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GRADUATE SCHOOL OF MANAGEMENT
MASTERS IN BUSINESS ADMINISTRATION

An Assessment of the impact of Electronic Commerce on Business Performance. Evidence
from the Zimbabwean Banking Sector.

*This Dissertation is submitted in Partial Fulfilment of the requirements for the Master's
Degree in Business Administration at the Graduate School of Management (University of
Zimbabwe)*

By

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DEDICATION

I would like to dedicate this dissertation to my family. The family members include my wife Lister Chivige, my kids Alexis Chingwe and Ansley Chingwe. They inspired me in the process of working on this research. I would also want to appreciate my brother Chamunorwa Chingwe, my late brother Caleb Chingwe and my cousin Wadzanayi Mushandikwa. Most importantly I dedicate this dissertation to my parents Bishop David and Emma Gangata for all the support, love and guidance that they offered from my childhood.

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ABSTRACT

The purpose of the research was to assess the impact of Electronic Banking on Business Performance with evidence from the Zimbabwean banking sector. Five banks that are Zimswitch compliant were used for the purposes of the study. These banks are namely CBZ, CABS, First Capital Bank, FBC and Steward Bank. The research was aimed at defining the relationship between Electronic Commerce and Business Performance. Furthermore, the relationship between Electronic Services and Electronic Products was established. The study also established the impact of Electronic Operations on Business performance. The relationship of a vibrant Electronic Business Support Unit on Business performance was also studied. The study used a descriptive research design which employs quantitative methods. A sample of 300 participants was drawn out of a target population of 410 participants from across the five banks. The major conclusions of the study are that there is a positive relationship between Electronic Commerce and business performance. Moreover, Electronic Products, Electronic Services, which are the major components of Electronic Commerce positively impact on business performance. Electronic Operations and a viable Electronic Banking Support Unit are important in the viability of Electronic Commerce. The major recommendations of the study are that Local banks should inject more funds in modernising and boosting their Electronic Commerce systems in order to maximise shareholder wealth. Electronic Products and Electronic Services offered by banks should be expanded and perfected in order to enhance operational competitiveness which boosts organisational performance.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

1 INTRODUCTION

This dissertation aims to assess the impact of Electronic Commerce on Business Performance. The study will be carried out in the context of the Zimbabwean Banking system. Most of the transactions are now being done using Electronic Commerce platforms as we are moving towards a cashless society. Electronic Commerce has its own benefits and costs to the organisation. The study wishes to investigate whether the benefits of implementing Electronic Commerce outweigh the costs associated with Electronic based transactions. Business performance is a broad concept which mainly looks at the analytical techniques that can be used to ascertain whether a business is meeting its set goals or not. The study aims to establish the relationship between Electronic Commerce and business performance. Electronic Commerce will be dissected into its subsets which are Electronic Products, Electronic Services, Electronic Operations and Electronic Banking Support Unit. These various elements of Electronic Commerce are important in evaluating the influence of such activities to business performance. Business performance can be measured in different perspectives which will be ways which will be elucidated in this study. Business performance can be measured from a financial perspective, managerial accounting perspective, operational perspective and strategic point of view. These standpoints of measurement help in mirroring how the business is performing. This chapter provides the background of the study, problem statement, research objectives, and research questions, justification of the study, assumptions and limitations of the study.

1.1 BACKGROUND

According to Laudon and Traver (2008), the history of Electronic Commerce dates back to the invention of the very old notion of "sell and buy", electricity, cables, computers, modems, and the Internet. Electronic Commerce became possible in 1991 when the Internet was opened to commercial use. Since that date thousands of businesses have taken up residence at web sites. At first, the term Electronic Commerce meant the process of execution of commercial transactions electronically with the help of the leading technologies such as Electronic Data Interchange (EDI) and Electronic Funds Transfer (EFT) which gave an opportunity for users to exchange business information and do electronic transactions. The ability to use these technologies appeared in the late 1970s and allowed business companies and organizations to send commercial documentation electronically.

Additionally, Collins (2001), points out that although the Internet began to advance in popularity among the general public in 1994, it took approximately four years to develop the

security protocols (for example, HTTP) and DSL which allowed rapid access and a persistent connection to the Internet. In 2000 a great number of business companies in the United States and Western Europe represented their services in the World Wide Web. At this time the meaning of the word Electronic Commerce was changed. People began to define the term Electronic Commerce as the process of purchasing of available goods and services over the Internet using secure connections and electronic payment services. Although the dot-com collapse in 2000 led to unfortunate results and many of e-commerce companies disappeared, the brick and mortar retailers recognized the advantages of Electronic Commerce and began to add such capabilities to their web sites for example after the online grocery store. According to all available data, e-commerce sales continued to grow in the next few years and, by the end of 2007, e-commerce sales accounted for 3.4 percent of total sales.

To this end the idea of Electronic Commerce has been spreading in the banking sector over the past few years. The technological advancement presented Electronic Commerce in the banking arena and this innovation has revolutionized the way in which commercial banks operate. Electronic in the context of a banking setup is defined by Saleem and Rashid, (2011), as the use of mobile telecommunication devices such as mobile phones and tablet's to perform banking services. Electronic Commerce services have advanced in waves, beginning with payments and transfers before progressing into savings, followed by credit, international transfers and more recently insurance. Hendrickson and Nichols, (2011), focused on a study of the performance of small banks in the United States of America. The authors found out that banks are more efficient when they use Electronic Commerce because Electronic Commerce is a low cost delivery channel to both the bank and the consumer hence leading to profitability and increased market share should banks adopt it. Al-Jabri, (2012) supports this line of thought and the author emphasizes that Electronic Commerce adoption promotes efficiency, improved customer service and growth of the entity. Apart from all the performance benefits gained, Electronic Commerce allows for the integration of advanced Electronic Commerce in the organisation, (Hendrickson and Nichols, 2011). This allows the bank to stay relevant in a fast paced and innovative industry where technology is causing changes. Saleem and Rashid, (2011) state that the younger generation of bankers aged between 18 and 35 will lean towards a bank that has good electronic banking products such as mobile banking. The author goes on to explain that for a bank to gain a significant market share in this demographic, they need to adopt Electronic Commerce. These younger generations need an application their phone

that allows them to perform tasks such as online shopping, recharging public transport passes, pay for their monthly subscriptions.

On the contrary, another group of scholars is of the opinion that the innovation of Electronic Commerce has a negative effect on financial performance. Scholars who subscribe to this school of thought include (Shih *et al.*, 2014; Mupfiga, 2013; Ngango, 2015 and Maringe, 2012).

Shih *et al.* (2014) conducted a study on Electronic Commerce as a method of financial inclusion and the author found that people in rural areas, who are the financially excluded, do not need the services offered by Electronic Commerce. The author goes on to explain that they only need basic banking functions like receiving money, sending money and balance enquiry, all of which can be provided by mobile money operators. Mobile money operators are mobile telecommunications companies and they provide such services at a cheaper rate as long as one owns a mobile phone. Maringe, (2012) states that because of the competition offered by telecommunications companies it is unreasonable for banks to incur the financial cost of adopting Electronic Commerce at the losing end to their counterparts. In fact, the author further explains that for the banks' clients to use their phones for Electronic Commerce, the bank has to pay a royalty to the mobile telecommunication companies because they provide the network platform. Ngango, (2015) supports this by stating that although banks want to stay technologically competitive, they are fighting a losing battle against the mobile telecommunication companies. The author goes on to say that banks would bear the risk of fraud, mobile malware, data theft and money laundering should they adopt Electronic Commerce.

Morrison, (2010) noted that although a number of commercial banks in Europe offered Electronic Commerce services as early as 1999, it was not until 2007 that large banks in the United States of America started to develop Electronic Commerce applications that actually worked to customer expectations. Statistics support that over 21% of all smart phone users were using Electronic Commerce by 2012 in developed countries. Meanwhile the financial services sector in Africa is changing rapidly and the Electronic Commerce revolution is the key driver to this change, (Jones *et al.* 2016). In Africa, the emergence of Electronic Commerce was stimulated by competition from the telecommunications industry offering 'mobile money' services such as M-Pesa in Kenya, Airtel Money in Nigeria and

EcoCash in Zimbabwe. The banking sector had to adopt Electronic Commerce to stay competitive.

In Zimbabwe, the first banks to adopt Electronic Commerce were Barclays now known as First Capital Bank, CABS and Stanbic, (Chikoko and Mangwendeza, 2015).

The authors further state that Electronic Commerce is a low cost financial services delivery channel, to both the bank and the client, as opposed to traditional banking services such as Real Time Gross Settlement (RTGS), Automated Teller Machines (ATM) and In-branch services.

The usage of the internet has gradually improved in Zimbabwe over the last two decades. The gradual increase in the use of the internet is positively associated with the usage of Electronic Commerce in the execution of transactions in the banking sector. The usage of the internet relative to the population has improved as follows

Table 1. 1: Internet usage Statistics

YEAR	USERS	POPULATION	Percentage of Usage
2000	50,000	14,712,000	0.30%
2002	500,000	13,874,610	3.60%
2005	820,000	12,247,589	6.70%
2008	1,351,000	12,382,920	10.90%
2011	1,445,717	12,619,600	11.50%
2016	6,759,032	14,546,961	46.50%
2018		14,546,961	55.40%

Source: <https://www.internetworldstats.com/af/zw.htm> Accessed 29 February 2020

The internet penetration rate has increased from as low as 0.03% in 2000 to 55.40% in 2018. This increase in the internet penetration rate has been associated with the adoption of Electronic Commerce products. The cash shortages experienced since 2016 have resulted in a cashless society which is heavily reliant on electronic money.

Finally with all that has been described in the background a gap still remains on the actual bearing that Electronic Commerce has on Business Performance. The study wishes to ascertain the impact that Electronic Commerce has on the business performance of Zimbabwean Banks.

1:2 PROBLEM STATEMENT

High volumes of transactions in the banking sector are now being processed using Electronic Commerce platforms. There are questions as to whether the benefits to organisational performance outweigh the costs of Electronic Commerce. The benefits of Electronic Commerce to a bank's performance include improved business revenues, improved operating profits, increased deposit mobilisation, improved customer service provision and operational efficiency. Electronic Commerce is also widely viewed as a low cost service delivery channel. The costs associated with Electronic Commerce include high licence fees, cyber risks like card cloning, compliance fees and high research and development costs. The research aims to answer the big question as to whether the benefits of Electronic Commerce outweigh the costs associated with Electronic Commerce usage in the Zimbabwean Banking sector.

1:3 AIM AND RESEARCH OBJECTIVES

To determine the relationship between Electronic Products and business performance

To determine the relationship between Electronic Services and business performance

To establish the impact of Electronic Operations on Business Performance

To establish impact of the electronic Business Support on Business Performance.

1:4 RESEARCH QUESTIONS

What is the impact of Electronic Commerce on Business Performance?

What is the impact of Electronic Products on Business Performance?

What is the impact of Electronic Services on Business Performance?

How does Electronic Operations affect Business Performance?

How does the Electronic Banking Support affect business performance?

1:5 HYPOTHESIS

H1: There is a positive relationship between Electronic Commerce and Business Performance

H2: There is a positive relationship between Electronic Products and Business Performance

H3: There is a positive relationship between Electronic Services and Business Performance

H4: Electronic Operations impact on Electronic Commerce which then affect Business Performance

H5: Electronic Banking Support Unit impacts on Electronic Commerce which then affect Business Performance.

1:6 ASSUMPTIONS.

The respondents will provide admissible and authentic data that is free from bias for a successful study.

The respondents will answer most of the administered questionnaires for data collection and the data will be used for analysis and presentation in the study

1:7 SCOPE OF THE STUDY

The study will be carried out within the period of 6 months. The population involves all Commercial Banks in Zimbabwe. A representative sample will be taken from the commercial banks. Questionnaires will then be administered to staff members within the bank in order to get the data which will help in getting to the results. The unit of analysis will involve middle level management which is cognisant to the operations of the organisations. This will involve branch managers and head office unit managers. The study will cover the period 2015 to 2019

1:8 SIGNIFICANCE OF THE STUDY

The study is aimed at investigating the impact of Electronic Commerce on the Business Performance of Commercial Banks in Zimbabwe. Although similar studies have been made on the adoption, no study has given the relationship of Electronic Commerce with the broader subject of Business Performance. Previous studies have not broken down Electronic Commerce into Electronic Products, Electronic Services, Electronic Operations and Electronic Banking Units which are pertinent when studying this subject. Furthermore, Business Performance covers a broader spectrum which includes financial performance, operational performance, strategic performance and a management account perspective and this has been overlooked in previous studies. This study will help policy makers and decision makers on

how best Electronic Commerce can be optimised to positively impact on business performance.

