CUSTOMERS' PERCEPTIONS OF ELECTRONIC BANKING DELIVERY CHANNELS IN ZIMBABWE: A CASE OF CBZ BANK (2013).

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# A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THEREQUIREMENTS OF THE MASTER OF BUSINESS ADMINISTRATION DEGREE

**GRADUATE SCHOOL OF MANAGEMENT** 

UNIVERSITY OF ZIMBABWE

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# DEDICATION

To my beloved wife and children

# DECLARATION

Student Declaration – I, **JOSEPH DESHE**, do hereby declare that this dissertationis the result of my own investigation and research, except to the extent indicated in theacknowledgements, references, and by comments included in the body of the report, and that this dissertation is therefore, my original work and has not been presented in part or in full for any other degree in any other University.

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Supervisor Declaration – I, Dr. N .Kaseke, confirm that the work reported in this dissertation was carried by the candidate under my supervision as University Supervisor. This dissertation has been submitted for review with my approval as University Supervisor.

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The views, errors and omissions are strictly mine and should not be attributed to any of the people or institutions mentioned above.

## ABSTRACT

The increased competition for customer's deposits as a result of the financial sector liberalization and the advent of technology based systems has led banks to adopt electronic banking. Literature argues that the introduction of electronic banking allows banks to attract new customers, retain the existing ones, reduce operational costs and offer improved service. However, realization of these net benefits from investment in electronic banking entirely depends on adoption and usage by customers. Indeed, usage is conditioned by customers' perceptions of attributes of the electronic banking system. Studies note that despite the low transaction cost and convenience offered through the electronic banking, most banks continue to experience long queues in their branches irrespective of the time of month. Thus, this study seeks to investigate how CBZ Bank customers' perception of electronic banking.

The study used a structured questionnaire to collect data from 237 CBZ Bank customers. The response rate for the study was 79 percent. Empirical findings from the study showed that there is low usage of electronic banking among CBZ Bank customers and the most of the customers prefer to use the traditional brick and mortar banking. The results also showed that the main services used by CBZ Bank customers on electronic banking platform are balance inquiry and mini -statement requests. The study identified perceived security, perceived trust, perceived usefulness and attitude, perceived cost, perceived convenience, brand reputation, contact, perceived quality of service and perceived efficiency as factors that affect customers' adoption of electronic banking. The study accepted the proposition that CBZ Bank customers have a negative perception of electronic banking. The study concluded that there is low usage of electronic banking and customers conduct their real financial transactions through branch banking. The study recommended that there is need for CBZ Bank to raise awareness and train staff on the usefulness, benefits and convenience of electronic banking to improve usage. The suggested area of future research is to conduct a similar study at industry level so that findings can be generalized across the industry.

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# ACRONYMS

BCCZ	-	Bank of Credit and Commerce Zimbabwe
CABS	-	Central Africa Building Society
CRM	-	Client Relationship Management
CZI	-	Confederation of Zimbabwe Industries
FDI	-	Foreign Direct Investment
HBL	-	Habib Bank Limited
HECC	-	Hyperelliptic Curve Cryptosystem
HIV/AII	DS-	Human Immuno Deficiency Virus/ Acquired Immuno Deficiency Syndrome
ІСТ	-	Information Communication Technology
IMF	-	International Monetary Fund
кмо	-	Keiser – Meyer – Olkin
KPMG	-	Klynveld Peat Marwick Goerdeler
MDC	-	Movement for Democratic Change
РС	-	Personal Computer
PESTEL	-	Political Economic Social Technological Ecological Legal
PIN	-	Personal Identification Number
POS	-	Point of Sale
PU	-	Perceived Usefulness
RBZ	-	Reserve Bank of Zimbabwe
SME	-	Small to Medium Enterprises
SSL	-	Secure Socket Layers
SWOT	-	Strength, Weaknesses, Opportunity, Threats.
TAM	-	Technology Acceptance Model
ТРВ	-	Theory of Planned Behaviour

- U.K United Kingdom
- **U.S CERT-** United States Computer Emergence Readiness Team.
- U.S.A United States of America
- UBL United Bank Limited
- ZANU PF Zimbabwe African National Unit Patriotic Front

# CHAPTER 1 INTRODUCTION AND BACKGROUND

## **1.1INTRODUCTION**

This chapter will focuson he background to the study, problem statement, research objectives, research proposition, justification of study, scope of research, limitations of the study, structure of dissertation and chapter summary. This study investigates CBZ Bankcustomers' perceptions of electronic banking delivery channels in Zimbabwe. The grounded on the understanding that increased competition for study is customers'depositsas a result of the financial sector liberalization and the advent of technology based systems has called for a paradigm shift in the way banks provide financial services to their customers. Prior to the financial sector liberalization, customers had to physically visit a bank's branch to perform financial transactions over the counter. However, the introduction of electronic banking delivery channels such as Automated Teller Machines, Point of Sale, PC Banking, Telephone Banking and Internet Banking allows banks to attract new customers, retain existing ones and reduce operational costs (Dube, Chitura and Runyowa, 2009). The introduction of electronic banking delivery channels allows bank customers to access financial services without necessarily having to physically visit the banks.Banks that fail to embrace electronic banking delivery channels face the strategic risk of losing customers to competitors who are aligning themselves with the new technology which is efficient and cost effective (Zimucha et al. 2012). At a national level, electronic banking delivery channels help to avert cash crisis through the useof digital and plastic money. It is evident that realization of net benefits from investment in electronic banking delivery channels depends entirely on usage by customers. Indeed, usage is conditioned by customers' perceptions of benefits, trust and sense of security (Dixit and Datta, 2010; Hassan et al, 2012). This development precipitates the need to understand how customers perceive these technologies n order to improve usage and realize effective cost reductions.

Interestingly, despite the installation of electronic banking delivery channels by most commercial banks in Zimbabwe, local empirical literature on customers' perceptions of these channels is very scanty (Dube et al. 2009). Moreover the acceptance and usage

of these electronic banking delivery channels is still very low in Zimbabwe. This study thus attempts to investigate why there is a low acceptance and utilization levels as well as to fill this literature gap by empirically investigating how CBZ Bank customers in Zimbabwe perceive electronic banking delivery channels.

# **1.2 BACKGROUND TO THE STUDY**

### 1.2.1 Overview of electronic banking delivery channels

According to Garuba(2008) the global business world has been taken by storm due to globalization and information and communication technology(ICT). This has posed great challenges and intensified competition in the banking industry. Information and communication technology (ICT) has changed not just the business world but also the world in which humans live in (Dube et al. 2009). Advancements in information and communication technology have seen many banks locally and across the globe adopting electronic banking delivery channels in order to remain relevant in this information age (Zimucha et al. 2012).

As noted by Mermod (2011), electronic banking delivery channels were pioneered in the 1990s. However, it was only in 1995 when it was first introduced by SecurityFirst Network Bank in the USA. By the end of 2003, more than half of the commercial banks in the U.S A and Europe had introduced electronic banking delivery channels (Mermod, 2011). According to Turkish Banking Bureau (2010) cited in Mermod (2011), Isbank first introduced electronic banking in 1997in Turkey followed by Garanti bank in the same year. According to the same research 22 banks were offering electronic banking in Turkey by 2004. HSBC was the first bank to set up the first ATM machine in India in 1987(Singh, 2009). Since then, ATMs have gained popularity as prominent electronic banking delivery channels in India. Banks have been deploying ATMs to increase their geographical reach.

In Zimbabwe the evolution of electronic banking delivery channels started in the early 1990s in the form of Automated Teller Machines (ATMs) (Zimucha et al. 2012).Standard Charted Bank and Central African Building Society (CABS) were the first banks to introduce (ATMs) (Zimucha et al. 2012).With the introduction of the ATMs by these two banks in Zimbabwe theother advanced forms of electronic delivery channels such as PC banking, internet banking, Point of Sale (POS) and mobile banking were introduced in the following years (Dube et al.2009). These forms of electronic banking delivery channels have rapidly grown and changed the way banks are offering financial service solutions to the customers.As put forward byDubeet al.(2009),there has been a proliferation of electronic banking systems over the years, especially in developed countries where it is driving economies closer to a cashless society as itremoves the need for tangible currency (cash) and physical payment systems and replacing themwith plastic money (cards) and digital money (e-based payments).

### 1.2.2Background to macro environment analysis

This section presents an analysis of the macro environment in which CBZ Bank operates. According to Eugene and Sullivan (1993),the macro environmental factors are factors which are beyond the control of any organization. That is, the business has no influence or control over these factors. Gubah (2008)advocated for the use of PESTEL which stands for Political, Economic, Social, Technological, Ecological and Legal to analyze the business' macro environment.

### **Political factors**

Zimbabwe experiencedan unprecedented economic decline since the payment of hefty allowances to the war veterans and the country's military intervention in the Democratic Republic of Congo in 1997 (Mujuru, 2003). Payouts to the veterans were unbudgeted for and they culminated in high money supply growth. This situation was aggravated by the controversial Land redistribution program in the year 2000 which destabilized the agricultural productive base on which the country hinged on. Through the intricate

relationships between industries, the destabilization of the farming sector had knock on effects on industrial production (Mujuru, 2003). The situation has been further worsened by the reported political uncertainty in the country which eventually saw the birth of a shaky Government of National Unity in September 2008. These events made business planning very difficult. To some extent, the formation of the unity government has brought stability to the political uncertainty as witnessed by single digit inflation and positive economic growth (Ministry of Finance, 2012). However, the African Development Bank (2013) noted that the banking sector has not benefited from the positive growth in the economy. Notably, the pending harmonized elections to be conducted in 2013 remain a major threat to all business operations in Zimbabwe. There is no definite or predictable economic direction after the election, whether ZANU PF or MDC T party wins the elections. Such uncertainty causes investors to disinvest in politically unstable markets. This is despite the fact that Zimbabwe is in dire need of foreign direct investment. As such, the political environment has a bearing on the operations of the banking industry.

### **Economic factors**

In February 2009, Zimbabwe adopted a multi-currency system to bring sanity to the economy and reign in the run-away inflation (RBZ, 2010). Although this was a welcome relief to businesses, the use of the United States currency as the medium of exchange has exposed Zimbabwe tothe effects of the global financial crisis. The liquidity crunch being experienced in developed countries has constrained the availability of Foreign Direct Investment (FDI) and credit lines (Reserve Bank of Zimbabwe, 2013). This has culminated in banks failing to play the financial mediatory role of efficiently allocating financial resources from savers to borrowers. Regrettably, the effectiveness of policy initiatives geared at enhancing access to finance has been severely undermined. As such, industrial earnings and salaries have remained subdued, a development that compromises savings to commercial banks (RBZ, 2010). The recurring failure by some banks to fulfill their settlement obligations through the national payment system has also dampened public confidence, promoted financial disintermediation and undermines the

stability of the banking sector (RBZ, 2011). The effects of liquidity crunch has affected the banks' ability to invest in electronic banking delivery channels

# The social factors

The prolonged period of economic decline in Zimbabwe has been accompanied by mass exodus of experienced personnel from all sectors of the economy looking for greener pastures abroad. This was also compounded by the devastating HIV/AIDS pandemic against a collapsing health delivery system (Nguwi, 2011). Although the exodus was not unique to the banking sector, most banks lost experienced professionals such as system analysts, treasury staff and credit analysts. The emigrations of experienced banking staff, the active workforce and effects of the HIV/AIDS pandemic have stripped banks of expertise and narrowed the customer base (Mujuru, 2003). Consequently, the remaining population is too small to sustain the banking sector (Mujuru, 2003). Moreover, emigration has starved the industry of essential expertise needed to run the banking industry efficiently as the educated and qualified left for greener pastures. Some of the failures in Zimbabwean banks have been attributed to lack of proper management and innovativeness (RBZ, 2011).

# **Technological factors**

Technological advancement world over continues to be central to quality service delivery in the banking sector. This implies that the brick and motor banking model is fast being replaced by electronic banking delivery channels. Dube et al.(2009) noted that banks and other businesses are turning to Information Communication Technology (ICT) toreduce operational costs, improve quality of service delivery, retain existing customers and attract new customers. ICT innovations have transformed the banking sector through the development of electronic banking channels such as Automated Teller Machines, Point of Sale, PC Banking and Internet Banking. Competition among banks has been reshaped due to ICT. As such, banks that fail to embrace ICT run the risk of losing business to competitors. Although Zimbabwe is a developing country, ICT innovations are shaping the way in which banks do their businesses (Dube et al. 2009). All commercial banks have installed ATMS and POS (Dube et al. 2009). In 1990,

only Standard Chartered Bank and CABS had installed ATMs, however, all other commercial banks have now installed ATMs (Dube et al. 2009). CBZ Bank has even installed Spark ATMs. The SPARK ATMs allow merchants to deposit their in-store cash in the ATMs. As the competition for customers increased, some banks such as Standard Chartered and CBZ Bank have introduced internet banking services to improve the quality of their services. As such, technological factors dictate the direction of service provision and how the service is delivered in the banking industry.

# **Ecological factors**

Zimbabwe being an agriculture based economy has been negatively affected by the change in weather patterns. Most banks' agribusiness departments or units have not been very active (African Development Bank, 2013). Due to the intricate linkages with other sectors, events in the agriculture sector have starved the manufacturing sector of the much needed raw materials (Mujuru, 2003). Ultimately, reduced production has impacted banks through low business from processors. Ecological factors through increased rainfall variability have increased the risk of lending to this sector. As such, most banks are reluctant to take the risk of financing this sector. This development has made the agriculture units in most banks to be redundant and curtailed the production potential of the sector. Interestingly, the sector used to contribute 50 percent of deposits and loans but has since fallen to 10 percent (Chichoni, 2009).

# Legal factors

The Indigenization and Economic Empowerment Act and Regulations of 17 April 2008 which requires that foreigners cede 51 percent of their share ownership in companies registered in Zimbabwe remains a threat to the financial sector (African Development Bank, 2013). These requirements bring uncertainty to the banking industry as they bar foreign investment. Additionally, the regulations themselves paint a heavy regulatory role by state actors in financial markets. This is contrary to the level of state interference in most liberalized markets and may lead to capital flight, closure of some banks and even companies. Compulsory ceding of ownership may have knock on effects on other

financial services players through systemic risk, capital flight and dampened investor confidence. Furthermore, central bank capital base requirements on banks impose legal rigidities on the operations of banks. While it is a prudent measure to raise capital requirements to protect depositors, the eventual curatorship and liquidation of failing banks has shaken the public's confidence in the financial services sectors (Munoz, 2007). Likewise, banks that fail to satisfy the capital requirements run the risk of experiencing bank runs and finally being liquidated.

### **1.2.3 Background to banking industry**

The Reserve Bank of Zimbabwe in 2013 observed that, despite negative global developments like Euro debt crisis, the Zimbabwe banking sector deposits gradually increased in 2012. The increase in deposit base is attributed to improvements in financial intermediation which has been realized since the inception of the multi-currency system in 2009. Accordingly, deposit base increased by 30.7 percent from USD 3.376 billion in 2011 to USD 4.41 billion in 2012 (RBZ, 2012). Deposits remained largely transitory in nature while loans and advances remained largely short term in nature. Most advances by banks have been mainly for working capital purposes than capital investments. Zimbabwe's financial sector has been a victim of liquidity shortages coupled with the absence of an active inter-bank market, limited access to FDI and absence of lender of last resort (RBZ, 2012).

Zimbabwe's banking sector is diversified with listed and unlisted financial intermediaries. As at 31 December (2012) there were 24 operating banking institutions and CBZ bank was the largest and leading indigenous bank in terms of deposit and asset base (CBZ, 2013). Chagwiza (2012) noted that the financial market players in Zimbabwe's banking industry can be broadly classified into central bank, Industrial bank, commercial banks, merchant banks, building societies and savings bank. The number of banking sector intermediaries is summarized in Table 1.1

Table 1. 1:Zimbabwe's banking Institutions

No. of banks	
1	
1	
16	
2	
3	
1	
	1 1 16 2 3

Source: Reserve Bank Monetary Policy. January 2012

In Zimbabwe, the central bank (Reserve Bank of Zimbabwe) regulates the monetary system, formulates and implements monetary policy and protects the currency of Zimbabwe in the interest of balanced and sustainable economic growth. Zimbabwe has 18 commercial banks that act as intermediaries between surplus units and deficit units by accepting deposits from customers and then lending them to borrowers as either loans or overdrafts at an interest (Chagwiza, 2012). Rennaisance Merchant Bank and Interfin Merchant Bank are the only merchant banks in Zimbabwe's banking industry. Their main role is to provide apital to companies in the form of share ownership instead of loans. They also offer advisory services on corporate matters to the firms which they lend to. There are three building societies in Zimbabwe namely FBC Building Society, Central African Building Society (CABS) and ZB Building Society. The role of these building societies in Zimbabwe is to provide mortgage finance, share deposits, savings and fixed deposits. The People's Own Savings Bank, which is wholly owned by the government of Zimbabwe is the sole savings bank in Zimbabwe (Reserve Bank of Zimbabwe, 2013). Its major functions include operating personal and corporate accounts, overdrafts and loans, structured finance, order finance, bridging finance and tax free investments.

The banking sector in Zimbabwe has been through several turbulent cycles of liquidity shortages of systemic importance (Dube et al, 2009). It is characterized by tight liquidity constraints owing to the use of the multi-currency system and stagnated economic growth. In 1993, the financial sector was liberalized- a move that witnessed entrance into the banking sector by largely less capitalized indigenous banks such as Century Bank, Barbican Bank, Royal Bank, Trust Bank, Genesis Investment Bank and Trust Bank (International Monetary Fund, 2005). The industry experienced crunching cash crises in 2003-4 and 2007-8 which had far reaching consequences (RBZ, 2008). The first period of the financial crises resulted in bank runs and ultimately the placement under curatorship of several indigenous banks that had thin capital bases such as Century Bank, Royal Bank, Barbican Bank and Trust Bank (Munoz, 2007). During that period, the central bank availed financial assistance to insolvent banks through a facility known as the Troubled Bank Funds (Munoz, 2007). Unfortunately, some of the banks that received the facility continued to experience liquidity challenges. Some of the indigenous banks that survived the crises strengthened their capital bases through mergers and new capital injections for instance Century Bank was taken over by CFX Bank.

In 2007-8, a new liquidity challenge bedeviled the banking sector. Contrary to the provision of customers deposits on demand, most banks failed to meet this role as money demand outstripped money supply (Reserve Bank of Zimbabwe, 2009). The runaway inflation that prevailed during that cash crisis period restricted financial payments to physical monetary payments. Most Point of Sale facilities became redundant and long winding queues at banking halls became the norm. Banks that could not meet their customers' cash requirements experienced deposit flights. The loss of confidence in banks as financial intermediaries prompted financial disintermediation. In February 2009, following the inception of the Government of National Unity, a multicurrency system was adopted to bring sanity to the banking industry and reign in the galloping inflation (Reserve Bank of Zimbabwe, 2010). Despite the stabilization of inflation within single digit levels, positive economic growth and improved customers'

confidence in the role of banks as financial intermediaries, liquidity constraints still haunt the sector. Most of the population is still unbanked and usage of electronic banking delivery channels is very low (Zimucha et al. 2012).

# **1.2.4Banking industry analysis: Porter's five forces model**

This section seeks to analyze the fundamental characteristics underlying the financial service sector in Zimbabwe in which CBZ Bank is operating. Porter (1996) developed the most famous model (Porter's Five Forces Model) which seeks to analyze and evaluate the forces in operation of any industry. The use of Porter's Five Forces model is critical as it helps to analyze the industry in which the firm operates. Thompson et al. (2010) defined an industry as a competitive battle field where different players continuously jostle for customer patronage. Porter (1996) identified the following as tools that affect any firm in an industry as shown in Figure 1.1;

- Threat of new entrants
- Substitutes
- Bargaining power of suppliers
- Buyers
- Competitive rivalry

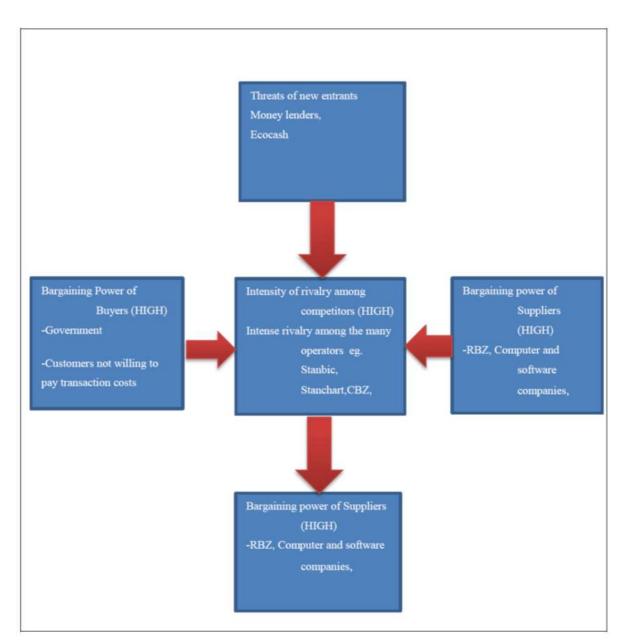


Figure 1. 1: Porter's Five Forces That Shape the banking Industry Competition

Source: Adapted from Porter, 1996.

