021-2023) have met it all objetives and it has developed through its special objectives compare to the problem statement, research questions and research hypothesis. He/she also intended to give Recomendation as sugestions to the future resseachers.





## **CHAPTER ONE: GENERAL INTRODUCTION**

### **1.1.Introduction**

The present study is to investigate the Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branch from 2021-2023).

This first chapter deals with the background of the problem, statement of the problem, research question, hypothesis, research objective, and significance of the study, scope, limitation of the study, research methodology, conceptual framework and organization of study.

### **1.2.Background of the study**

E banking systems are software, programs that gather various accounting information related to sales, receivables payable, cash receipts and payroll and cash disbursement. Are in this procedure, the financial statement is generated (Islam, 2010:21). They associate with electronic computers so that to facilitate and /or to automate procedures, operate, produce, among others by using means of electronic computer, provides with a computer or computer systems, and then enter, process or store information in a computer or in a system of computers rather than manual book keeping (Islam, 2010:19).

Rwanda like other sub- Saharan and East African countries in the latest decade has adopted the economic liberalization program to privatize the financial sectors, to reduce financial depression and encourage market competition. Therefore the mission of BPR was became challenge to be achieved, because it has been stricken performance which was still ineffective and inefficient due to the use of manual and pore accounting systems that characterized by hand usage and no automated computer systems rather than automatic computer systems usage. All that problems lead to pore assurance of financial statements, low level of decision making in financial management due to unsafe financial transactions, records and book keeping system not guaranteed.

Tthose problems cited above contribute to pore service to their customers and made them feel unsatisfied.



The E Banking replaced all that archaic accounting and it has implemented by using accounting software. This is the use of computer to keep files and account by folders and software in computer system (Steiner 2007:32). In my study, I focused on the Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branch from 2021-2023). It will be the good task for researchers to analyze the accounting soft ware's which are used in BPR Kinamba branch that are compatible and gainful to make change in satisfaction of customer services in that period of 3 years compared to the period before.

### **1.3.Problem statement**

Complaints over the processes in which Rwandan banks offer their services specifically in withdrawal, deposit and credit services, processing customer information and giving them feedback called for this research. The E banking's operations and services as well as the introduction of accounting software and Automated Teller machines by some multi-national banks has helped in improving the financial strength Rwandan commercial banks.

Various studies conducted by most scholars established that Information technology has considerable positive effects on banks productivity, cashier's duties, banking transaction, bank patronage, bank services delivery and customers' services. They concluded that, these have positive effect on the growth of banking industry and improve customer services at the high level of satisfaction. The main research problem is that, banks in Rwanda seem to be performing below expectation and this has affected customer's participation of which some of them have been left with no other option than to be selective and extra vigilant in their dealings with the banks

### **1.4. Research questions**

The main concern of this study is the Effect of E banking on customer satisfaction in commercial

- Is E Banking used effectively by BPR LTD KINAMBA branch?
- Is the use of E banking system has positive effects on satisfaction of customer services of BPR LTD KINAMBA branch?

## **1.5. Research hypothesis**

According to Growitz M. (1994 page. 12) a hypothesis is a proposal response to an asked question related to the research objective. In this study, the hypothesis have formulated as follow:

- The E banking system is used effectively by BPR Kinamba branch.
- There is positive effects of E banking system on customers satisfaction in BPR Ltd Kinamba branch.

## **1.5. Objectives of the study**

### **1.5.1. General objective**

To analyze the effects of Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branch from 2021-2023

### **1.5.2. Specific objectives**

To fulfill the above general objective this study will endeavor to attain the following specific objectives:

- To evaluate the strength of the Electronic banking system used by PBR Ltd Kinamba- branch.
- To analyze extent to which Electronic banking affect the performance of bank services in commercial banks especially PBR Ltd Kinamba- branch.
- To assess the degree of customer satisfaction after using of electronic banking system in BPR Ltd Kinamba- branch.

## **1.6. The scope of study**

This study based on analyzing the Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branche in the period of Three years from 2021-2023).

### **1.6.1. Geographical scope**

This study has carried out at BPR Kinamba branch, which is located in Kigali City Province, Gasabo District, and Kacyiru Sector.

### **1.6.2. Time scope**

This study covers a period of period between 2021 up to 2023, by analyzing the comparison of previous years.

### **1.6.3. In Domain of the study**

In this research, the researcher on domain of banking service relying on the topic “The Effect of E banking on customer satisfaction of commercial banks in Rwanda”. The Case study will be BPR Kinamba branch from 2021 to 2023, by analyzing both sides of respondents. In order to get proper result of findings, the researcher will assess the customer satisfaction compared to the bank service delivered by BPR Kinamba branch from 2021 to 2023 throughout E banking system.

### **1.7. Significance to the study**

This study is of impotence to the researcher as it equips him the knowledge concerning by E banking systems used in commercial banks of Rwanda, how its contribute to the quality service of their customers, and its positive effect in rising degree of customer satisfaction which may also contribute to the performance of the commercial banks.

### **1.8.1. Personal Interest**

In conducting this researcher, the researcher gain more knowledge in terms of Electronic baking especially based on considerable interest of quick service toward commercial bank’s customers in ensuring the satisfaction of their service desires. This study is again an opportunity to council theories to the realities on the ground.

### **1.8.2. Academic interest**

Academically the realization of this work, complies with the academic requirements by which any study completing the provided undergraduate program of course has to conduct research, compile and present a dissertation in order to be awarded a bachelor's degree from Kigali Independent University. This research will help the future researchers as documentation for realizing their dissertation.

### **1.8.3. Social Interest**

The importation of this study for the community is to motivate people for them to be excited in adaptation of E banking usage in all bank service in order to get satisfied whenever their access on bank services.

### **1.8.3. To the commercial bank (BPR Ltd Kinamba branch)**

In commercial banks especially BPR, Kinamba brash there will be the benefit through the measures taken and the recommendations given by the researcher.

It will help them to have proper understanding on importance of electronic system and how it contribution in satisfying their customers when it used effectively

## **1.9. Research methodology**

In order to verify hypothesis and the objective, the researcher has used the research methodology, which is a process of arriving at effective results by collecting, analyzing and correcting data. The research was used various techniques to conduct the research. Those different techniques are the following: Interview, Questionnaire and Documentation.

**Interview:** A qualitative research method relies on asking questions in order to collect questions. It involves two or more people, one of whom is the interviewer asking the questions. There are several types of interviews, often differentiated by their level of structure asking interview participants a series of informal questions to obtain knowledge has been a common practice among

anthropologists and sociologists since the inception of their disciplines this is the one have use in conducting this dissertation.

**Questionnaire:** A questionnaire is a research instrument consisting of a series of questions for gathering information from respondents. Questionnaires can be thought of as a kind of written interview. Telephone, computer, or post can carry them out face to face.

Questionnaires provide a relatively cheap, quick, and efficient way of obtaining large amounts of information from a large sample of people.

**Documentation:** Documentation is any communicable material that is used to describe, explain or instruct regarding some attributes of an object, system or procedure, such as its parts, assembly, installation, maintain...

**There are two key principles to follow:**

- When you have a longer iteration on your hands (four weeks), document as it unfolds, because the information is already likely to stabilize while the iteration is still ongoing.
- With shorter iterations wait to write after the iteration because the information will be stable only after the iteration is complete.

### **1.10. Structure of the dissertation**

This research entitled “the Effect of E banking on customer satisfaction in commercial bank of Rwanda” displays its different chapters, sub chapters, sections, and subsections. Chapter one is the general introduction included the background of the study, problem statement, research objectives (general and specific), research questions, Scope of the study and significance of the study, Chapter Two will present a title of Literature Review, which made up of the conceptual and theoretical framework of the research. It gives the definitions of keys terms such as customer satisfactions and it discusses the concepts of E-baking system. In addition, issues relating to these concepts have studied. Chapter three will be known as research methodology displayed the methodology used in caring out this research, includes research designs, study population, sample size and sampling procedure, data collection methods and research instruments, data processing, analysis, and presentation and Chapter Four will present case study description, research findings, analysis and

interpretations of data collected. These findings will be analyzed in connection to the research objectives of study.

Finally, it will compose by suggestions general, conclusion, and recommendations that cover a summary of responses to the research questions and objectives of this research study.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1. Introduction**

This chapter covers the key concepts about the research subject and theories put in place by scholars related to the topic “effects of E banking in the satisfaction of customers in commercial

### **2.2. Conceptual review**

A conceptual review is a critical examination of the theories, concepts, and frameworks relevant to a particular topic or field of study. This type of review helps to clarify and synthesize existing knowledge, identify gaps in the literature, and establish a foundation for future research.

#### **2.2.1. Defining the key concepts**

##### **1. Electronic banking**

Different authors have attempted to define differently. However, this study uses VanHoose's (2003) definition: E banking is the act of conducting financial intermediation on the Electronic. With the exception of cash withdrawals, Electronic banking gives customers access to almost any type of banking transaction at the click of a mouse (De Young, 2001).

The Electronic as a new alternative channel can bring occurrence in customer satisfaction for the distribution of financial services is Important for achieving a competitive advantage in commercial banks. (Flavian, Torres and Guinaliu, 2004). All banks using the Electronic as an additional delivery channel and those using only the Electronic as a Delivery channel can equally compete for customers around the world. This is why the Popularity of E banking as a delivery channel for financial services is increasing in this era (Karjaluo et al. 2002)

## **2. Customer:**

A customer is a person or business that buys goods or services from another business. Customers are crucial because they generate revenue. Without them, businesses would go out of business. Every business fights to get customers by advertising their products or services heavily, cutting costs to get more customers, or making unique products/service and experiences that people love

## **3. Customer satisfaction:**

Customer satisfaction is defined as a measurement that determines how happy customers are with a company's products, services, and capabilities. Customer satisfaction information, including surveys and ratings, can help a company determine how to best improve or changes its products

## **4. Commercial banks**

A commercial bank is a kind of financial institution that carries all the operations related to deposit and withdrawal of money for the general public, providing loans for investment, and other such activities. These banks are profit-making institutions and do business only to make a profit.

## **5. Electronic Banking.**

This is where a customer can access his or her bank account via the Electronic using personal Computer (PC), or mobile phone and web browser However Marsh (2005) defined electronic banking as a form of banking in which funds are transferred through an exchange of electronic signals rather than through an exchange of cash, checks, or other types of paper documents (Encyclopedia, 2020) say that electronic banking is an umbrella term for the process for which a customer may perform banking transactions electronically without visiting a brick and Mortar institution. Bhattacharjee (2001) summarizes it all and defines it as an integrated system that can provide customers" flexible, convenient and inexpensive platform with integrated services of online personal banking products including online checking and saving accounts, money market accounts, certificate of deposit, credit cards, home equity loan, home mortgage, insurance, investment services, portfolio management and other related financial services.