1.9 LIMITATIONS

At first respondents were unwilling to divulge company information because of the confidentiality expected from them by the employer and the official secrecy of banking data.

Confidentiality of information provided was guaranteed in the study

The corona virus pandemic lockdown reduced the number of respondents available since most of the staff were at home. The research had to work with those on the critical staff complement in order to successfully carry out the research.

1.10 CHAPTER SUMMARY

This Chapter introduced the subject of Electronic Commerce and its impact on business performance. The background of the study was given on how the subject of Electronic Commerce has evolved from the yesteryear to date. The problem statement, aims and objectives of the study, research questions, hypothesis, and scope of the study and the limitations of the study were given.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The Chapter reviews literature on the broad subject of Electronic Banking and its relationship with business performance. Important terms to be used will be defined to give an insight into the essential areas of the study. The major theories in the area under study are the financial intermediation theory, innovation diffusion theory and the transactional cost theory. These theories give rise to the four models that were used in the study. Business performance was discussed and how it can be measured. A conceptual framework was developed on the study based on the literature reviewed.

2.2 Definition of Terms

2.2.1 Electronic Commerce

According to www.ecommerceguide.com, Electronic Commerce refers to transactions conducted via the internet. Every time individuals and companies are buying or selling products and services online they are engaging in Electronic Commerce. Electronic Commerce encompasses other activities including online auctions, internet banking, payment gateways and online ticketing. The definition notes that Electronic Commerce revolves around the use of the internet in executing transactions. The internet of things has facilitated the use of Electronic Commerce in the banking sector to conduct online banking and several other internet-related activities. Furthermore, the definition points out that Electronic Commerce can be used by both individuals and corporates.

In addition, Mehtab *et al* (2015) postulates that Electronic Commerce is a concept which means that the sales purchase or exchange of goods and services or information is by using a computer network, including the Internet. With respect to communication it is to provide information, services, payment and product using computer networks, telephone networks and other electronic means. There are three types of Electronic Commerce, i.e. business to business, business to customer and customer to customer. Electronic Commerce is the source of improvement in organizational performance by using computer networks. An organisation with Electronic Commerce uses electronic tools such as file transfer, fax, video conferencing, EDI and file transfer. In the past, trade is carried on with the physical presence of

buyer and sellers but now a day with technological advancement, it is not necessary for both to appear physically at the market place.

According to Mutua (2015), the invention of telecommunication network means for example internet, web technologies and other electronic devices makes easy the business as well as facilitate the both (business and customers). Buyer of product and services can online order the product by using internet without physically appearing to that shop or office and seller deliver that product according to the order. Through this buyer saves time as well as transportation cost and seller build a strong relationship with the customer and get the list of customers as well as manage the inventory

Tawari et al, (2010) defined Electronic Commerce is the provision of financial services with the assistance of the internet. Electronic Commerce services are provided using the internet via multiple Electronic gadgets which include desktop computers, laptops, tablets and mobile phones. Electronic Commerce as a service provided by a bank or other financial institution that allows clients to perform financial transactions using mobile communication devices (Chogi, 2006).

There is a general agreement among different authors that Electronic Commerce involves an exchange of goods and services involving both individuals and corporates. The importance of Electronic Commerce as a payment platform is emphasised hence its importance in replacing traditional banking methods. The focus of the study will be Electronic Commerce in the banking sector and some popular products in the Zimbabwean banking sector include internet banking, mobile applications, Ecocash banking services, One money, CBZ touch, FBC Mobile Moolar, CABS textacash, pay now and buy safe transactions. The Electronic Commerce transactions have gained popularity to become the game changers when it comes to being competitiveness in the banking sector. This has proven to be a major source of Non-interest income for the financial institutions.

2.2.2 Internet Banking

Internet banking has been defined in this study because it is the most popular service associated with Electronic Commerce. According to www.cbz.co.zw, internet banking is defined as an electronic banking solution which gives secure and unlimited access to your account, enabling you to carry out transactions via the internet from anywhere in the world. The definition points out the most important aspects that are associated with Electronic Commerce in the form of internet banking. The first aspect is internet banking is an electronic

banking solution which is the subject of this study. Secondly it gives a secure and unlimited access to a client's account. This virtual effect of internet banking removes the need for a client to visit the branch to access one's account but it can be done over the internet. The aspect of security is also raised in this definition since it's a cyber-threat. Finally, the account can be accessed from anywhere in this world hence the breaking of geographical barriers.

Additionally, Internet banking is defined as electronic systems that enable bank customers to obtain access to their accounts and general information bank products and services through the use of bank's website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmations (Chang 2003). This definition adds the dimension of information the virtual access of the account. The information of bank products and services is essential in raising awareness and ensuring competitiveness of bank products. This enables cross selling of bank's products since most banking institutions have diversified in the form of being holding companies.

To add on Sullivan and Wang (2005), are of the view that internet banking is a process of innovation whereby customers handle their own banking transactions without visiting brick and mortar bank structures where they interact with bank personnel. Dube *et al.* (2009) observe that internet banking can be divided into three types, that is, informational, transactional and communicative. This definition points out the three types of internet banking activities. Of interest is the communicative role whereby there is mutual communication between the banking institution and the client. The clients can receive communication from the banks via the internet banking platform and also give feedback hence the reciprocation of communication. The transactional role is associated with the actual execution of transaction by the clients.

As a final point there is a general consensus among the authors that internet banking gives unlimited access to the client's accounts. They further agree that internet banking replaces the traditional brick and mortar banking whereby clients were expected to visit the banking halls to access their accounts. The role of internet banking can either be transactional, communicative or informative.

2.2.3 Financial Performance

Financial performance is an intuitive measure of how effectively an institution can generate revenue using assets from its primary business operations (Greenwood and Jovanovic, 2010). The definition points out the revenues are earned using assets from the primary business

operations. This study will be focused on the activities of commercial banks which will be using Electronic Commerce as a means of generating revenues. The revenues are generated through fees, charges and commissions which is a diversion from interest income which is the bank's primary source of revenue from issuing out loans. Financial performance as a measurement of an entity's policies and operations using monetary terms. These policies and operations are reflected in the entity's return on investment and value added. The revenues from Electronic Commerce are mainly attributed to non-interest income which is different from the traditional sources of banking income which is earned by disbursing loans.

In addition, Shodhana (2012), states that financial performance is the undertaking of financial activity. In a more extensive view, financial performance is the extent to which financial goals have been achieved. The financial health of an entity over a given period is measured using financial performance ratios. The ratios are used to compare like firms in the same industry or to compare sectors collectively. This study will mainly focus on commercial banks performance. There is a vast number of ways to measure financial performance and all measures should be assessed collectively (Mutua, 2015). Revenue from operations and cash flows from operating activities are line items that can be used to measure performance (Jayawadhera *et al.* 2010). The main objective of every firm is to make profit. Several ways are available to measure profitability such as ratios like Return on Asset (ROA), Return on Equity (ROE) and Net Interest Margin (NIM), (Murthy and Sree, 2008). Financial ratios are important indicators of financial performance in the analysis of business performance and the comparing of the firm's performance with reference to industry standards or other competitors. Ratios enable the comparison of performance in relation to different standards and benchmarks. They are easy to compute and they enable analysis of multiple periods of time depending on the objectives of the study. However, this study will employ a slightly different approach which does not use financial statements in its analyses of business performance.

Financial performance relates to measuring the results of a firm's policies and operations in monetary terms. These results are reflected in the firm's return on investment, return on assets and the value added. The definition points out the measurement of a firm's policies and operations. The policies on Electronic Commerce and how Electronic operations affect the overall performance of the business organisation. These operations are expressed in monetary terms in terms of the dollar value. The overall value added into the overall organisation is important accompanied by the return on investment and the return on assets.

The overall return on investment is important in ensuring that shareholder wealth is maximised.

The authors agree that financial performance quantifies the impact of operational activities and goals on the overall performance of the organisation. The measure focuses on checking whether there is a return on investment, return on assets of the overall resources invested into the business operations. This study will ascertain whether Electronic Commerce impacts positively on business financial performance or not. The analyses will focus on the responses from the research itself rather than historical data from financial statements. The approach of using financial statements has been employed in other studies and this study would like to add a new dimension in ascertaining the impact of Electronic Commerce on business performance.

2.3 Theories of Electronic Commerce

2.3.1 Financial Intermediation Theory

In 1960 it was established by Gurley and Shaw that the financial intermediation theory was a base theory of informational asymmetry and agency. An entity that performs the role of a broker between two parties in financial transactions is a financial intermediary. According to Porteous (2010), Electronic Commerce is classified into transformational Electronic Commerce and additive banking. The former is the provision of financial services using mobile phones to reach the financially excluded population and the latter is whereby mobile phones are an additional channel used to accentuate banking services to the already banked. It has increased provision of financial services with a wide choice of services geared towards all levels of society (Vaidya, 2011). People do not know the difference between Electronic Commerce and mobile money and for the purposes of this study the distinction shall be made. Electronic Commerce is an access channel for your existing relationship with the bank. One can carry out transactions such as funds transfer, pay bills, check mini-statements, view balance, apply for loans and stop orders. All the transactions are based on existing bank accounts (Banerjee, 2015).

The theory helped to analyse the transactions of Electronic Commerce in Zimbabwe and how it affects the financial performance of the banking industry.

2.3.2 Innovation diffusion theory

Bradley and Stewart introduced the theory in 2002. The innovation diffusion theory states that firms engage in industry innovations in order to remain competitive, minimise costs and to guard their strategic positions. The theory originally put forward in 1962 is well-known and it explains how an innovation is spread among users over time (Liu and Li, 2009). The theory helps to understand the behaviour of customers in the adoption or non-adoption of an innovation (Rogers, 2010). The theory gives the idea that the adopters of innovations follow a bell shaped distribution curve that can be divided into five parts to categorise users based on their innovativeness (Liu and Li, 2009). Rogers classified users as innovators, early adopters, early majority, late majority and laggards.

The adoption of Electronic Commerce has the potential to remove barriers in the formal financial sector to the financially excluded population in Africa. Ivatury and Mas, (2010) highlighted the characteristics of the early adopters of WIZZIT, which was the first major initiative dedicated to providing Electronic Commerce to the unbanked in Southern Africa. The innovation diffusion theory was used in the research to see how upgrades in Electronic Commerce products affect financial performance of commercial banks.

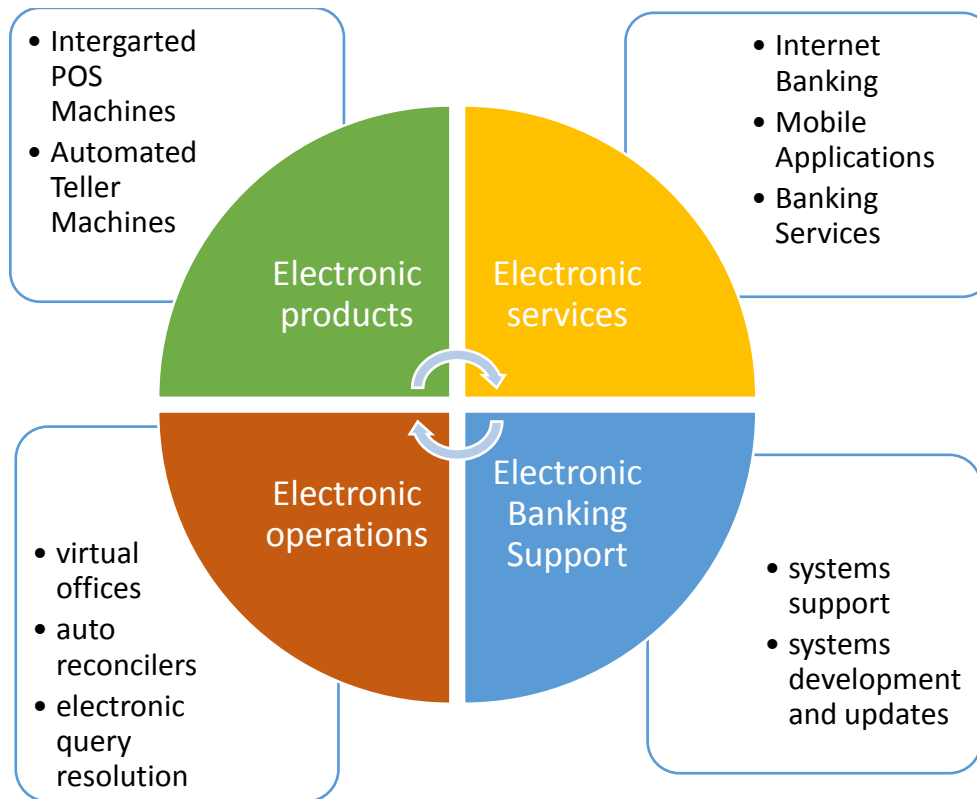
2.3.3 Transaction Cost Theory

The Transaction Cost Theory was developed by Williamson under transaction cost economics. According to Williamson (1985), there are three key concepts involved in Transaction Cost Economics: asset specificity in the technical issues, bounded rationality hypothesis about the human nature, and opportunism on the behaviour aspect. Williamson argued that a transaction occurs when a good or service is transferred between technologically separable stages. The attributes of a transaction can be identified from three lengths namely asset specificity, uncertainty and transaction frequency. Under the bounded rationality hypothesis, it takes people high transaction cost to estimate the time and styles of opportunism's occurring and to make precautions. To ensure the proceeding of the transaction and save transaction costs, it is necessary to construct matches between transactions with different attributes and governance structures with different costs and efficiencies. Distinguishing from incentive intensity, administrative control and the contract law regime, the alternative modes of governance structure include market, hybrid and hierarchy. In this framework, transaction could be considered as the most basic and general form of human economic relationship. No matter what simple or complicated Electronic Commerce activities, transaction could be taken into account as a basic analysing unit. Compared with traditional spot market, Internet