The financial services sector in Zimbabwe is characterized by intense competition. Major competitors to CBZ are Standard Chartered, Stanbic, Barclays, Banc ABC and FBC Bank. Stiff competition is also comingfrom mobile telecommunication services especially Econet which is offering cheap mobile money transfer through Ecocash. Due to stiff competition the bank lost its market share in February 2013 to 21.6 percent compared to 25.35% in December 2012 (CBZ, 2012). According toCBZ Bank Market Performance Analysis report of February 2013, CBZ Bankremains the leading bank in terms of balance sheet and profitability as indicated in Figure 1.2.

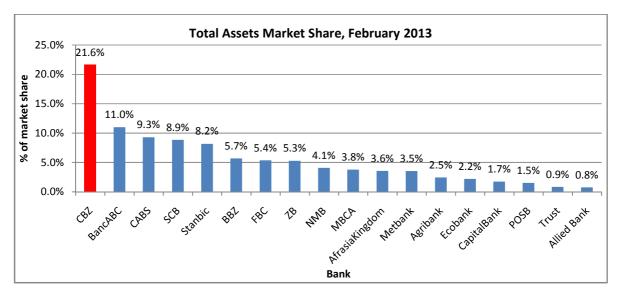


Figure 1. 2:Banking Sector market share Ferbruary 2013 Source: CBZ Monthly Economic Review February, 2013

# Threat of new entrants

The threat of entry in the financial servicessector is relatively low as the industry is heavily regulated. There are high barriers to entry, legal and registration entry requirements which include highminimum capital base requirements currently pegged at US100 million (RBZ, 2012). However, threat to entrance in the financial sector is posed by international banks and mobile telecommunication companies such as Econet. In 2013, the largest mobile telecommunication firm, Econet aquired a majority share holding in TN BANK (CBZ, 2013). Its entrance is set to transform and change the rules of the game in the whole financial services sector (CBZ, 2013). Additionally, Ecobank a regional bank with operations in many African countries entered the Zimbabwean Financial Sector in 2011 through Premier bank.

### **Bargaining Power of Suppliers**

The bargaining power of the suppliers is relatively high in the Zimbabwean financial sector due to the nature of specialized products offered to banks such as IT banking system and IT network such as wide area network.Maximum security is a must for the banking operating systems to protect bank customers' private information and risk management. Most of the banking system vendors are foreigners and these have bargaining power since they own supply contracts with established players in the global market (Zimucha et al. 2012).

## Threat of Substitutes

Porter (1996) defined substitutes as those products and services that are designed to imitate the performance of the original products but offerlower levels of durability and satisfaction. This is very high in the case of CBZ Bank. The Bank faces a threat of substitutes from services being innovated by mobile telecommunication companies such as Ecocash which is more inclined to banking as compared to telecommunication. The other players in the market also offer substitutes since the products in the financial sector are all homogeneous although differentiated. Products offered by micro finance organizations are also a big threat to CBZ Bank loan products. The micro finance organizations offer quick loans to individuals with less rigorous requirements and quick turnaround time.

### **Bargaining Power of Buyers**

Buyers have many considerations that influence their choice of a particular supplier over another (Porter, 1996). The current liquidity challenge and stiff competition in the banking industry gives bank customers high bargaining power. This is also worsened by the fact that banks offer homogeneous products hence many compete for the few customers available. Currently, the only large customer available to banks is the government hence all players in the market seek to find means to lure the government institutions to bank with them. What makes a difference for CBZ Bank is the way it offers quality service and convenience to its customers through various electronic banking deliverychannels (CBZ, 2012).

### 1.2.5Internal Analysis of CBZ Bank using SWOT.

Pearce and Robinson (2005) highlighted that the assessment of the firm's internal strengths and weakness as well as the environmental opportunities and threats it is exposed to is done through (SWOT) analysis. SWOT analysis assists the organisation to analyse its internal environment and formulate strategies that will create a business model that will best align the firm's available resources and capabilities to the demands of the environment in which it operates.

#### <u>Strengths</u>

According to Mintzberg et al. (2003), strengths are the distinctive competences of an organisation. The bank's major strength lies in its ability to capitalise on the economies of scale through its size and a wide and diversified branch network. This gives the bank an upper hand compared to its competitors. Currently, the bank is the largest financial institution in the country commanding 21.6% of the market share (CBZ, 2012). The bank has also the largest branch, ATM and POS network. As outlined in its mission statement, the bank aims to continue to provide innovative financial service solutions to its customers. The bank offers a number of electronic banking services which includes internet banking, POS, SMS banking, Automated Teller Machines and Mobile banking. CBZ Bank appreciates the need to keep abreast with technological developments in the region and the globe so as to continue to have a competitive advantage.

#### <u>Weaknesses</u>

Pearce and Robinson (2005) define a weakness as a limitation or deficiency in one or more resources or competencies in comparisons to competitors that impedes a firm's effective and efficient performance. The bank's major weakness is the current liquidity crunch prevailing in the Zimbabwe multi-currency era. Most of the deposits available are

of a transitory nature hence it is very difficult to match these hot deposits with long term loans of twelve to twenty four months which the bank is offering. A greater percentage of CBZ Bank clientele base is mainly government institutions as opposed to blue chip business (CBZ, 2013). Despite the bank's innovation and massive investment in technological electronic banking delivery channels, the majority of the customers' still prefer to access the banking services through the traditional brick and mortar model.

### **Opportunities**

As put forward byPearce and Robinson (2005), an opportunity is a situation of positive impact in a firm's environment.CBZ Bank can take advantage of its market leadership position and take on board the blue chip companies on the stock exchange. It can also take advantage of its wide branch network to reach out to most of the unbanked customers. CBZ Bank has also a great opportunity to provide a one-stop shop for its customers through the various subsidiaries within the group. The bank has a great opportunity to introduce new technologically related products to its customers.

### **Threats**

According to Pearce and Robinson (2005), threats are major impediments to a firm's desired position. The major threat of the bank is the current liquidity challenges in the market and the transitory nature of the deposits available in the banking sector. Due to high perceived country risk the banking sector at large has failed to access substantial external lines of credit for onward lending to its customers. This has also resulted in low foreign direct investment to boost liquidity in the financial sector and thusproduction in the manufacturing sector remains low (CZI, 2010).

### 1.2.6 Background to CBZ bank

The Commercial Bank of Zimbabwe (CBZ Bank) is a subsidiary of the diversified and listed financial services group CBZ Holdings (CBZH). The bank was established in 1980, as (BCCZ), a joint venture between the Government of Zimbabwe and the Bank of Creditand Commerce International HoldingsLimited (BCCIH). In the year 1991, the

government acquired the total shareholding in the Bank and BCCIH acquired a new identity as Commercial Bank of Zimbabwe (CBZ), whose mandate was to steer stability, growth and success (CBZ, 2012).

In 1997 the bank diversified when the Zimbabwean government sold part of its shareholding in the Bank in a bid to adequately capitalize the bank (CBZ, 2012). ABSA became the bank's technical partner and largest single shareholder (CBZ, 2012). The bank made a public offer of shares to become fully privatized and was listed on Zimbabwe Stock Exchange on 29 June 1998. As part of its diversification move, the bank established the Microfinance Unit to support SMEs.In 2004, the bank refocused to establishCBZ Holdings (CBZH) as an entity poised to provide all client segments with a one-stop shopping experience for financial services and this was operationalized in June 2005. The period of intense growth through diversification began. The bank became a subsidiary of the holding company and was renamed CBZ Bank Limited. In January 2007, the CBZ Group issued an announcement to shareholders advising of its complete acquisition of Beverly Building Society. Notably, this development made mortgage financing facilities available to clients of the Group and enhanced business synergies(CBZ, 2007). In addition, there was a marked increment of value for shareholders.

With effect from 2010, CBZ Holdings started an operational integration which resulted in the consolidation of CBZ Bank and CBZ Building Society. This means that the Group now offers a one-stop shop facility to its clients, making the whole range of the Group's Banking and Building Society products and services available under one roof. The most important and biggest benefit will be felt by the Bank's clients, as the consolidation was designed specifically to make CBZ Bank an extremely customer-centric Bank(CBZ, 2012).

CBZ Bank, right from its inception, successfully withstood the pressures of the historical turbulent developments in the financial services sector. Some of the

developments affecting the financial services sectorwere so adverse that they caused consumers of banking services to become skeptical about saving their money with indigenous banks. In a bid to remain competitive in such a business environment by increasing profitability, market share, deposit base and principally adding shareholder value, the bank pursued a number of strategic objectives. The chief strategy which the was the need to improve quality, effectiveness and efficiency in bank adopted customer service delivery through adoption of a host of electronic banking delivery channels. As such, the bank went on a drive in opening on-site and offsite ATMs, distributed POS terminals in most retail outlets and rolled out internet banking servicesCBZ Bank installed on-site and offsite ATMs in 1998. To date, CBZ Bank has a total of 40 onsite ATMs and 5 offsite ATMs in countrywide. In 2013, CBZ Bank also installed 8 spark ATMs in partnership with Spark International South Africa. The bank introduced the POS service in 2004. To date CBZ has 687 POS terminal country wide and 300 of them are in Harare. Prior to the launch of internet banking services, most commercial banks in Zimbabwe used PC banking. In 2003, CBZ introduced PC banking and then moved to Internet banking in 2004.

### 1.2.7 Vision

According to Pearce and Robinson (2005), a company's vision is an expression of the aspirations of the executive management. A vision defines a firm's strategic intent that directs the focus of the firm's resources in attaining a desirable future. The vision of CBZ Bank is to be the bank of choice in Zimbabwe. This means that CBZ Bank aims to be the preferred bank in Zimbabwe's banking industry.

### 1.2.8 Mission statement

As put forward by Cole (1996), a firm's mission statement is a public statement of the reason for an organization's existence with specific focus on satisfying customer needs, dominating the market within which it will meet those needs and also spelling out the manner in which it meets them. CBZ Bank's mission statement is to be a progressive

strong bank geared to satisfy the diverse needs of its customers through innovative financial solutions. This is achieved through efficient service delivery, competency and flexibility while adhering to principles of integrity, transparency and fairness. Furthermore, the bank seeks to achieve this mission by being customer focused, responsive, professional, efficient and reliable.

### 1.2.9 Services offered by CBZ Bank

The CBZ Bank is a registered commercial bank that offers a wide range of innovative banking and financial services solutions to corporate and personal customers. These services are provided through retail banking, corporate and investment banking, E-banking and card services, mortgage facilities and agribusiness services(CBZ, 2010). CBZ Bank's corporate and personal customers can access the banks' services through the extensive branch network located in all major centres of Zimbabwe. However, the bank's electronic banking facilities are available through internet banking and card based transactions such as VISA Gold, Automated Teller Machines and Point of Sale. Services offered by CBZ Bank fall under four main divisions namely; corporate and merchant banking, retail banking, treasury services and operations.

### Corporate and merchant banking division

CBZ Bank's corporate and merchant banking division caters for large business concerns. The division's main objective is to grow the business of the bank by building strong long term profitable relationships with blue chip corporates and government institutions. Tailor made services such as short term and long term business loans, offshore financing and leasing financing are offered by this division.

### **Retail banking division**

This division forms the back-bone CBZ Bank's operations. The supervision of all branch network operations falls under this division. Personal customers are provided

with a wide range of retail banking deposits products to facilitate transactional, savings and investment requirements. Products offered by this division include savings accounts, current accounts, cash plus family products and senior citizens accounts. This division provides enhanced customer services through electronic banking delivery channels (ATMs, POS and Internet Banking) that can be accessed offsite 24 hours a day. Electronic banking delivery channels users can conveniently access an array of services such as balance inquiry, interim statement, Real Time Gross Settlement (RTGS) transfers and internal funds transfers.

### **Treasury division**

The department offers short term and long term money markets investments products to both personal and corporate clients. Products offered by this department include Bankers' Acceptances, Treasury Bills and Fixed Deposits.

## **Operations division**

The main function of this department is formulation and implementation of the bank's policies and procedures. Other services offered by this department include voucher processing, clearing of cheques, signature scanning and customer salaries processing.

Although most banks in Zimbabwe have now adopted electronic banking delivery channels, there is not enough evidence of its acceptance amongst consumers as shown in Table 1.2. This is despite the fact that electronic channels are cheaper to use than over the counter transactions as shown in Table1.3. This problem of low usage of electronic banking delivery channels is not peculiar to Zimbabwe as studies in the USA and Malaysia have noted that 50 per cent of the people who try internet banking end up being inactive users (Rahman, 2003). One of the plausible explanations for failure of internet banking are the highly publicised cases of security failures. Dube et al. (2009) reports that security concerns are the major driving force behind non-adoption of internet banking.

Cash withdrawal			Transfers RTGS		Internal transfers		
Year	Manual	ATM	POS	Manual	Electronic	Manual	Electronic
2011	3 729 402 789	3 578 640	690 196	2 256 182 680	1 519 549	4 311 020 597	13 924 997
2012	2 153 089 655	120 292 400	52 321 292	496 678 124	13 838 260	1 151 089 217	79 873 754

Table 1. 2: Comparisons of volumes of manual and electronic transactions for CBZ Bank

Source: CBZ Flexicube system (2013)

 Table 1. 3:Transaction charges for over the counter and electronic channels

TRANSACTIONS			CHARGES	
	ATM	POS	Internet	Manual
Cash Withdrawal	\$2.00	\$0.20	-	0.50%
				Min \$2.00
				Max \$100
RTGS	-	-	\$2.00	0.25%
				Min \$2.00
				Max \$10
Internal Transfer	-	-	\$1.00	\$2.00
Statement Request	-	-	\$0.10	\$0.50 per page
Balance Enquiries	-	-	No charge	No charge

Source: CBZ, (2013)

The prevalence of long customer queues in most commercial banks irrespective of the time of the day and date of the month highlight the need for adoption of electronic banking delivery channels in conducting financial transactions. Surprisingly, most of those customers who queue in brick and mortar branches do so to access banking services that can be cheaply and conveniently accessed on electronic banking delivery channels. For instance, most customers withdraw money from the bank to make payments in cash for utility bills or purchases in grocery shops. However, these

payments can be conveniently executed through electronic banking delivery channels such as Point of Sale and Internet banking services. Such developments highlight the need to understand how CBZ customers perceive electronic banking delivery services.

# **1.3 RESEARCH PROBLEM**

Despite the huge capital outlay invested in electronic banking delivery channels by CBZ Bank, evidence from internal records show that 26 percent of ATM card holders are active users and only 5 percent of cash withdrawals are done on ATMs and POS (CBZ, 2012). Moreover, internet banking usage among corporate customers is 11 percent and 1.21 percent for personal account holders (CBZ, 2012). These statistics depict a very low usage of electronic banking delivery channels. Indeed, long winding queues of customers queuing for services that are accessible through electronic banking delivery channels are a common feature in the banking halls anytimeof the month. This is despite the fact that the cost of making a transaction using electronic banking delivery channels is lower than that for conventional banking services. For instance, cash withdrawal from an ATM is pegged at \$2 per transaction compared to 0.5 percent of the amount withdrawn for an over the counter transaction. Additionally, inter account internet banking transfers cost \$0.50 per transaction but the same transaction costs a minimum of \$2 if conducted over the counter. Moreover, interbank transfers conducted using internet banking cost \$2 while the same transaction attracts \$10 if conducted over the counter. The disparities between charges for transactions conducted through electronic banking delivery channels and conventional banking shows that customers are better off using the former. However, customers are apparently not willing to use electronic banking delivery channels. Thus, there is need to investigate how CBZ Bank customers perceive electronic banking delivery channels.

# **1.4 RESEARCH OBJECTIVES**

The objectives of this research are as follows:

1. To establish the level of usage of electronic banking delivery channels by CBZ Bank customers in Zimbabwe.

2. To identify the type of services which CBZ Bank customers use electronic banking delivery channels for.

3. To determine the reasons for non-usage of electronic banking delivery channels in Zimbabwe.

# **1.5 RESEARCH QUESTIONS**

This study will address the following research questions;

1. To what extent do CBZ Bank customers use electronic banking delivery channels in Zimbabwe?

2. What services do CBZ Bank customers use electronic banking delivery channels for?

3. What are the reasons for non-usage of electronic banking delivery channels in Zimbabwe?

# **1.6 RESEARCH PROPOSITION**

This study seeks to test the validity of the following proposition:

Customers have a negative perception of electronic banking delivery channels.

## **1.7 JUSTIFICATION OF STUDY**

Most banks leapt to invest extensively in electronic banking delivery channels without conducting studies on the right electronic banking delivery platform that meets the

changing needs of customers (Zimucha et al. 2012; Dube et al. 2009). Moreover, no proper awareness campaigns were done to inform customers on the usage and relevance of electronic banking delivery channels (Kaseke and Charira, 2012). As such, long queues for services that can be accessed on electronic banking delivery channels continue to prevail in banking halls. This is despite the fact that transactional charges on electronic banking delivery channels are negligibly low compared to conventional banking charges. The cash crisis that occurred in Zimbabwe in 2003 and 2007 is testimony to the low customer appreciation of digital and plastic money. Furthermore, there is very scanty literature in Zimbabwe on customers' perceptions of electronic banking delivery channels which is a literature gap. In most developed countries, numerous studies have been conducted on customers perceptions of electronic banking delivery channels particularly internet banking(Clemens et al. 2012; Dixit and Datta, 2010; Srivastava, 2007). Corrective measures have already been adopted to address the issues related to low usage of electronic banking delivery channels. Given that the future and the survival of banks is going to be anchored on electronic banking delivery channels, there is need to understand how customers perceive electronic banking channels in order to improve usage and position a bank strategically.

It is expected that the findings of this research will go a long way in informing bank management on how to improve usage of electronic banking delivery channels. Improvement in use of electronic banking delivery channels will improve quality of service provision, reduce operational costs, attract new customers, retain existing ones and improve bank profitability (Srivastava, 2007). Furthermore, understanding customers' perceptions of electronic banking delivery channels will make banks realize a return on their investment in electronic banking delivery channels. The findings from this study will contribute to the thin body of literature on customers' perceptions of electronic banking delivery channels.

## **1.8 SCOPE OF RESEARCH**

The financial services sector in Zimbabwe comprises of commercial, building societies and merchant banks. Despite this diversity in financial services players in Zimbabwe who provide services through electronic banking delivery channels, this research will however focus only onCBZ Bank. This is largely due to limited financial, personnel and time resources that may constrain the execution of data collection from a wider sector. Although CBZ Bank has 62 branches throughout Zimbabwe, the city of Harare is the hub of financial services where most banks have more than one branch and there is intense competition for customers through financial services provision using electronic banking delivery channels. Out of the 62 branches nationwide, 22 of the branches are locatedin Harare. This study will be confined to CBZ Bank's corporate,SMEs clients bank employees, managers, tellers and individual account holders for Harare branches.

## **1.9 LIMITATIONS TO THE STUDY**

This research will cover corporate, SMEs clients Bank managers, tellers and personal customers for CBZ Bank in Harare. Since corporate customers are part of the target population for this research, they may not have ample time to complete the questionnaires in time for analysis. To solve this problem the researcher will send questionnaires well in advance so that the respondents have more time to answer the questionnaires and get clarification if need be. The researcher will deliberately avoid long questions to keep the respondents motivated. Appointments and follow – ups will also be made to ensure that the questionnaires are responded to. The major limitation of this study is that the researcher does not have sufficient exposure to rigorous statistical data analysis methods. As such, the researcher will use the basic descriptive statistics to report the findings. Help will be sought from colleagues and lecturers with experience in factor analysis. The other limitation of this study is that despite using primary data from users and non-users of electronic banking channels, the results cannot be generalized across towns and across banks since the research isbased on CBZ Bank customers who hold accounts with Harare branches only. Furthermore, there is very limited local empirical literature on the research issue. Although a great deal of foreign

literature is available, it may be less useful due to differences in the levels of technological achievements and financial services environments.

## **1.10 DISSERTATION STRUCTURE**

## Chapter 1

This chapter introduces the study and sets the foundation of the research. It presents the background to the study, problem statement, research objectives, justification, scope and limitations of the study.

## Chapter 2

Chapter 2 sets the theoretical framework of the study. The purpose of this chapter is to set an in-depth understanding of the research and to identify the literature gap. It presents the theoretical and empirical literature review on customers' perceptions of electronic banking channels. The empirical literature review is constructed by comparing and contrasting findings and views of different previous researches from peer reviewed articles.

## Chapter 3

This chapter focuses on the research methodological issues that are research design, sampling, data collection and data analysis. The chapter evaluates different research approaches used and gives a justification to the research design approach adopted in the study.

## Chapter 4

Chapter 4 presents the findings and discussion of study findings. In this chapter, study findings are compared with literature and probable explanations from emerging patterns are explained. This chapter forms the basis upon which the study's recommendations and conclusions are drawn from.

## Chapter 5

This chapter presents the summary of key findings, conclusions and recommendations from the study. The interpretation of the study findings are premised on the study objectives and research questions.

## **1.11CHAPTER SUMMARY**

This chapter introduced the research problem, background of case study bank and electronic delivery channels. It questioned the notion of how bank customers perceive electronic banking delivery channels. The chapter challenged banks on why they need to understand the continued existence of long queues in banking halls and low usage of electronic banking delivery channels. The chapter introduced the research objectives and questions which form the basis of this study's recommendations. Finally, the scope and limitations of the research were stated to show the reader what to expect and what to anticipate at the end of the research.