### **2.3. Theory on Electronic banking**

E-banking offers an ever-alluring response to the pressures by its consumers for more products, services, and 24-hour access to accounts. Additionally, personal e-banking definitely made the banking process convenient as well as less time-consuming than ever before. Therefore, no more standing in the lines or using old check as well as stamp method to pay utility bills. Thus, facilitation has been extended in its true sense within the respective domain by banks across the globe. Digital enterprise transformation facilitates financial services organizations via enabling them to be more secure, compliant, as well as being digital. It modifies the experience of employees, partners, customers, and stakeholders. Theory and research both are important notions. Theory provides the basic structure of propositions and research provides the technique and method to fit the theory in a particular context. It also helps to bring modifications regarding the existing theories.

The success of Web portals has increased over time, in such a way that a portal user can choose among a wide variety of portals. Therefore, the presence of a Web portal in Internet will depend on its quality. In this chapter, several portal quality models are presented and compared. Moreover, one of the best portal quality model previously proposed has been adapted to the e-banking context. Finally, the new e-banking portal quality model has been compared with the original portal quality model, as well as with the main portal quality characteristics

The electronic bank consists of the use of electronic channels by means of which the financial institutions can send products or offer the banking services. Between the services and products, they are possible to be included, deposits, financial management of accounts, warnings, payments of electronic accounts, and provision of other products of electronic payments.

According to historical data, the first banks in the ancient world were most likely religious temples. They were most likely founded in the third millennium B.C. Scholars have also claimed that these banks foresaw the development of money (Gilbart, 1919; Millet, 2002). Grain was first placed, but other products such as animals and agricultural machinery were added later. Valuable metals such

as gold on compressed plates (i.e., simple to transport) and precious stones were eventually placed (Liverani, 2013). Temples and palaces were the safest places to keep money and other valuables since they were well-maintained and well-constructed as holy sites (Schmandt-Besserat, 1992). Additional records of loans were given by temple priests to merchants in Babylon in the 18th century B.C. Financial had progressed that rules controlling banking operations and processes could be justified by Hammurabi's Code, written around 1754 BC (Prince, 1904).

By using Electronic banking, bank customers can conduct the same banking transaction provided by brick and mortar branch at any time and any place through a simple and userfriendly browser Polatoglu and Ekin (2001). Electronic banking, you can check your transactions at any time of the day, and as many times as you want to. In a traditional method the banks customer gets quarterly statements from the bank. If the fund transfer has to be made outstation, where the bank does not have a branch, the bank would demand outstation charges. Whereas with the help of online banking, it will be absolutely free for you. Recently Centenary bank offers a number of electronic banking services and let's go ahead and elaborate on these services. E B offers many benefits to banks. The main benefits to banks are cost savings, reaching new Segments of the population, efficiency, enhancement of the bank's reputation and better customer Service and satisfaction (Brogdon, 1999). The more those clients convert to IB, the greater the monetary saving will be. According to Robinson (2000), the cost of an electronic transaction is dramatically lower than the cost of a Face-to-face branch transaction. In a study conducted by Booz-Allen and Hamilton (1997), the author further asserts that online services are a must for banks that have to compete with a growing number of services from other financial institutions, investment concerns and insurance companies. This is in light of the fact that banking is no longer tied to time and place. As a result global competition is expected to broaden. Sheshunoff (2000) says that the single most important driving force behind the implementation of full-service Electronic banking by banks is the need to create powerful barriers to customers exiting. The author argues that once a customer moves to full-service Electronic banking, the likelihood of that customer moving to another financial institution is significantly diminished. The main reasons for this behavior can be found in the consumer behavior theory, which indicates that switching always requires much time and effort from the individual consumer.

The author concluded that the competitive advantage of Electronic banking for banks is very significant. Burns (2000) argues that electronic banking customers are more valuable to banks than traditional customers. Through electronic banking, banks can achieve better cross-channel Productivity and performance. The move towards Electronic banking increases the need for a holistic approach to channel and process management, especially when integrating new delivery channels into existing frameworks (as many traditional banks are currently doing). Burns (2000) indicates that the Electronic will not replace other delivery channels, but will offer increased flexibility and the opportunity for improved service.

Electronic banking customers are said to be more loyal to their bank than non-Electronic Banking customers (Mols, 1998). Mols concluded a survey in Denmark and presented some interesting insights about Electronic banking users. His results suggest that Electronic banking customers: are more satisfied with their bank; have higher switching barriers; provide more positive word-of-mouth opinions about their bank; have higher repurchase intentions; have lower price sensitivity; have a lower propensity to exit and a higher propensity to complain.

### **2.3.1. Types of Electronic Banking**

According to Molla (2002), there are different forms of Electronic Banking based on: a bank's Proprietary software, personal computers using dial-up software, on-line services, and the World Wide Web. Electronic banking based on a bank's proprietary software uses the bank as an "Electronic gateway" to customer accounts. In this case, customers install this software on their Home computers and mobile telephones to enable them to transfer funds and pay bills electronically. Electronic Banking based on personal computers and portable telephones using dial-up software makes use of home finance Software to link customers to banks for online banking. Electronic Banking based on on-line Services involves banks setting up retail branches on subscriber-based online services, as is the Case with America Online. Electronic Banking based on the World Wide Web bypasses Subscription based services and allows banks to interact directly with their customers through the World Wide Web. In many commercial Banks some cases mixtures -based features are the commonly used types by customer'

- **Automated Teller Machines (ATMs)**

These are electronic terminals that let you bank almost virtually any time. For customers to Withdraw cash, make deposits, or transfer funds between accounts, they generally insert an A TM card and enter their PIN"s. ATM"s have a positive response. Since the introduction of the first cash dispenser 30 years ago, ATM technology has gradually become the electronic face for most bank customers. They are 24 hours around the clock electronic cashiers which provide access into customers account by use of A TM cards on the banks A TM machine located on site in all branch offices and off site in strategic places in the main towns around the country. Uganda now has a good network of these ATM machines in most of the important business towns which are also VISA electronic enabled and thus you can withdraw cash for your use locally. Wakefield

J. (2010). According to Morris,c. (2004), ATMs have extended banking services to the remote areas depositing and withdrawing of funds can be carried out thus yielding positive results. Looking at the service range of ATM as reported by Chattered Institute of bankers journal (1995) and Peter Wandri of Daily Monitor, include, cash withdraws, school fees payment, balance inquiry, ordering of financial statements, topping up air time, and also paying credit and utility bills to mention but a few. ATMs come with advantages like, they save time, one does not need to come to the bank and wait in a cue or fill some paper work every time one wants to withdraw cash. Ramsay (2000) in his managerial auditing journal says that ATMs are also easy to use and the machine guides the customer through each step. All what the customer has to do is to follow the instruction appearing on the screen.

- **E-service payment**

This is a flexible and convenient bill payment method for all customers through all Bpr Bank"s branches and service centers. These services are offered free of charge, instant Confirmation of the customer's payment is done through your phone and to use this service the Customer must have a Customer reference number and a mobile phone number. Benefits of the services to the customers Are ease of making your bill payment in a secure environment, ability service locations countrywide, flexibility of payment (cash, draft, Standing order, or cheque) and many others

- **Cashless with Mobile payment**

Cashless with Mobile payment is a 24/7 full banking service that allows customers to perform Financial transactions and access banking information using their mobile phones anytime and Anywhere, here a customer can see his balance, mini statement, fund transfer, Ailtime purchase And bill payment using your phone. Benefits of this service to the customers include a 24/7 banking at your finge1tips; convenience- allows transactions from anywhere, anytime, simple to Use, instant services received like ailtime, transfer of money. (Michael Muchmore & Gabriel Zamora)

- **SMS Banking**

SMS banking uses short text messages sent through the client"s mo bile phone. SMS text Messages are used for both passive and active operations similarly as with classic telephone Banking. A client can automatically receive information about his account balance the message is sent to the client immediately after a certain operation is performed, or on request: a client sends the bank a correctly formatted message, which processes it and answers the client"s request by SMS. Information sent on request mostly concerns current interest rates or currency exchange rates. Providing these is simple for the bank because this is publicly accessible information that needs no protection. A client however can request information about the balance in his account,which is not public information and must be protected when it is provided. Passwords are used for this purpose or teclmologies based on the principle of an electronic key. A client however is required to know the code of eve1y transaction including constant and variable symbols.

- **Direct Deposit**

Another E-banking service is the direct deposit and these let you authorize specific deposits like paychecks, Social Security checks, and other benefits to your account on a regular basis. A customer may pre-authorize direct withdrawals so that recurring bills like insurance premiums, mortgages, utility bills, and gym memberships are paid automatically. Bank customers should also be cautious before they pre-authorize recurring withdrawals to pay companies they are not familiar

with; funds from their bank account can be withdrawn improperly. Therefore, customers should make sure that direct recurring payments take place and are for the right amount.

- **Mail Banking**

Mail banking is another electronic banking service that makes it possible to communicate with the bank by electronic mail or e-mail. The most frequently used service is sending account Statements at agreed periodicity to the client's mailbox. E-mail is not used for operations that are more complex. Payment Instruments and Self-Service Zones Apart from those already Mentioned, there are other more or less widely known forms of electronic banking, including a payment card. An electronic wallet represents a chip card similar to a payment card that contains a record of a financial sum that is available to its owner.

A self-service zone is a fully automated alternative work place of a bank with terminals and devices that clients can use to get various bank services. It enables active and passive operations offered by the bank to be made without the presence of a bank employee. Devices are constructed for very easy use with simple intuitive controls

Mailbanking" – news · newspapers · books · scholar · JSTOR (*September 2015*) (*Learn how and when to remove this message*)

- **Personal Computer Banking**

PC banking helps customers to handle many banking transactions using their personal computers. For example, you may use your computer to request transfers between accounts and pay bills electronically. Customers can get a number of benefits that 24 hours availability of the services, hassle free and no queues.