involves higher uncertainty and more opportunism. Under this circumstance, the neoclassic contracts are hard to be applied to govern all Electronic Commerce transaction relationships, only three choices can be made: aborting the transaction; integrating into organization internal transaction; or depending on certain hybrid governance structure that can not only ensure the relevant modifications of the contract ex ante with the continuing and the extending of the transactions, but also be able to defend opportunism and to save transaction cost. Hence, whether an Electronic Commerce activity can realize and bring value for transactors depends on whether a kind of effective governance structure can be built to coordinate the mutual economic relationships between transactors. Actually so called Electronic Commerce model could be considered as a kind of exterior exhibition of governance structure in commercial practice. In this way, some new approaches might be offered for Electronic Commerce practitioners by using the theory and methods of transaction cost economics to study the attributes of various Electronic Commerce transactions, attributes of Electronic Commerce transactions' governance structure, and researching their mutual correspondence (Duan, 2007).

2.4 Model of Ecommerce in the Banking Department of a Commercial Bank

Figure 2. 1The (Quad E) Electronic Commerce Model



Variables in the model explained

(Business Impact Category)

EP~ Electronic Products

(Revenue Generator)

ES~ Electronic Services

(Revenue Generator)

EO~ Electronic Operations

(Cost Saver)

EBS~ Electronic Banking Support

(Cost Saver)

BP~ Business Performance

(Financial Performance)

$$EP+ES+(EO)+(EBS)=BP$$

The quad E model categorises Electronic Commerce variables into Revenue generators and Cost saver. The model is applicable in a Commercial Bank with an E-Banking Department. It assumes a positive relationship between revenue generators and business performance. The model assumes a negative relationship between cost savers and business performance. An increase in revenue generators results in non-interest income and fees which will increase the company's profits as given in the statement of comprehensive income. A decrease in operating

costs due to use of technology results in reduced operating expenses and fixed costs resulting in an improved business performance.

2.4.1 Business Performance

Recent scholars have come up with different definitions of business performance which will be reviewed. According to Sebestova and Lejková (2020), Business Performance is a set of analytic processes that enables the management of an organization's performance to achieve pre-selected goals. The definition has two notable points which is the set of analytic processes and goals. The analytic process enables the achievement of organisational goals which are derived from the preselected goals and objectives. In this study the analytic processes should evaluate whether Electronic Commerce is contributing to the maximisation of shareholder wealth. The major areas under Electronic Commerce that should be analysed include electronic Products, Electronic Services, Electronic Operations and Electronic Banking Support Unit. Electronic Products and Electronic Services should be analysed as to whether they are aiding to the revenues streams of the banks. These revenues are generated in the form of fees and commission. Electronic Operations and Electronic Banking Support unit should be analysed as to whether they are reducing the operating costs of the organisation. These costs include labour costs, rent and rates, fuel and the opportunity cost of lost revenues through obsolescence and technology lags. This analysis will be done based on the targets that would have been set but the respective departments within the bank.

Demner and Hysi (2020) postulate that Business Performance encompasses areas of business outcomes such as financial performance, product market performance, and shareholder return. This definition introduces an interesting dimension in the understanding of business performance. Financial Performance, product market performance and shareholder return are the most critical factors when analysing a firm's performance. Financial Performance enables the quantification of the actual performance in figures which are easier to calculate and interpret. The measure of financial performance includes accounting ratios and capital adequacy figures. Product market performance can be calculated using the market share of product as compared to other competitor products. In this case the Electronic Products and Electronic Services performance should be compared relative to other competing banks in the market. Shareholder wealth maximisation is the primary goal of the firm. The definition is comprehensive since it covers the most pertinent business aspect.

Furthermore, Zin and Manaf (2019), suggests that business performance encompasses a wide range of indicators that can focus on profitability, growth, or social performance of companies. The other broader aspects of business performance are introduced in this definition. These are namely profitability, growth and social performance. Profitability is the actual money made in the carrying out of business operations and it is measured by profitability ratios which include gross profit margin and net profit margin. Growth of a business is an important part of business performance. Growth entails then enlargement of operations with a period of time. The portfolio of products, tangible assets and intangible asset is important in measuring growth. Social responsibility is giving back to the community which facilitates the business activities carried out by the organisation. This aspect was ignored by previous definitions even though it is essential in the assessment of business performance.

Business Performance involves activities, closely connected with business competencies, which help the entrepreneur to achieve business goals based on key performance indicators. The most important aspect introduced by this definition is the area of business competencies. Business competencies are the abilities, aptitudes, proficiencies and know how's that distinguishes the business from its competitors. The proficiencies are technologically related when it comes to Electronic Commerce success (Wessel and Vries, 2019).

Finally, for the purpose of this study a Business Performance definition is one which covers the discussed areas. These areas include social performance, shareholder profit maximisation, business competencies, financial performance, product market performance, achievement of predetermined goals.

2.4.2 Measurement of Business Performance

There is a lack of agreement among scholars on the actual definition of Business Performance Measurement. The study will review the different definitions given in the area to come up with one general definition which will be used in this dissertation. From an operations perspective, Business Performance Measurement system is mainly perceived as a set of metrics used to quantify both the efficiency and effectiveness of actions or as the reporting process that gives feedback to employees on the outcome of actions (Martinez *et al*, 2007). This dissertation will attempt to quantify the outcomes of Electronic Commerce activities carried out by commercial banks in the form of Electronic Products, Electronic Services, Electronic Operations and Electronic Banking Support Systems.

Moreover, from a strategic control perspective, two different aspects of a Business Performance System can be identified. On the one hand, it reflects the procedures used to cascade down those performance metrics used to implement the strategy within the organisation. On the other hand, a Business Performance System is the system that not only allows an organisation to cascade down its business performance measures, but also provides it with the information necessary to challenge the content and validity of the strategy. In this study the validity and the competitiveness of Electronic Commerce as a strategy will be reviewed with empirical evidence that will be found from the study. This is done at the strategic review stage after the strategic implementation stage. This will help commercial banks to ascertain whether Electronic Commerce is viable as a strategy.

Furthermore, from a management accounting perspective, Business Performance Measurement is synonymous with management planning and budgeting. Budgeting entails a quantitative plan for the future which will be reviewed as a control measure. In this study the actual performance of Electronic Products, Electronic Services, Electronic Operations can be compared to the budgeted figures in order to come to a conclusion whether the business performed well or failed.

The financial accounting perspective is important in the measurement of business performance. The financial accounting perspective uses measures which include Return On Assets (ROA), Return On Equity (ROE) and Net Interest Margin (NIM) (Murthy and Sree, 2008).

ROA is an important ratio that expresses the profitability of a bank. It is a ratio of the bank's income to the bank's total assets, (Khrawish, 2011). It is a measure of an organisation's ability to generate income by utilizing the assets at their disposal. NIM measures the difference between revenue generated from a bank's assets and the expenses associated with paying out its liabilities. NIM as the difference between the income from loan interest generated by financial institutions and the amount of interest paid out to the bank's lenders, for example, the amount of deposits as compared to their interest earning assets. It is expressed as a percentage. The calculation is what the bank gains on loans and other assets over a specific period minus the interest paid on funds borrowed divided by the average assets that produced income in that specific period.

ROE is a ratio that expresses the profit a company makes compared to the total shareholders' equity found on the balance sheet. ROE is an important ratio to the shareholders because it indicates how much return they get on their investment.

Finally, for the purposes of this study the ideal Business Measurement System is one that combines the operations perspective, strategic control perspective, financial accounting perspective and the management accounting perspective.

2.4.3 Relationship between Electronic Commerce and Business Performance (Empirical Evidence).

The relationship between Electronic Commerce and Business Performance is supported by Empirical evidence. A study carried out on the relationship between Electronic Commerce adoption and organisational performance in Malaysia in 2013 came up with some interesting findings pertaining to the subject under study. According to Sobihah *et al.* (2013), The findings demonstrated the significant relationship between Electronic Commerce business network, and Electronic Commerce competency with organization performance. The outcomes of multiple regression analysis confirmed that Electronic Commerce business network, and Electronic Commerce competency had stated significant influence on organization performance. Of all the predictor's variables, Electronic Commerce business network appeared to be the most dominant variable in influencing organization performance. This result has also supported with previous studies by Tow (2004) and Bharadwaj (2000).

These findings had imposed potential implications for management to review for future plans in order for them to increase organization performance. The broader the scope of the organization activities, the more likely it is for the organization to use Electronic Commerce (Dewan & Kraemer, 2000). Referring to the results, it is therefore suggested for management to consistency creates value through their willingness to invest in the Electronic Commerce business network to increase performance. It provides useful guides to the click and mortar companies to evaluate their current Electronic Commerce usage and to determine the areas that need to be re-engineered in the process to increase organization performance.

Further studies on the impact of Electronic Banking on organisational performance in Pakistan came up with some empirical evidence in support of the assertion in question. According to Mehtab *et al.* (2015), the main aim of conducting this research was help to understand

the impact of Electronic Commerce on organization performance especially in the banking sector of Pakistan. The study showed the existence of positive significant relationship between the Application of Electronic Commerce and the organizational performance in the banking sector of Pakistan. The study also helped the managers to understand the importance of Electronic Commerce in improving the performance of banking sector of Pakistan. The results of this research reveal that Electronic Commerce is positively related with the organization performance. The research was limited to banking sector and questionnaires are filled from the manager's operation managers. Our study will also take a similar approach. In this study Electronic Commerce was regressed against organization performance. The results showed that the hypothesis is substantiated. An R square value of .563 at a significant level of $p < 0.001$, with $df (3)$, confirms that 56% of the variance in organization performance is significantly explained by the independent variable. Finally, this study was limited to the non-financial aspects of organization performance, financial aspect like return on asset, return on equity, EPS and dividend payout etc are not included. This study is limited to the banking sector but it can also conduct in other sectors.

Nour (2015) carried out a study on the Impact of Electronic Commerce on Organizational Performance: in Jordanian Insurance Companies. The objectives of the study are to investigate the concept of Electronic Commerce and organizational performance, and examine the impact of Electronic Commerce on organizational performance in Jordanian insurance companies. The population of the study includes all insurance companies in Jordan, a sample of (100) accountant based on (8) branches of insurance companies in Amman city was selected randomly for the purpose of this study. The study instrument is the questionnaire. The study found that there are positive attitudes towards Electronic Commerce because their means are greater than the standard mean. The study also rejects hypotheses: H_0 : There is no statistical significant relationship between Electronic Commerce and organizational performance in Jordanian insurance companies. The study recommended that insurance companies should improve their company's computer and information needs in order to use Electronic Commerce, and insurance companies should increase their attention for application of Electronic Commerce.