# CHAPTER TWO LITERATURE REVIEW

## **2.1 INTRODUCTION**

This chapter forms the theoretical foundation of the study by giving a review of the literature on customers' perceptions of electronic banking delivery channels. The chapter particularly looks at literature that addresses the research questions and objectives of the research. Different concepts and views by different authors on the study will be considered, compared and contrasted. The chapter is segmented into four sections. The first section covers the definitions of electronic banking, Automated Teller Machines, Point of Sale and Internet Banking. The second section covers the theoretical review, followed by a description of how the electronic banking channels work and the benefits of each based on previous studies undertaken by other researchers around the subject. The last section covers empirical literature review on reasons for non-usage. The chapter closes by looking at the factors affecting customers' perceptions on electronic banking delivery channels and case studiesfrom different countries.

## **2.2 DEFINITION OF TERMS**

## 2.2.1 Electronic banking:

According to Ganesan and Vivekanandan (2009) electronic banking is the delivery of banks' information and financial services to customers via different delivery platforms that can be used with different terminal devices such as a personal computer, television and a mobile phone with browser or desktop software, telephone or digital television. E-banking can be conducted using the Web, the internet, intranets, extranets, or some combination of these (Gerrad and Cunningham, 2003). This definition encompasses the delivery of financial services outside conventional bank branches through the use of information and communication technology such as debit cards and electronic equipment.Point of Sale is also added to these channels.

#### 2.2.2 Internet banking

Zimucha et al.(2012), Ganesan and Vivekanandan (2009) and Dube et al.(2009) refer to internet banking as systems that enable financial institutions' customers to get access to their accounts, transfer funds, transact business, buy financial products or services on line and access general information on bank products and services through the use of the bank's website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmations. It provides universal connection from any location world-wide and is universally accessible from any internet linked computer. Sullivan and Wang (2005), added to the definition by noting that internet banking is a process of innovation that enables financial institutions customers to handle their own banking transactions without visiting the bank.

#### 2.2.3 Point of Sale (POS)

The Point of Sale system is an electronic payment system that is designed to read into a customer's debit or credit card with a subsequent debiting of customer's account and crediting the merchant's account for goods and services provided (Muehlberger and Hughes, 2000). In most cases, the POS service is offered in merchant shops through a point of sale terminal.

#### 2.2.4 Automated Teller Machines (ATMs)

Mohammed and Rameshwar (2012) define an Automated Teller Machine (ATM) as cash rending teller machine connecting to the bank's accounting platform. It has easy to follow, step by step instructions that are menu driven and operates 24 hours a day, 7 days a week (Mohammed and Rameshwar, 2012). An ATM uses a plastic, magnetic strip card and a personal identification number (PIN) issued by a financial institution (Singh, 2009). A complementing definition is by Peter and Sylvia (2008), who define an ATM as a combination of a computer terminal, recordkeeping system, and cash vault in one unit, permitting customers to enter a financial firm's bookkeeping system with either a plastic card containing a Personal Identification Number (PIN) or by punching a

special code number into a computer terminal linked to the financial firm's computerized records 24 hours a day (Garuba and Aigbe, 2010).

## 2.3 HOW ELECTRONIC BANKING DELIVERY CHANNELS WORK.

## 2.3.1 Automated Teller Machine

The operation of an ATM requires a plastic, magnetic-strip debit card that gives entry into the ATM room (Mohammed and Rameshwar, 2012). Upon inserting the card into the ATM room, the ATM will ask the customer to key in a Personal Identification Number (PIN). The PIN which is issued by the bank is exclusive to the customer and it enables the customer to perform transactions to the account linked to the card (Singh, 2009). Once the customer has entered in the correct PIN, the ATM will display step by step easy to follow instructions to the customer in order to allow him or her perform desired transactions. As noted by Singh, (2009), the main advantage of ATMs is that ATMs eliminate the risk of carrying large sums of paper money for transactional purposes. Furthermore, ATMs are convenient and save time as there is no need to visit and queue in the traditional brick and mortar branches during working hours (Kumbhar, 2012).Despite these benefits, Garuba and Aigbe (2010) noted that the main disadvantage of ATMs is that the infrastructure is susceptible to misuse and fraud.

## 2.3.2 Point of Sale (POS)

As put forward by Reeder (2000), bank customers who intend to use a point of sale service need to have either a debit or credit card while the merchant has to have the hardware (terminal) for swiping the customer's card. To access the services through the card, the merchant takes the customer's card and swipes it through a magnetic stripe reader at the customer's location at the time of the sale. The cashier will hand back the customer's card and the terminal for keyingin of customer's PIN. The terminal will electronically transmit the customer's PIN and bank account information electronically through a network of ATMs to the customer's bank account (Muehlberger and Hughes, 2000). The customer's bank will either approve the transaction and debit the customer's

account or reject the transaction. The acceptance or rejection of the debit is transmitted electronically through the ATM network back to the merchant's Point of Sale terminal. The main advantage of point of sale is that the customer has the convenience of not carrying hard cash when making purchases (Reeder, 2000). Although the Point of Sale service offers convenience to bank customers, it also has its own draw backs. For instance the customer has to be physically present at the merchant's location and the merchant has to have the hardware or terminal to initiate the debit transaction. In addition to this, the merchant must physically swipe the debit card through the magnetic stripe reader(Reeder, 2000). Moreover, the merchant must make sure that approval of debit is received before releasing goods purchased.

## 2.3.3 Internet Banking

The operation of internet banking to perform routine banking transactions requires a computer that has access to internet. The customer dials in and uses the bank's software or that of an internet service provider provided that there is internet (CBZ Annual Report, 2004). Performing financial transactions on the internet requires a username and an exclusive password. Upon logging in, the customer is prompted to the bank's platform where transactions can be performed. This provides customers with the ability to perform transactions via the bank's website with the advantage of not being required to visit a physical branch or ATM (Automated Teller Machine). The major benefits of internet banking to the bank against the traditional banking include reduction in transaction costs and improvement in speed of service delivery. The reduction in brick and mortar structures accords a banking institution the opportunity to reduce its staff compliment, lower error rate and paper work and better fund management for banks (Munusamy et al. 2012; Riyadh et al. 2009). Bank customers benefit from internet banking through improved service delivery, convenience, time and costs savings (Hua, 2009).

# 2.4 TYPES OF SERVICES OFFERED THROUGH ELECTRONIC BANKING DELIVERY CHANNELS

## 2.4.1 Automated Teller Machines

Automated teller machines support a variety of transactions and they have reduced costs per transactions to almost one-fourth as compared to the branches (Singh, 2009). Bank customers with debit cards can use them to access financial institutions services 24 hours a day (Peter and Sylvia, 2008). The main utility of ATMs is cash withdrawal and balance enquiry. It should be noted that once access into the ATM room is gained, cash withdrawal can only be done only up to the specified daily limit (Garuba and Aigbe, 2010). Nevertheless, other services that can be accessed through ATMs include cash deposits, funds transfer, mini statements, card to card funds transfer, bill payments and placement of requests including requesting for a new cheque book (Mohamed and Rameshwar, 2012; Kumbhar, 2012). In developed countries, new ATM technology has facilitated the installation of in-wall ATMs, which are weather-proof and can be established in shopping malls or busy commercial localities. The advent of technology has facilitated the installation of new advanced ATMs such as the Spark ATMs.

## 2.4.2 Point of Sale

Bank customers can access financial services from a Point of Sale terminal off site and at any time of the day. The services that a bank's customers can access from the use of a Point of Sale service include balance enquiry, settling a bill in a merchant shop and cash back. The cash back is only available on condition that the bank's customer makes a purchase from the merchant's shop (Reeder, 2000).

## 2.4.3 Internet banking

The services that a bank's customers can access from internet banking differ from bank to bank. According to Munusamy et al. (2012) and the Banking Survey (2011), a bank's customers can access a number of services that include banking enquiry functions, balance enquiry, mini statements or accounts summary, funds transfer, bill payments, change of PIN and alerts on account activity or passing of set thresholds. Customers who use internet banking can also monitor their term deposits; access their card statements, check status of cheques and stop payments on cheques (Munusamy et al. 2012). The use of internet banking also allows bank customers to order cheque books and request mutual funds and equity statements (McKechnie et al.2006). However, technological advancement has led to the addition of new services on the internet banking platforms. These services include stop payments, blocking of lost cards, insurance policy management, and pension plan management (Safeenaet al. 2010). The sophisticated banks offer services such as purchase of financial markets products such as shares and units trusts (Standard Bank, 2009).

# 2.5THEORIES OF INFORMATION COMMUNICATION TECHNOLOGY ADOPTION

There are two theories that are commonly used in assessing user acceptance and use of information communication technology namely the Theory of Planned Behaviour (TPB) and the Technology Acceptance Model (TAM).

#### 2.5.1 Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour is an extension of the Theory of Reasoned Action and has been widely used in settings involving information technology acceptance research. According to Ajzen (1985), the theory is premised on the notion that intention predicts behaviour. He define intention as an indication of a person's readiness to perform a given behaviour. TPB predicts deliberate behaviour based on the notion that behaviour can be deliberative and planned (Safeena et al. 2013). As such, the TPB predicts intention based on three predictors namely attitude toward the behaviour, subjective norm, and perceived behavioural control, with each predictor weighted for its importance in relation to the behaviour and population of interest. In this theory, attitude towards behaviour is defined as the degree to which performance of the behaviour is positively or negatively valued. It is determined by the total set of accessible behavioural beliefs linking the behaviour to various outcomes and other attributes. Ajzen (1985) expresses subjective norm as the perceived social pressure to engage or not to engage in behaviour. He used the total set of accessible normative beliefs concerning the expectations of important referents to determine the subjective norm. The last predictor is the perceived behavioural control which refers to people's perceptions of their ability to perform a given behaviour and it is determined by the total set of accessible control beliefs. The rule of thumb for this theory is that, the more favourable the attitude and subjective norm, and the greater the perceived behaviour control, the stronger should be the individual intent to perform the behaviour in question. In general, the Theory of Planned Behaviour implies that behaviour is determined by the intention to perform the behaviour (Safeena et al. 2013).

#### 2.5.2 Technology Acceptance Model (TAM)

The widely accepted model among information systems researchers' for assessing user acceptance of new information systems is the Technology Acceptance Model (TAM). The Technology Acceptance Model is an extension of the Theory of Reason Action and the Theory of Planned Behaviour (Safeena et al. 2013, Adesina and Ayo, 2010). The model has been applied in different contexts to investigate a wide range of information technologies and to determine acceptance of various information systems. According to Davis (1989) and Karahanna et al. (1989), the TAM provides an explanation of how users come to accept and use new information systems technology. Specifically, the TAM seeks to explain why a particular system is unacceptable and then tries to find out or come up with corrective steps. The theory describes the impact of external factors that affect internal attitudes, beliefs and usage intentions of the users and uses this to predict the acceptance and use of the system. It evaluates the effect of system characteristics on user acceptance of computer based information systems. As noted by Davis (1989), the TAM is premised on the notion that system use is determined by perceived usefulness and perceived ease of use, relating to the attitude toward use that relates to intention and finally to behaviour. Perceived usefulness refers to characteristics which a user believes that using a system will enhance his or her performance (Adesina and Ayo, 2010).

The perceived ease of use is the extent to which a user believes that using a particular system will be free of effort (Al Hajri and Tatnal, 2008). The model posits that when a user is presented with a new technology, a number of factors influence the decision on how and when they will use it. According to Argawal and Prasad (1999), the TAM is the most widely accepted model because of its prudent approach and amount of recent empirical support for it. King and He (2006) conducted a statistical meta-analysis of the TAM as applied in various fields using 88 published studies. Their results revealed that TAM is a powerful, highly reliable, valid and robust model that may be used in a variety of contexts.

Critics of the TAM argue that the TAM has low external validity, as such, there is need to explore the nature and specific influences of technological and usage-context factors that may alter the user's acceptance, for instance trust and perceived risk (Moon and Kim, 2001). Trust plays a pivotal role in influencing a user to engage in online exchanges of money and sensitive personal information while perceived risk determines adoption. Hu et al. (1999) in a study on adoption of telemedicine technology by a physician used the TAM and reported that the TAM has low explanatory power. The researchers concluded that the TAM can be improved by incorporating additional factors to improve specificity and explanatory utility in a specific area. This implies that perceived ease of use and perceived usefulness may not fully reflect users' intention to adopt electronic banking channels. As such, there is a need to add factors that better predict the acceptance of electronic banking channels.

#### 2.5.3 Extended Technology Acceptance Model

The extended TAM is a modification of the basic TAM and is a widely used model for investigating user's acceptance of information systems (Adesina and Ayo, 2013). It includes external variables and measuring their impact on user's adoption of information systems (Fonchamnyo, 2013; Adesina and Ayo, 2010). This study adopted the Extended TAM to investigate CBZ Bank customers' perceptions of electronic banking

delivery channels. Variables adopted for this study are perceived usefulness, perceived ease of use, perceived connection, perceived trust, perceived security, perceived reliability, perceived accessibility, perceived cost, perceived awareness, demographics, and attitudes. The model used in this research is presented in figure 2.1.

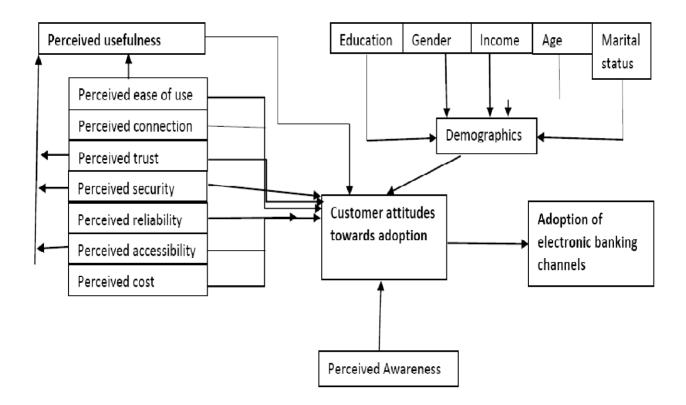


Figure 2. 1: Extended Technology Acceptance Model

Source: Fonchamnyo, 2013

# 2.5.4 Extended Technology Acceptance Model variables

This section discusses the variables of the Extended Technology Acceptance model.

# Perceived ease of use (PEOU)

According to Davis et al. (1989), Perceived Ease of Use refers to the degree to which the users perceived that using this electronic banking would be free of effort. Perceived ease of use affect attitude. As such, an application perceived to be easier to use than another is more likely to be accepted by users (Jahangir and Begum, 2008).

## Perceived usefulness (PC)

Perceived Usefulness refers to the extent to which customers believe that adoption of a banking technology will improve their banking transactions (Davis, 1989). Hence bank customers will adopt an application for as long as they believe that it will aid their performance.

## Customers Attitude (CA)

Customers' attitude refers to the users' positive or negative feeling towards the adoption of electronic banking (Davis et al. 1989; Taylor and Todd, 1995). That is, a person's desirability to use the system or his or her perception aboutelectronic banking credibility and reliability. Attitude is argued to have a strong, direct and positive effect on user's intention to actually use the new information system (Jahangir et al. 2008).

## Perceived reliability (PR)

Perceived Reliability is the extent to which the customer perceives e-banking services as reliable so as to influence its adoption by customers (Fonchamnyo, 2013).

## Perceived Security (PS)

Hassan et al. (2012) defined security as the protection of information or systems from an unauthorized intrusion, that is, the degree to which the customer perceives ebanking to be easily susceptible to fraud.

## Perceived Trust (PT)

Perceived trust refers to the belief that the promise of another can be relied upon and that, in unforeseencircumstances, the other will act in a spirit of goodwill and in a benign fashion toward the trust(Mayer et al. 1995).

## Perceived Cost of Service (PCS)

Perceived Cost of Service refers to the degree to which the customers believe that the cost of using thee-banking services is expensive or not (Fonchamnyo, 2013).

## Perceived Accessibility (PA)

Perceived accessibility is the extent to which customers can have access to e-banking services at anytimeand anywhere (Fonchamnyo, 2013).

## Perceived Awareness (PAW)

According to Pikkarainen et al. (2004), perceived awareness refers to the degree to which the users are informed about the existence of the new technological innovation. It focuses on the amount of information that a customer has about electronic banking as well as its benefits and challenges.

## Quality of Internet Connection (QIC)

Quality of internet connection refers to the degree to which internet connection will enable thecompletion of e-banking transactions (Fonchamnyo, 2013). A good connection is key to ensure completion of transactions.

## **Demographics**

The demographic variables include age, marital status, gender, education and income level of respondent (Fonchamnyo, 2013).

## <u>Age</u>

Age reflects the differential attitudes among age groups on usage of electronic banking channels (Dixit and Datta, 2010). This implies that younger customers are more likely to use electronic banking delivery channels more than the older customers due to negative attitudes.

## Marital status

Marital status refers to whether a respondent is single or not. The influence of gender on usage of electronic banking is not skewed to any sex.

#### Education level

Education refers to how educated the respondent is (Burke, 2002). As such, highly educated customers are more likely to adopt electronic banking delivery channels than the less educated ones.

#### <u>Gender</u>

According to Fonchamnyo (2013), gender refers to the differences in attitudes between male and females. Literature produced mixed results on the influence of gender on usage and adoption of electronic banking.

#### **Income**

Income expresses to what extend the users' income influences usage or non-usage of electronic banking delivery channels. As income increases, customers with high income are more likely to use electronic banking delivery channels than those with low income (Flavian et al. 2006).

The review of literature on the theoretical models reveals that the TAM with its two main constructs of perceived ease of use and perceived usefulness is the widely accepted and used model in information systems researches on technology acceptance. However the main drawback of the TAM is that it has low explanatory power. As such, it becomes necessary to add variables that fully explain user perceptions of new information technology by including factors such as trust, connection, security and demographics such as gender, marital status, income level and age to the basic TAM. This study adapted the extended TAM to examine customers' perceptions of electronic banking delivery channels in Zimbabwe.

## 2.6REASONS FOR NON-USAGE OF ELECTRONIC BANKING CHANNELS

Ojeka and Ikpefan (2011) note that the advent of electronic banking delivery channels brought the market close to the customers and potential customers at a relatively low cost. Electronic banking is the fastest growing delivery channel adopted by most retail banks in the developing and developed world today. Adesina and Ayo (2010) propounded that the adoption of electronic delivery channels is fast gaining ground in Nigeria and different electronic channels such as internet banking, mobile banking and electronic cards have since been introduced. Ojeka and Ikpefan (2011) agreed with Garuba and Aigbe (2010) that most banks get cost savings by offering their services through electronic channels. Banks can also increase profitability by reducing their branch network and down size the number of service staff. Electronic banking channels are important for long term survival and competitiveness in the world of electronic commerce(Ojeka and Ikpefan, 2011).

However, despite all these perceived benefits of electronic banking, a number of studies carried show that there is still low acceptance and adoption of electronic banking especially in the developing world (Fonchamnyo, 2013; Kaseke and Charara, 2012).Studies on factors that influence non usage of electronic banking delivery channels identified security,trust, awareness, confidentiality and demographics as the main factors that contribute to non-usage (Zimucha et al. 2012; Kaseke and Charara, 2012; Malhotra and Singh, 2010; Dube et al, 2009). This section reviews some of the empirical evidence on the factors that influence non -usage of electronic banking delivery channels in different countries.

#### 2.6.1 Security

Hassan et al. (2012) and Dixit and Datta (2010) defined security as the capability of online firms to protect the information and transactions of customers from being stolen by phishers and hijackers. Security can also be defined as the subjective probability with which bank customers believe that their private information will not be viewed, stored and manipulated during transit and storage by inappropriate parties(Lallmahamood, 2007; Pavlou, 2003). Studies in different countries show that security is the major determinant of usage of electronic banking delivery channels (Howcroft et al. 2012; Hassan et al.2012; Dixit and Datta, 2010; Mavri and Ioannou,

2006; Yousafzai et al. 2003; Enos, 2001). According to Howcroft et al. (2012), bank customers are very much confident with their banks but they have less confidence in the bank technology because of security issues in their electronic transactions. Similarly, a study by Hassan et al.(2012) in Pakistan revealed that customers are concerned about lack of security in transaction involving electronic channels such as POS, ATMs, credit cards and internet banking. They concluded that customers would prefer branch service if they perceived that electronic banking is not capable of preventing their transaction information from being stolen.Security of transactions was also identified by Mavri and Ioannoa (2006) as one of the key factors affecting customers' perceived usefulness of electronic banking in China.

Another study by Dixit and Datta (2010) in India revealed that the acceptance of electronic banking delivery channels is very low due to security and data confidentiality issues. They argued that the bank customers' trust and satisfaction of electronic banking is affected by the bank's ability to protect them from invasion of their privacy. Their findings show that assecurity is closely related to trust, a bank's failure to protect the privacy of customer's transactions will result in the bank losing customers and getting a negative publicity.For instance the rapid rise in customer accounts hijacking and virtual fraud in Indiahas adversely impacted customer trust in the electronic banking delivery channels (Dixit and Datta, 2010). They however noted that, the introduction of new information technologies such as SSL, digital signature, encryption, firewalls and PKI infrastructure, internet security has improved greatly and consumers' confidence in their banks and the banks' technology is increasing.Sayar and Wolfe (2007) concurred with earlier studies on customers' perceptions of electronic banking delivery channels that indeed security is a key determinant of customers' usage or non-usageof electronic banking delivery channels.