- **Debit Card Purchase or Payment Transactions**

A payment card is currently one of the most widely used payment instruments designated for authorized holders through which they can perform non-cash payments or cash withdrawals from an extensive network of automated teller machines. These let you make purchases or payments with a debit card, which also may be your ATM card. Transactions can take place in-person, online,

or by phone. The process is similar to using a credit card, with some important exceptions. A debit card purchase or payment transfers money quickly from your bank account to the company's account, so you have to have sufficient funds in your account to cover your Purchase. This means you need to keep accurate records of the dates and amounts of your debit card purchases, payments, and ATM withdrawals.

- **Telephone banking**

Africa has experienced an incredible boom in mobile phone use over the past decade. Today There are more than 500million mobile users and in Uganda alone over 10 million people or about 30% of the population own mobile phones, and the number is growing rapidly every day. In respect to this research, telephone-banking technology means availability, accessibility, and Use of telephones (wired or wireless telephones) to engage in deposits, withdrawals and account Balance inquiry by users in the industry.

- **Mobile Money (MoMo) Payments**

The Bank on behalf of the some society of telecommunication accepts the transactions from customer's bank accounts to accomplish daily payment between individual to another or different organizations. Such as salary payment, Tax payment, water and electricity payment.... Cash for the contributions or payment due is credited directly to a given organization or company "s Collection and there is no need for customers to go to head office Premises.

- **Electronic Check Conversion**

This service converts a paper check into an electronic payment in a store. When the customer gives her check to a cashier in a store, the check is ran through an electronic system that captures the customers banking information and the amount of the check. The customer signs a receipt and gets a copy for her records. When the check is given back to her, it should be voided or marked by the merchant so that it cannot be used again. The merchant electronically sends information from the check (but not the check itself) to the customer"s bank or other financial institution, and the funds are transferred into the merchant's account.

The success of electronic banking, as argued by many researchers, depends probably on bank service quality, customer preferences, and satisfaction. Recent studies found that consumer behavior is changing partly because of more spare time. The way of use of financial services is characterized by individuality, mobility, independence of place and time, and flexibility (Seitz and Stickel, 2004). Despite the fact that banks have taken this innovative step in adding value to customers, some environmental factors are affecting banks in achieving the desired level of their intentions. Financial institutions on a global scale have lost over 650 billion (\$5 billion) to Electronic banking fraud from 2005 to 2007. He further stressed that, when such losses are incurred, banks are very fast in passing the bill to the final consumer (bank customers) which does not create any value to them. This situation heightens fear amongst consumers of this very Product/service.

### **2.3. Theory on Customer Satisfaction**

Customer satisfaction refers to the degree to which customers feel that their expectations and needs have been met or exceeded by a product, service, or overall experience. It is a crucial metric for businesses as it can influence customer loyalty, repeat purchases, and overall brand perception.

#### **2.3.1. Introduction**

Businesses always start and close with customers and hence customers must be treated as the King of the market. All the business enhancements, profit, status, image etc of the organization depends on customers. Hence, it is important for all the organizations to meet all the customers' expectations and identify that they are satisfied.

#### **2.3.2. Definition of customer satisfaction**



Customer satisfaction is the customers overall feeling of contentment in a business interaction (Elaine 2005). Customer satisfaction is defined as a measure of how products and services supplied by an organization meet or surpass customer satisfaction. According to Berry (2000)

Customer satisfaction is defined using IO dimensions of satisfaction which include quality, value, timeless, efficiency, ease of access, environment, interdepartmental team work, frontline services, behavior, commitment to the customer and innovation. Satisfaction may develop quickly or it may be cultivated over a period. It is the overall pleasant experience after consume a product or service. Therefore, customer satisfaction is the state of mind that Customers have about a company when their expectations have been met or exceeded over the life time of the product or service.

The international consortium,(2005) spells out the ability to be flexible in managing customers enables the business to reap the benefits of good customer satisfaction and this is because customer satisfaction is closely linked to quality in recent years. The achievement of customer satisfaction leads to company loyalty and product repurchase. Clearly defining and understanding customer satisfaction can help any company identify opportunities for product and service Innovation and serve as the basis for performance appraisal and reward systems. Only customers can evaluate service in light of their unique expectations. Consequently, responsibility for Measuring and demonstrating continuous service improvements should focus to the service Professional. Only when service teams are actively involved in every facet of the service Business, including measurement of quality, can organizations capture the enthusiasm needed to Radically enhance service delivery.

### **2.3.3. Determinates of Customer Satisfaction**

Consumer satisfaction can be determined by a number of factors that is to say customer Expectations, fees and charges, quality, customer care, and many others as discussed below.

- **Product perceived performance and expectations,**

If the performance falls short of the expectations, the customer is dissatisfied. And when the Performance exceeds expectations; the customer is highly satisfied or delighted (Ulrich 1999). Many companies are aiming for high satisfaction because customers who are just satisfied still find it easy to switch when a better offer comes in. Customer satisfaction does not only result from

providing excellent service, but from customers perceiving that a company delivers a service that is unique. Achieving this quality of service takes a serious commitment from every employee in the organization though providing excellent service that exceeds customers' expectations to the extent that they are willing to tell others about their experience. Oliver (1980) found that disconfirmation can affect customer satisfaction. Positive disconfirmation (perceived performance above the expectation) increased consumer satisfaction and while negative disconfirmation (perceived performance below expectation) decreases consumer satisfaction

- **Customer Service**

Employees should answer the phone with a smile. A smile can be "heard" in someone's voice. Nothing frustrates customers more than being served by an employee who feels the customer is a waste of their time. According to Craig C (2003) improving an organizations customer service requires commitment and consistence effort from everyone in the organization. They advanced 10 fundamentals that will help create a culture of continuous service improvement. Companies need to define success for everyone in the organization as continually improving everything every day. Customer service improvement is the cumulative effect of thousand small improvement made daily at every level in the organization. It often requires changing the culture from one that accepts the status quo to one that is excited about change and constant improvement. Listening is the foundation of all good relationship and pre-requisite to business Success, but surprisingly, few compames systematically listen to customers, suppliers, employees, and competitors. The radical service improvements needed to sustain a competitive advantage, require better customer information systems. The more the organization knows about customers' business and needs, the easier for it to form strategic partnership with in them.

- **Service Quality**

Service quality or perceived service quality is a determinant of customer satisfaction. Some researchers state that service quality and satisfaction measure the same underlying concept and therefore are the same. Other authors argue that satisfaction with a specific transaction precedes the perception of the overall quality of the firm and therefore are the antecedent of perceived

quality. Finally others suggest that the concept of satisfaction and quality are different and that it is the perceived service quality that will affect customer satisfaction. Fornell (1992) finds that as a general psychological phenomenon, satisfaction is primarily a function of customer's quality experience with a product or service. So over all it is expected that the greater the perceived quality, the higher the level of customer satisfaction.

- **Needs and desires of the customers.**

This is one of the determinants of customer satisfaction (Grigoroudis 2010). In order for a business to meet the needs and desires of customers, the business must know the needs and desires of the customers. This information is vital not only for successful business but also for Understanding and improving customer satisfaction. This important component helps to set the Standards and components of satisfaction from the perspective of the consumer.

- **Value of Products and Services**

According to SwaminathanJ & Ananth A (2010) perceived value of the product is one of the determinants of customer satisfaction. Customer satisfaction depends greatly upon receiving a quality product with the expected value attached and service at a competitive price. Not only is the customer looking for the right product or service, he is looking for someone who is knowledgeable about the product or service as well.

- **Product ambiguity**

Clarity of issues is also determines customer satisfaction. Product experience can often be ambiguous, such as when the quality of a product is difficult to evaluate. The difficulty may arise when a product for example clothes or insurance cannot be judged based on objective criteria, or when a product for example diamond may have many credence qualities or subjective attributes, Alternatively, there might be a potential for multiple interpretations of product quality Sometimes it is difficult to determine what is acceptable, desired, or valued from product. If the product is

difficult to evaluate or ambiguous, consumers are likely to lack confidence about the performance ratings.

- **Fees and Charges**

Service quality attributes in e-banking industry are important since human-Electronic interaction is the main service delivery and communication channel. Offering high quality services to satisfy consumers' needs, at lower costs, are potential competitive advantage of e banking. Some studies show that e-banking has successfully reduced operating and administrative costs (Speece,2003). Cost savings have helped e-based banks offer lower or no service fees, and offer higher Interest rates on interest-bearing accounts than traditional banks (Gerlach et al 2000). Therefore, it is hypothesized that fees and charges have positive impact on customer satisfaction.

## **2.4. Review of related literature**

### **2.4.1. Relationship between E- Banking and Customer Satisfaction in Commercial Bank**

Electronic banking is linked to customer satisfaction through globalization. He explains that this has only brought the world closer together, but it has allowed the world's economy to become a single interdependent system. This means that local and international business can easily share information quickly and efficiently.

Lenaini .S. (2012) argues that customer satisfaction for financial institutions and banking Website display positive growth in 2010 and nearly two thirds of online financial customers now use bill pay across, credit cards and third party websites.

Electronic banking has drawn attention of many banks to application of various technology devices in promoting or achieving better customer service delivery that guaranteed customer satisfaction that translates into increased profitability and higher return on investment.

Electronic banking services and customer satisfaction have a positive relationship, which has afforded banks the opportunities to impress customers, which eventually encourage them to keep coming back. Today it would be difficult to see any bank in the country that doesn't render one form of electronic banking service or the other, even banks in the most remote parts of the world.

Vaidya (2011) argues that emerging technology would enable to create new ways of lead generation, prospecting as well as developing deep customer relationship and electronic banking would achieve superior customer experience with bi-directional communications. In his view, ascertains that access to basic financial services, ability to save, transfer and also invest small amounts of money can make a huge difference to people around the world.

The other linkage between electronic banking and customer satisfaction as revealed by (Barney, 2006) is cost effectiveness. He explains that information technology has helped to computerize the business process thus streamlining businesses to make extremely cost effective moneymaking machines.

Barney (2000) also adds on the fact that electronic banking has created more time for businesses. This is so in that electronic banking has made it possible for business to open 24/7 all over the globe. This means that a business can be opened any time anywhere, making purchase from different countries easier and more convenient. It also means that you can have your goods delivered right to your doorstep with having to move a single muscle.