Sadi-Nezhad (2017) carried out a study on measuring the effect of Electronic business on organizational performance in projectors like education, Telecommunication, Textile, Sports etc. based organizations. The broad objective of the study was to measure the effect of this new facility on supply chain in project based organizations. This study performs a study

to measure the indirect effect of electronic business on project based organizational performance. The proposed study of this paper designs a questionnaire and distributes it among 140 professional experts in different industries in province of Ontario, Canada. The survey examines different hypotheses for a possible correlation between e-business and integrated suppliers, electronic business and customers, integrated customers and suppliers with organizational performance. The results of this survey indicate a positive relationship between all these components either directly or indirectly.

Hu, Jianzheng and Yang (2012) studied the Impact of E-commerce on Organizational Performance: The Role of Absorptive Capacity and Integrative Capability. This study examines how Electronic Commerce creates value for firms from the perspective of dynamic capability theory. A theoretical model is proposed and tested using structural equation modelling techniques based on survey data collected from firms that have been using Electronic Commerce in their operations for an average of four years and have more than 25% of sales or procurement via Electronic Commerce channels. We find that top management participation is a key contributor to the development of a firm's potential and realized absorptive capacities. These two forms of absorptive capacity in turn contribute to the firm's integrative capability, theorized as a form of dynamic capability, which then impacts the firm performance indicators. Different contributions of the two absorptive capacities are delineated, so are the effects of top management on the absorptive capacities.

2.4.4 Benefits of the Relationship between Electronic Commerce and Business Performance

Some of the benefits that accrue to an organization from implementation of Electronic Commerce are increased revenues since you will be able to reach more customers, improved customer satisfaction since services will be readily available and fast in their provision, cost reduction because it will not have to incur heavy wage bill, reduced space requirements and hence reduced rent or lease payments. The increased revenue streams are a direct result of the increase in the number of customers who will be reached by the Electronic Commerce services offered by the bank. Additionally, customer satisfaction is improved as a result of convenience, flexibility and the reliability of service provision that is assured by the experience derived from banking over the internet. To add on Electronic Commerce is associated with reduced fixed costs as a result of the substitution of manual processes with electronic

processes which are driven by the internet. The reduced cost subsequently impacts on the net profit margin of the bank.

Other benefits include increased efficiency since automation enables you to do more with less input, increased level of output and employee satisfaction and motivation since they will not have to toil really hard. Larger market share through attraction of new customers and customer loyalty may be gained (UNCTAD, 2015). Automation is associated with efficiency since it broadens the income streams of the bank to the attractive non-interest income. The fees and commissions associated with Electronic Commerce give a higher level of output out of the assets being utilised by the bank. The percentage of market share is also improved as more clients are reached via the internet. Electronic Commerce services market the bank products on their own since the clients can access all the services on offer on an integrated platform which cross sell all the products.

The tangible benefits are benefits that directly accrue to the organization and contribute directly to increase in revenue and profit. These include: Efficiency which is the ability of the business process to produce the same level of output using reduced resource output or to produce more output using the same level of input (Ankit, 2011). Increased automation of processes where most of the operational activities which were done by people are carried out by machines without physical presence of people (Bradley and Stewart, 2003).

Electronic Commerce enables accessibility of markets that would have been otherwise inaccessible without automation. This is for example customers who wish to carry out transaction at night are taken care of by the use of ATMs. This process leads to transformation of traditional market chain (Bhowmik, 2012). Unlike ATMs Electronic Commerce goes a step further to enable clients to transact at the comfort of their own homes rather than travelling to an ATM at Night. The Zimbabwean cash crisis has resulted in a cashless society which relies on the internet to carry out transactions. A cashless society is a fertile ground for Electronic Commerce.

Retained and expanded customer base and acquisition of a niche market. By the use of internet and electronic fund transfer, banks are able to serve customers who are in places where they don't have branches (Dubeet *al.* 2009). To this end Electronic Commerce has reduced the need for the opening of physical branches as long as there is connectivity in that place. The internet penetration rates for Zimbabwe are way above 90% hence the feasibility of Electronic Commerce in the broadening of the markets.

Reduced operation costs. When people are replaced by machines in an organization, the amount of salary paid out is reduced and hence the operation cost decreases (Enos, 2001). Intangible benefits are benefits that do not directly contribute to an increase in revenue but may give goodwill and customer loyalty to the organization. They include, enhancing well-being and education of customers. By providing information to customers online, they are enabled to learn more about the organization and also how to carry out their transaction effectively and efficiently at reduced time and cost (Filmer and Pritchett, 2001).

2.5 The Concept of Electronic Commerce

Electronic Commerce consists of buying and selling of products and services over electronic systems such as the internet and other computer networks (Khan, 2016). Modern Electronic Commerce typically uses the World Wide Web at some point in the transactions lifecycle, although it can encompass a wide range of technologies such as e-mail. A small percentage of Electronic Commerce is conducted entirely electronically for virtual items such as access to premium content on a website, but most Electronic Commerce eventually involves physical items and their transportation in at least some way. Today, it encompasses a wide range of business activities and processes, from e banking to off shore manufacturing to logistics. The ever growing dependence of modern industries on electronically enabled business processes gave impetus to the growth and development of supporting systems, including backend systems, applications and middleware (Gangeshwer, 2013). Examples are broad band and fiber optic networks, supply chain management software, customer management software, inventory control systems and financial accounting software.

The emergence of Electronic Commerce also significantly lowered barriers to entry in the selling of many types of goods; accordingly, many home based proprietors are able to use the internet to sell goods. Often small sellers use online auction sites such as e-bay or sell via large corporate websites such as amazon.com, in order to take advantage of the exposure and set up convenience of such sites (Magutu *et al.*, 2009).

2.5.1 Electronic Commerce and Products

Electronic Commerce offers products and operates under four market segments namely business to business, business to consumer, consumer to consumer and consumer to business. Electronic Commerce products can be conducted over computers, tablets, or smartphones. Nearly every imaginable product and service is available through e-commerce transactions,

including books, music, plane tickets, and financial services such as stock investing and online banking. As such, it is considered a very disruptive technology. The study focuses on Electronic Commerce and Products in the context of banking institutions. Electronic Commerce products and services are methods used by banking organizations to carry out their transactions without necessarily coming into physical contact with their clients. These services include Automatic Teller Machines (ATMs), Electronic Fund Transfer (ETF), mobile banking, online banking, Electronic Data Interchange (EDI) and telecommunication services.

The most common segment of Electronic Commerce is business to customer. The Credit card is one of the few remarkable innovations introduced successfully by banks in the last five decades, and it is currently being used extensively in B2C electronic commerce. However, it is an expensive means of payment for Electronic commerce and many online shoppers will prefer other forms of paying for their purchase (Nanehkaran, 2013). So will many online retailers who have to cough up set up and transaction costs and 23% of every payment. Moreover, credit cards are not suitable for person to person trade on the Internet. In short, Electronic Commerce has created a demand for low cost facility for micro payments and Flexible payment (Long, 2000). New ways of online payments are appearing in the market, such as deduction from a prepaid account, electronic billing services, direct transfer out of bank accounts.

Furthermore, the most important applications of Electronic Commerce will be discussed in detail. These applications in the banking sector include Electronic billing, ID verification, mobile payments, digital only banking, business to business, and international commerce. Electronic billing is one of the biggest benefits that Electronic Commerce has brought to both consumers and businesses. Banks now offer the ability to automatically pay your bills through their website or on their app. Companies can send out electronic invoices to their customers and receive payment automatically instead of waiting for and cashing a physical check. The connection between the ability for banks to send and receive payment digitally and the rise of e-commerce as a primary driver of sales and revenue in many businesses is not a coincidence; it would be nearly impossible to effectively have one without the other www.tuchfunnel.com.

Identification Number verification is another application of electronic commerce. Banks should take identification very seriously. The job of a credible financial institution is to ensure that the person spending is the person who should have access to the funds in the account. This has become harder the more technology has advanced. But Technology has also helped

drive innovation in the ability to confirm the identity and other credentials so that customers can conduct their e-commerce transaction more securely, without the possibility of data being stolen or leaked. This identification process is not just a protection for the customer, but also for the retailer or vendor. It's the responsibility of all stakeholders which include banks and Electronic Commerce retailers to uphold ID verification and customer information security standards.

Mobile commerce, or m-commerce, is an important part of Electronic Commerce. Mobile focused commerce has become a new normal for many people who are now able to buy everything from a dog sitter to a plane ticket from their phone. A smartphone has become another important Electronic Commerce tool also known as a digital wallet. Customers can now pay for many of their in-person purchases with a smartphone app, whether it's a bank-backed credit card app or an app like Apple Pay which keeps payment options for customers' various financial sources together in one place for easy payment. While mobile payments are more often used to describe in-person digital transactions, they are definitely born out of the application of Electronic Commerce in banking endeavors.

Digital banking is another application of Electronic Commerce. Electronic Commerce has enabled app payments and transactions, leading the way for reeducation in physical brick and mortar banks. While many large banks with an Electronic Commerce presence do still have in-person presences in certain communities, many banks have opened as online-only operations, such as Ally. Mortgage brokers have joined the online finance trend as well. Having users interact with their banking primarily through an app is in line with how consumers interact with many other parts of their daily lives, from paying for coffee to ordering groceries to setting doctor's appointments and more. Online-only banks can also offer a better banking experience by often being able to give customers a better interest rate on savings accounts or loans because of the money the bank itself was able to save by not having to pay overhead costs like rent.

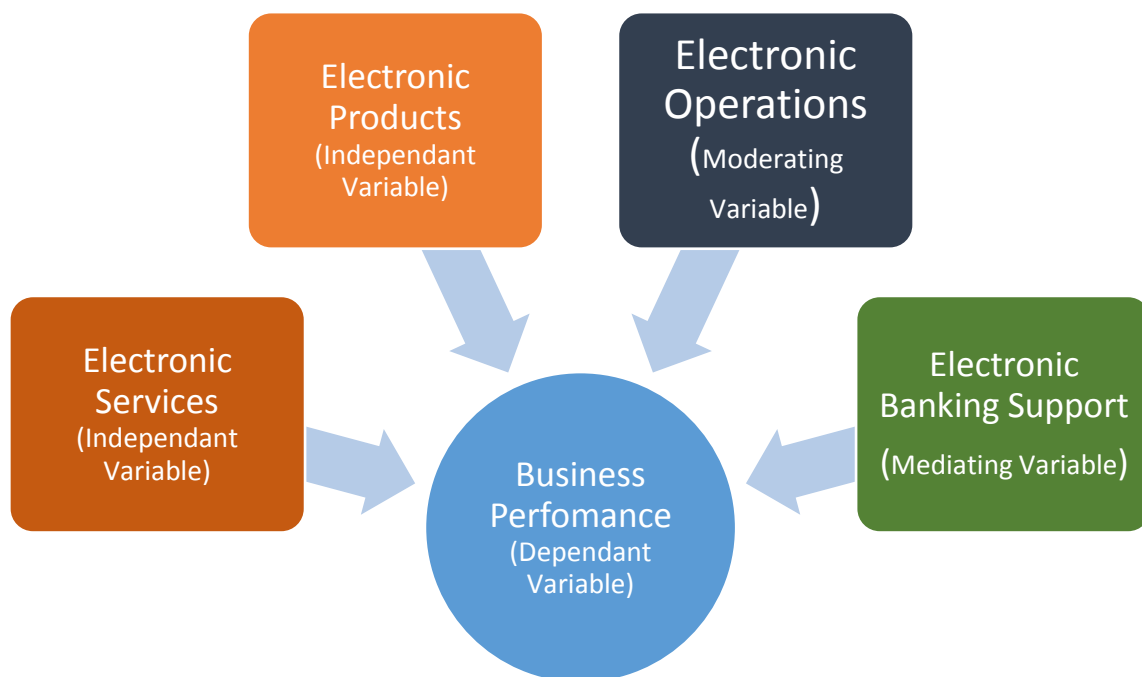
Business to Business innovation is another application of Electronic Commerce. The Electronic Commerce experience has changed the way business to business buyers anticipate buying and selling experiences to go. This has largely been due to the implication of Electronic Commerce in banking in Business to Customer spheres. Electronic Commerce has

enabled banks to offer faster account opening, digital invoice payment, and other conveniences that Business to Customer buyers have long enjoyed.

In conclusion, International Commerce is increasingly becoming important in the discussion of Electronic Commerce and products. Electronic Commerce has made it easier for people to bank internationally or pay for goods and services from another country without having to work around banking regulations or exchange rates. Thirdparty vendors like PayPal work as a go-between for Electronic Commerce retailers and financial organizations and banks. The availability of international gateways like iVeri and CSC bank of Lebanon has expedited the process of international integrations, resulting in the spread of international commerce as a global phenomenon.