In another study, Lallmahamood (2007) highlights that highly publicized cases involving major security failures with regards to online banking have contributed to the public's

concern and lack of acceptance of Internet banking. He cite an example of such negative publicity involving a businessman in Malaysia who reported that RM100 000 (USD 27 000) was illegally transferred from his account by an unknown party via an internet transaction. Zimucha et al. (2012) claims that the literature on electronic banking delivery channels is loaded with cases of online banking threats. For instance, Fatima (2011) quote three major examples of electronic banking threats. The first case involved the USD\$10 million fraud against Citibank, the second case was an internet bank Egg case in Britain and the last case involved USD\$110000 which was lost by a fire and alarm company of Arkansas when hackers stole the firm's e-banking credentials and drained its payroll account.

#### 2.6.2 Trust

Koskosas (2008) define trust as confidence and positive expectations of one party within an Information Technology (IT) group that another party is willing to cooperate to set goals efficiently, in the context of Internet banking security. Trust is most commonly defined as a belief in a person's competence to perform a specific task or expectancy that the promise of an individual can be relied upon (Rotter, 1967; Morgan & Hunt, 1994). Gefen et al. (2003) note that business transactions are determined by trust. The reason why electronic banking lacks trust is that parties in the transactions do not have face to face communication (Cho et al. 2007). Once the customers' trust on electronic banking delivery channels is low, consequently its adoption and usage will be slow (Rotchanakitumnuai and Speece, 2003). Hassan et al. (2012) pointed out that most customers do not trust that their transactions and personal information is fully secured on the electronic banking platform. A study by Dixit and Datta (2010) concluded that trust plays a very critical role in the acceptance and adoption of electronic banking by customers. This implies that trust is a decisive factor for the success or failure of electronic banking. These results agreed with the findings of Karake (2006)who noted that in the UK, privacy and security are the major determinants of customers' trust in electronic banking transactions.

#### 2.6.3 Privacy

Warren and Brandeis, (1890) as cited by Dixit and Datta (2010) define privacy as the right of a person to be left alone and to be able to have control over the flow and disclosure of information about him or herself. Lallmahamood(2007) define information privacy as the claim of individuals, groups, or institutions to determine when, and to what extent, information about them is communicated to others. Dube et al.(2009) cited that privacy is a major impediment to electronic banking thus represents the control of transaction between users. Dixit and Datta (2010) noted that privacy concern and worries have been brought about by sophisticated information and technology that have improved the collection, storage, use and sharing of personal information. Dixit and Datta (2010) also noted that a study conducted in Turkey and UK privacy was found to be the most critical factor which affects customer utilization levels and acceptance of virtual banking. According to Hassan et al. (2012) the main reason why customers do not use electronic banking is that they perceive that their transacting information and data is not private and secured. As such lack of privacy compromise security of customers' transacting on electronic banking platform. If there is lack of privacy and security customers will be exposed to threats whereby fraud or a hacker may get unauthorized access to electronic banking users' account and fraudulently acquire sensitive information such as users' names and passwords(Lee, 2009: Littler and Melanturion, 2006). Chung and Paynter (2002) note that bank customers in New Zealand are slow to adopt electronic banking as they fear that their account details and personal information lack privacy. Poon (2008) noted that the major dissatisfaction among customers towards adoption of electronic banking is privacy. He observed that privacy gives customers the assurance that their electronic banking transactions are secured.

#### 2.6.4 Demographics

Literature argues that the common demographic factors that influence customers' perceptions of electronic banking delivery channels are user's age, gender, education and income (Hill, 2004). A research conducted by Hill (2004) cited by Dixit and Datta

(2010) show that demographics do influence acceptance and adoption of electronic banking. The results of the study revealed that the young people and high income earning people tend to be active users of electronic banking delivery channels. Research findings from Hill (2004)'s study revealed that the highest category of people using online banking were people aged 30 to 49, while the lowest category was above 65. The results also reflected that people over the age of 65 generally tend to be late adopters of Information Communication Technologies (ICT). Study findings by KPMG (2012) in Nigeria show that 45 percent of the surveyed customers who use electronic banking are below 30 years while 3 percent are above 55 years. Empirical literature on the role of gender in usage or non-usage of electronic banking delivery channels produced mixed results. A study by Gao and Owolabi (2008) in Nigeria showed that females are more likely to use electronic banking than their male counterparts. On the contrary, a research conducted by Pew Internet & American Life Project dated 2002 in India cited by Dixit and Datta (2010) concluded that men are more likely to adopt online banking than women. The same results were obtained by Srivastava (2007) in a study conducted in India on customer's perception on usage of electronic banking. His results revealed that males are more internet banking users compared to females. Shergill and Li (2005) share the same views with other researchers that women tend to be lesser users than men as they regard privacy protection and ethical standards more seriously than men.

Dixit and Datta (2010) point out that customers' with low levels of education are less likely to adopt electronic banking channels. These results agreed with earlier studies by Polatoglu and Ekin (2001) who reports that highly educated consumers are more likely to adopt electronic banking channels. Gerrard et al. (2006) share the same view that less educated consumers are less likely to use and accept electronic banking. Srivastava (2007) also note that education plays an important role on adoption and usage of electronic banking delivery channels. For instance, people with high educational attainment may have an aptitude for computers and possess good information processing skills. The results also revealed that academic people tend to use electronic banking channels than non-academic. Electronic banking requires that customers' acquire the necessary computer skills to transact online. According to Flavián et al. (2006) older and lower income groups in Chile are less likely to conduct their banking through electronic banking channels. Stavins (2001) noted that white collar customers who are high income earners adopt electronic banking more readily than other income groups. Karjaluoto et al.(2002) and Mattila et al. (2003) confirmed the results by Stavins (2001), those customers who belong to upper middle class and high-level occupations are more likely to use and adopt Internet banking. Similarly, Srivastava (2007) revealed that people of higher income groups.

However, a study carried by Sohail and Shanmugham (2003) on customers' preferences of E-banking in Malaysia noted that age and educational qualifications of electronic banking users have no significant impact on E-banking adoption. Instead, they noted that accessibility to the Internet, awareness of E-banking and customers' resistance to change are the main factors influencing adoption of electronic banking. Findings by Liao and Cheung (2002) also supported the view by Sohail and Shanmugham (2003). In their study they concluded that education and age have no significant effect on adoption of electronic banking while security, user-friendliness, convenience and accuracy are key influencers.

## 2.6.5 User friendliness

Hill (2004) found out that adult customers who discontinued the use of electronic banking attributed this to insufficient or nonexistent of training on how to use the electronic banking technology. They also highlighted that confusing web pages and complex steps discourage the adoption of online banking. Hill (2004) concluded that aged users of electronic banking prefer internet sites that do not demand complicated manipulation of software and hyperlinks. Customers appreciate functions that make on-line navigation easier and more convenient. They prefer technological platforms which

are simple and clear(Srivastava, 2007). As such a site that is easy to use, fast, clear, and secure increases the acceptance of online banking (Dixit and Datta, 2010). Similarly, Hernandez et al. (2007) also noted that a website which is easily navigable makes it user-friendly to users of electronic channels. A study carried by Srivastava (2007) in India confirmed the same results that user-unfriendly software is a key issue which hinders usage of electronic banking. He further argued that complicated technology (ICT) discourages maximum usage of electronic banking channels.

#### 2.6.6 Convenience

Nasri (2011) carried a study to investigate factors affecting adoption of electronic banking in Tunisia and singled out convenience as one of the important factors affecting adoption and usage. He noted that convenience focuses on resources such as time and effort required by customers in shopping for a product. Gerrard and Cunningham, (2003) noted that the 24 hour service availability makes electronic banking convenient. Most researchers noted time savings , worldwide access and wide range of accessible services and home access as key drivers of electronic banking convenience (Gerrard and Cunningham, 2003; Liao and Cheung, 2002).

A study by Nasri (2011) agreed with findings of a similar study by Eastin (2002) that perceived convenience was the strongest predictor of online banking usage. Lallmahamood (2007) noted that Perceived usefulness (PU) and Perceived ease of use as poised by the TAM Model are significant factor affecting acceptance of an information system. Lallmahamood (2007) claimed that perceived ease of use is a major factor that affects acceptance of an Information system. As such, information system or an application that is perceived to be easier to use than another is more likely to be accepted by users. These results concurred with earlier study findings by Wang et al. (2003) who noted that perceived ease of use, perceived usefulness and perceived creditability and security have significant and positive effects on the adoption of electronic banking in Taiwan.

#### 2.6.7 Awareness and Familiarity

Pikkarainen et al. (2004) identified the lack of knowledge and information about the availability and the advantages of e-banking services as critical factor inhibiting the adoption of online banking. An enhanced TAM study for the adoption of electronic banking, revealed that the awareness of and the amount of information about electronic channels that bank customers have plays a critical role in the adoption of e-banking. Banks need to increase their marketing efforts by initiating awareness programs to raise customer awareness and interest in electronic banking, (Dube et al. 2009). Gerrard et al. (2006), pointed out that the third most frequently mentioned reason for not using Internet banking was the lack of awareness about the service. Familiarity refers to knowledge and experience of a person with the technology(Dimitriadis and Kyrezis, 2010). They argued that familiarity in an electronic context plays a critical role as one of the factors that influence-directly or indirectly or the willingness to use a Web site both for information or transaction purposes. According to Bhattacherje(2002) customers only use technology which they are familiar and aware of. Srivastava (2007) highlighted that training through awareness campaigns on services offered on electronic banking, advantages of electronic banking will help to improve the usage of internet banking.

## 2.7 BENEFITS OF E-BANKING

#### 2.7.1Benefits of E-Banking to Customers

Electronic banking offers benefits and constraints to both customers and the bank. The benefits to customers include time savings, convenience, accessibility, confirmation and security. As noted by Sayar and Wolfe (2007), electronic banking is time saving in the sense that the customers can perform transactions without visiting the brick and mortar branches. Electronic banking delivery channels such as internet banking provide customers with universal connection from any location worldwide through any internet linked computer (Safena et al. 2011and Sayar and Wolfe, 2007). This flexibility provides customers with access to their accounts 24 hours a day and 7 days a week. The use of e-banking provides convenience to customers as they can effect payments through electronic funds transfer and thus eliminates the need for writing cheques, queuing in

banking halls or physically carrying money (Pikkarainen et al. 2004). Unlike the cheque clearing system which takes days to confirm a payment, with E-banking customers can get instant confirmations for the transactions that they would have executed (Ojeka and Ikpefan, 2011). Furthermore, e-banking offers security to customers as transactions have to be authorized through an exclusive PIN. The use of a PIN to access the account prevents unauthorized use of customers' accounts (Garuba and Aigbe, 2010). An outstanding benefit of e-banking to customers is that it provides safety to customers through reduction in the need to carry large sums of money in cash (Ojeka and Ikpefan, 2011).

Despite the benefits of electronic banking to customers, there are a number of constraints associated with e-banking that include cost, cash availability and security. Some forms of electronic banking such as internet banking require that the customers make an investment in accessibility equipment such as computer, memory and browsers. These investments prove to be an extra cost to the customer as compared to traditional brick and mortar banking methods (Adesina and Ayo, 2010). The customers will need to make a time investment in learning how to use the service. E-banking channels do not accord customers the social dimension of face to face interaction that is offered in brick and mortar banking (Mattila et al. 2003). According to Garuba and Aigbe (2010) and Ezeoha (2005), electronic banking raises security concerns due to their high susceptibility to fraud, phishing by hijackers.

## 2.7.2 Benefits of E-Banking to Banks

Electronic banking offers several benefits to banks such as cost reduction, geographical expansion and marketing (Ojeka and Ikpefan, 2011;Hernando and Nieto, 2007). These benefits allow the bank to have a competitive edge of its rivals as it can improve service quality, retain and attract new customers. According to Ojeka and Ikpefan (2011) and Adesina and Ayo (2010)most banks can realize cost savings and increase profitability by reducing their branch networkand downsizing on the number of service staff. Several

studies show that once established, electronic banking is the cheapest way of providing financial service to customers (Srivastava, 2007). Khalfan et al.(2006) observed that electronic banking also enables banks to expand their business geographically and broaden their customer base without necessarily investing in the establishment of new brick and mortar branches. As noted by Omar et al. (2011),the other benefit of electronic banking is that it enhances marketing and communication as it serves customers 24hrs a day. The customers can be guided through a catalogue of products and services which the bank provides. The main disadvantage of electronic banking to banks is that they need to be proactive to security concerns as these can easily tarnish the bank's image and result in low adoption of electronic banking delivery channels (Dixit and Datta, 2010). Security concerns affect customers' trust in a technological innovation and this determines whether customers will take it or not.

#### 2.8E-BANKING SECURITY THREATS

Security threat is defined as an event that can destroy, modify, waste, deny or disclose or decrease efficiency of the data and network resources (Zimucha et al. 2012). As put forward by Ganesa and Vivekanandan (2009), Egwali (2008) and BITS (2006) security concerns related to electronic banking include spoofing, phishing scams, identity theft, friendly fraud and larceny. Zimucha et al. (2012) carried out a study to evaluate the effectiveness of e-banking security strategies in Zimbabwe amongst 15 commercial banks that provide electronic banking. Their results show that the adoption of electronic banking. Their results show that the adoption of electronic banking by commercial banks increases security risks. As such, most banks in Zimbabwe adopted security features such as passwords, firewalls, encryption, virtual keyboards, pins and access codes and Secure Socket Layers.

Yousafzaiet al.(2003), noted that security threats can either be through network or data transaction and transmission attacks or through unauthorized access to the account by means of false authentication. They further argued that security threats usually occur at

the network level (the server), the communication channel or the user's personal computer (the client). Aburrouset al. (2010), cited phishing as one form of online identity theft. They further claimed that identity theft involves a combination of social engineering and web site spoofing techniques used to trick users into disclosing their confidential information with economic value. US-CERT (2006) on the other hand identifies pharming and malware as other e-banking security threats. Schneier (2005) observed that online attackers have changed their strategy of attacking banks directly but instead now target the weak end users. The attackers use various ways such as phishing, key-logger, Trojan horse attacks and application threats (Ganesan and Vivekanandan, 2009). Attackers who use application threats appear to be a bonafide user of the online banking application while effecting illegal transactions. BITS (2006) claimed that security measures such as firewalls, proxy servers and network filters hardly protect a bank from application based threats. Phishing attacks occur when a customer visits a link and then provides information. When attackers are using malware, the customer is tricked into performing activities they rarely perform such as installing the malware on one's computer. As noted by US-CERT (2006), attackers who use pharming normally send an email or attachment which will request the customer to visit a fake website wherein one will provide information that compromises one's financial identity

## 2.9CASE STUDIES ON ELECTRONIC BANKING DELIVERY CHANNELS

#### 2.9.1 Electronic banking in Nigeria.

Prior to the installation of electronic banking delivery channels in the Nigerian Finance and Banking Industry, the banking industry was dominated by big banks such as United Bank of Africa, First Bank of Nigeria and Union Bank of Nigeria (Ojeka and Ikepfan, 2011). Despite the long queues for withdrawals and cash deposits that prevailed in these banks as a result of manual transactions, customers patronized them as these banks dictated the market pace by offering the widest range of financial products and services. However, the advent of electronic banking in 2003 revolutionized the Nigerian banking sector and tilted competition in favor of banks that embraced electronic banking delivery channels (Ojeka and Ikepfan, 2011). The first banks to adopt electronic banking in Nigeria were Intercontinental Bank, Zenith Bank and Guarantee Trust Bank (Ojeka and Ikepfan, 2011). Several studies have been undertaken to ascertain the acceptance of electronic banking delivery channels in the Nigerian Banking and Finance industry.

Garuba and Aigbe (2010) conducted a study to ascertain and critically examine ATM challenges and proffer suggestions that will enhance ATM usage in Nigeria. Although the use of electronic channels has rapidly grown and become popular due to its low transaction costs and convenience to customers, Garuba and Aigbe, (2010) noted that electronic delivery channels have become unpopular due to security issues. Their research highlighted that the infrastructure that supports the ATMs is susceptible to misuse and failure rendering it unsecure from customers' perspective. As such, customers fret about security of online transactions. The greatest challenge noted by Garuba and Aigbe (2010) in their study was ATM fraud in the Nigerian banking industry. Their study revealed that ATMs have proved vulnerable to fraud and identity theft where sensitive private and confidential information about individuals was being stolen by unauthorized users and used to make large withdrawals. They concluded that customers' privacy, trust and security are the major issues that would determine the usage and acceptance of electronic channels in Nigeria. Similarly, a study conducted by Ojeka and Ikpefan (2011) revealed that the low usage of electronic channels in Nigeria was a result of insecurity and inadequate operational facilities like stable network and telecommunication infrastructure. They concluded that the low acceptance of electronic banking delivery channels is due to insecurity, lack of e-commerce knowledge, awareness, trust and resistance. The low usage of electronic banking channels in Nigeria was confirmed by KPMG (2012) in their customer satisfaction. The results of the survey showed that 80 percent of the customers used ATMs, 7 percent used internet banking, 6 percent Point of Sale, 5 percent Telephone Banking while 2 percent used mobile banking.

## 2.9.2 Electronic Banking in Pakistan.

According to Omar et al.(2011), electronic banking in Pakistan was pioneered by Allied Bank in 2004. Several other banks in Pakistan such as Habib Bank Limited (HBL), United Bank Limited (UBL), National Bank of Pakistan (NBP), Bank Alfalah, Standard Chartered Bank and Askari Commercial Bank Ltd adopted electronic banking after Allied bank.

A study by Omar et al. (2011) on customers' perception of electronic banking services in Pakistan revealed that customers do not fully utilize online banking services because of lack of awareness of the services and trust in online banking services. They noted that the key challenges hindering adoption of online banking services among customers in Pakistan are trust, security and safety especially of ATMs. These findings are consistent with the findings of Lee and Turban(2001) cited by Omar et al.(2011) who noted that the majority of bank customers hesitate to use on line banking services because of security and privacy issues.Omar et al. (2011) noted that cases of fraudulent transactions, robbery, bad and unreliable ATM services played a significantly adverse role in reducing the trust of consumers on online banking services. Furthermore, the study results show that issues such as reliability, convenience, speed, safety and security played a pivotal role in retaining existing and attracting new customers.

Hassan et al. (2012) conducted a study to find out the determinants of customer service quality perception of internet banking in Pakistan. The research noted that almost every bank in Pakistan provides electronic banking services due to low cost and convenience to customers. The study however revealed that despite the advantages brought about by electronic banking, usage remains low. Results from their study show that trust and security are the vital issues considered by customers in adopting electronic banking channels. Lackof trust and uncertainties about the dependability of internet based services has led to slow uptake of electronic banking delivery channels. These results concurred with the earlier findings of Omar et al. (2011).

#### 2.9.3 Electronic Banking in New Zealand and Taiwan.

Since the introduction of electronic banking delivery channels in New Zealand, the number of users has been increasing each year. According to Taylor (2002), New Zealand had 30 000 in 2000 but by end of 2001, the numbers of users had shot up to 480 000. In 2008, the number of registered electronic banking channel users exceeded one million (Neilsen Company, 2008). Several studies have since been carried out to ascertain the factors that influence customers' adoption of electronic banking channels in New Zealand and Taiwan.

Clemes, Gan and Du (2012) carried out a research on factors the affect customers' perception on adoption of internet banking in New Zealand. Their study adopted the Technology Acceptance Model for the conceptual framework. The research concluded that user-friendly website, marketing communication, perceived risk, price and internet familiarity affect customers' perception of adoption of electronic banking. Despite the convenience, low costs and speed associated with electronic banking, Lee (2009) observed that the low uptake of electronic banking channels in New Zealand was due to factors such as lack of internet access and perceived risk. In another study in Taiwan on factors influencing adoption of electronic banking channels conducted by Wanget al. (2003) noted that perceived ease of use, perceived usefulness and perceived credibility and security have significant and positive effects on the adoption of electronic banking channels. Customers who perceive electronic banking as more convenient, less complex and more compatible tend to adopt electronic banking.

#### 2.9.4 Electronic Banking in India.

Dixit and Datta(2010) carried out a study on customers' acceptance of electronic banking delivery channels in India. They observed that although the number of electronic banking users has increased dramatically, most of them were still reluctant to provide their sensitive and confidential information to websites as they do not trust electronic banking security. Results from their study further show that the adoption of electronic banking was mainly influenced by security, privacy, trust, familiarity, innovativeness and awareness. Malhotra and Singh (2010)shared the same view that

customers are very much concerned about security and privacy of electronic banking. The study findings from Dixit and Datta (2010)'s study were in agreement with earlier studies by Liao et al. (2003) who found out that consumer perceptions of transaction security, transaction accuracy, user friendliness and network speed are the critical factors for customers' adoption and acceptance of electronic banking. However, an earlier study by Mattila (2001) concedes that customer satisfaction, security and trust are key factors to successful adoption of Internet banking. On the contrary, a study by Lee (2009) on adoption of electronic banking concluded that Customer Relationship Management (CRM) efforts of the banks are the main determinant of customers' acceptance and access of online self-service tools than any other factor.