## **2.5. Research gap**

### **2.5.0. Introduction**

The simplest level, a research gap is essentially an **unanswered question or unresolved problem** in a field, which reflects a lack of existing research in that space. Alternatively, a research gap can also exist when there's already a fair deal of existing research, but where the findings of the studies **pull in different directions**, making it difficult to draw firm conclusions (Ethar Al-Saraf PhD)

Based on our topic that aims to identify the “effect of E-banking on customer satisfaction of commercial banks in Rwanda a case study BPR Kinamba branch .we upon reviewing the literature, that we might find that there's a body of research that points toward customer satisfaction as a key factor – but at the same time, a large body of research that finds no link between e-banking usage and customer satisfaction. In that case, we might have something of a research gap that warrants further investigation.

### **2.5.1. Types of research gaps**

While there are many different types of research gaps, the four most common ones we encounter what helped on our field study are the following

1. The **classic** literature gap
2. The **disagreement** gap
3. The **contextual** gap, and
4. The **methodological** gap

### 1. The Classic Literature Gap

First up is the classic literature gap. This type of research gap emerges when there's a **new concept or phenomenon** that hasn't been studied much, or at all. Based on our topic, when there is a new software related to E-banking system launched by commercial banks, to improve customer satisfaction, there's an opportunity to explore its impacts on users especially customers, how it could be leveraged for its satisfaction, its impact on in daily service delivery, and so on..

Classic literature gaps can present **exciting research opportunities**, but a drawback.

While this is manageable, it was challenging for first-time researchers, so we have to be careful not to bite off more than you can chew.

### 2. The Disagreement Gap

As the name suggests, the disagreement gap emerges when there are contrasting or contradictory findings in the existing research regarding a specific **research question** (or set of questions). The hypothetical look at our topic, regarding the effect of E-banking on customer satisfaction in commercial banks of Rwanda a case study of Kinamba branch gap.

Importantly, for this type of research gap, there needs to be a relatively balanced set of opposing findings. In other words, a situation where 95% of studies find one result and 5% find the opposite result wouldn't quite constitute a disagreement in the literature. Of course, it's hard to quantify exactly how much weight to give to each study, but we could need to at least show that the opposing findings aren't simply a corner-case anomaly.

### 3. The Contextual Gap

The third type of research gap is the contextual gap. Simply put, a contextual gap exists when there's already a decent body of existing research on a particular topic, but an **absence of research in specific contexts**.

- For our study, there could be a lack of research on:
- A specific **population** – a certain age group, gender or ethnicity
- A **geographic** area – identify a country, city, province, District and sector
- A certain **time period** –the time scope of the studies took place three years from 2021 to 2023

The contextual gap is a popular option for dissertations and theses, especially for first-time researchers, as it helped a researcher to develop her research on a **solid foundation of existing literature** and potentially even use existing survey measures.

### 4. The Methodological Gap

Last but not least, we have touched the methodological gap. As the name suggests, this type of research gap emerges as a result of the **research methodology or design** of existing studies. With this approach, you'd argue that the methodology of existing studies is **lacking in some way**, or that they're missing a certain perspective.

For this study, it might show argue that the bulk of the existing research has taken a quantitative approach, and therefore there is a lack of rich insight and texture that a qualitative study could provide. Similarly, you might argue that existing studies have primarily taken a cross-sectional approach, and as a result, have only provided a snapshot view of the situation – whereas a longitudinal approach could help uncover how constructs or variables have evolved over time

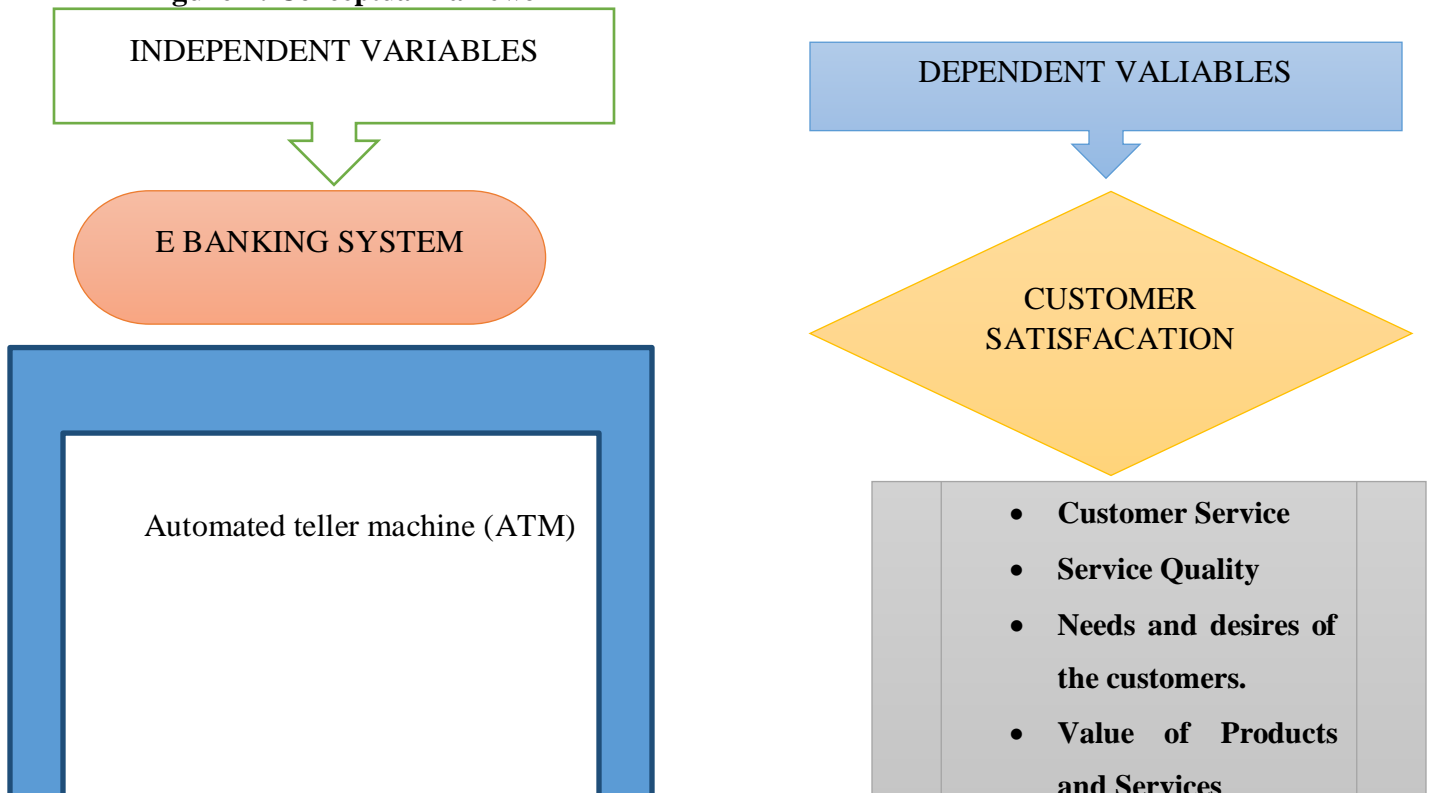
In this part we may represents a brief summary of the main findings of the study by giving few Advices to future researchers for deep discoveries. It looks like recommendations on, which were learnt from the field based on the objectives of the study to our topic which is “effect of E-banking on customer satisfaction of commercial banks in Rwanda a case study BPR Kinamba branch from 2021to 2013.

- The impact of Computerized accounting systems on customer satisfaction in commercial banks of Rwanda.
- How E Banking system can measure the degree of satisfaction of customer through the performance of staff in the management control.
- E- Banking system has simplified most of the banking services requirements in commercial banks of Rwanda.

**2.6. Conceptual framework**

This research is mainly based on “effect of E-banking on customer satisfaction of commercial banks in Rwanda a case study BPR Kinamba branch from 2021to 2013. After analyzing the dependent variables and independent variables, the conceptual framework constructed by researchers in this study, shows that customer satisfaction is dependent variable whereas E-banking system is independent variable as is defined in the figure below

**Figure 1: Conceptual framework**

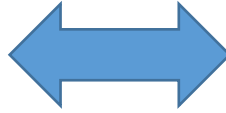




E-service payment

Cashless

SMS Banking



Debt card purchase & payment

E- mail banking

### **INTERVENING VARIABLES**

#### **Centre bank of Rwanda (BNR) & Government policies**

- **Cashless**
- **E-banking services and other related banking transactions.**

**Source:** Researchers Ideas, 2024

E banking system applied in BPR Kinamba Branch, with reinforcement of Accuracy reporting, updated of information to customers account brings variability to Service Quality, Needs and desires of the customers, Value of Products and Services, Product ambiguity for easy access by customer have an influence to the satisfaction on the side of customer.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1. Introduction**

Research methodology is the science of how to make research decision, and it includes the practice of evaluating the goodness or badness of decision made in the course of doing research.

Methodology refers to a set of methods and principles that are used when studying a particular kind of work. It usually includes descriptions of the research design, data gathering procedures, and measuring instruments. Richard (1989:111)

This chapter describes the ways in which data were collected and analyzed. It includes research design, sampling procedure, research population, sample, research instrument, validity and reliability of the instrument, and data analysis.

### **3.2. Research design**

Research design is a master plan specifying the methods and procedures for collecting, analyzing and interpretation of the needed information (notes in research methodology). Williams and Grinnell (1990:212),

Research design is the entire process of the study carried out and the problem formulation through dissemination of findings. This term is sometimes used to refer to graphic representation of independent and dependent variables. For the purpose of current study, survey method was adopted. Research survey was chosen due to the fact that this was an exploratory study on the impact of strategic business planning in the economic development of financial institutions. According to Grinnell (1990:279)

This part will describe the methods that should be used by researchers for data collection, sampling and data analysis, it is processing and finally the limitations of the study, it should be carried out on the basis of case study method. For that reason one public organization was chosen to represent others. The methodology to be used in getting answers to the research problem will involve both qualitative and quantitative techniques.

### 3.3. Research population

Population refers to groups or categories of human being and other things, which have one or more characteristics in common as the target population of the converses. Population is a group of individuals or items that share one or more characteristics from which data can be gathered and analyzed. Kakooza (1992:79)

In this study, the researchers took 26 employees of BPR Kinamba branch and have sample size of 12 respondents.

### 3.4. Sampling procedure

The sampling is concerned with the selection of a subset of individuals from within a population estimate characteristics of the whole population. Williams and Grinnell, (1990:216),

Our sampling was about getting information from a smaller group from total population of 26 people. The sampling procedure used in this research is according to the position occupied by all employees in organization of BPR Kinamba branch.