2.7 Conceptual Framework

Figure 2.2 Relationship between Electronic Commerce and Business Performance



2.8 Chapter Summary

Electronic Commerce for the purpose of this study involves the buying and selling of products and services over electronic systems such as the internet and other computer networks. Mobile

Banking is also an integral part of Electronic Commerce which uses cell phones to transact. The major theories underpinning this study are mainly the financial intermediation theory, innovation diffusion theory and the transaction cost theory. Business Performance can be measured from a strategic control perspective, financial accounting perspective, management accounting perspective and an operational perspective. The independent variable in this study is Electronic Commerce which results in operational efficiency consequently financial performance which is the dependant variable.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter focused on the research techniques applied in this study in order to answer the research objectives. It gives a clear and concise description of how the study was carried out. Precisely, the chapter covers research design, population and sampling, research instruments, data collection procedures and data analysis.

3.1 Research Design

Research design refers to the all-inclusive strategy that is selected to join together various elements of the research in a logical way, thereby, guaranteeing that the research problem is appropriately tackled. Research design constitutes the strategy for data collection and analysis, (Wilkinson, 2012). This study adopted a descriptive research design. Teo *et al* (2011) explains research design as a master plan that provides answers to 'who, what, when, where and how' questions related to a specific research problem. Ahrens and Khalifa, (2013) explain that descriptive research is used to acquire information pertaining to the situation at present and to explain 'what exists' regarding variables of the situation. The research was carried out to get a clear picture on the nature of the relationship between Electronic Commerce and Business Performance. This is descriptive in the sense that the subject under study is known to be Electronic Commerce and Business performance in the Zimbabwean banking sector.

There are mainly two research methods namely qualitative approach and quantitative approach. The study used a quantitative approach. The approach is suitable for the large volumes of data

that will be gathered from the questionnaires. The quantitative approach was used to unearth the hidden patterns in the data.

3.1.1 Qualitative Research

Qualitative research is basically exploratory research. Qualitative research is used to obtain an appreciation of concealed opinions and motivations. Wilkinson, (2012) elaborates that it is concerned with understanding the behavior of humans from their informants' point of view. Open-ended questionnaires, observations and unstructured interviews are the data research instruments used to collect qualitative data. Qualitative data provides depth and detail and encourages people to give in-depth responses which may even open the way for new topics areas that were never considered at first.

However, the collection of qualitative data is more time consuming. Unless there is sufficient time and financial resources, it is important to limit the size of the sample to a smaller one. Another drawback of qualitative research is that it requires the work of an expert to make 89/systematic comparisons to interpret it.

3.1.2 Quantitative Research

Quantitative research is the verifiable investigation of circumstances that can be observed using statistical and mathematical methods. Wilkinson, (2012) states that quantitative research deals with finding out facts about situations and it is based on a fixed and measurable assumption. Quantitative research collects data using numbers which can be categorized and ranked in order or measured. Experiments are concerned with measuring things and usually yield quantitative data. However, research methods such as questionnaires may produce both quantitative and qualitative data. Quantitative methods give researchers the opportunity to conduct broad surveys that involve a vast number of subjects and standardised findings. More likely than not, they give accurate results.

However, quantitative methods are inflexible and provide little to no evidence about the attitudes and behaviour of the subjects under study. In this study, quantitative methods were used to analyse data from the questionnaires. This was suitable because numbers were used to group responses from the questionnaires. These responses were given codes which were then used in SPSS to analyse the findings of the study.

3.2 Population

Wilkinson, (2012) defines population as a group of individual persons from which samples are taken for statistical measurement. Green and Carmone, (2011) further explain that research population is the totality of all members, objects and subjects that have common characteristics and features relative to the study to which sample findings can be generalised. The population for this study comprises of zimswitch registered local banks. The target population was 17 local banks which are on the zimswitch platform.

3.2.1 Sample Size and Design

According to Scott and Vessey, (2015) sampling refers to selection of individuals from a population of interest to make an estimation of the qualities of the population. The use of sample population made the research objective and successful as this research is limited to five major banks CBZ, CABS, FBC, Steward and First Capital bank employees. Oliveira and Martins, (2011) pointed out that a large sample, not too big will produce information that is adequate for the research to be carried out but a sample that is too small may provide inadequate information. Brick and Wood, (2014) further explained that a sample population that shows a good representative should be 30% or more of the target population.

Good and Hart, (2013) further justifies this by stating that a sample of more than 50% of the total population should produce reliable results.

Table 3. 1 How the sample was constituted?

Sample Elements	Population	Sample Size	Sampled Population
First Capital	75	50	67%
CABS	100	75	75%
CBZ	100	75	75%
FBC	76	50	66%
Steward Bank	80	50	63%
Total	431	300	70%

The five Zimswitch compliant Banks randomly chosen represent more than 30% of the population since Zimbabwe banks Zimswitch compliant banks. The research indicates a good

representation of the target population of 70% was obtained in the sample population, and it is more than 50% of the target population. Judgement sampling was used to select the sample. The target was to get more than 300 responses in order to come up with a valid conclusion. A too small sample will hide some important patterns in the data resulting in distorted results. A too large sample is not feasible since it will be equal to the population hence a strain on the resources. The sample chosen for the study is adequate for getting the best results.

3.2 Primary Data

Ahrens *et al* (2015) defined primary data as an indigenous report on the results of collected data from a sample population. Primary data is raw data that must be collected by the researcher. Primary data gives raw and relevant answers to specific research questions so as to give an accurate view of results. However primary data may be very costly to collect. Respondents may falter in filling out questionnaires and the researcher has no control over this when data is being collected. It is important that that researcher must be skilled enough to collect the data in order to avoid collecting insufficient information. Interviews and questionnaires were used to collect primary data. Data about the demographics of the respondents and their opinion on the performance of First Capital, CBZ, CABS, FBC and Steward Bank were collected. The reason for collecting primary data was to get accurate specific information needed for the study. Most of the data needed for this study can not be solicited using secondary information. The research intends to add value to the current body of knowledge and also provide solutions to industry hence the decision to search for raw primary data.

3.3.1 Interviews

Kapoulas, (2012) and Fontana *et al*, (2011) revealed that; an interview is a process of communication through which the respondent and the interviewer exchange information. Information gathered from interviews is influenced by the respondent who is tasked to translate their past experiences, (Theo, Ranganathan and Dhaliwal, 2011). Interviews can be divided into open ended and structured interviews, (Guilford, 2013). In this study, semi-structured interviews were used with respondents from the five banks on the topic under study. These types of interviews allow the respondents to express their opinion freely on how the organisation is performing and how it can be improved. They provide comparable, reliable and relevant qualitative data. Semi-structured interviews were used to get in-depth knowledge on the subject of Electronic Commerce. The respondents were giving information in relation to the subsets of Electronic Commerce which are electronic Products, Electronic

Services, Electronic Operations and Electronic Banking Support Unit. These were dissected relative to their relationship with Business performance with the help of Semi structured interviews.

3.3.2 Questionnaires

According to Borg *et al* (2012), a questionnaire is an instrument of research used to collect information from respondents for the research topic under study. Church, (2013) stated that there are two kinds of questionnaires, open-ended and closed-ended questionnaires.

Closed-ended questions allow the respondent to choose a response from explicit options given (Guilford, 2013). For the purpose of this study, closed-ended questions were used to obtain information how Electronic Commerce has affected the business performance of First Capital, CBZ, CABS, FBC AND Steward Bank. The questionnaires asked specific questions on how the various components of Electronic Commerce are related to business performance. The components of Electronic Commerce were interrogated in relation to business performance. The components include Electronic Products, Electronic Services, Electronic Operations and Electronic Banking Support units. The researcher chose this comprehensive approach to dealing with the subject of Electronic Commerce as a way of unearthing the hidden patterns of data that exist in the subject. When closed-ended questions are used to collect data, the research is made easier and faster because the respondents are restricted to the responses that are provided only. The use of closed-ended questions when carrying out research makes it easier and quicker to obtain the responses and comparisons of different responses are easier to make. The closed ended questionnaires used in this study enabled a quick collection of data given the operational challenges that were being experienced as a result of the Corona Virus pandemic which affected every industry.

Additionally, closed Questionnaires were used in this study because they have the capacity to collect large amounts of data and analyse them. Three hundred questionnaires were responded to and easily analysed on SPSS due to the codes that were assigned on the responses using the Likert scale. Closed questionnaires simultaneously enabled the collection of the large volumes of data and the subsequent analysis of the gathered data.

Moreover, the cost and time of carrying out personal interviews was eliminated since these questionnaires were remotely responded to. The administering of questionnaires was done in bulk in the five banks which were being studied and it was cost and time effective rather than attempting to hold personal interviews with everyone.

Likewise closed ended questionnaires offer flexibility and convenience to the respondents resulting in a high response rate. The respondents can choose to complete the questionnaires in their own time hence a high response rate as compared to setting up meetings with the respondents. The convenience associated with these instruments are favourably associated with an exceptional response rate.

Finally, these closed ended questionnaires are a good way to reach out to those who are always travelling in and out of office. The questionnaires were administered via email as a way of reaching out to those who were not at their workstations for various reasons.

According to Stanley and Campbell (2013), argue that if too many response choices are provided, closed questions may be confusing and errors on marking the incorrect boxes when filling out the questionnaire is possible.

3.3.2.1 Pretesting of the questionnaire

Pretesting or Pilot survey is conducted to test the survey instrument and data collection procedure before data collection begins. The objective is to ensure that the questions being asked accurately reflect the information the researcher desires and that the respondent can and will answer the questions. The questionnaires were pretested as fellow students were asked to respond to the questionnaires and the researcher was convinced that the instrument is suitable for the study.

3.4 Secondary Data

Gray (2014), defined secondary data as data that already exists and might have been collected for the purposes of another research or for record keeping but is still relevant for use. Secondary data provides the history of an organisation. Because secondary data makes use of data that was previously collected by another party it is cheaper to undertake. Secondary data maintains its relevance even if secondary data is purchased, the cost is likely to be less than the cost of collecting fresh data, (Gray, 2014). Secondary data is reliable as it is collected and published by professionals which add value to the research. Gray, (2014) adds that secondary data is convenient for students since they have to complete their dissertations within a set period of time. In addition, secondary data is readily available to the researcher. The researcher made use of Electronic Journals available on the internet to search for information related to Electronic Commerce and Business Performance. Given the limited time available to carry

out the research it was impossible to get primary data on each and every aspect under review. Secondary data cultivates the spirit of research since it gives a foundation of the study through literature review paving way for the few areas that require primary data. Also, secondary data enables comparisons and contrasts among existing reading materials in order to come up with a comprehensive view of the subject under study. Secondary data was used in the study to carry out an in-depth study of the subject of Electronic Commerce and its relationship with business performance.

However secondary data may be obsolete, incomplete, biased and inaccurate which may affect the results of the research. Secondary data was collected from journals, textbooks, internet pages and Electronic Commerce surveys and reports.

3.5 The Likert Scale

Kahn and Cannell (2014) defined a Likert scale as a strategy used for ranging or measuring responses given by respondents on qualitative data, used for the analysis of data. The Likert scale enables easy interpretation of data. This study used the Likert scale to allow respondents to select the most appropriate answer for each question presented on the questionnaires, (Gilgal and Cull, 2011).

Table 3. 2: The Likert Scale

Strongly Agree	Agree	Neutral/Uncertain	Disagree	Strongly Disagree
1	2	3	4	5

The Likert scale enabled the easier analysis of the responses on SPSS. This was necessitated by the ability to categorise responses received in order to come up with the overall position or conclusion. Responses from the Likert Scale can be coded on SPSS to facilitate the quantitative analyses of data. Large volumes of data and responses received in the study were analysed on SPSS based on the responses gathered using the Likert scale. The use of descriptive statistics was expedited by the use of the Likert scale.

3.6 Validity and Reliability of Data

The study adopted triangulation as a data validation strategy. Triangulation entails gathering data from a number of sources and making comparisons of the responses and findings gathered. Data gathered from research instruments is compared against each other to establish a solid conclusion. This study compared data from questionnaires and interviews to see if the data points towards the same response then results would be considered reliable.