#### 2.9.5 Electronic Banking in Malaysia

Lallmahamood (2007) carried a study in Malaysia on the examination of individual's perceived security and privacy of the internet and the influence of this on the intention to use e-commerce. The study used the Technology Acceptance Model (TAM) to examine perceived security and privacy perception. Results of the research revealed that security and privacy are the chief concerns which affect the acceptance and usage of electronic banking technology. In his study, Lallmahamood (2007) noted that ease of use of internet banking, internet security, internet banking regulations and customers' privacy would remain future challenges of internet banking acceptance. Although internet banking is rapidly growing in Malaysia, Lallmahamood (2007) highlighted that there is no evidence of its acceptance. For instance in Malaysia, only 31 percent of customers indicated an interest in banking on the internet in future while 66 percent were worried by security concerns. Robinson (2000) reported that half of the people that have tried internet banking will not become active users due to security concerns. The highly publicised cases involving major security failures might have contributed to the public's concern and lack of acceptance of internet banking (Lallmahamood, 2007). Similar results were obtained by Chong et al. (2010) who empirically examined the factors that affect the adoption decision of online banking in Vietnam. Perceived usefulness, perceived ease of use, trust and government support was examined to determine if these factors are affecting online banking adoption. The results showed that perceived usefulness, trust and government support were all positively associated with the intention to use online banking in Vietnam. Contrary to the Technology Acceptance Model, perceived ease of use was found to be not significant in this study.

## 2.9.6 Electronic Banking in Zimbabwe.

Dube et al. (2009) carried out an exploratory research on the adoption and acceptance of virtual banking in Zimbabwe. The research results showed that although the majority of banks in Zimbabwe have adopted electronic banking, usage levels have remained relatively low and sluggish as many customers still prefer the traditional brick and mortar model of banking. This is against the bankingconvenience brought to customers by this technological innovation. Their study highlighted that the chief challenge faced by Zimbabwean banking customers in adoptingvirtual banking is security concerns. Other impediments to the adoption of virtual banking in Zimbabwe include compatibility with existing legal systems and cost of implementation (Dube et al.2009). These findings agreed with results from studies by Singh (2004) and Sukkar and Hassan (2005) that challenges such as security, compatibility with existing systems, cost of implementation and lack of expertise were the major inhibitors or barriers of internet banking adoption. Additionally, the results also revealed that electronic banking is at its infancy stage in terms of being accepted by commercial banks customers in Zimbabwe.

## 2.10 E-BANKING SECURITY STRATEGIES

Egwali (2008) and Hawkins et al. (2000) noted that, most financial institutions including banks apply security mechanisms such as Secure Socket Layers (SSL), encryption of data that is transferred over the internet, digital certificates and passwords. Along with that, Claessens et al. (2002) claim that in order to improve the overall security of the ebanking systems, banks have employed security measures such as passwords, policies to minimize on line banking security. Research work by Aburrous et al. (2010) reported that SSL as one security mechanism used in e-banking by most banks. Ganesan and Vivekanandan (2009) suggested a secured hybrid architecture model for the on-line banking using Hyperelliptic curve cryptosystem and MD5. This model is implemented

with the Hyperelliptic curve cryptosystem (HECC) and it performs the encryption and decryption processes in an efficient way merely with an 80-bit key size.

Encryption is a very much prevalent security strategy among banks in Zimbabwe. Zimucha et al. (2012) further noted that only a small minority is not implementing encryption. However, most of Zimbabwean commercial banks are not utilizing virtual keyboards as an e-banking security strategy. Zimucha et al. (2012) argued that this strategy is relatively new to Zimbabwe and most e-banking personnel showed ignorance of the strategy. The study realized that sophisticated strategies such as SSL are on average implemented by Zimbabwean commercial banks as evidenced by the above results.

## 2.11CHAPTER SUMMARY

Studies show that security, trust, demographics, privacy, user friendless, awareness and ease of use are the key factors that influence customer adoption and usage of electronic banking delivery channels. Most of the studies in both developed and developing countries concentrated their research efforts either on adoption of internet banking or customers perceptions of internet banking. Although the acceptance of electronic banking seems to be well researched in other countries, empirical studies on customer' perception of electronic banking delivery channels in Zimbabwe are very few. Not enough is known regarding how customers perceive and evaluate electronic banking delivery services. Despite the rapid growth in installation of electronic banking delivery channels, there is not enough evidence of its acceptance amongst customers in Zimbabwe. The next chapter will look at the methodology derived from the literature survey. The chapter will discuss research methodology, research design, research strategy, sample selection and data collection methods used to conduct the study.

# CHAPTER THREE RESEARCH METHODOLOGY

## **3.1 INTRODUCTION**

This chapter discusses the research methodology that was used to conduct the study. It outlines the research design, research strategy, population, and sample size, sampling methods, data collection and analysis methods that were used. Methodology refers to the activity of the research that is, how it precedes, how to measure its progress, and what constitutes its success (Chapman, 1988). Saunders et al. (2003) noted that methodology in research includes theory of research subject being conducted, that is theoretical and philosophical assumptions upon which the research is based and the impact of method or methods followed for the research process. Saunders *et al.* (2003) further pointed out that research requires a systematic approach to providing solutions or answers to the stated research problem.

## **3.2 RESEARCH DESIGN**

A research design is a map or plan outlining how the research is going to be conducted to find answers to the research problem (Kumar, 2005).Zikmund (2003) defines a research design as a master plan that specifies the methods, approaches and procedures for collecting and analyzing of the needed information. He further noted that the choice of the appropriate research design is determined by the objectives of the research, the available data sources and the cost of obtaining data.

## **3.3 RESEARCH PHILOSOPHY**

According to Saunders et al. (2003) and Yin (1994), there are two main recognized research philosophies, in the classification and analysis of primary data, that is positivism and phenomenological. The philosophy which a researcher can adopt is dependent on the characteristics of data collected in the research process. The main difference between the two philosophies is how the numbers and statistics are used.

The choice of the research philosophy in a research study is mainly governed by the research problem or research questions.

#### 3.3.1 Positivism Philosophy.

As noted by Saunders et al. (2003) positivism philosophy is mainly characterized by research that intends to figure out facts or causes of any social phenomena systematically. It deals with deductive reasoning first and then data collection later. Collis and Hussey (2003) argued that positivist (quantitative) research uses large samples and involves structured survey questioning that is numerically and statistically analyzed. It generalizes a specific population based on the results of a representative sample of that population. The philosophy involves the process of collection of primary data from a large number of individuals with the intention of projecting the results to a wide population (Collis and Hussey, 2003). Saunders et al. (2003) noted that the positivism philosophy applies when the researcher would be working with observable social reality. The product of such a research can be more like generalizations similar to those produced by the physical and natural scientists. Positivism proposes a research approach which is scientific in nature, with a view to deduce a proposition or hypothesis. Collis and Hussey (2003) pointed out that the positivism philosophy is based on testable hypothesis and tend to be numerical in nature thus it measures "how often" or "how much". It seeks to evaluate any phenomena and provide a rational explanation for it. The philosophy of positivism proposes that the researcher can distinguish the object of study from the subject. Therefore, the investigator must identify the causal relationships and regularities in order to establish the "laws" governing reality with a view to manipulate reality in line with some purpose(Saunders et al. 2003).

## 3.3.2 Phenomenological Philosophy

Zikmund (2003) highlighted that the phenomenologicalphilosophy (qualitative research)provides greater understanding of a concept or crystalizes a problem rather than providing precise measurement or quantification. It does not focus on numbers but rather words and observation. Qualitative research applies inductive reasoning to data collected in order to arrive at possible explanations.Qualitative research approach

mainly deals with finding out what is going on in a person's mind. A major drawback of studying human behaviour following the phenomenologicalphilosophy is that it is not easily measured (Postlethwaite, 2005). It involves less structured questions and observations of respondents (Schmidt and Hollensen, 2006).

Taking into consideration the discussion of the two research philosophies in line with the objectives of this research, the researcher decided to adopt the positivism philosophy which relies on quantitative research approach. Since this study uses a case study, the researcher chose the positivism approach. The study seeks to explore CBZ bank's customers' perception of electronic banking delivery channels.

## **3.4RESEARCH APPROACHES**

## 3.4.1 Qualitative versus Quantitative approach

According to Molapo (2008), there are two broad approaches to research which are commonly adopted in the classification of studying primary data in science research studies that is quantitative and qualitative research approaches. Quantitative research deals with numerical representation and manipulation, observation with the aim of describing and explaining the phenomena that the observations reflect. It uses large samples and structured survey sample (Zikmund, 2003). The questions arenumerically and statisticallyanalyzed and the results from the sample can be used to make generalizations about a specific population. On the other hand, qualitative research involves non-numerical representation and interpretation of observation with the aim of discovering the underlining patterns of relationships. The process and the mean are not thoroughly examined in terms of quantity, frequency or amount of intensity (Molapo, 2008). The focus is not on the number but rather on words or observations (Zikmund, 2003). The purpose of qualitative research is to find out what is going on in a person's mind and it involves less structured questions and observations of the respondent.

Considering the approaches discussed and the study objectives, the researcher adopted the quantitative research approach as the data investigated perceptions of customers using a structured questionnaire. The data collected from the sample was analyzed and generalized to the population.

## 3.4.2 Deductive Approach

The deductive research approach refers to a research study in which a conceptual and theoretical structure is developed (Hussey and Hussey, 1997). It involves the logic process of deriving the conclusion from unknown primacy. The approach is appropriate where there is a lot of literature about the research topic from which a theoretical framework can be defined. Since the study adopted a quantitative research approach, the researcher followed the deductive approach.

#### 3.4.3Inductive Approach

According to Hussey and Hussey (1997:13) the inductive approach refers to a study in which theory is developed from the observation of empirical reality to which general inferences are deduced from given circumstances. This approach involves collection data and developing theory as a result of the data analysis.

#### 3.4.4Subjectivity and Objectivity

In research studies or paradigms, subjectivity and objectivity are considered critical elements. Asoted by Easterby-Smith et al. (1991) objectivity in research refers to independence in the execution of the field work. On the contrary, subjectivity refers to the involvement in or having influence on the result of a study. Easterby-Smith et al. (1991) further pointed out that objectivity is associated with positivism. The researcher must therefore be completely independent if the results are to be validated. It is widely acknowledged that the phenomenological approach is subjective.As such, the researcher used the objectivity research approach.

## **3.5CLASSIFICATION OF RESEARCH PURPOSE**

As noted by Yin (1994) research purpose can be classified as exploratory, descriptive or explanatory depending on the nature of the research problem. However, a study can adopt more than one strategy (Saunders et al. 2003).

## 3.5.1 Exploratory Research

An exploratory research design seeks to define the research question and form hypotheses(Shepard et al.1993). Saunders et al.(2003) argued that exploratory researches are an important means of finding out what is happening by seeking new insight, asking questions and assessing phenomena in a new light. According to Saunders et al.(2003), methods of conducting exploratory research include literature search, consulting from an expert in the subject of research and conducting focus group discussions. Exploratory research purpose is appropriate where there is little prior knowledge of the research problem. It is also applicable where the research purpose.

## 3.5.2Descriptive Research

Descriptive research portraysan accurate profile of persons and events of a situation by going further, deeper and trying to describe different characteristics of a phenomenon (Babbie, 1989). In such circumstances, the research problem is known but the researcher is not fully aware of the situation. It then follows that a descriptive case study will require a theory toguide the collection of data. This study was classified as a descriptive study as it sought toassess CBZ Bank customers' perceptions of electronic banking delivery channels based on the Extended Technology Acceptance Model.

## 3.5.3 Explanatory Research

According to Saunders et al. (2003) explanatory research explains causal relationships between variables. As this study seeks to understand the customers' perception of electronic banking delivery channels, the research is considered partly exploratory in nature hence adopted in the study. Table 3.1 summarises these three different types of research purposes. It displays the scenarios under which each research approach is used and common research questions that relate to each research purpose.

Types of	Description	General Research
Research		Question
Purpose		
	-To investigate little-understood	-What is happening in this
	phenomena.	social program?
Exploratory	-To identify or discover important	-What are the salient
	categories of meaning.	themes, patterns or
	-To generate hypotheses for further	categories of meaning for
	research.	participation?
		-How are these patterns
		linked with one another?
	-To explain the patterns related to	-What events, beliefs,
Explanatory	the phenomenon in question.	attitudes, or policies shape
		this phenomenon?
	-To identify plausible relationships	-How do these forces
	sharing the phenomenon.	interact to result in the
		phenomenon?
Descriptive	-To document and describe the	-What are the salient
	phenomenon of interest.	actions, events, beliefs,
		attitudes, social structures
		and processes occurring in
		this phenomenon?

Table 3. 1:Different Types of Research Purpose
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Sources: Marshall & Rossman, 2006,

# **3.6RESEARCH STRATEGY**

Yin (2003) highlighted that the most important determinant of a research strategy to be adopted in a research process is the type of questions being asked. In the field of social science, there are five main research strategies to use when collecting and analyzing empirical evidence. The strategies are experiments, surveys, archival analysis, history and case studies(Nachmias and Nachmias ,1996). As noted by Yin (2003) each research strategy is conditioned by the following;

- Type of research questions being posed
- The extent of control which the investigator has over actual behavioral events.
- The degree of the focus on contemporary as opposed to historical events.
- Relevant Situation for Different Research Strategies

Yin (2003) summarized the relationship between each condition and five different strategies as shown in Table 3.2.

Research Strategy	Form of Research	Requires Control	Focus on
	Question	Over Behavioral	Contemporary
		System	
Experiment	How, why	Yes	Yes
Survey	Who, what, where,	No	Yes
	how many, how		
	much		
Archival Analysis	Who, what, where,	No	Yes/no
	how many, how		
	much		
History	How, why	No	No
Case Study	How, Why	No	No

Table 3.	2:Relevant	situation	for	different	research	strategies
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Source: Yin, (2003)

The strategy to be used depends on the stated research questions. According to Yin (2003) the common questions stated are who, what, when, where, how and why. The researcher can take advantage of experimental, case study and historical study when how and why questions are being used. He further outlined that the basic rationale for using a case study is to assemble information as comprehensively and systematically about the selected case firm. The advantage of a case study research approach is its ability to provide rich descriptive detail, conveying it like it is and to experience an organization or event or problem from an inside point of view. Moreover, Yin (2003) propounded that a case study approach also allows the discovery of grounded theory and the comparison of existing theory and literature with what is obtained on the ground or reality.

#### 3.6.1 Surveys

A survey is where a sample of subjects or elements are drawn from a population and studied in order to make inferences about the whole population (Canhao and Keogh, 2000). Similarly, Nesbary (2000) and Canhao and Keogh (2000) defined a survey as the process of collecting representative sample data from a large population and infer the attributes of the entire population using this sample. They further noted that descriptive survey and analytical survey are the available types of survey researches. From the above definitions, it can be concluded that using a representative sample, it is possible to use statistical techniques to demonstrate the likelihood that the characteristics of the sample will also be found in the population. A descriptive survey is concerned with identifying and counting the frequency of a specific population either at one point in time or at various times for eventual comparison. Such surveys are common for political elections but are also frequently adopted in business research involving attitude surveys (Canhao and Keogh, 2000). An analytical survey is where the intention is to determine the existence or non-existence of a relationship between different variables (Canhao and Keogh, 2000). Identification of the independent, dependent and extraneous variables is important in this method. As such, the researcher adopted the survey approach as it enabled the researcher the opportunity to use a sample to make inferences about all CBZ Bank customers on their perceptions of electronic banking.

#### 3.6.2 Cross-Sectional Studies

This methodology is designed to obtain information on variables that are in different contexts at the same time (Saunders et al. 2009). Different populations are randomly selected and a study is conducted simultaneously to ascertain how factors differ in the selected variable. Cross-sectional studies are conducted when there are constraints of time resources. Data is collected once over a short period of time before it is analysed and reported. This approach is often used to investigate characteristics of large numbers of people or organisations. The main limitation of this approach is that it does not explain why a correlation exists. It is an inexpensive method and is conducted simultaneously so that a single occurrence of phenomena is measured in separate populations. As such, there is no chronological order of results.

#### 3.6.3 Longitudinal Studies

According to Stebbins (1992) a longitudinal study is based on a primarily qualitative approach. A distinctive feature of this approach is that there is a chain of studies. Each link in the chain is an examination or re-examination of a related group or social process or an aspect of a broader category of groups.

## 3.6.4Experiments

According to Canhao and Keogh (2000) experiments are tests which are conducted in a laboratory or natural environment in a systematic way. They include testing the effects of one variable on the other. Such designs arenormally employed in hard sciences and engineering because of the effect of one variable to be seen on another. All extraneous variables should be held constant so that the effects are only attributed to the variables being tested. The benefit of this research approach is that experiments are conducted in a real life situation. Thisimplies that they avoid many of the draw backs of laboratory experiments especially artificiality.

#### 3.6.5 Grounded Theory

Nachimias and Nachimias (1996) defined grounded theory as a systematic method of conducting research that begins with an inductive approach. It then moves on to simultaneous data collection and analysis which consists of several flexible guidelines. The methodology was pioneered by Glaser and Strauss (1967) in the medical field but has now been applied in many research disciplines.

#### 3.6.6 Action Research

Saunders et al. (2003) argued that action research is an approach which assumes the research is part of the ever changing social environment. It is a type of applied research designed to find an effective way of bringing about a conscious change in a partly controlled environment. They furthernoted that this research approach is designed and conducted by practitioners who analyze the data to improve their own practice through iteration and reiteration. This research approach was not employed in this research.

#### 3.6.7Case Study

Yin (2003) defined a case study as an inquiry that investigates a contemporary phenomenon within its real life situation, especially when the boundaries between phenomenon and context are not clearly evident. It focuses on understanding the dynamics of the present within single setting and documents evidence of particular issues, symptoms, reactions and conclusion drawn from the study.

According to Yin (2003), case studies can be categorized into four classes;

- (i) Descriptive case studies
- (ii) Exploratory case studies
- (iii) Illustrative case studies
- (iv) Experimental case studies

The main strength of a case study is its ability to provide rich descriptive detail and conveying a feeling of what it is like to experience an organization problem from the inside. Case studies allow discovery of groundedtheory and the comparison of existing literature and theory with what actually happens in reality (Bonoma, 1985). Burns (2000)

highlighted that in a case study the researcher can probe deeply and simultaneously undertake intensive analysis of the case subject. However the major limitation of the case study approach relates to its narrow focus. As such, the unrepresentativeness of the study units makes it difficult to make generalizations about the population (Isaac and Michael, 1995). There is high possibility that the generalizations can be manipulated to suit personal views, agendas or settle vendettas. Moreover, case studies are considered as subjective because the investigator maybe selective in interpreting results and making conclusionsthat may not be easily checked or verified (Tapererwa, 2009). This study used CBZ Bank as a case study to investigate why bank customers in Zimbabwe are not utilizing electronic banking delivery channels.

## **3.7POPULATION AND SAMPLING**

#### 3.7.1 Population

Wegner (2007) defined a population as every object which possesses data on research phenomenon under study. A population can also be defined as the totality of all elements under investigation (Field, 2009). Where it is not possible to reach the entire population, a sample is then drawn from the target population for purposes of making statistical inferences or generalizations about the target population. The research population for this study consists of all CBZ Bank customers from the 18 branches in Harare who are registered as users of electronic banking delivery channels. As such, the target population for this study includes individual clients, bank employees (managers, tellers), SME clients and corporate clients.

#### 3.7.2 Sample Size

Zikmund (2003) defined sampling as the process of using a small number of units or elements of a bigger population to make general conclusions about the whole population. The target populations for this study are CBZ customers who are registered as users of electronic banking delivery channels. The study used a sample size of 300 CBZ Bank customers from Harare branches. The sample size of 300 was chosen as it allowed reasonable statistical representation of the electronic banking users. The sample was broken down as follows; 150 individual customers, 50 corporate clients, 50 SME clients, 20 bank tellers, 15 client relationship managers (CRM) and 15 bank managers.

## 3.7.3Sampling Methods

Sampling methodology refers to the methods used to select the units of analysis for a research. The sampling methods can be broadly categorized as probability or non-probability sampling. Non-probability sampling involves the probability of any particular unit being chosen while probability sampling exposes every element to an equal chance of being selected (Molapo, 2008). Taking into consideration the discussion on non-probability and probability sampling methods and the objectives of this study, this study used stratified sampling approach since the target population is clearly segmented into stratum. Stratified sampling allows representation of sampling especially in situations that involve stratified strata or sub groups (Field, 2009; Wegner, 2007). The sampling units for this study were classified as bank managers, customer relationship managers, bank tellers, SME clients, corporate clients, individual clients as shown in Table 3.3.

Stratum	Sample size
Bank managers	15
Customer relationship managers	15
Bank tellers	20
SME clients	50
Corporate clients	50
Individual clients	150
Total sample	300

Table 3	3:Sample	Distribution
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## 3.8DATA SOURCES

The study used both primary and secondary sources of data.