### 3.5. Sample size

This is typically done using the formula for a proportion: There are many formulas used for calculating sample size. One of the most common formulas used is Yamane's formula:

$$n = N / (1 + N (e)^2)$$

Initial Sample Size according to our Population of 26 is 12 respondents

In practice, we often need to round this number to a more practical value. For very small populations, like 26, using 12 respondents can be reasonable if we want to keep the sample size smaller for practical reasons.

Thus, if we need a sample size of 12 respondents, we're accepting a lower level of precision but can still use this sample effectively for smaller populations of 26.

**Table 1: Showing the category and size of respondents used for the study**

<b>Staff department</b>	<b>population</b>	<b>Sample size</b>	<b>Percentage</b>
Management Staff	6	2	24.86%
Support staff	5	3	24.86
I.T Staff	5	3	20.10%
Accounting	4	2	20.10%
Staff/Tellers	4	1	15.09%
Customer care	2	1	15.09%
<b>Total</b>	<b>26</b>	<b>12</b>	<b>100%</b>

**Source: Primary data (2024)**

### **3.4. Data collection techniques**

The main research techniques in this study are the questionnaires, interview, observation and documentation. Williams and Grinnell, an Introduction to social Research (1990:228). After composing and structuring the questionnaires and interview schedule, the researchers took them to the director for approval.

The researchers also made contact and show the questionnaires and interview forms to other related academicians for the pieces of advice. After discussing and corrected, it is when the researchers went to the field with those research tools to correct data

#### **3.4.1. Questionnaire**

Some others defines questionnaire as a set of predetermined, written questions, which calls for responses on the part of the clients; it may be either self-administered or group-administered.

Specifically this research used as a self-administrated questionnaire and the questions were mutually exclusive. It has been distributed to the employees of BPR Kinamba branch. Williams and Grinnell, an Introduction to social Research (1990:228

### **3.4.2. Interview**

Interview is a procedure of scientific investigation using a verbal communication process in order to called information related to the set objectives, which constitute the finality of the research hypothesis. The interview technique consists to organize a conversation in which the investigator asks questions to the surveyed person in so as together information on the hypothesis and the concept indicators. The investigator must prepare an interview guide which comprises themes (indicator) to be imperatively handled.

In a research, the interview is very important to the research because we have to introduce the question to the concerning persons in order to get answer. An interview has allowed us to understand the reality of things. You can address yourself to the survey group, the shareholders directly or indirectly using phones. This technique has helped us to get verbally answers and directly the responses and discuss if possible. Garawitz, (1979:42)

### **3.4.3. Documentation**

This tool is used in collection of data that already exists in boxes in some organization, documents, computers and library. It is used purposely in analyzing the historical background, newspapers, reports and internet. Mutaganda, (2008:32),

The all above techniques have been used in order to collect useful and relevant data relating to our study.

### **3.5. Data analysis**

In analysis of data, the researcher used the following methods:

### **3.5.1. Quantitative method**

This method is a type of approach that has been used to present the data collected from the documents and questionnaires. In this approach data have been analyzed by the use of simple tabulation and calculation of % so as to depict the magnitude of responses which had been given by target population (sighted students, visually impaired students and disabled students assistants) This method is used because there is some analysis of data which asks in collecting data in the form of numbers, for example tables, figures, and percentages. (Bailey, 2001:76)

### **3.5.2. Analytical method**

This method allowed the researchers to analyze all data and information gotten from all techniques.(Kakooza 1992: 51).This also helped us to analyze the Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branch from 2021-2023).

### **3.5.3. Comparative method**

The comparative analysis consists to see for differences and similarities existing between situations which call for comparison Garawitz, (1987:62). This method is used because the researchers will compare these three years of the study, it means 2021 up 2023.

## **3.6. Sources of data**

The researchers will use both primary and secondary source of data.

### **3.6.1 Primary source of data**

Primary sources provide the 'raw data' that you use first to test the working hypothesis and then as evidence to support your claim. In history, for example, primary sources include documents from the period or person you are studying, objects, maps, even clothing; in literature or philosophy, your main primary source is usually the text you are studying, and your data are the words on the page. In such fields you can rarely write a research paper without using primary sources." Is based on eyewitness of accounts written by employees of microfinance institution under study primary data was be obtained through administering questionnaire.

If the information you need is unavailable or hasn't yet been gathered, you'll have to gather it yourself. Four basic methods of collecting primary data are field research, content analysis, survey research, and experiments. Other methods of gathering primary data include historical research, analysis of existing statistics, and various forms of direct observation."

### **3.6.2. Secondary source of data**

Secondary sources may redistribute information received from the primary source either in their initial form or after some transformation including further aggregation, reclassification or other manipulation such as seasonal adjustment.

Secondary data for this research was gathered from annual reports of BPR Kinamba branch, texts books from library and electronic data from internet.

### **3.7. Data presentation, analysis and interpretation**

Analysis as the ongoing process in participant observation research method. Data analysis in this study was done throughout the research stages. It was based on direct interpretation of insinuations first impression and meanings. Bogman and Taylor (1975:81)

During this, several stages were undergone to process the data collected including examining questionnaires and interviewing responses where by consistency, accuracy and competency of the responses was ensured. Interviewing guide notes were organized and the researcher compared them with literature review to ascertain uniformity and consistence and undergoing of questions. So, data collected from the field were processed, analyzed, and interpreted then transformed into meaningful information for easy understanding. Therefore data processing involved editing, coding, tabulation and usage of statistical techniques for quantitative were used for easy analysis of data.

### a) Editing

The researchers here crosschecked and ensured that all answers given were coherently and logically recorded to provide sufficient and rich information.

### b) Tabulation

The researchers here summarized the data by constructing frequency tables of responses given on each question in the questionnaire or in the interview. This helped us show the distribution of the responses for each question.

### C) Coding

Coding is an interpretive technique that both organizes the data and provides a means to introduce the interpretations of it into certain quantitative methods. Most coding requires the analyst to read the data and demarcate segments within it. Each segment is labeled with a “code” usually a word or short phrase that suggests how the associated data segments inform the research objectives. When coding is complete, the analyst prepares reports via a mix of: summarizing the prevalence of codes, discussing similarities and differences in related codes across distinct original sources/contexts, or comparing the relationship between one or more codes.

## 3.8. Limitation of the study

The major limitations of this study are the following:

- **Uncooperative respondents:** as usual, not every respondent during research is completely willing to cooperate positively towards the demands of the researcher, some are even hostile. However, giving up on the respondent only hinder the acquisition of the necessary information, so the researchers not get tired as far as wooing the respondents to cooperate is concerned
- **The problem of finding the staff to conduct in-depth interviews is likely to arise.** This is because of their rather busy schedule in office; but this has been solved by making appointments with them and agreeing on the time that may be appropriate for them. Further still all interviews were conducted during working hours.



- **Cost of the research/study:** just like any other research, costs are normally unavoidable and these may include, transport costs, airtime costs, typing, printing and binding costs among others that may come up unpredicted. However, as far as costs are concerned, the researcher has to acquire soft loans from friends and relatives so as to meet the costs of the research
- **Time required to carry out the research:** the time required to carry out the research were not adequate, given unpredicted and uncertain happenings that may hinder timeliness such as delays and bad weather which the researcher definitely has to bear with and try as much as possible to work longer hour in order to compensate for the lost time.

## **CHAPTER FOUR: PRESENTATION, ANALYSIS AND INTERPRENTATION OF THE RESULTS.**

### **4.1. Introduction**

This chapter considers and analyses the data collected and interprets it to draw conclusions in line with the study objectives. This chapter deals with the analysis and interpretation of primary data collected from the field. It is the presentation of data analysis and the interpretation of finding on the Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branch from 2021-2023). The data are presented in the form of tables and that give mathematical explanations in term of percentages for better understanding. Each question is analyzed and interpreted individually.

### **4.2. Identification of respondents**

The identification of our respondents carries on the variables such as the gender, the age, the education level, and working experience.

#### **4.2.1. Gender of respondents**

The researcher have considered the variable “gender” to see if the males and the females are all implicated on the Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branch.

Then, the following table presents respondents according to their gender.

**Table 2: Distribution of respondents by sex**

Gender		Respodents	Percent	Valid Percent	Cumulative Percent
Valid	Female	5	41.6	41.7	41.7
	Male	7	58.3	58.3	100.0
	Total	12	100.0	100.0	

**Source:** Primary data, December (2023)

The above table shows that out of 12 respondents who returned the questionnaires proposed 5 females representing 41.7 % and 7 respondents of males representing 58.3%. Thus, the number of male that was compared to that of female respondents is bigger because generally BPR Ltd Kinamba branch has so far a small number of female staff compared to males.

The policy of our country requires the participation of everybody to the technology and it encourages the equality of sexes (gender) in giving them the equal luck to the education and to the different professions. It is for this reason that the researchers have considered the gender in the sample because each activity in our country should involves the participation of each sex by the condition of at least 30% of females.

#### **4.2.2. Age of respondents**

It's proper and important to consider age as an important variable in scientific research, because different age range gives different ideas from different people. In this study, age variable was also used to test the understanding about the Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branch. Between the young people and the older ones.

Then, the following table indicates results concerning age profile of respondents.

**Table 3: Distribution of respondents by age**

Age range		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below of 15-30	6	50.4	50.4	50.4
	Between 31-40	4	28.5	28.5	78.9
	Between 41-50	2	21.1	21.1	100
	More than 50	0	0	0	100
	Total	12	100.0	100.0	100

**Source:** Primary data, February (2023)

From the study findings, the study population was mainly composed of people from different age groups. Respondents aged between 15 and 30 years, representing 50.4% response rate, those aged between 31 and 40 years comprised of slightly over 28%, Aged between 41 to 50 responded representing 21.1%, where as those aged fifty years and above comprised zero percent (0%).

As noted / indicated above, the variations in age structure were pointed out as a result of various factors, the major one being the fact that people lying in the age bracket of 15 – 30 are the youth who now days largely engage in high / advanced institutions of learning a warning them satisfying qualifications a long side fresh brains thus are largely opted for by such efficiency yearning banks and financial institutions. This thus explains why those falling between 15 – 30 years and many compared to the rest. Others in the bracket of 31 – 40 and above were fewer because these qualified earlier thus cannot easily cope up with the ever-increasing modern systems of finance handling especially due to current usage or utilization of modern information and technology equipment and methods.

### 4.3.3. Working experience of respondents

The distributions of respondents by working experience in BPR Kinamba sub-branch are classified as following: 1 year1 Month – 1 Year1 - 2 years, 2– 3years, 4 and above years.