Validity refers to how effectively a test measures what it is purported to measure (Gilgal and Cull, 2011). The data collected from respondents was valid because the findings were similar to those collected from other closely related studies. Data collection methods used was also similar to those used by closely related studies. The data collected from respondents was valid because the research instruments were approved by the fellow students and other seasoned bankers within the Electronic Commerce department before they were distributed to the sample population for data collection. In the pilot study, the designed questionnaires were distributed to a small group of fellow students who found it easy to answer all the questions as they were clearly asked and structured in an understandable way. This ensured that the questionnaires would collect valid and reliable data.

The use of closed questions for data presentation and analysis guaranteed that relevant data was gathered to ensure validity of the findings. The research carried out on the impact of Electronic Commerce on financial performance was reliable as a good representation of the target population was achieved at 70%. Green, (2011) was of the view that a reliable research must have a sample population that is 50% or more in relation to the whole population.

3.7 Data Presentation

Data collected was presented in graphs, pie charts and tables constructed using the SPSS package.

Tables give a clear picture to the reader when presenting numerical data and they are easy to formulate. Data is classified into categories for easy interpretation using tables. Tables can easily summarise data making decision making easier. However, tables are unsuitable for a lot of numerical data as they fail to clearly show trends and connect dots.

Graphs show an understandable picture of trends or results that is present in a set of data. Graphs are easy to understand. Graphs enable comparison between different variables under

study. The construction of graphs was made easier by the SPSS package that was used by the researcher.

3.8 Data Analysis

Data was analysed both quantitatively and qualitatively. The qualitative data that addressed the objectives was complemented by quantitative analysis.

3.9 Ethical Considerations

The study accounted for ethical considerations when undertaking the research study on the impact of Electronic Commerce on financial performance of Zimbabwean Banks. The banks used for the purposes of this study are First Capital Bank, CBZ Bank, CABS, FBC AND Steward Bank. The study made sure that the ethical considerations were not violated, (McShane and Pekele, 2012). The study was carried out with confidentiality highly maintained. Information from the interviews and questionnaires distributed was treated with confidentiality; the respondents from the various departments did not disclose their names. The information was neutral. The respondents were well informed about what the research was about and they participated willingly and with the permission of the employer.

3.10 Summary

This chapter focused on the research techniques applied in the study in order to answer the research objectives. Precisely the chapter covered research design, population, data collection, presentation and analysis.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The Chapter focused on presenting and analysing data obtained from research instruments used, that is questionnaires and interviews as discussed in chapter three. Factor analysis was used as a data reduction technique in the study. The data gathered from questionnaires was presented using graphs and tables. A summary was included at the end to give an overview of the chapter.

4.2 Questionnaire Response Rate

Harnett and Murphy, (2012) defined response rate as a measure, usually expressed in percentage, of how many of the distributed questionnaires were returned to the researcher. With 410 people forming the target population, 410 questionnaires were distributed and out of them only 300 questionnaires were returned (73%). Table 4.1 below shows the response rate to the questionnaires.

Table 4. 1: Questionnaire Response Rate

Responding Group	Questionnaires Distributed	Questionnaires Returned	Response Rate
CABS	90	75	83%
CBZ	89	75	84%
FBC	76	50	66%
First Capital	75	50	67%
Steward Bank	80	50	63%
TOTAL	410	300	73%

As illustrated in the Table 4.1, of the 90 questionnaires distributed to CABS 75 were returned with a response rate of 83%. The less than 100% response rate can be attributed to the lockdown conditions. Some employees were on the critical staff list whilst some were at home. Those on the critical staff list managed to respond since they were working. The response rate at CBZ was the highest at 84%. This can be attributed to the fact that the researcher is employed at the bank and has managed to create relations within the Bank. The 76 questionnaires were distributed to FBC bank and 50 were returned giving a response rate of 66%. The same challenges which affected other respondents may have contributed to the rather low response rate. The response rate for First Capital Bank and Steward Bank were 67% and 63% respectively. Overall the distributed questionnaires had 73% response rate. A better and higher representation of the target population is obtained if a high response rate of at least 70% is achieved, (Kahn and Carnell, 2014). They further explain that this ensures validity of the research. According to Goode and Hart, (2013), research data that is sound for objective analysis must have a high response rate. This study got a response rate of 73% and hence it is valid as it exceeds 70%.

In order to gather corroborative data, the respondents were interviewed over the telephone. Interviews were conducted to 5 members in the sample population, one from each department. Closed-ended questions were structured and the answers were comprehensive. The response rate for the interviews was 100%.

4.3 Factor Analysis

4.2.1 KMO and Bartlett's Test

Table 4. 2: KMO and Bartlett's Test

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.886
	Approx. Chi-Square	4204.506
Bartlett's Test of Sphericity	df	10
	Sig.	.000

The KMO and Bartlett's test shows the Sampling Adequacy and the Significance of the study. According to Cerny and Kaiser (1977) The KMO test measures sampling adequacy for each variable in the model and for the complete model. An KMO value of between 0.8 to indicates that the sampling is adequate. The value of less than 0.6 indicate that the sampling is not adequate and that remedial action should be taken. To this end the KMO value of 0.886 in this study indicate that the sample is adequate. The Bartlett test of Sphericity compares an observed correlation matrix to the identity matrix. Essentially it checks to see if there is certain redundancy between variables that we can summarise with a few number of factors. The P - value of 0.00 is below the standard of 0.05 and it shows that the study is statistically significant.

4.3.2 Communalities

Table 4. 3: Communalities

Communalities

	Initial	Extraction
Electronic_Commerce	1.000	.986
Electronic_Products	1.000	.987
Electronic_Services	1.000	.972
Electronic_Operations	1.000	.984
Electronic_Banking_Unit	1.000	.957

Extraction Method: Principal Component Analysis.

The communalities show the extraction values used for the study. The extraction values show the proportion of variance that can be explained by each factor. The extraction values are very high showing that they are good extraction values which explain Business Performance. The communalities are in line with the objectives of the study which aim to determine the relationship between Electronic Commerce and business performance. The objectives of the study include the subelements of Electronic Commerce which include Electronic Products, Electronic Services, Electronic operations and Electronic Banking Unit. The figures on the table show that the independent variables used for the study are best suited to explain the dependant variable of business performance. The results show that

there is a positive relationship between Electronic Commerce and business performance, Electronic products and business performance and Electronic services and business performance. Additionally, the extraction values show that Electronic Operations result in efficient Electronic Commerce activities which impacts on business performance. To end with an Electronic Banking Unit is necessary for electronic banking success since they fuel operations which in turn impact on business performance.

4.3.3 Total Variance Explained

Table 4. 4: Total Variance Explained

Total Variance Explained

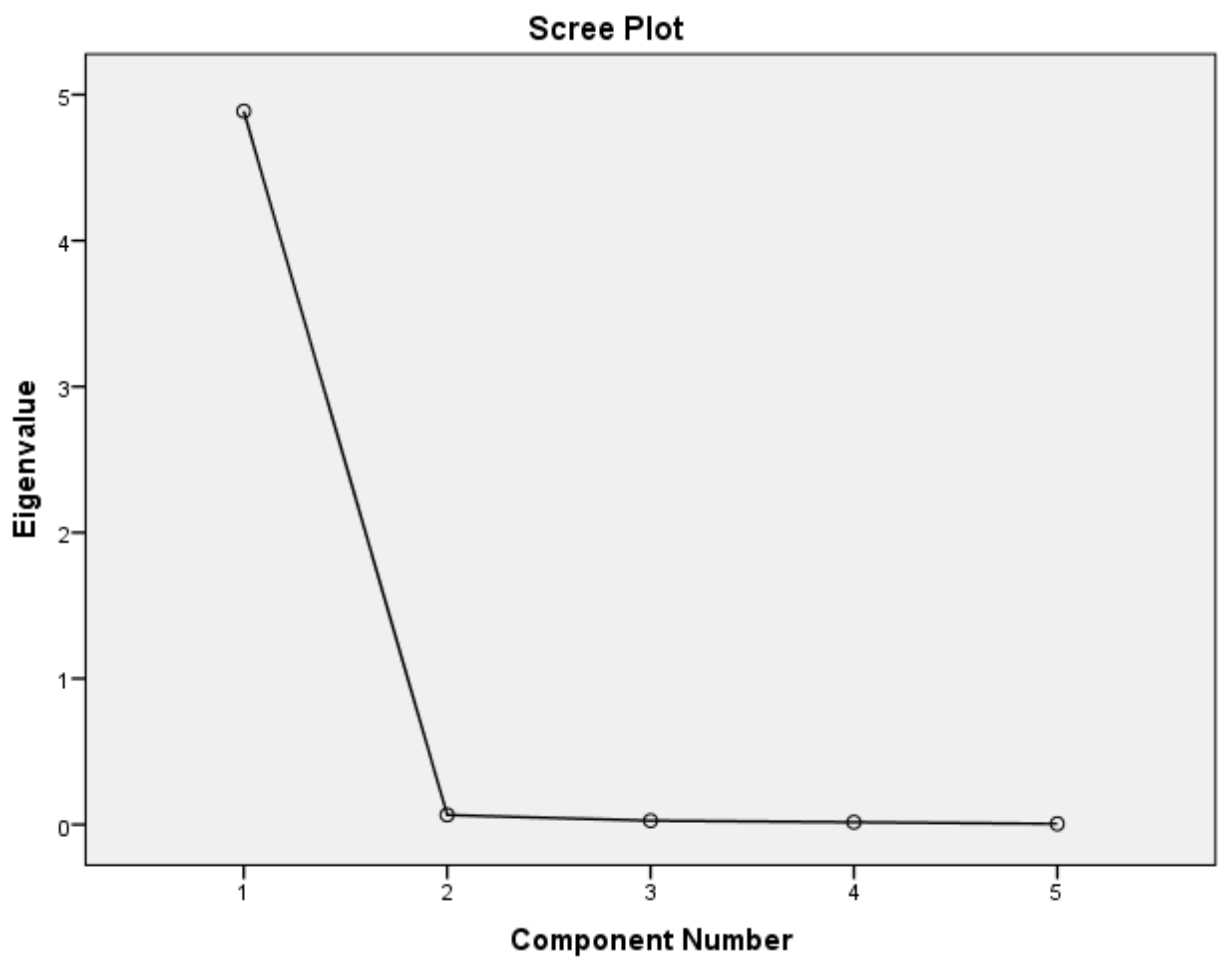
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.887	97.735	97.735	4.887	97.735	97.735
2	.066	1.317	99.052			
3	.026	.525	99.577			
4	.016	.321	99.897			
5	.005	.103	100.000			

Extraction Method: Principal Component Analysis.

Component number 1 (Electronic Commerce) was extracted for the study and it explains 97.735% of the total variance. It has an Eigenvalue of 4.887 and it shows that Electronic Commerce as a variable adequately explains the relationship in the model which attempts to establish its impact on Business Performance. The one factor extracted explains a cumulative 97.735% of the total variance. The statistic links with the objective of the study which aims to explain the relationship that exists between Electronic Commerce and Business Performance. The Component analysis shows that Electronic Commerce as a variable in the model explains 97.35% of the changes in the dependant variable which is business performance. To this end the objectives of the study will be met since the model used for the study of the impact adequately explains the changes in the dependant variable. The objectives of the study will be met on the background on the component analysis.

4.2.4 Scree Plot

Figure 4. 1Scree Plot



The Scree Plot shows the relationship between the components and their Eigen values. Components with an Eigenvalue of more than 1 are selected for the study. In this study component 1 (Electronic Commerce) was extracted for this study since it has an Eigenvalue of 4.887 which is way above 1. The other four components are below the eigenvalue of 1 and they were not extracted. The results impact on the objective of the study in the sense that the most important variable that can explain the model under study is the component of Electronic Commerce. The use of the other components with an Eigen value of less than 1 will be a duplication since they are all explaining the same thing. The components of Electronic Products, Electronic Services, Electronic Operations and Electronic Banking unit all explain the same thing. To this end all the objectives of the study can be met using Electronic Commerce as a variable of analysis.

4.2.5 Component Matrix

Table 4. 5: Component Matrix

	Component
	1
Electronic_Commerce	.993
Electronic_Products	.994
Electronic_Services	.986
Electronic_Operations	.992
Electronic_Banking_Unit	.978

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

The component matrix shows that one component was extracted which is Electronic Banking. It shows that the components have good extraction values. The overall results show that the sample is adequate and statistically significant. Electronic Commerce is best suited to explain the dependant variable of business performance and this study will proceed with in that way. The component matrix shows that all the components used in the study are suitable

for a study involving Electronic Commerce and business performance. The results found using this model are statistically significant when it comes to meeting the objectives of the study. The objectives of the study involve establishing whether a relationship exists between Electronic Commerce and business performance. It also aims to establish how other variables in the study impact on business performance. The outcomes of the analysis done based on the findings done in this study are significant in meeting the objectives of the study.