#### 3.8.1 Primary Data

Primary data refers to data that is collected from the source of data for a specific research project. Saunders et al. (2009) defines primary data as data generated for the first time and for a specific purpose or research at hand. The use of primary data offers researchers a high degree of data accuracy. However, the major challenge with primary data is that it is expensive to collect in terms of time and money.

#### 3.8.2 Secondary Data

Secondary data refers to data collected and processed for a purpose other than the one at hand. This data could either be raw or published summaries which could be qualitative or quantitative (Saunders et al. 2009). The data can be used for exploratory or descriptive studies. Furthermore, secondary data can be used as a valid basis for testing and interpreting hypothesis. The major advantage of secondary data is that it is already available and thus can be accessed with minimal or no additional costs. In most cases, secondary data is collected for a specific research problem and thus may be less useful to the current research. Examples of secondary data sources include textbooks, journal articles, annual reports, reports, internal bulletins and price lists. Journal articles which helped the researcher in developing the contextual framework for this study were from other countries.

#### 3.8.3Interviews

Data collection was done through face to face interviews from personal account holders. Face to face interviews accord the researcher the opportunity to explain and probe issues. The main advantage of face to face interviews is that there is a high response rate. Self-administration was used to collect the data from corporate clients, SMES, bank managers and bank tellers. The reason behind this approach is that this stratum is literate and busy during working hours.

#### 3.8.4Questionnaire

According to deVaus (2002) cited in Saunders et al. (2009) a questionnaire is a data collection technique in which each respondent is asked to respond to the same set of questions in a predetermined order. Zikmund (2003) noted that a good survey is a result of the questions that it asks, hence the design of a questionnaire is a very critical stage in a research process. The questionnaire must be relevant and precise in trying to address the essence of research objectives. The researcher must therefore decide questionnaire enables the researcher to collect data from a large sample prior to quantitative analysis. This study used a questionnaire with structured and unstructured questions to collect customers' perceptions of electronic banking delivery channels.

The questionnaire used in this study was divided into 3 sections. The first section consists of the respondent's demographic profile and electronic banking usage. The second section consists of 42 questions, six questions on perceived security, six on perceived trust, three on perceived quality of connection, six on perceived quality of service, three on perceived access, four on perceived convenience, two on perceived cost, three on perceived communication, three on perceived usefulness and three on attitude. The last section has two unstructured questions on challenges encountered by respondent on electronic bank usage and recommendations for improving the usage of electronic banking delivery services. These questions were developed with guidance from the following studies; Dixit and Datta (2010); Molapo (2008); Kaleem (2008); Lallmahamood (2007) and Srivastava (2007). The research used Likert scales and the respondents were asked to indicate their attitude by checking how strongly they agree/ disagree with carefully constructed statements that ranged from very negative to very positive towards the attitudinal object. As noted by Schmidt and Hollensen (2006), Likert scales are widely used for researches that require respondents to indicate their disagreement or agreement with each of the statements about the stimulus objects. The researcher conducted a pretest to establish the relevance and accuracy of the research tool in capturing the essence of the research objectives. Thirty questionnaires were printed and distributed to CBZ Bank Selous branch. Respondents for the pre-test were

randomly picked customers from CBZ Bank's Selous branch and customers from this branch were excluded from the final survey to avoid interviewing the same respondents.

#### **3.9DATA ANALYSIS**

Data collected in this research was entered and analysed in Statistical Package for Social Scientists (SPSS). Descriptive statistics (frequencies, percentages and means) are presented in tables. Likert scale rankings were presented as percentage of responses. Factor analysis was used to find the factors influencing the users' perceptions of electronic banking delivery channels.

#### 3.9.1 Cronbarch Alpha Test

The Cronbarch Alpha Test is a statistical measure that is used to test the internal validity or homogeneity of the survey (Anthony, 2011). It checks whether the proportion of variability in the survey responses is a result of differences in responses and not confusion in interpreting the questions. When the value of Alpha is close to zero, it implies that the questions are not addressing the same issue; values close one show that questions are addressing the same issue. Values between 0.7 -0.8 are generally acceptable as adequate (Field, 2009). The researcher used the Cronbach Alpha test to test the consistency of questions under each variable prior to data analysis.

#### 3.9.2 KMO Testand Bartlet's Test of Sphericity

The Kesier-Meyer-Olkin Measure of sampling adequacy is used for comparing the magnitude of observed correlation coefficient in relation to the magnitude of the partial correlation coefficients (Anthony, 2011; Filed, 2009;). The measure explains whether correlations between variables can be explained by other variables. As such, a KMO value greater than 0.5 indicates that correlations between variables can be explained by other variables can be explained by other variables. In such a scenario, one can proceed to do factor analysis. However, when the KMO value is below 0.5, then the correlations between variables cannot be

explained by other variables. This renders factor analysis impossible. The researcher conducted a KMO and Bartlet test to validate the data for factor analysis.

The Bartlet's test of Sphericity is used for testing the hypothesis that the correlation matrix is an identity matrix, that is, all diagonal items are ones while the non-diagonal items are zero (Anthony, 2011; Field, 2009). The decision rule for the Bartlet's Test of Sphericity indicates that at a significance level of 0.05, the variables are perfectly correlated with themselves and have some level of correlation with other variables so that they can be part of the same factor.

## 3.9.3 Factor analysisprincipal component analysis

Factor analysis is a statistical procedure which relies on the Principal Component Analysis Extraction approach to identify a small number of factors that can be used to represent a relationship among a set of interrelated variables (Anthony, 2011). It explains the variance-covariance structure through a number of linear combinations of original data that is; it identifies the otherwise not so directly observable factors on the basis of a set of observable variables (Marston, 2010). The purpose of conducting factor analysis using the principal component extraction process with Varimax rotation was to reduce the data (data reduction), reveal relationships that would not otherwise have been suspected and to guide interpretation that would not have ordinarily resulted. Factor analysis relies on the communality values, Eigenvalues and the factor components to either drop or keep a dimension of an attribute. The communality of a variable shows the proportion of variance accounted for by the common factor of a variable while Eigenvalues refer to total variance explained by each factor (Marston, 2010). As such, any factor with an Eigenvalue which is less than one does not have wellenough total variance to represent a unique factor. Lastly, principal components used in factor analysis display linear combinations of observed variables that account for the variance in the sample. The decision rule for factor analysis is that a variable is retained if its communality value is greater than 0.5, Eigenvalue is greater than one and its factor loading is above 0.7 (Field, 2009).

## **3.10RELIABILITY AND VALIDITY**

#### 3.10.1 Reliability

Reliability refers to the extent to which the repeated measurements (interviews) made on the same materials (respondents) by the same measuring instruments (interviewer) would yield the same result. Easterby-Smith et al. (2002) define reliability as the extent to which data collection techniques or analysis procedures will yield consistent findings. Reliability can be assessed by posing the following questions:

- 1. Will the measures yield same results on other occasions?
- 2. Will similar observations be reached by other observers?
- 3. Is there transparency in how sense was made from raw data?

According to Robson (2002) cited in Saunders et al. (2009), there are four threats to reliability namely participant error, participant bias, observer error and observer bias. Subject or participant error occurs when different results are obtained from similar observations at different times. This can be corrected by choosing neutral times for conducting the research. Subject or participant bias occurs when the respondents tell the researcher what they think the researcher wants them to say. This normally happens when there is fear of reprisals or insecurity after giving a particular answer. Observer error ensues when there are different ways of asking the same questions. This error can be overcomed by highly structuring the questionnaire. The last threat to reliability is observer bias. Observer bias occurs when there are different ways of interpreting the same replies and the interviewer prefers one way. The study used the Cronbach Alpha to test for the consistency of responses that is; are the differences in responses a result of differences in respondents and not multiple interpretations of the same questions.

#### 3.10.2 Validity

Validity is concerned with whether findings are really about what they appear to be about, that is, closeness to the truth which one is trying to ascertain (Saunders at al. 2009). There are several threats to validity namely history, testing, mortality, maturation and ambiguity about causality direction. The threat of history occurs when respondents give replies to a subject matter based on preceding events to a particular situation. As such, the results become biased as respondents put emphasizes on preceding events of the subject matter instead of a level judgment. Testing happens when respondents condition their replies if they feel that the research results may negatively affect them. Instrumentation occurs when there are unintended effects as a result of following instructions. Mortality occurs when participants drop out of the study. Maturation threat to validity occurs when certain events in a particular period end up affecting behavior in the long run. Ambiguity in direction of causality occurs when the researcher is not certain about what causes what. This study is not affected by mortality, maturation and ambiguity of direction of causality. However, the researcher used the KMO and Bartlet's Test of Sphericity to test if there are correlations between the dimensions under each attribute. These tests were used to test for the validity of the data for Factor analysis.

## **3.11RESEARCH ETHICS**

Cooper and Schindler (2008:34) define ethics as norms or standards of behaviour that guide moral choices about our behaviour and our relationship with others. In conducting research work, ethics require us to formulate, collect, analyze and report research findings in a moral and responsible way. The researcher considered the following ethics during the research process;

#### 3.11.1 Informed Consent

This principle states that the potential respondent has a right to decide on whether or not to participate in the research. The respondent must make a free choice and the decision must be reached without coercion or under influence. The potential respondent has a right to know who the researcher is, why the researcher is doing the study, why the researcher needs that information, how the information will be used and their right to confidentiality. The potential respondents were informed of the purpose of the study and how the information collected would be used through the researcher's introductory letter.

## 3.11.2 Privacy and Confidentiality

The researcher must preserve the confidentiality of respondents by not disclosing any information that could lead to distress or social harm. The researcher established safeguards that ensured that the participants will not be identified. For instance the researcher did not ask for the respondent's names or account numbers of the respondents in the questionnaire to ensure the privacy of the respondents. The researcher also ensured that all information obtained from respondents was handled with confidentiality.

## **3.12CHAPTER SUMMARY**

This chapter discussed the methodological aspects that include research design, research strategy, sampling, data sources, research instruments, data credibility (reliability and validity), data analysis and research ethics. The chapter gives a minor review of literature on the methodological concepts and provides reasons for the adequacy and relevance of the research design adopted for this study. The next chapter presents the results of the study.

# CHAPTER FOUR RESEARCH PRESENTATION, ANALYSIS AND DISCUSSIONS

## **4.1 INTRODUCTION**

This chapter presents the empirical results of the study on customers' perceptions of electronic banking delivery channels. The estimation, presentation and interpretation of results is based on the methodology articulated in the preceding chapter.

## 4.2 RESPONSE RATE

The descriptive statistics presented in this chapter is based on 237 respondents. The survey targeted 300 respondents but out of the 300, 250 were received constituting. However, upon checking the questionnaires the researcher discarded 13 questionnaires that were unsatisfactorily completed hence unusable. This means that the response rate for the study is 79 percent.

# **4.3RELIABILITY ANALYSIS**

Cronbach Alpha	Cronbach's alpha based on standardized items	No. of items
0.950	0.951	43

Prior to data analyses, a reliability test using the Cronbach Alpha test was conducted on eleven attributes (43 dimensions) of electronic banking to test the validity of the questionnaire that is do the variables measure the same dimensions of the customers' perceptions of electronic banking. The results in Table 4.1 show that the value of the Cronbach Alpha is 0.950. Given that the recommended correlation coefficient for Cronbach test is between 0.6-0.99 (Field, 2009) the results in Table 4.1 imply that the

dimensions in the questionnaire are highly reliable and the entire test is internally consistent for using data for this study.

## 4.4DEMOGRAPHIC INFORMATION OF RESPONDENTS

This section presents the socio demographic characterization of the survey respondents. The variables considered in the profiling of respondents are gender, age group, marital status, educational level, gross monthly income, employment status and the level of computer literacy.

Variable	Number of respondents (n)	% of respondents
Gender, n=237		
Female	105	44
Male	132	56
Total	237	100
Age in years, n=237		
21-25	38	16
26-30	57	24
31-35	70	30
Above 35	72	30
Total	237	100

 Table 4. 2: Sample demographic information:

The demographic results in Table 4.2 show the profile of the respondents. The results show that the number of male respondents (56%) is higher than the number of female respondents(44%). Despite there being a higher proportion of males amongst the

survey respondents, study findings show that there is low usage of electronic banking channels by CBZ Bank customers. This result is contrary to the findings of Srivastava (2007) Dixit and Datta (2010) who noted that males are more likely to be electronic banking users than females. The summary statistics for age show that a large pool of the respondents (30%) is above the age of 35 years while 30 percent are in the 31-35 years age group. Another 24 percent are in the 26-30 years age group while the remaining 16 percent are in 21-25 years age group. The dominance of the above 35 years in the age has negative implications for adoption and usage of electronic banking delivery channels. The probable explanation of this trend is that their lives and work environment are not heavily influenced by information communication technology compared to those below 35 years who are always looking for low cost and convenient banking solutions. This is in line with the results of Hill (2004) and Dixit and Datta (2010) who observed that the younger customers use electronic banking more compared to older customers.

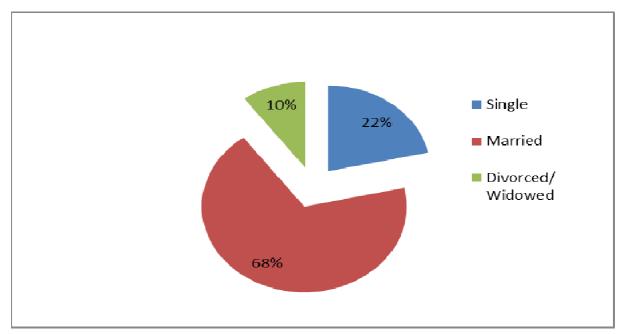


Figure 4. 1:Respondent's marital status

Of the surveyed respondents, the analysis in Figure 4.1 show that most of the respondents (68%) are married while 22 percent are single and 10 percent are either divorced or windowed.

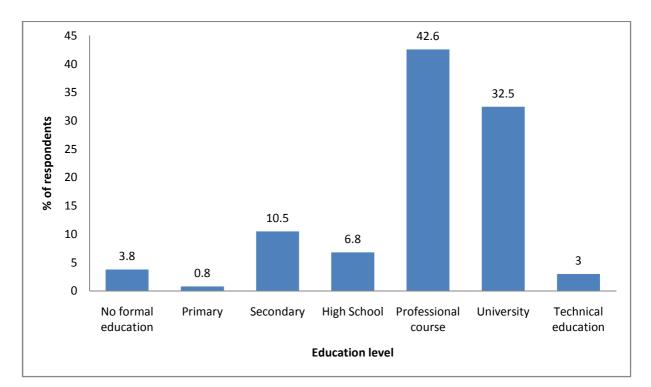
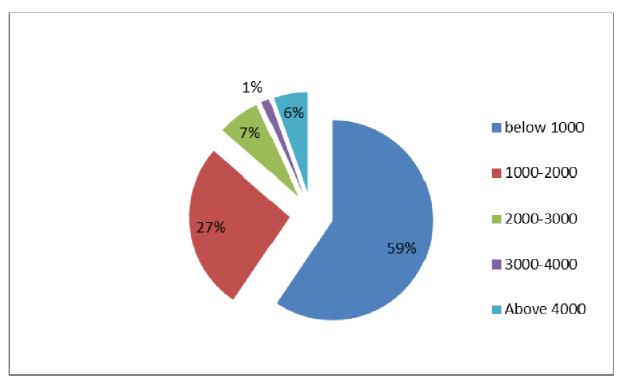


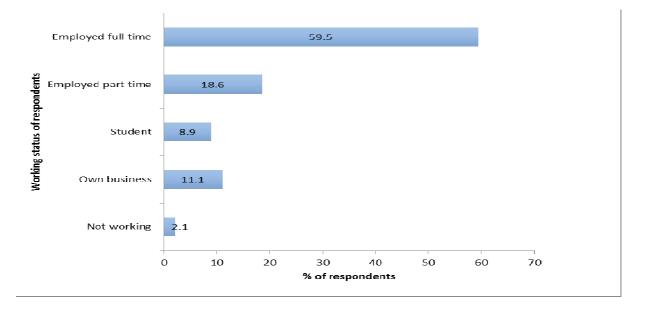
Figure 4. 2:Respondent's level of education

The results displayed in Figure 4.2 show that of surveyed respondents, 3.8 percent have no formal education, 0.8 percent have primary education, 10.5 percent have secondary education while 6.8 percent have high school education. Respondents that have professional education were 42.6 percent while those with university education were 32.5 percent. Only 3 percent had technical education. These results imply that most of the respondents are literate and can understand issues related to electronic banking in their financial transactions.Despite the high level of education, results show that there is low usage of electronic banking by CBZ Bank customers. These results are contrary to Srivastava (2007); Dixit and Datta (2010) and Gerrad et al. (2006) who noted that learned customers are more likely to use electronic banking compared to their counterparts.





Gross monthly income for the surveyed respondents shown in Figure 4.3 ranged from belowUSD1 000 to above USD4 000 per month. Out of the surveyed respondents, 59 percent have a gross monthly income which is below USD1000, 27 percent fall between USD1 000-2 000, 7 percent are between USD2000-3 000, 1 percent are between USD3 000-4 000 and the remaining 6 percent are above USD4 000. Since CBZ Bank is a major bank for the government and most government ministries, most of its customers are thus civil servants. Given that most of the civil servants among other workers in various sectors earn gross monthly salaries that are way below USD 1 000, it implies that they are thus less likely to use electronic banking. This is consistent with the findings of Srivastava (2007) and Flavian et al. (2006) who noted that most electronic banking users have high incomes.



## Figure 4. 4:Respondent's working status

The analysis in Figure 4.4 presents the survey respondents' employment status and level of computer literacy. The majority of the respondents (59.5%) are employed full-time, 18.6 percent are employed part-time, 8.9 percent are students, and 11.1 percent are self-employed or own business while the remaining 2.1 percent are out of employment.

Level of computer literacy	Frequency (n)	% of respondents
Do not know how to use a		
computer	12	5
Beginners	46	19
Advanced	151	64
Expert	28	12
Total	237	100

Table 4. 3:Respondents' level of computer literacy

The results in Table 4.3 show that most of the survey respondents (64%) have advanced knowledge of computers, 19 percent are at the beginner's level and

12percent are experts while 5 percent do not know how to use a computer. Since the majority of the survey respondents have advanced knowledge of computers, it implies that they are more likely to use electronic banking as they understand issues to do with financial transactions on electronic banking. However, the study findings are contrary to the results of Srivastava (2007) and Dixit and Datta (2010) who observed that customers with high levels of computer literacy are more likely to use electronic banking.

Method of banking	Frequency (n)	% of respondents
Visit branch	71	31
ATMs	65	29
Point of sale	38	17
Internet banking	39	17
Telephone banking	15	6
Total	237	237

Table 4. 4:Respondent's pre	eferred method of banking
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Results in Table 4.4 show that most CBZ Bank customers (31%) prefer the brick and mortar branch banking, 29 percent prefer ATMs, 17 percent prefer Point of Sale, and 17 percent prefer internet banking while 6 percent prefer telephone banking. These results imply that CBZ Bank is likely to have long queues as most of their customers prefer brick and mortar banking as compared to electronic banking.

Period in years	Frequency (n)	% of respondents
Less than a year	21	9
1-3 years	75	32
4-5 years	48	21
6-7 years	22	9
Over 7 years	67	29
Total	233	100

Table 4. 5:Number of years which respondent has been a CBZ Bank customer

The descriptive analysis in Table 4.5 displays the number of years the surveyed respondents have been customers of CBZ Bank. The results indicate that 32 percent of the respondents have operated an account with the bank for a time period of between 1 to 3 years, 29 percent for over 7 years, 21 percent between 4 and 5 years, 9 percent between 6 and 7 years and 9 percent have operated an account a period less than a year. Since the majority of the customers have been account holders for between 1-3 years, these customers are less likely to have developed enough confidence about the security, reputation and trust of CBZ Bank's electronic system. As such they are more likely to use branch banking compared to those who have been customers for a longer period.

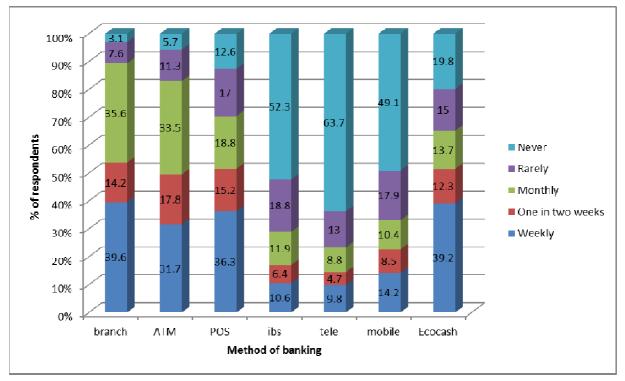




Figure 4.5 indicates that out of the surveyed respondents who indicated that they use branch banking,39.6 percent of the respondents use the branch banking weekly. This implies that despite the presence of electronic banking, most CBZ Bank customers still prefer to use the branch for their financial transactions. Results for the frequency of using ATM services show that out of the surveyed respondents, 33.5 percentuse ATMs on a monthly basis. This implies that most of CBZ Bank customers do not frequently use ATMs. Out of the surveyed respondents, 36.6 percentwho use POS, use it on a weekly basis mainly for shopping. Interestingly, the majority of the surveyed respondents (52.3%) have never used internet banking services by CBZ Bank customers. Telephone banking is the least used electronic banking channel as the majority of the respondents (63.7%) have never used it and only 17.9 percent of the respondents on a weekly basis while only 19.8 percent of the respondents have never used it. This implies that usage of electronic banking by CBZ Bank customers is very

low. The results also show that CBZ Bank customers are increasingly using Ecocash more than any other form of electronic banking.