**Table 4: Working experience of respondents**

working experience	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 year1 Month – 1 Year	1	8.3	8.3	8.3
1 - 2 years	3	25	25	33.3
2– 3years	6	50	50	83.6
above4 years	2	16.6	16.6	100.0
Total	12	100.0	100.0	100

**Source:** Primary data, December (2023)

The table above shows that, below 1 year1 Month – 1 Year representing 8.3% response rate have experience in working in bans and other financial institutions domain, 25 % of respondents have between 1-2 years of experience, 50 % have between 2-3 years of working experience therefore, 16.6 % have above 5years of working experience.

In addition, this table shows that all employees of BPR Kinamba branch have working experience and are qualified as they perform their job day to day. The experience permits the researchers to get accurate and reliable information. Basing on this table, it was found that there is a link between the respondent's experience and their knowledge on the role of computerized accounting system in the performance of commercial banks particularly BPR ltd Kinamba branch.

#### 4.4. Respondents views

This section illustrates the overview of respondents on the Effect of E banking on customer satisfaction in commercial bank of Rwanda Case study BPR Kinamba branch.

##### 4.4.1 How E banking system used by BPR Kinamba branch

**Table 5: Does E Banking used effectively by BPR LTD KINAMBA branch?**

Alternative		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	100	100	100
	No	0	0	0	100
	Total	12	100.0	100.0	100

**Source:** Primary data, December (2023)

Table above indicates that all the respondents (100%) are in agreement that the organization actually runs and maintains a computerized accounting system for its operations. This positive response is of great significance to the study since it enabled deeper research into the topic in question.

**Table 6: Appreciation of major way used in performing E-banking system.**

Responses		Frequency	Percent	Valid Percent
Valid	Automated teller machine(ATM)	8	66.6	66.6
	E- bill payment service	10	83.3	83.3
	Cashless	11	91.6	91.6
	SMS Banking	8	66.6	66.6
	E-mail banking	9	75	75

**Source:** Primary data, December (2023)

The above table shows the major tools used in E-banking system stated by the majority of the respondents. It is also evident by the percentage differences above that the respondents mostly appreciate the ability of the system to get satisfied by its services. Automated teller machine (ATM) (66.6%), E- bill payment service (83.3%), Cashless (91.6) and E-mail banking by (75%) all the above activities are available at BPR Kinamba branch commercial as banks and helped to achieve a considerable level of satisfaction to its customers.

**Table 7: Responses about the factors that determine of customer satisfaction.**

alternatives		Respondents	Percent	Valid Percent
Valid	Service quality	12	100	100
	Customer services	11	91.6	91.6
	Needs and desire of customers	11	91.6	91.6
	Product ambiguity	10	83.3	83.3
	Time saving	8	66.6	66.6

**Source:** Primary data, December (2023)

The research also aimed at finding out what factors that determine customer satisfaction and as we can see in above table, are the various elements of the kind of satisfaction that the respondents

pointed out during the study. All determinants named above rank highly in percentages of interviewee responses. This reveals that the stated factors are the most commonly generated by E-banking services system at the bank. As seen above, the study findings on the effects of E-banking system is paramount. In the first case, we can reveal that the case study actually E-banking system for its operations as per the findings of the research and the tasks performed by the system among other found out include those summarized in table 4 above. While the system performs several tasks in the bank, the saving of time of customer in while are enjoying bank service any wheels not compulsory visit the branch.

**Table 8: Does customers of Banque populaire du Rwanda ltd Kinamba-branch all have an access to E-banking system?**

Alternatives		Respondent	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	8	53.7	53.7	53.7
	Strongly agreed	4	46.3	46.3	100
	Total	12	100	100	

**Source: Primary Data February, 2023.**

Findings indicate that 53.7% respondents out of 12 that were interviewed agreed that actually to have an access E- banking services as long as branch has a maintained e-banking system and 46.3% strongly agreed. This implies that all customer actually are involved in e-banking system usage. And which helps in performing satisfying through tools cited above. The purpose of researcher to get this find was to be sure if the E- banking system is permanently used and maintained always but not some time or temporary used.



**Table 9: Banque populaire du Rwanda ltd Kinamba-branch has qualified staff in dealing with Electronic banking system.**

Alternative		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	9	66.7	66.7	66.7
	Disagreed	1	8.3	8.3	75
	Strongly agreed	2	25	25	100
	Total	12	100.0	100.0	

**Source:** Primary data, December (2023)

Table 9 reveals that 66.7% of the respondents agreed, 66.7% disagreed, while 25% strongly agreed that Banque populaire du Rwanda ltd Kinamba branch has qualified staff that can manipulate the E-banking system operations. The impression reflected is that most of the staff at Banque populaire du Rwanda ltd Kinamba-branch is computer literate and skilled as they receive trainings from BPR ltd Kinamba branch on it in order to realize an effective accomplishment of their daily tasks related to bank services and make customers get satisfied from any bank service rendered.

#### **4.3.2 Determination of the strength of the electronic banking system used by PBR Ltd Kinamba-branch.**

**Table 10: Does E Banking used effectively by BPR LTD KINAMBA branch?**

Alternatives		Repondent	Percent	Valid Percent	Cumulative Percent
Valid	efficient	100	100	100	100
	Effective	100	100	100	100
	Non efficient and effective	0	0	0	0

**Source:** Primary data, December (2023)

As shown in the above table, 100% of respondents said that the computerized accounting system of BPR Ltd is effective and efficient in Kinamba-branch.

Therefore, the objective of E banking information system is to provide accurate and timely information to a business management, and continue to arise a positive effect service satisfaction internal and external users. It makes the information about the financial position and performance available while it also furnishes the information about the changes in financial position of the enterprise. Since effective decision makings demands accurate, timely and relevant information, it possesses the characteristics of reliability, relevance, understandability and comparability in order to facilitate management in decision making process. Thus, it may be said that a well-designed and well-managed accounting information system can improve the work performance and it leads to improve efficiency and effectiveness of a business enterprise.

#### **4.3.3. presatation of findigs about the effects of E-banking system on customer satisfaction of BPR Ltd Kinamba-branches**

**Table 11: The use of E banking system has positive effects on satisfaction of customer services of BPR LTD KINAMBA branch.**

Responses		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	100	100	100
	No	0	0	0	100
	Total	12	100	100	100

**Source:** Primary data, December (2023)

According to the above, table all respondents representing 100% agreed that the E-banking system of BPR Ltd Kinamba-branch has positive effects on satisfaction of customer services.

**Table 12: Presentation of findings that show if the use of E-banking system have a considerable value on the side of customer's services in BPR ltd Kinamba branch.**

Alternative		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	10	66.9	67.9	66.9
	Strongly agreed	2	34.1	32.1	100
	Total	12	100.0	100.0	

**Source:** Primary data, December (2015)

The table above shows that 53.7% respondents out of 12 that were interviewed agreed that E-banking system has a considerable Value on the side of customers of BPR ltd Kinamba-branch and 46.3% strongly agreed. This means that in using E-banking system BPR ltd Kinamba-branch gains more profit and this is great positive alignment by the side of researchers where we constant that computerized accounting system have an important role on the performance of commercial bank.

**Table 13 E-banking system simplified most of the accounting requirements and meet needs and desires of customers of BPR Ltd**

Alternative		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	6	46.7	46.7	46.7
	Disagreed	1	6.7	6.7	53.4
	Not sure	2	13.3	13.3	66.7
	Strongly agreed	3	33.3	33.3	100
	Total	12	100	100	

**Source:** Primary data, December (2023)

Table 13 revealed that 46.7% of the respondents agreed, 13.3% were not sure while 40% of the respondents strongly agreed to the fact that the E-banking **quality services to customers**. This implies that costs associated with manual storage have been minimized in BPR Kinamba-branch with the introduction of the E-banking system.

**Table 14: presentation of finding which show whether E-banking system has simplified most of the accounting requirements to meet needs and desires of customers of BPR Ltd**

Alternative		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	6	46.7	46.7	46.7
	Disagreed	1	6.7	6.7	53.4
	Not sure	2	13.3	13.3	66.7
	Strongly agreed	3	33.3	33.3	100
	Total	12	100	100	

**Source:** Primary data, December (2023)

According to the findings in table 14, BPR Kinamba branch by introducing the E-banking system has simplified most of its accounting requirements and meet needs and desires of customers of BPR Ltd Kinamba. 46.7% of the respondents agreed, 6.7% disagreed, 13.3% were not sure, and 33.3% strongly agreed. This implies that there is proper accountability for the activities of BPR ltd Kinamba Branch.

**4.5. Presentation and interpretation of Findings that Show that E-banking system is contributing to the customer satisfaction through conceptual determinants.**

**Table 15: presentation of findings that Show that Automated teller machine (ATM) has a considerable values to increase the degree of satisfaction of customers in BPR Kinamba branche.**

Alternative		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	6	60	60	60
	disagreed	1	6.7	6.7	66.7
	Not sure	2	13.3	13.3	80
	Strongly agreed	3	20.0	20.0	100
	Total	12	100	100	

**Source:** Primary data, December (2023)

The table above shows that 60% respondents out of 12 that were interviewed agreed that the use of ATM via E-banking system has a considerable contribution on customers of BPR ltd Kinamba-branch and 20% strongly agreed and 13.3% not agreed. This means that in using ATM, BPR ltd Kinamba branch satisfy more its customers and this is great positive alignment by the side of researchers.

**Table 16. E-service payment has a good index in satisfaction of customers in BPR Kinamba branche.**

Alternatives		Respondent	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	8	53.7	53.7	53.7
	Strongly agreed	4	46.3	46.3	100
	Total	12	100	100	

**Source: Primary Data, (2023)**

Findings indicate that 53.7% respondents out of 12 that were interviewed agreed that actually to have an access E- services payment as long as branch has a maintained e-banking system and 46.3% strongly agreed. This implies that all customer actually are involved in e-payment system usage

**Table 17: Cashless is cotrubuting in customer satisfaction at BPR Kinamba branche.**

Alternatives		Respondent	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	8	53.7	53.7	53.7
	Strongly agreed	4	46.3	46.3	100
	Total	12	100	100	

**Source: Primary Data February, 2023.**

Findings indicate that 53.7% respondents out of 12 that were interviewed agreed that they have adopted the usage of cashless system as log as it have linked with E- banking and e-services payment and the branch has maintained it all in its daily activities. 46.3% strongly agreed. This implies that all customer actually are involved in cashless system usage.