4.3 Analysis of the Data on Electronic Commerce and Business Performance

4.3.1 Test of Normality

Table 4. 6: Test of Normality

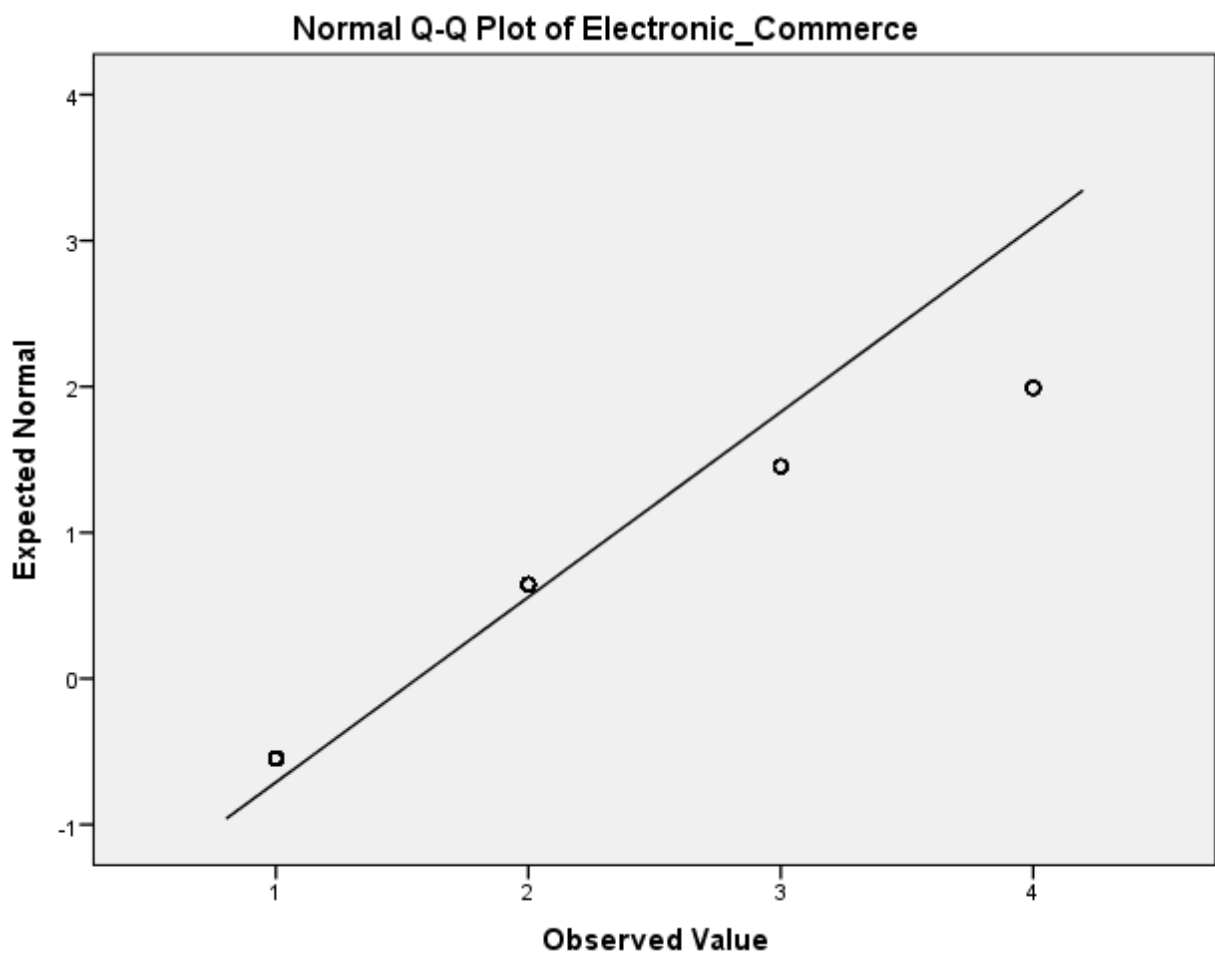
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Electronic_Commerce	.345	300	.000	.698	300	.000

a. Lilliefors Significance Correction

The null hypothesis states that the responses are normally distributed. The Shapiro-Wilk test of normality and Kolmogorov-Smirnov tests states that the p-value should be greater than 0.05 in order to accept the null hypothesis. The p-values of 0.000 using the Shapiro-Wilk test is less than 0.05 hence the null hypothesis should be rejected. Both tests are agreeing that the data is not normally distributed.

4.3.2 The Normal Q-Q Plot of Electronic Commerce

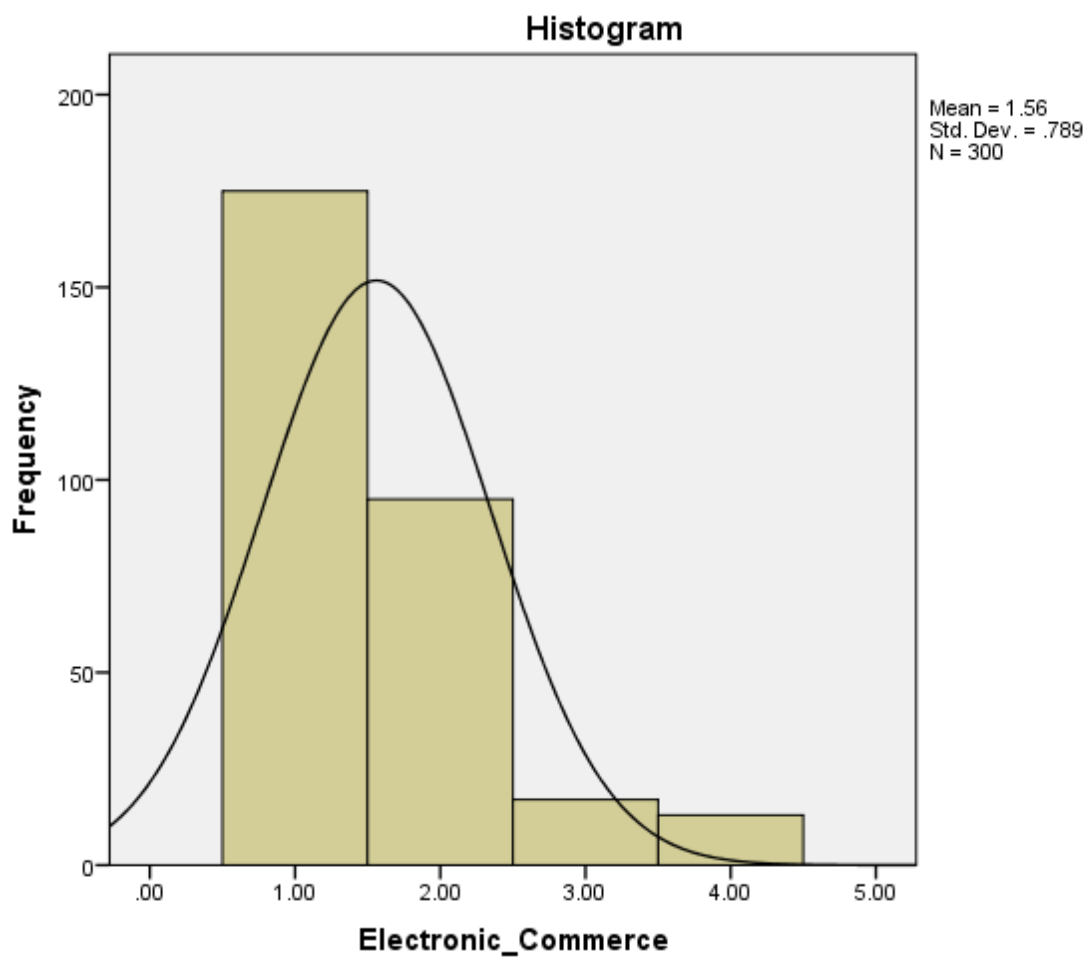
Figure 4. 2The Normal Q-Q Plot of Electronic Commerce



The Normal Q-Q plot shows that the data is not normally distributed. Data items should be laying along the normality curve for a distribution to be normal. The Normal Q-Q plot agrees with tests of Normality used earlier on.

4.3.3 Electronic Commerce Distribution

Figure 4. 3Electronic Commerce



The histogram confirms that the distribution is not normal. Most responses are concentrated around the score of 1 and 2 with an average being 1.56 with a positive skewness of 0.141. The scores are highly concentrated on the scores of 1 and 2. This shows that most of the respondents agree that Electronic Commerce positively impacts on business performance.

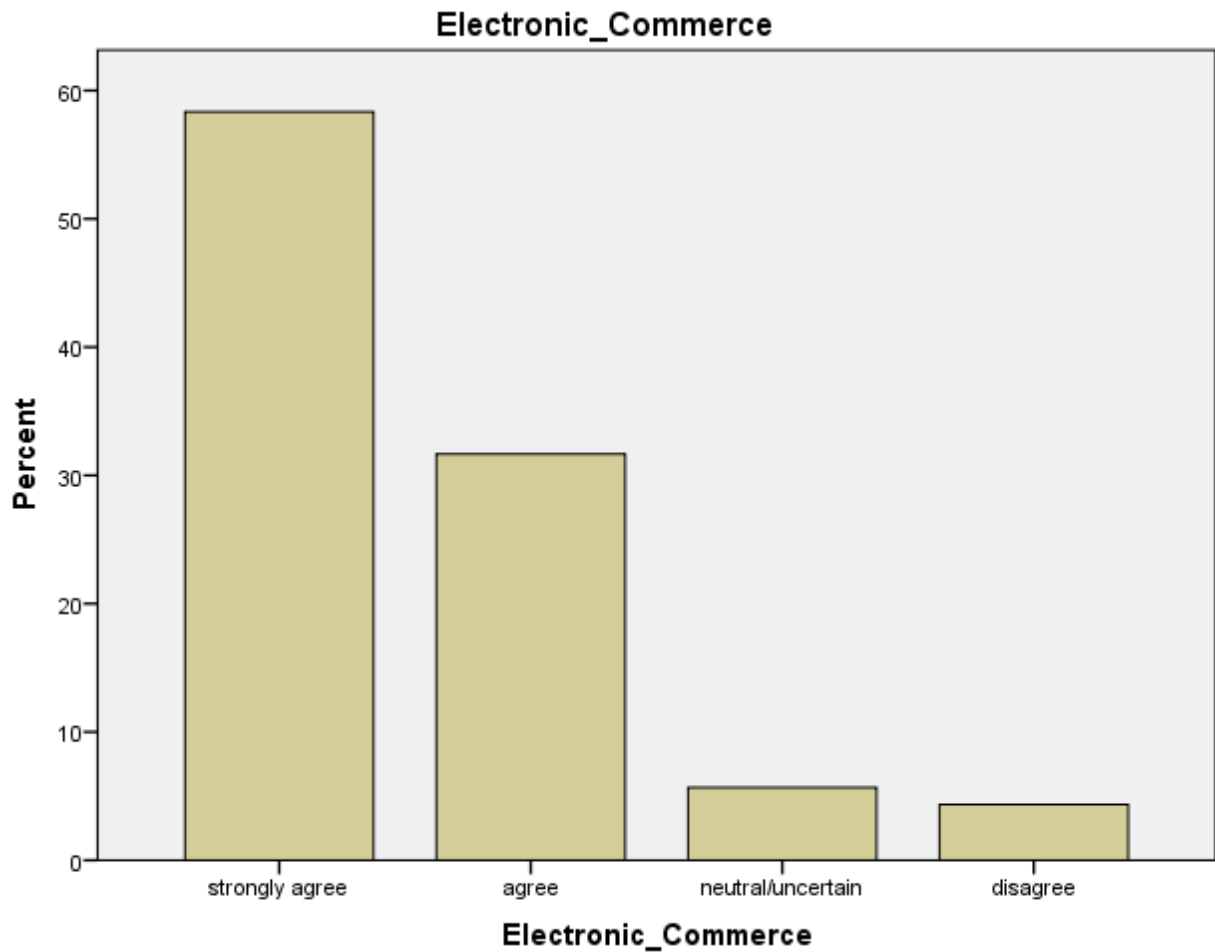
The distribution is positively skewed with most responses laying between the score of strongly agree and agree which is 1 and two respectively. This confirms the hypothesis that there is a positive relationship between Electronic Commerce and business performance. To this end boosting a bank's Electronic Commerce services will result in good business success.