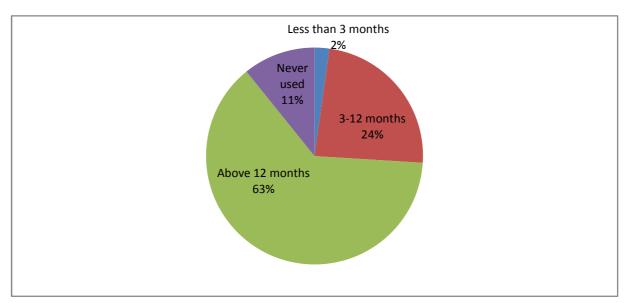


Figure 4. 6:Number of years respondent has been using electronic banking

The results in Figure 4.6 show that 2 percent of the survey respondents have used electronic banking for less than three months, 24 percent have used it for a period that is between 3 and 12 month while 63 percent have used electronic banking for more than 12 months. However 11 percent have never used electronic banking. Since the results show that the majority of the customers have used electronic banking for at least twelve months, this implies that the customers have an appreciation of how CBZ Bank's electronic banking platform. As such, their experiences during the usage of electronic banking haveeither a positive or negative influence on their future use.

Source of information	Frequency (n)	% of respondents
Relative/Friend	141	60
Bank advertising	78	33
Bank employee	18	7
Total	237	100

Table 4. 6:Source of information about electronic banking

The results in Table 4.6 show that customers who are aware of the existence of electronic banking got the information from relatives or friends, bank advertising and bank staff. Out of the 225 respondents 60 percent got the information from relatives or friends, 33 percent got the information from bank adverts while 7 percent got the information from bank employees. These results show that the majority of CBZ Bank's electronic banking customers got information on electronic banking through positive word of mouth from either friends or relative, hence the need to increase awareness through bank advertisements to increase usage.

Type of service	% of respondents
Balance enquiry	22
Mini statement	52
Marketing services	5
Download or print statement	5
Interbank transfers	3
Internal transfers	7
Utility bill	3
Other payments	3
Total	100

#### Table 4. 7: Main service accessed on electronic banking

Table 4.7 shows the results for the main service used by respondents. Results in Table 4.7 indicate that 22 percent of the surveyed respondents use electronic banking for balance inquiry, 52 percent uses it for mini-statement, 5 percent for marketing, 5 percent to download or print statements, 3 percent for executing interbank transfers, 7 percent for internal transfers, 3 percent for utility bill payments while 3percent use it for other payments. These results show that since the majority of the customers only use electronic banking for either mini-statement or balance enquiry, their lack of trust in the security system, slow speed of connection, lack of knowledge on usefulness of electronic banking makes them prefer branch banking when conducting other financial transactions such as transfers. This implies that despite the availability of low cost electronic banking delivery channels, most customers will use branch banking.

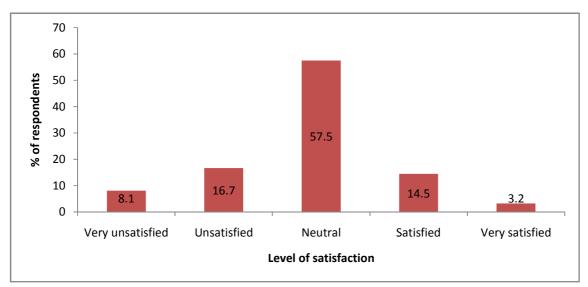


Figure 4. 7:Respondent's level of satisfaction with electronic banking services

Figure 4.7 shows the satisfaction level of CBZ Bank customers with electronic banking. The results show that the majority of electronic banking users are indifferent about the level of satisfaction that they drive from using electronic banking (57.5%), 8.1 percent are very unsatisfied, 16.7 percent are unsatisfied, and 14.5 percent are satisfied while 3.2 percent are very satisfied. This implies that most of CBZ Bank electronic banking customers are neither satisfied nor dissatisfied with electronic banking services. As such they are less likely to use electronic banking.

# 4.5RATING OF CUSTOMERS' PERCEPTIONS OF ELECTRONIC BANKING DELIVERY CHANNELS

This section presents the customers' rating of different dimensions or aspects on the customers' perceptions of security, trust, quality of connection, access, service quality, perceived ease of use, perceived usefulness, cost, convenience, communications and attitude. The mean scores are based on a five point Likert scale ranking of responses with value of (1)-strongly disagree to (5) strongly agree.

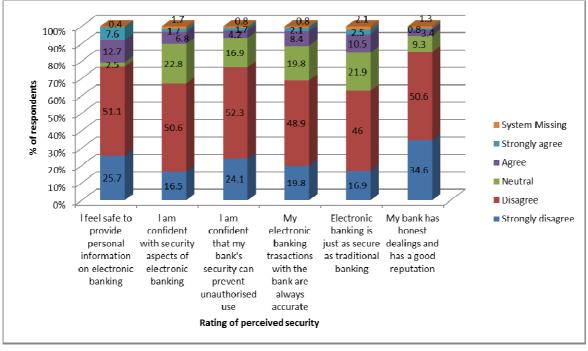


Figure 4. 8:Rating of customers' perceived security

As can be seen in Figure 4.8, security is a key factor affecting usage of electronic banking. The results show that 51.1 percent of the customers disagreed with the view that they feel safe to provide personal information on electronic banking, 50.6 percent disagreed that feel confident with the security aspects of the electronic banking, 52.3 percent disagreed that they feel confident that the bank provides enough security to prevent unauthorized use, 48.9 percent disagreed that electronic banking transactions with the bank are always accurate, 46 disagreed that electronic banking is as secure as traditional banking and 50.6 percent disagreed that CBZ Bank has honest dealings and has a good reputation with respect to electronic banking issues. These results imply that CBZ Bank's electronic banking users are influenced more by security of their transactions. These results are consistent with the findings of Howcroft et al.(2012); Hassan et al. (2012);Dixit and Datta(2010); Mavri and Ioannou (2006); Yousafzaiet al.(2003); and Enos (2001) who noted that security is a major factor influencing use of electronic banking channels.

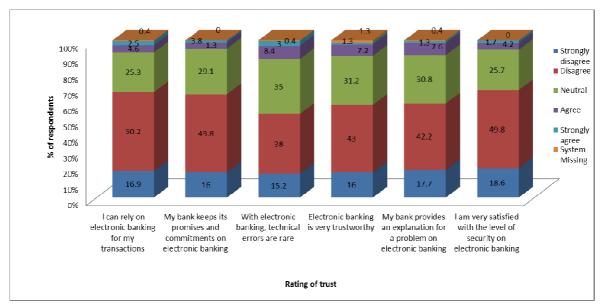


Figure 4. 9:Rating of customers' perceived trust

As can be seen in Figure 4.9, the majority of the respondents (50.2%) disagreed with the view that they can rely on electronic banking for their financial transactions, 49.8 percent disagreed that CBZ Bank keeps its promises and commitments on electronic banking, 38 percent disagreed that technical errors are rare with electronic banking, 43 percent disagreed that electronic banking is very trustworthy, 42.2 percent disagreed that CBZ Bank provides explanations for errors on electronic banking transactions while 49.8 percent disagreed that they are satisfied with the level of security on electronic banking. These results show that trust is a very key factor in influencing customers' usage of electronic banking. These results are consistent with the findings of Cho et al, (2007), Dixit and Datta (2010)andHassan et al. (2012) who believed that trust affects customers' usage of electronic banking channels.

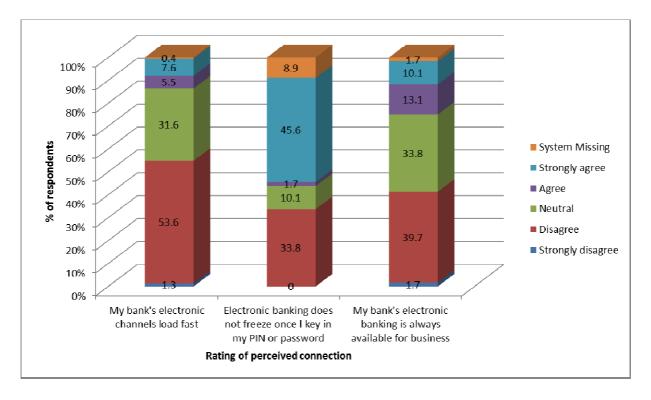


Figure 4. 10:Rating of perceived connection

Figure 4.10 shows that amongst the three dimensions of perceived quality of connection which the respondents rated, the majority (53.6%) disagreed with the view that CBZ Bank's electronic banking channels load fast, 45.6 percent strongly agreed that the electronic banking delivery channels do not freeze once the customer has keyed in his or her personal identification number and 39.70 percent disagreed that CBZ Bank's electronic banking is always on line. These results indicate that quality of connection is a key issue in influencing usage of electronic banking and influence customers' usage of electronic banking. These findings are consistent with the findings of Fonchamnyo (2013) who noted that connection is a key determinant of usage of electronic banking.

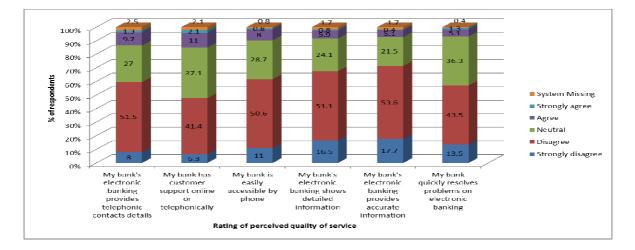


Figure 4. 11:Rating of quality of service

Results in Figure 4.11 show that among the six dimensions of perceived quality of service, the majority (53.6%) of the customers disagreed with the view that electronic banking provides accurate information, 51.5 percent disagreed that CBZ Bank's electronic banking provides telephonic contact details, 51.1 percent disagreed that CBZ Bank's electronic banking provides detailed transaction information, 50.6 percent disagreed that the bank is easily accessible by phone, 43.5 percent disagreed that the bank quickly resolves problems encountered on electronic banking and 41.4 percent disagreed that CBZ Bank has customer support staff on line or telephonically. These results suggest that the perceived quality of service is a major determinant of electronic banking usage. These findings are consistent with the findings of Molapo, (2008).

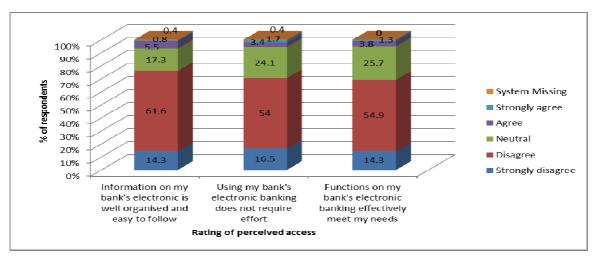


Figure 4. 12:Rating of perceived access

Figure 4.12 shows that most of the respondents (61.6%) disagreed that information on the bank's electronic banking is well organized and easy to follow, 54.9 percent disagreed that functions on the bank's electronic banking effectively meets their needs and the view that using electronic banking is effortless. The results demonstrate thatorganization of information on the electronic banking channel is a key dimension of perceived access and in turn influence usage of electronic banking. These research results are consistent with the findings of Fonchamnyo (2013) and Hassan et al. (2012).

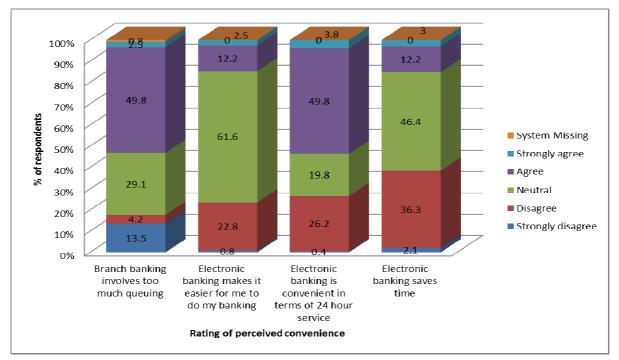
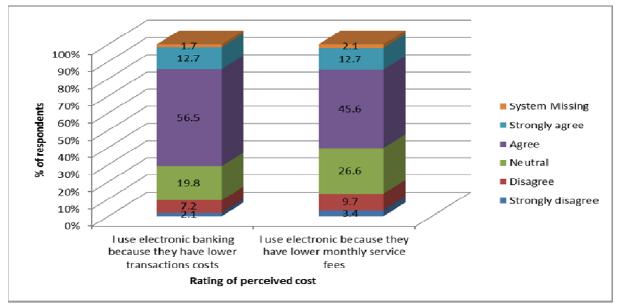
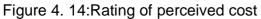


Figure 4. 13:Rating of perceived convenience

Results in Figure 4.13 indicate that the majority of the respondents (49.8%) agreed that branch banking involves too much queuing as most customers prefer branch banking. Interestingly, most of the respondents (61.6%), 49.8 percent agreed that electronic banking is convenient while and 46.4 percent were indifferent or neutral on their rating of dimensions of convenience that is electronic banking makes it easier for them to do banking, electronic banking is convenient in terms of 24 hour service and that it saves time. These results imply that although customers concur that branch banking involves too much queuing while internet banking saves time and is convenient, however,

theyend of using brick and mortar services due to security and trust concerns. These results contrast with findings from Nasri (2011),Gerrard and Cunningham (2003) and Eastin (2002) which show that electronic banking saves time, makes it easy to do banking and is convenient in terms of 24 hour service.





Respondents' rating of the two dimensions of perceived cost displayed in Figure 4.14 show that the majority (56.5%) agreed with the view that transaction costs on electronic banking channels are lower compared to those forbrick and mortar banking. Despite resoundingly agreeing that electronic banking has lower transaction costs, 45.6 percent of the respondents agreed that electronic banking has lower monthly service fees. These results indicate that one of the reasons why CBZ Bank customers use electronic banking is because of its lower transaction charges compared to over the counter transactions. This implies that holding other things constant, transaction costs have a major bearing on usage of electronic banking. As such, perceived cost affects usage of electronic banking. These results are consistent with the findings of Fonchamnyo (2013) and Garuba and Aigbe (2010).

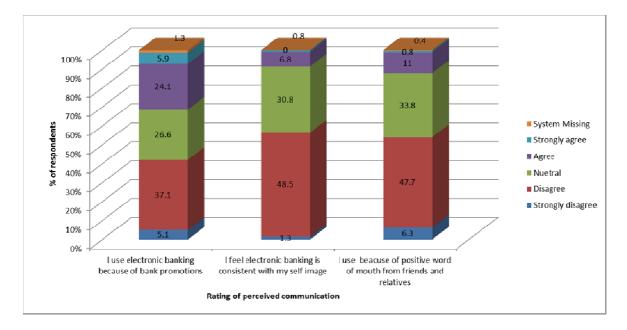


Figure 4. 15:Rating of perceived communication

As shown in figure 4.15, the majority of the respondents (48.5%) disagreed with the view that the electronic banking is consistent with their self-image, 47.7 percent disagreed that they use electronic banking because of positive word of mouth from either relatives or friends while 37.1 percent disagreed that they use electronic banking because of bank promotions. This implies that electronic banking appeals to the young and educated customers who align themselves with current trends in electronic banking. Furthermore, the results indicate that the bank's marketing of electronic banking is weak as most of the respondents who use electronic banking do so because of positive word of mouth. These results are consistent with the findings of Omar et al. (2011),Dimitriadis and Kyrezis (2010) and Gerrard et al. (2006).

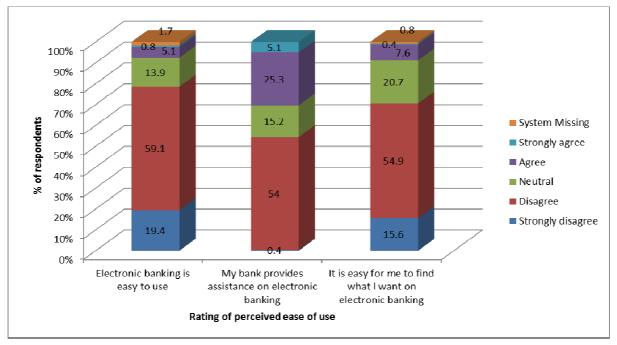


Figure 4. 16:Rating of perceived ease of use

The majority of the respondents (59.1%) as shown in Figure 4.16 disagreed with the view that electronic banking is easy to use and 54.9 percent disagreed that it is easy to find what they want on electronic banking while 54 percent disagreed with the view that CBZ Bank provides assistance on electronic banking. This shows the reason why CBZ Bank customers do not use electronic banking is that they perceive that it is not easy to use, the bank does not provide assistance and it is also not easy to find the functions that they want on electronic banking. However, these results imply that CBZ Bank has not been educating electronic banking users and does not provide support to new users. This has the implication of reducing both adoption by new users and usage by current users. These results are consistent with the findings of,Hernandez et al. (2007), Srivastava (2007),Jahangir and Begum (2008)and Dixit and Datta (2010) who noted that user friendliness affects customers' usage of electronic banking.

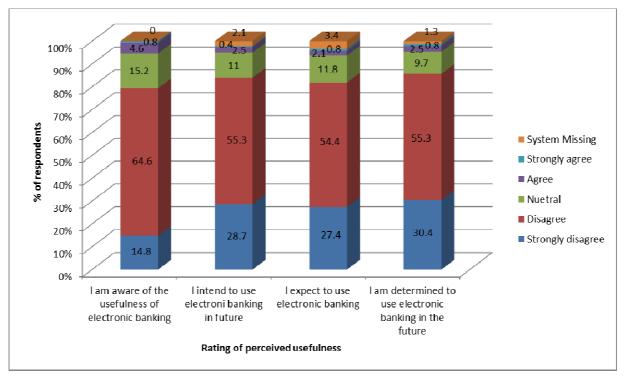


Figure 4. 17:Customers' rating of perceived usefulness

The high percentages in disagreement with the four dimensions of perceived usefulness as shown in Figure 4.17 indicate that one of the major factors affecting electronic banking usage is perceived usefulness. The majority of the respondents (64.6%) disagreed that they are aware of the usefulness of electronic banking, 55.3 percent disagreed that they intend to use electronic banking, 55.3 percent disagreed that they are determined to use electronic banking while 54.4 percent disagreed that they expect to use electronic banking. These results show that most of the customers are not aware of the usefulness of electronic banking in future. These results are consistent with the findings of Fonchamnyo (2013) on electronic banking.

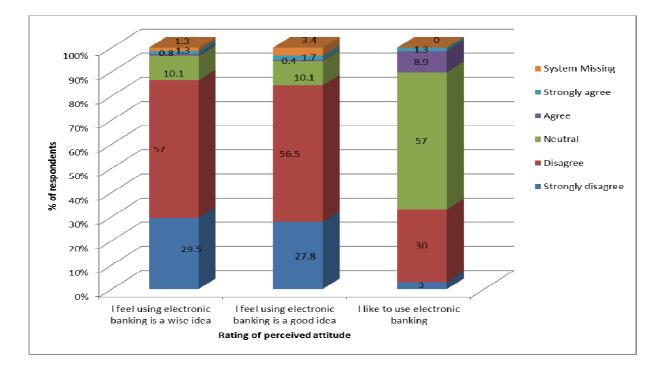


Figure 4. 18:Customers' rating of perceived attitude

As shown in Figure 4.18, the respondents have a very negative attitude towards electronic banking. The majority of the respondents disagreed that they feel that using electronic banking is not a wise idea and 56.5 percent disagreed that they feel that using electronic banking is a good idea. However, 57 percent are indifferent about the view that they like to use electronic banking. These results imply that when customers have a negative attitude about electronic banking, they are less likely to adopt it and would prefer branch banking. These results are consistent with the findings of Jahangir and Begum (2008).

#### **4.6FACTOR ANALYSIS**

The research used factor analysis of the multi-item variables to explain the variancecovariance structure through a number of linear combinations of original data. The purpose of conducting factor analysis using the principal component analysis extraction process with Varimax rotation was to reduce the data (data reduction), reveal relationships that would not otherwise have been suspected and to guide interpretation that would not have ordinarily resulted. The study adopted a measure of factor loading of 0.7 or greater to examine item reliability of all measures.

# 4.6.1 Keiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlet's test of Sphericity

Table 4. 8:KMO and Barlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.894
Bartlett's Test of Sphericity	Approx. Chi-Square	4950.457
	df	903
	Sig.	0.000

Prior to factor analysis, the researcher conducted two tests that is the Kaiser-Meyer-Olkin (KMO) measure of sampling Adequacy and Bartlett's Test of Sphericity to confirm the suitability of the data for Factor Analysis. The KMO test of sampling adequacy compares the magnitude of observed correlation coefficients in relation to the magnitude of the partial correlation coefficients. If the KMO value is less than 0.5, then the researcher should not proceed to do Factor analysis (Field, 2009). On the other hand, the Bartlett's Test of Sphericity tests the hypothesis that the correlation matrix is an identity matrix, that is, all diagonal terms are one and all off-diagonal terms are zero with a significance of less than 0.05. The results in Table 4.8 show that the KMO score is 0.894 while the Bartlett's test is significant at 1 percent. Since the decision rule for conducting factor analysis states that the score for the KMO Measure of Sampling Adequacy should be above 0.6 while the upper limit for significance of the Bartlett's Test of Sphericity is 5 percent. As such, the results in Table 4.9 indicated that the researcher could proceed to do factor analysis. A large KMO value indicates that the correlations between pairs of variables can be explained by other variables.