**Table 18. Finding about SMS Banking contribution in customer satisfaction at BPR Kinamba branch**

Alternatives		Respondent	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	8	53.7	53.7	53.7
	Strongly agreed	4	46.3	46.3	100
	Total	12	100	100	

**Source: Primary Data 2023.**

Findings indicate that 53.7% respondents out of 12 that were interviewed agreed that SMS Banking is more likely by almost all customers of BPR Kinamba Branch to have an access E- services payment, account updates by every and each transaction made, and more information need by bank account as long as branch has a maintained e-banking system and 46.3% strongly agreed. This implies that all customer actually are involved in good service of e-banking system usage

**Table 19. Findings that show that Debt card purchase & E-payment contributed more in customer satisfaction at BPR Kinamba branch.**

Alternatives		Respondent	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	9	59.7	59.7	59.7
	Strongly agreed	3	40.3	40.3	100
	Total	12	100	100	

**Source: Primary Data February, 2023.**

Findings indicate that 59.7% respondents out of 12 that were interviewed agreed that the usage of Debt card purchase & payment is another determination of good service to customer that BPR Kinamba branch have adopted to enhance the usage of E- services banking system. 40.3% strongly agreed. This implies that all customer actually are all enjoying in e-banking system usage.



#### 4.5.4 presentation of Responses on the degree of satisfaction before and after using of E-banking system in BPR Ltd Kinamba branch

**Table 20: findings about comparison of customer satisfaction before and after applying E-banking system.**

Alternative		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	6	60	60	60
	disagreed	1	6.7	6.7	66.7
	Not sure	2	13.3	13.3	80
	Strongly agreed	3	20.0	20.0	100
	Total	12	100	100	

**Source:** Primary data, December (2023)

Findings from table 14 shows that 60% of the respondents agreed, 6.7% disagreed, and 13.3% were not sure, while 20% strongly agreed that implementing a E-banking system is very helpful compared to the period before of acquiring it and to the costs involved in obtaining the system. Reason why I as a researcher, I am strongly recommend that the rest banks business and financial institutions could applied it in their business activities

**Table 21** Table 21: showing that the Electronic banking system is more efficient and time saver than the manual system.

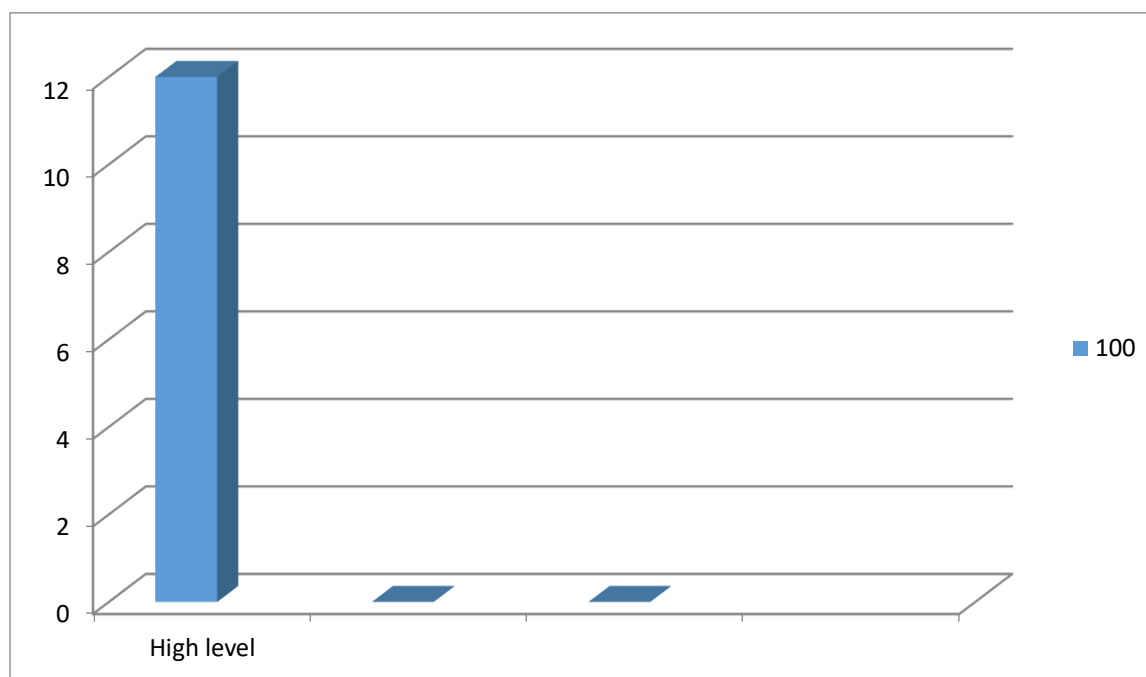
Alternative	Respondents	Percent	Valid Percent	Cumulative Percent
Valid agreed	8	53.3	53.3	53.3
Strongly agreed	3	33.4	33.4	86.7
Strongly disagreed	1	13.3	13.3	100
total	12	100	100	

**Source:** Primary Data, December (2023)

Table 17 can reveal that of the 12 respondents that, 53.3% agreed that the E-banking system is more efficient and time saver than the manual system. Only 13.3% of those interviewed strongly disagreed while 33.4% strongly agreed. This result indicates that the E-banking system has enhanced efficiency in work flows and is also flexible to the users compared to the manual system.

Using E-banking system can save your time as accounting software allows faster data entry than manual accounting, and allows documents such as invoices, purchase orders and payroll to be collated and printed quickly and accurately. Because of its efficiency and ease of use, E-banking system also allow you to improve inventory control and payment collection, saving time and improving cash flow. It is helpful in update some records automatically, thus your account records could be always be up to data and make your business very clause to your customer through quick access to information and rapid service deliverance.

**Chart 1.** presentatio of responses that showing the level of satisfaction after using of E-banking system in BPR Ltd Kinamba-branch.



According to the above Chart, 12 respondents representing 100% agreed that after using of E-banking system in BPR Ltd Kinamba-branch the level of performance is highly.

Therefore, E-banking systems offer several advantages for small businesses. Systems for small and medium sized businesses can be purchased off the shelf at low cost. These programs allow users whether internal or external to have an easy access to the company's financial position in get services at a real-time, and make adjustments to the business strategy as needed. E-banking system can also provide instant reports on stock evaluation, profit and loss, customer accounts and payroll and sales analysis, again, allowing faster adjustments in your business strategy. In addition, transactions need to be input only once. Not that with specific trainings given to the staff, a business or company especially commercial banks and other related financial institutions can know how he/she could performs the required task effectively throughout computerized accounting system. And that have a highly contribution in satisfying customer care services.

#### 4.5. Overview of how customer satisfaction is valued before and after using E-banking system

Customer satisfaction with electronic banking systems can vary significantly before and after their adoption.

**Table 22: Presentation of findings that show that there is a positive change in situation of customer satisfaction comparing before and after using Electronic banking have**

Alternative		Respondents	Percent	Valid Percent	Cumulative Percent
Valid	agreed	8	53.3	53.3	53.3
	Strongly agreed	4	46.7	46.7	46.7
	Disagreed	0	0	0	100
	total	12	100	100	

**Source:** primary Data (2023)

Findings from table 16 shows that 53.3% of the respondents agreed, 46.7% strongly agreed, and 0% were not disagreed that before using E-banking system the services was not good and accurate due to the time it takes to get bank service, difficult access to the information related, and security of accounts and delay of transaction.

**Table 23: Showing whether customers of Banque populaire du Rwanda ltd Kinamba-branch Are all satisfied after using E-banking system.**

Alternatives		Respondent	Percent	Valid Percent	Cumulative Percent
Valid	Agreed	8	53.7	53.7	53.7
	Strongly agreed	4	46.3	46.3	100
	Total	12	100	100	

**Source:** primary Data (2023)

Findings from table 16 shows that 53.3% of the respondents agreed, 33.4% strongly agreed, and 13.3% were not disagreed, E-banking system is very helpful compared to the services provided by BPR Ltd Kinamba-branch staff, Reason why I as a researcher, I am strongly recommend that the rest banks and other financial institutions could applied it in their business activities

#### **4.6.Inconvenience of Using Electronic Banking System**

##### **4.6.1. Before Using Electronic Banking Systems**

###### **a. Time Consumption:**

- Customers face traditional banking methods time-consuming and inconvenient. Long lines, limited banking hours, and the need for physical visits might be frustrating.

###### **b. Limited Access:**

- Access to banking services might be restricted by location or business hours, limiting customers' ability to perform transactions or access account information when needed.

###### **c. Errors and Inefficiencies:**

- Manual processes can lead to errors and inefficiencies, such as delayed transactions or difficulty in tracking financial activities.

###### **d. Customer Service Experience:**

- Interactions with bank staff might be mixed, with some customers experiencing excellent service and others encountering difficulties or unhelpful responses.

###### **e. Security Concerns:**

- Customers may have concerns about the security of their financial information and the potential for errors or fraud in manual processes.

#### **4.6.2. After Using Electronic Banking Systems**

**a. Convenience of Accessibility:**

- Electronic banking offers 24/7 access to accounts, allowing customers to perform transactions, check balances, and manage their finances at any time and from anywhere.

**b. Efficiency:**

- Transactions are often processed more quickly, and customers can easily track their financial activities, reducing the likelihood of errors and delays.

**c. Enhanced Features**

- Online and mobile banking platforms typically offer features such as bill pay, funds transfers, account alerts, and budgeting tools, enhancing overall convenience and control.

**d. Customer Service Improvements:**

- While some customer service interactions might still be necessary, electronic banking can reduce the need for in-person visits and streamline customer support processes through chatbots or virtual assistants.

**e. Security Measures:**

- Modern electronic banking systems incorporate advanced security measures, such as encryption and multi-factor authentication, to protect customer information and reduce the risk of fraud.

**f. Overall Satisfaction:**

- Generally, customers tend to report higher satisfaction levels after adopting electronic banking due to the increased convenience, efficiency, and access to a range of features that simplify financial management.

In summary, while there might be an initial adjustment period, the overall trend is that customer satisfaction improves after the adoption of electronic banking systems due to the numerous benefits they offer.