4.4. Positive Relationship between Electronic Commerce and Business Performance

Table 4. 7: Electronic Commerce and Business Performance

	Frequency	Percent
strongly agree	175	58.3
Agree	95	31.7
Valid neutral/uncertain	17	5.7
Disagree	13	4.3
Total	300	100.0

Figure 4. 4 Electronic Commerce Has an Effect on Business Performance



As shown by Figure 4.5 and Table 4.7 58.3 % strongly agree,31.7% agree,5.7% uncertain and 4.3% disagree to the assertion that Electronic Commerce Affects Business Performance. A total of 90% are of the view that Electronic Commerce is strongly linked to business performance and it results in success due to high fees and commissions. These findings are in line with (Kithaka, 2014) who tested whether Electronic Commerce (Mobile Banking) had an effect on Business Financial performance using a regression model. From the test, she concluded that Electronic Commerce positively and notably has an effect on the financial performance of banks. Possible reasons for this positive relationship are non interest income from the fees and commissions gained from these electronic platforms. Electronic Commerce facilitates the mobilisation of deposits which can be used by the bank to lend and get loan interest income.

4.5 How the results from the quantitative analysis impact on the objectives of the study?

As a recap the objectives of the study areas follows:

- ✚ The determine relationship between Electronic Commerce on Business Performance

- ✚ To determine the relationship between Electronic Products and business performance
- ✚ To determine the relationship between Electronic Services and business performance
- ✚ To establish the impact of Electronic Operations on Business Performance
- ✚ To establish impact of the electronic Business Support on Business Performance.

The results analysed do indeed confirm that there exists a positive relationship between Electronic Commerce and business performance. The benefits associated with Electronic Commerce outweigh the costs. The implication is that business performance is improved by Electronic Commerce. The study through factor analysis saw it fit to use the most important of Electronic Commerce since it adequately explains business performance in this study. Electronic Products and Electronic Services should be invested in in order to yield good business performance. Although these components were not used in this model they are equally important as evidenced by the high extraction values produced by the principle factor analysis. The business should invest more in Electronic Products and Electronic Services if they want to achieve good business performance. In addition the results also emphasise on the need for efficient Electronic operations if business success is to be achieved. To end with the bank need a proper Electronic Banking Support Unit for it to be successful.

4.6 Analysis of Interview Questions

4.6.1 Since the adoption of Electronic Commerce have you noted any changes in the performance of your bank?

The respondents seemed to agree that there have been major changes in their respective banks' performance since 2011, when Electronic Commerce was integrated in the banks' Operations. The respondents highlighted that there has been a strong upward growth in non interest income attributed to fees and commissions received from Electronic Commerce platforms. Steward Bank highlighted that there has been a 40% increase in income attributed to Electronic Commerce for the period 2015 to 2018, CBZ has a 35% increase for the same period, CABS has 38% for the same period, First Capital had 30% and 25% for FBC. The increase in Electronic deposits for the banks can be attributed to Electronic Commerce.

4.6.2 What are the key differences have you noted in the pre-adoption and post-adoption performance of your Bank?

The respondents seemed to agree from the five banks there have been notable changes in the post adoption Era of Electronic Commerce. CBZ Bank has witnessed a huge increase in its customer base and level of Electronic Commerce. The success of CBZ Touch mobile application contributed to the huge increase in volume of transactions and subsequent increase in deposits. Steward Bank has seen an increase in electronic balances due to the popular ecocash banking services and the ecocash trust account. These accounts facilitate transactions by individual and ecocash banking services agents. These have seen a creation of billion electronic money. CABS has seen an increase in their Zimswitch settlement figures which shows the presence of merchant pos machines which were facilitated by Electronic Commerce. For FBC bank Electronic Commerce has facilitated the intergration of the bank with other international transfer agents like Mastercard and Visa. This is attributed to Electronic Commerce. First Capital Bank in association with Barclays international has seen the perfection of internet banking which resulted in the success of the mobile banking platform.

4.6.3 Has the bank seen any decrease in operating costs due to the adoption of Electronic Commerce?

The respondents seem to agree that the adoption of Electronic Commerce resulted in a decrease in operations in different ways. The respondent from CBZ highlighted that the adoption of Electronic Commerce in their activities has resulted in the closure of some of their branches since customers can do self service on their internet based platform. Moreover, in 2019 the bank managed to retrench since some staff were excess to requirement since the machines could do the work. The closing of branches resulted in a decrease in fixed costs which include rent and rates, the cost of fuel, wages and salaries and other maintenance costs. Moreover, the CBZE- Banking Department also reduced the number of staff complement required due to the use of auto reconcilers which were facilitated by Electronic Commerce. Moreover, the other four banks agreed that their branch network, labour complement has been reduced due to Electronic Commerce resulting in reduced cost and increased business performance. Steward has implemented a business model of using agencies rather than the traditional branch network. This was facilitated by the adoption of Electronic Commerce.

4.6.4 Is the Electronic Banking Support Unit a Cost or Benefit to your Bank?

The respondents agreed that although an Electronic Banking Support unit is usually viewed as a cost centre they are of immense value to their Banking institutions and its rather a benefit

in the long run. CBZ Bank attributed the success of their Electronic Banking unit to the strong Electronic Banking Support given by Group IT. The bank attributed the success of the CBZ mobile Banking app to a strong support given by the IT. Moreover, the support unit has facilitated the successful integration with other partners like MFS, Verifone, EFT and Iverity to a vibrant E-Banking support Unit. The other four Banks also agreed that their innovations and successful integration with mobile service providers like One money, Telecash and Ecocash has been sustained by a good Electronic support unit.

4.6.5 How is Electronic Commerce Related to Business Performance?

There was consensus from the five respondents randomly chosen from the bank that Electronic Commerce is positively related to Business Performance. This implies that an increase in Electronic Products and Electronic Services results in an increase in non-interest income. The respondent from CBZ highlighted that an increase in Electronic Commerce Products Post 2015 has resulted in a continuous increase in Non-interest income. Steward Bank agreed that the increase in the coverage of Ecocash Banking services has resulted in improved Business Performance. The reasons were given in the earlier responses. CABS attributed the increased acquiring figures on the Zimswitch platform to Electronic Commerce on mobile banking platforms. This success has resulted in interchange fees and commissions which have been a good source of a positive Business Performance.

4.7 Summary

The chapter covered presentation and analysis of data collected using the various research instruments as discussed in chapter 3. Factor Analysis was used as a data reduction technique for the quantitative analysis. The data was presented using graphs, pie charts and tables. The findings were linked to related studies by other scholars who researched on similar topics.

CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSION

5. INTRODUCTION

This Chapter is focused on the main areas of the study, the main research findings, recommendations and conclusions, having studied the impact of Electronic Commerce on Business Performance in the case of Zimbabwean Banks.

5.1 Summary of Major Findings

- ✚ The relationship between Electronic Commerce and Business Performance is Positive. The benefits of Electronic Commerce outweigh the associated costs. This implies that the level and quality of Implementation Electronic Commerce

practices results in good business performance. Consequently 90% of the respondents from the five banks used in this study agreed that Electronic Commerce is associated with a strong business performance.

- ✚ Electronic Products have a positive relationship with Business Performance. The more Electronic products the bank has is likely to result in more benefits to the organisations. The number of products and the quality of Electronic products that a bank has in its Electronic Commerce portfolio are associated with level of Business Performance. 89.7% of the respondents agree that Electronic Products are positively linked to Business Performance.
- ✚ Electronic Services have a positive relationship with Business Performance. The number and quality of Electronic Services affect its performance. These services include internet based applications like CBZ Touch and Mobile Moolar. Hence 90.3% of the respondents agree that Electronic Services positively affect Business Performance.
- ✚ Electronic Operations facilitate Business Performance. Sound Electronic Operations results in an efficient Electronic Commerce systems which will result in good Business Performance. The Electronic operations include virtual offices, auto reconcilers and Electronic query resolution. 90.7% of the respondents agree that Electronic operations facilitate Business Performance.
- ✚ A vibrant Electronic Banking Support unit ensures Business Performance. The Electronic Banking Support Unit is responsible for system developments, innovation and system updates. These units were traditionally viewed as cost centres but they are the backbone of Electronic Commerce. To this end 92% of the respondents agree that Electronic Banking Units ensure Business Performance.

5.2 Conclusions

- ✓ There is a positive relationship between Electronic Commerce and business performance. The benefits of Electronic Commerce outweigh the associated costs to the organisation. This is supported by the results which show that 90% of the respondents agree that the subject of Electronic Commerce positively influences business performance.

- ✓ Electronic Products positively impact on organisational performance. The results in the study show that more than 90% of the respondents agree that Electronic Products have a positive impact on business performance.
- ✓ Electronic Services positively influence business performance
- ✓ Electronic Operations improve operational efficiency of Electronic Commerce resulting in positive business performance
- ✓ A viable Electronic Banking Support Unit results in improved Business Performance.

5.3 Recommendations

In relation to the findings of the research, the advantages currently being enjoyed by the five Banks used in the study namely CBZ, CABS, FBC, First Capital and Steward Bank. These banks are among the most successful Banks in the country due to their Electronic Commerce activities. The author recommends that:

- ❖ Local Banks should inject more funds in modernising and boosting their Electronic Systems in order to reap the rewards of the benefits of Electronic Commerce which outweigh the associated costs.
- ❖ The portfolio of Electronic Products being offered should be expanded in order to tap into the fees and commissions which are associated with these products. The quality of the products offered should be improved in order to gain a competitive advantage and efficiencies.
- ❖ Electronic Services should be improved in order to yield good business performance. Banks should ensure their services have a good uptime also dealing with increased volume of transactions with good speed
- ❖ Electronic Operations for the banks should be enhanced to facilitate good Electronic Operations which will in turn improve business performance. Efficient Electronic operations are associated with good business success in terms of increased revenues and reduced costs.
- ❖ Banks should invest in an Electronic Banking Support Unit which offers support to the electronic banking department. These departments ensure innovation and technological development need to keep Electronic Commerce activities relevant.

5.4 Suggestion for future research

This study focused on the impact of Electronic Commerce on business performance in the banking sector. Further studies can be focused on the perceptions of customers towards the Electronic Commerce services offered by the banks. It will also determine the benefits derived and challenges faced by customers who use such services.

5.5 Summary

This Chapter summarised the major findings of the study, the conclusions and the recommendations of the study.

APPENDIX

Questionnaire

This questionnaire has been prepared by a final year MBA Student at the University of Zimbabwe. In partial fulfilment of the program, every student is required to conduct a dissertation on a topic of her/his choice.

Research Topic

An Assessment of the Impact of E-commerce on Business Performance. Evidence from the Banking Sector of Zimbabwe.

Instructions

Please indicate your response by ticking in the box corresponding your desired response.

Please do not write your name anywhere on this questionnaire.

Kindly assist by completing the questionnaire. Information provided shall be treated with strict confidentiality and used for academic purposes only.

SECTION A

Please tick where appropriate

1. The Bank in which one is stationed

CABS	CBZ	FBC	FIRST CAPITAL	STEWARD
1	2	3	4	5

SECTION B

2. The relationship between Electronic-Commerce and Business Performance

	Strongly Agree	Agree	Neutral/Uncertain	Disagree	Strongly Disagree
a)Electronic commerce affects Business Performance					

3. The relationship between Electronic Products and Business Performance

	Strongly Agree	Agree	Neutral/Uncertain	Disagree	Strongly Disagree
a) Electronic Products affect Business Performance					
b) Electronic Products are source of revenue in the form of fees and commissions					

4. The relationship between Electronic Services and Business Performance

	Strongly Agree	Agree	Neutral/Uncertain	Disagree	Strongly Disagree
a) Electronic Services affect Business Performance					
b) Electronic Services are source of revenue in the form of fees and commissions					

5. How Electronic Operations affect Electronic Commerce

	Strongly Agree	Agree	Neutral/Uncertain	Disagree	Strongly Disagree

	Agree				Disagree
a) Electronic Operations Facilitate Electronic Commerce					
b) Electronic operations reduce operating costs					

6. Electronic Banking Support units ensure Business Performance

	Strongly Agree	Agree	Neutral/Uncertain	Disagree	Strongly Disagree
a) A Vibrant Electronic Banking Support Unit results in good Business Performance					
b) An efficient Electronic Banking Support department saves cost					

Thank You

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