#### **4.7. The main challenges that have faced by a researcher during this study**

In conducting a research project can be a complex and demanding process. Researchers often face several challenges, including:

1. **Defining a Clear Research Question:** Formulating a focused, relevant, and feasible research question is crucial but can be difficult. It requires a deep understanding of the subject area and the ability to identify gaps in existing knowledge.
2. **Literature Review:** Conducting a comprehensive literature review was time-consuming. Researchers and sift through vast amounts of information to find relevant studies and ensure they are not duplicating previous work.
3. **Funding and Resources:** Securing funding is often a significant challenge. Research projects can be expensive, and obtaining grants or financial support requires a compelling proposal and sometimes a lot of time and effort.
4. **Data Collection:** Gathering data can be challenging due to issues like access to participants, obtaining permissions, and ensuring the data is reliable and valid. For some fields, especially those involving sensitive information or vulnerable populations, ethical considerations add another layer of complexity.
5. **Methodological Issues:** Designing a robust research methodology that is appropriate for the research question was also a challenging. This includes choosing the right research design, sampling methods, and data analysis techniques.
6. **Data Analysis:** Analyzing data accurately requires a solid understanding of statistical or qualitative analysis methods. Errors in data analysis can lead to incorrect conclusions and impact the validity of the research.
7. **Time Management:** Research projects often take longer than anticipated. Balancing research with other responsibilities and managing the timeline effectively was become a challenging.

8. **Ethical Considerations:** Ensuring that research adheres to ethical standards, such as obtaining informed consent and protecting participant confidentiality, is critical and can be complex, particularly in sensitive areas.
9. **Interdisciplinary Challenges:** In interdisciplinary research, integrating knowledge and methods from different fields can be difficult. Researchers need to understand and reconcile different approaches and terminologies.
10. **Publication and Dissemination:** Getting research published has been a lengthy process, involving peer review and revisions. Additionally, researchers had to effectively disseminate their findings to reach their intended audience.
11. **Keeping Up with Advances:** Research fields are constantly evolving. Staying updated with the latest developments and incorporating new knowledge or techniques could be challenging but was necessary to maintain the relevance of the research.
12. **Dealing with Setbacks:** Research often involves unexpected setbacks, such as failed experiments, issues with data collection, or changes in project scope. Resilience and problem-solving skills are essential to navigate these challenges.
13. **Maintaining Motivation and Focus:** Research can be a long and arduous process, requiring sustained motivation and focus. Researchers faced burnout or periods of low motivation, which impacted productivity.

Each of these challenges requires careful planning, flexibility, and problem-solving skills to navigate successfully.



## **GENERAL CONCLUSION AND RECOMMENDATIONS**

### **1. Introduction**

This is a brief summary of the main findings of the study by giving a general overview of the research discoveries. It also represents recommendations and conclusions, which were learnt from the field based on the objectives of the study.

### **2. Conclusion**

The topic we have treated during our study is entitled the effect of E banking system on customer satisfaction on commercial banks. A Case Study: BPR Ltd Kinamba-Branch (2021-2023)

This work aimed to answer to the following principle questions:

- Does E Banking used effectively by BPR LTD KINAMBA branch?
- Is the use of E banking system has positive effects on satisfaction of customer services of BPR LTD KINAMBA branch?

In responding to these questions, we have formulated the following hypothesis:

- The E banking system is used effectively by BPR Kinamba branch.
- There is positive effects of E banking system on customers satisfaction in BPR Ltd Kinamba branch.

The specifics objectives assigned to this work are:

- To evaluate the strength of the Electronic banking system used by PBR Ltd Kinamba- branch.
- To analyze extent to which Electronic banking affect the performance of bank services in commercial banks especially PBR Ltd Kinamba- branch.
- To assess the degree of customer satisfaction after using of electronic banking system in BPR Ltd Kinamba- branch.

In order to check or verify the hypotheses, various techniques and Methodology of data collection and analysis were used. Interview, questionnaires, documentation and direct observation were the major techniques used in data collection and also quantitative, analytical and comparative methods used in data collection. Data was analyzed and interpreted basing on quantitative and qualitative approaches.

In order to achieve the objective and make it possible to verify my hypotheses, I first gathered for opinions about the problem statement, and then analyzed the hypotheses on basis of information got on the field. Before I lay on the response of my research questions. ,I have firstly had a look on if my topic if it will being successful, here I tried to know how the E-banking system that was the independent variable is really has an effect on customer satisfaction in banking activities of BPR Ltd Kinamba branch my study area then I examine how it contributes in customer satisfaction which was dependent variable.

The first hypothesis was proved positively because 100% of respondents said that the The E-banking system is used effectively by BPR Kinamba branch especially.

The second hypothesis was confirmed because all respondents representing 100% agreed that the computerized banking system of BPR Ltd Kinamba-branch contributes to positive effects on customer's satisfaction in BPR Ltd Kinamba branch.

### **3. Recommendations**

After conducting the research on the effect of E banking system on customer satisfaction on commercial banks and after analyzing the obtained findings from respondents, our recommendations could expressed as follow:

- **To determine the uses of Electronic banking system.** We strongly recommend that commercial banks and even other financial institutions should continuously adopt a culture of utilizing computerized accounting systems that provide easy preparation of financial reports as seen from the earlier chapters, computerized accounting systems perform enormous tasks which if performed correctly provide the company with accurate, efficient and timely reports.

- **To find out the pros and cons of Electronic banking system to financial institutions:** The computerized accounting system has got its own strengths and weaknesses while in operation. However, the study findings show that the system is actually more of a benefit than a loss to the company's business operations and it would therefore be necessary to recommend that other financial institutions that have not yet implemented this system, get to adopt the idea of establishing it so as to improve on operations in terms of effectiveness and efficiency.
- **To update the financial reports generated by El-banking system.** In the business world of ICT there is a continuous update of system due to innovation personal creativity that is why even in financial nature, thus has involved in technology system should being updated in the accordance with ICT evolution.

From the findings and summary, the researcher recommends that first and foremost, banks and other financial institutions need to acquire an electronic banking system that suits the organizational needs. Enough resources need to be saved for a tailor made software and system analyst need to be consulted in this important issue. There should also be routine system maintenance programs put in place so that the system can get rid of shortfall such as viruses, fraud among others that may affect the system operations. This should be done so that the system can operate to the expectation of management and other users and especially contribute to the high level of satisfying customer services in all banking aspects.

- **There is need to increase the security levels in the internal control system.** Management needs to ensure that requisitions are authorized; cheque payment, vouchers and other source documents are approved. On recording, it is important to have a clerk to enter the data which is then updated yet by another person preferably one with more experience and expertise and that is to increase assurance to the security of customer's accounts and make them safety guaranty to their amount deposited and all transaction are made in transparence.

#### **4. Areas of further study**

There is need for more research to be undertaken to establish the other studies on:

- The impact of E- banking systems on effectiveness of financial reporting

- How E- banking systems can measure the performance of staff in the light management control of an organization.
- E- banking systems has simplified most of the accounting requirements of financial institutions.

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# APPANDICES



## **APPENDICES 1: RESEARCH QUESTIONNAIRES**

**KIGALI, August 29<sup>th</sup> 2024**

Dear respondent,

I, fourth Level students in the faculty of Social Sciences and Development Studies, Department of Management and Development Studies, in accounting Option at **KIGALI INDEPENDANT UNIVERSITY (ULK)** .As a requirement for the award of a Bachelor’s degree in Management option of Accounting, I am undertaking research entitled “**EFFECT OF E BANKING ON CUSTOMER SATISFACTION IN COMMERCIAL BANK OF RWANDA CASE STUDY BPR KINAMBA BRANCH FROM 2021-2023**).

Filling this questionnaire therefore would be very helpful in making this research a success. The information intended to be collected is for academic purpose, therefore the researcher guarantees a high degree of confidentiality.

**Instructions:**

The respondent is not required to indicate his or her name and that of institution, in order to achieve confidentiality.

The respondent is requested to tick only one correct item or suggestion amongst each question.

The respondent is requested to answer all the questions provided.

**General information****SECTION A: Background of the respondent****1. Sex**

i. Male

ii. Female

**2. Age of respondent**

i. 15-30

ii. 31-40

iii. 41 and above

**3. Time spent working with Banque Populaire du Rwanda Ltd Kinamba branch**

i. 1 year1 Month – 1 Year

ii. 1 - 2 years

iii. 2– 3years

iv. 4 and above years

**4. Position held / responsibility.....****5. Department**

a. Procurement . Information and stores

c. Administration . Sales

**SECTION ONE: THE USE OF A E-BANKING SYSTEM**

6. Does your organization/company employ the use of a computerized accounting system?

(a) Yes

(b) No

7. What are the major tasks performed by the system?

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

8. What are the financial statements (reports) generated by the computerized accounting system

Statement of comprehensive income

Statement of financial position

Statement of cash flows

Income statement

Others documents

Apply a tick where applicable using the following key.

SA – Strongly Agree, A – Agree, NS – Not Sure, D – Disagree SD – Strongly disagree

Does your organization/company employ the use of a E-banking system?	SA	A	U	DA	SD
There are some tusks that performed by a E-banking system					
Banque Populaire du Rwanda ltd Kinamba-branch has a working computerized accounting system					

**SECTION TWO: EFFECTIVENESS AND EFFICIENCY OF E-BANKING SYSTEM**

9. Is a E-banking system effective and efficient in BPR ltd especially in RUSHAKI sub-branch?

Yes

Non

If is yes explain your opinion

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

**SECTION THREE: CONTRIBUTION OF E- BANKING SYSTEM AT BPR LTD RUSHAKI SUB-BRANCH.**

10. What is the contribution of e- banking system at BPR Ltd RUSHAKI sub-branch?

.....  
 .....

Apply a tick where applicable using the following key.

SA – Strongly Agree, A – Agree , NS – Not Sure, D – Disagree SD – Strongly disagree

	SA	A	NS	D	SD
E-banking has a considerable profit in the performance of BPR ltd Kinamba-branch					
The computerized accounting system maintains error free records					
Computerized accounting has eased the transaction processing in BPR Ltd Kinamba-branch					
The computerized accounting system provides easy storage, reference and access to information					

11. What is the degree of performance after using computerized accounting system in BPR Ltd Kinamba-Branch?

.....

.....

Apply a tick where applicable using the following key.

SA – Strongly Agree, A – Agree, NS – Not Sure, D – Disagree SD – Strongly disagree

	SA	A	NS	D	SD
The expected level of customer satisfaction obtained from applying an E-banking system is greater than the cost of obtaining it.					
The E-banking system is more efficient and flexible than the manual system					
E-banking system has simplified most of the accounting requirements of BPR Ltd					
There is a highly and considerable customer stratification after using a E-banking system.					

**Thanks for your cooperation.**