### 4.6.2 Communalities of the 43 variables

Table 4. 9:Communalities of the variables

Question	Initial	Extraction
c1.1 feel safe to provide personal information on electronic banking	1	0.746
c1.2 I am confident with security aspects of electronic banking	1	0.741
c1.3 I am confident that my bank provides security to prevent unauthorized use	1	0.793
c1.4 My electronic banking transactions with the bank are always accurate	1	0.682
c1.5 Electronic banking is just as secure as traditional banking	1	0.596
c1.6 My bank has honest dealings and has a good reputation	1	0.656
c2.1 I can rely on electronic banking for my transactions	1	0.682
c2.2 My bank keeps its promises and commitments on electronic banking	1	0.643
c2.3 With electronic banking, technical errors are rare	1	0.748
c2.4 Electronic banking is very trustworthy	1	0.743
c2.5 My bank provides an explanation for a problem on electronic banking	1	0.606
c2.6 I am very satisfied with level of security on electronic banking	1	0.708
c3.1 My bank's electronic channels load fast	1	0.576
c3.2 Electronic banking do not freeze once I key in my PIN or password	1	0.719
C3.3 My bank's electronic banking are always available for business	1	0.697
c4.1 My bank's electronic banking provide telephonic contacts details	1	0.709
c4.2 My bank has customer support online or telephonically	1	0.696
c4.3 My bank is easily accessible by phone	1	0.576
c4.4 my bank's electronic banking show detailed information	1	0.816
c4.5 My bank's electronic banking provide accurate information	1	0.683
c4.6 My bank quickly resolves problems which I encounter on electronic banking	1	0.534
c5.1 Information on my bank's electronic banking is well organized and easy to follow	1	0.653
c5.2 Using my bank's electronic banking does not require effort	1	0.679
c5.3 Functions on my bank's electronic banking effectively meet my needs	1	0.666
c6.1 Branch banking involves too much queuing	1	0.681
c6.2 Electronic banking makes it easier for me to do my banking	1	0.695
c6.3 Electronic banking is convenient in terms of 7days and 24 hour service	1	0.732
c6.4 Electronic banking saves time	1	0.783
c7.1 l use electronic banking because they have lower transactions costs	1	0.701
c7.2 I use electronic banking because they have lower monthly service fees	1	0.715
c8.1 l use electronic banking because of bank promotions	1	0.682
c8.2 I feel electronic banking is consistent with my self-image	1	0.618
c8.3 I use electronic banking because of positive word of mouth from friends and relatives	1	0.621
c9.1 Electronic banking is easy to use	1	0.525
c9.2 My bank provides assistance on electronic banking	1	0.62
c9.3 It is easy for me to find what I want on electronic banking	1	0.624
C10.1 I am aware of the usefulness of electronic banking	1	0.606
c10.2 l intend to use electronic banking in future	1	0.782
c10.3 I expect to use electronic banking	1	0.746
c10.4 I am determined to use electronic banking in the future	1	0.781
c11.1 I feel using electronic banking is a wise idea	1	0.801
c11.2 I feel using electronic banking is a good idea	1	0.828
c11.3 l like to use electronic banking	1	0.781
Extraction Method: Principal Component Analysis.		

Table 4.9 presents the results of the communalities of the 43 variables (questions) from the eleven attributes. Communalities are made up of initial values and the extracted values and they indicate the reliability of an indicator. A low communality of a given value indicates that the factor should probably be excluded from the instrument as the factor that it relates to cannot explain its variance. The extracted value in communality represents the percentage of variance in a given variable that is explained by the extracted factor. As shown in Table 4.9, the communalities for all dimensions of attributes are all above 0.50 which shows good and high correlation between variables and the factors. This implies that none of the questions should be dropped when conducting factor analysis.

Initial Eigenvalues			Extraction Su	ms of Square	ed Loadings	Rotation Sums	of Squared Lo	adings	
		% of	Cumulative		% of	Cumulative		% of	Cumulative
Factor	Total	Variance	%	Total	Variance	%	Total	Variance	%
1	14.444	33.591	33.591	14.444	33.591	33.591	5.545	12.895	12.895
2	3.609	8.394	41.985	3.609	8.394	41.985	4.017	9.342	22.23
3	2.119	4.928	46.913	2.119	4.928	46.913	3.573	8.309	30.54
4	1.825	4.244	51.156	1.825	4.244	51.156	3.091	7.189	37.73
5	1.614	3.755	54.911	1.614	3.755	54.911	2.992	6.958	44.692
6	1.450	3.373	58.284	1.450	3.373	58.284	2.526	5.875	50.56
7	1.233	2.867	61.151	1.233	2.867	61.151	2.403	5.587	56.15
8	1.185	2.755	63.906	1.185	2.755	63.906	2.070	4.814	60.96
9	1.117	2.599	66.505	1.117	2.599	66.505	2.066	4.805	65.77
10	1.072	2.493	68.998	1.072	2.493	68.998	1.387	3.225	68.99
11	0.960	2.234	71.232						
12	0.815	1.896	73.128						
13	0.787	1.831	74.958						
14	0.775	1.803	76.761						
15	0.679	1.580	78.341						
16	0.671	1.560	79.901						
17	0.614	1.427	81.328						
18	0.593	1.379	82.707						
19	0.582	1.354	84.061						
20	0.522	1.215	85.276						
21	0.507	1.180	86.456						
22	0.481	1.118	87.573						
23	0.433	1.007	88.581						
24	0.415	0.965	89.546						
25	0.399	0.928	90.474						
26	0.373	0.869	91.342						
27	0.352	0.818	92.160						
28	0.334	0.778	92.938						
29	0.318	0.739	93.677						
30	0.297	0.691	94.368						
31	0.291	0.678	95.046						
32	0.255	0.593	95.639						
33	0.243	0.564	96.204						
34	0.236	0.550	96.754						
35	0.216	0.503	97.257						
36	0.194	0.451	97.708						
37	0.181	0.420	98.128						
38	0.169	0.392	98.520						
39	0.166	0.387	98.907						
40	0.147	0.342	99.249						
41	0.141	0.327	99.576						
42	0.106	0.247	99.823						
43	0.076	0.177	100.000						

Table 4. 10:Total variance explained

Extraction Method: Principal Component Analysis.

Table 4.10 shows the Total Variance Explained which is used to determine the number of factors to extract. The Eigenvalue represents the total variance that is explained by each factor. When a factor has a low Eigenvalue, it means that, that particular factor explains less of the variance in the variable and can thus be removed from the instrument. As such, all factors with an eigenvalue of less than one are disregarded in the analysis as they do not have enough variance to represent a unique factor. Results in Table 4.10 show that factors one through ten are retained for the analysis while factors eleven through forty three are dropped because none of them has an Eigenvalue above or greater than one. This implies that as individuals none of these factors have enough total variance to stand as unique factors despite representing over 30 percent of the variation.

Component	1	2	3	4	5	6	7	8	9	10
1	0.473	0.412	0.379	0.345	0.281	0.245	0.289	0.231	0.241	0.100
2	-0.740	0.376	0.301	0.120	0.179	-0.307	0.070	0.226	0.030	-0.154
3	-0.113	0.016	-0.084	-0.322	0.821	0.304	-0.229	-0.175	-0.093	0.137
4	-0.059	-0.380	0.628	-0.474	-0.106	0.212	0.055	0.020	0.363	-0.204
5	0.305	-0.373	0.196	0.132	0.319	-0.647	-0.350	0.263	0.000	-0.002
6	-0.257	-0.580	0.160	0.523	0.100	0.292	0.254	0.030	-0.326	0.177
7	-0.106	-0.150	-0.169	0.040	0.141	-0.330	0.418	-0.406	0.572	0.375
8	-0.172	-0.078	-0.240	-0.090	-0.120	0.197	-0.212	0.665	0.321	0.506
9	-0.085	0.150	0.349	0.285	-0.212	0.089	-0.618	-0.433	0.118	0.362
10	0.078	0.135	0.303	-0.396	-0.114	-0.223	0.259	0.012	-0.500	0.589

Table 4. 11:Component Transformation matrix

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

The component transformation matrix in Table 4.11 shows how the retained factors correlate with each other. The weights for the positive and negative correlations are equal.

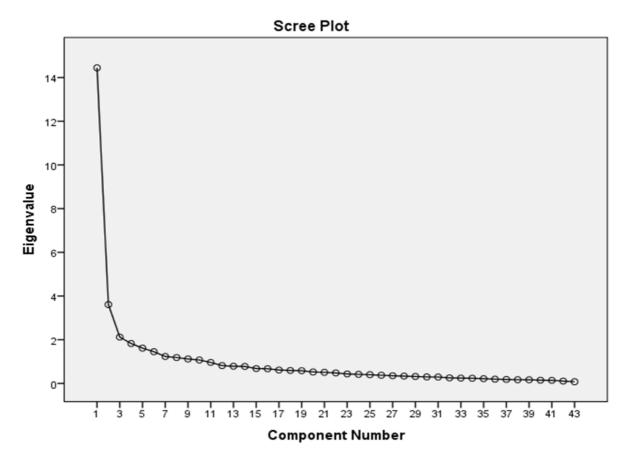


Figure 4. 19:Scree plot for dimensions of customers' perceptions

Figure 4.19 is a screeplot of total variance associated with each factor in the data. The scree plot indicates that although there are forty three dimensions in the data, only ten have an Eigenvalue above one. These ten factors are perceived security, perceived trust, perceived contact, perceived convenience, cost, perceived usefulness; attitude, efficiency and reputation affect usage of electronic banking. This implies that usage of electronic banking by CBZ Bank customers is influenced by these factors. These findings are consistent with the findings of Srivastava, (2007), Molapo (2008), Dixit and Datta (2010), and Fonchamnyo (2013).

#### Table 4. 12: Rotated factor Matrix

	Factor	•								
Measurement items	1	2	3	4	5	6	7	8	9	10
Perceived usefulness and Attitude										
C10.2 I intend to use electronic banking in future	0.83									
C10.3 I expect to use electronic banking	0.82									
C11.2 I feel using electronic banking is a good idea	0.82									
C11.1 I feel using electronic banking is a wise idea	0.80									
C10.4 I am determined to use electronic banking in the future	0.80									
C11.3 I like to use electronic banking	0.75									
Perceived Trust										
c2.3 With electronic banking, technical errors are rare		0.81								
Perceived security										
c1.1 feel safe to provide personal information on electronic banking				0.76						
c1.2 I am confident with security aspects of electronic banking				0.75						
Perceived cost										
c7.2 I use electronic banking because they have lower monthly service fees					0.74					
Perceived convenience										
c6.4 Electronic banking saves time						0.79				
c6.3 electronic banking is convenient in terms of 7 days and 24 hour service						0.78				
Brand reputation										
c1.6 My bank has honest dealings and has a good reputation							0.74			
Perceived contact										
c4.2 My bank has customer support online or telephonically								0.74		
c4.1 My bank's electronic banking provide telephonic contacts details Perceived quality of service								0.72		
c4.4 My bank's electronic banking shows detailed information									0.81	
Perceived efficiency										
C6.1 Branch banking involves too much queuing										0.77
Eigenvalues	14.4 4	3.61	2.12	1.83	1.61	1.45	1.23	1.19	1.12	1.07
% of Variance	33.5 9	8.39	4.93	4.24	3.76	3.37	2.87	2.76	2.60	2.49
Cumulative variance	33.5 9	41.9 9	46.9 1	51.1 6	54.9 1	58.2 8	61.1 5	63.9 1	66.5 1	69.0 0
Extraction Method: Principal Component Analysis.										

Table 4.12 shows the results for the Rotated Component Matrix. The Rotated Component Matrix displays the correlations between each question in the survey instrument and the different factors. The results indicate that the following questions correlate best to Factor 1 as observed in Table 4.12, as such they will be grouped together; question C10.2 (83%), C10.3 (82%), C11.2 (82%), C11.1 (80%), C10.4 (80%) and C11.3 (75%). All these questions have communalities which range between 0.75 and 0.83. As such we retain these questions as their communalities are far above the minimum acceptance of 0.50 and they also have high correlations.

Using the same logic, only one question C2.3 (81%) is highly correlated to Factor 2 and has a communality value of 0.75 which is above 0.50. As such we retain this question for this Factor. There are no questions that are highly correlated with Factor three. As such we skip this Factor. The fourth Factor should include questions C1.1 (76%) and C1.2 (75%) as they are highly correlated with it. Furthermore, these two questions have communalities of 0.746 and .741 which are all above the minimum acceptance level of 0.5. As such we retain both questions for this Factor. Factor 5 is explained by C6.4 (74%) with a communality value of 0.78. As such we retain the question for the Factor. As shown in Table 4.12, Factor 6 is explained by C6.4 (79%) and C6.3 (78%) with communality values of 0.783 and 0.732 respectively. Similarly, Factor 7 is explained by C1.6 (74%) with a communality value of 0.656 relates to brand reputation. This factor was included as theory outlined that a good brand has a positive influence on customers' perceptions. Factor 8 is explained by C4.2 (74%) and C4.1 (72%) with communality values of 0.696 and 0.709. Only one question C6.1 (77%) with a communality value 0.681 is highly correlated with Factor 9. On the same note, the question that explains Factor 10 is question C4.4 (81%) with communality value of 0.816. Notably all the questions explaining the different Factors had high correlations and communality values above 0.50. As such all the questions explain the Factors were retained. This reflects that the questions that were asked in the survey instrument are consistent as proved earlier on by the KMO and Bartlet's Test Sphericity.

The Principal component analysis also shows that the variables relating to the initial theoretical model discussed are not well group to adequately represent all the dimensions. As such the variables should be regrouped to represent the nine factors. The new factors can be presented as follows; perceived usefulness and attitude, perceived trust, perceived security, perceived cost, perceived convenience, brand reputation, perceived contact, efficiency and perceived quality of service while the questions are split as follows;

Factor 1: Perceived usefulness and attitude (C10.2, C10.3, C11.2, C11.1, C10.4 and C11.3)

Factor 2: Perceived trust (C2.3)

Factor 4: Perceived security (C1.1, C1.2)

Factor 5: Perceived cost: C7.2

Factor 6: Perceived convenience (C6.4, C6.3)

Factor 7: Brand reputation (C1.6)

Factor 8: Perceived contact (C4.2, C4.1

Factor 9: Quality of service (C4.4)

Factor 10: Perceived Efficiency (C6.1)

Factor one refers to perceived usefulness and attitude towards electronic banking. It includes variables like intention to use electronic banking based on its usefulness and what customer feels about the idea of using electronic banking. The second Factor relates to trust that is issues to do with the low occurrence of technical errors related with electronic banking. The fourth Factor relates to perceived security. It relates to variables such as safety of providing personal information on electronic banking and confidence in the security aspects of the electronic banking system. The fifth factor relates to perceived cost and includes the variable on low transaction costs for

electronic banking transactions. The sixth Factor relates to perceived convenience. Variables included under this factor include time saving dimension of electronic banking and convenience in terms of availability 24 hour a day. The seventh Factor relates to brand reputation and it includes variables such as the dimension that the bank has honest dealings and a good reputation. The 8<sup>th</sup> Factor relates to contact and the variables included under this dimension include dimensions that relate to the bank having customer support available on-line or telephonically and provision of telephonic contact details. Factor 9 relates to the provision of detailed transaction information and this is labeled as perceived quality of service. Lastly, Factor 10 relates to perceived efficiency and it includes variables such as the dimension that branch banking involves too much queuing.

#### **4.7CHAPTER SUMMARY**

Chapter four has presented the analysis and discussion of data that was collected from 237 respondents using a structured questionnaire that was administered through face to face interviews and self-administration. The data analysis and interpretation was guided by the methodological approach discussed in chapter 3. The findings show that the majority of CBZ Bank customers prefer using brick and mortar banking as opposed to electronic banking. The usage trends show that most of the electronic banking users use this channel mainly for checking their account balances and requesting for ministatements while they perform the actual financial transactions over the counter. Factors identified by the study that affect usage of electronic banking are perceived security, perceived trust, perceived convenience, perceived cost, perceived attitude, perceived ease, perceived usefulness, quality of service, efficiency, demographics and income. The next chapter presents the conclusion and recommendations from the study.

## CHAPTER FIVE CONCLUSIONS AND RECOMMENDATIONS

#### **5.1 INTRODUCTION**

This chapter presents the research conclusions on the CBZ Bank customers' perceptions of electronic banking. The chapter also presents recommendations for CBZ Bank as a result of the research findings. The chapter concludes by suggesting further areas of research on customers' perceptions of electronic banking. This chapter is structured into three sections namely conclusions, recommendations and further areas of study.

#### **5.2 CONCLUSIONS**

The following conclusions are made on the study;

#### 5.2.1 Customers prefers brick and mortar

The study concluded that the majority of CBZ Bank customers prefer branch banking as opposed to electronic banking. The results on the frequency of use of various banking delivery channels supported this result as the majority of CBZ Bank customers use branch banking more frequently as compared to electronic banking. The researcher also concluded that there is low usage of electronic banking among CBZ Bank customers.

#### 5.2.2 There is limited use of electronic banking

The study concluded that the majority of the electronic banking users use the platform largely for balance enquiring and mini statement requests. The results show that irrespective of the high transactions costs for over the counter transactions and the inconvenience of waiting in long queues associated with branch banking, CBZ Bank customers prefer conducting the actual financial transactions (funds transfer, bill payments, interbank transfers, cash withdrawals) by physically visiting a branch. The

researcher also concluded that CBZ Bank customers do not use electronic banking for conducting their financial transactions despite having lower transaction charges and the convenience that comes with its use.

#### 5.2.3 Factors influencing usage or adoption of electronic banking

The study concluded that CBZ Bank customers do not have much trust in the bank's security system as they feel insecure to conduct financial transactions electronically. Furthermore, the customers are not aware of the usefulness of electronic banking. The study also concluded that CBZ Bank customers are not satisfied with the quality of service that they are getting from CBZ Bank's electronic banking system.

Irrespective of the development that banks in Zimbabwe are embracing electronic banking technologies such as ATMs, POS, Telephone Banking, Internet Banking and Mobile Banking, the study concluded that there is low usage and adoption of these electronic banking channels as opposed to traditional branch banking.

#### **5.3 VALIDATING THE RESEARCH PROPOSITION**

In light of the findings of the study, the researcher accepted the proposition that CBZ Bank customers have a negative perception of electronic banking delivery channels.

#### **5.4RECOMMENDATIONS**

#### 5.4.1 Usage of electronic banking

Inorder to realize a return on electronic banking investment and reduce operational costs, the study recommends that one of the ways of stimulating usage of electronic banking among the CBZ Bank customers is through intensive advertising, awareness campaigns and staff training on the benefits and usefulness of electronic banking. Staff training on electronic banking can be achieved through establishing ICT knowledge and eLearning platforms at CBZ Bank level. Usage of electronic is key as the bank needs to

realize a return on the investment made on the technology. However, the realization of a return is possible only if the majority of the customers use electronic banking.

#### 5.4.2 Services that they use on electronic banking

The study recommends that the bank could raise awareness of the services available on electronic banking other than requesting balances and mini statement. The bank could also stop offering such services that are available on electronic banking in the branches. One strategy could be hiking fees for such services to deter branch banking.

#### 5.4.3 Factors influencing usage or adoption of electronic

The study recommends that the bank upgrades its electronic banking platform to improve availability, accessibility and integrity. Upgrading the system will improve customers' perceived security, trust, convenience, accessibility and in turn increase adoptionand usage.

The study recommends that there is need for all commercial banks in Zimbabwe and the central bank to promote usage of electronic banking channels through creation of an enabling environment for electronic banking platform with set standards that safeguard bank failures and security threats associated with online banking.

#### **5.5AREAS FOR FURTHER STUDY**

Since this study focused on CBZ Bank customers' perceptions of electronic banking delivery channels, the findings may not be generalized at industry level. As such, one area of future studies is to consider customers' perceptions of electronic banking across the banking industry. This will be key in informing policy on overall strategy for electronic banking usage and adoption. Another possibility on future studies is conducting an industry level study on customers' perceptions of electronic banking

when the country has adopted its own currency. In such an environment, there is a high likelihood that salaries would be bench marked to economic indicators as compared to the multi-currency. As such, electronic banking will be more relevant than in an era with most customers' salaries that are below poverty datum line.

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## **APPENDIX 1: RESEARCHER INTRODUCTORY LETTER**: RESEARCHER INTRODUCTORY LETTER

01 July 2013

Dear Sir/Madam

#### **RE: MBA Research Questionnaire**

My name is Joseph Deshe, a Master of Business Administration Student with theGraduate School of Management of the University of Zimbabwe. As a requirement for thefulfillment of the degree programme, I am conducting a research which seeks to investigate the Customers' perception of electronic banking delivery channels in Zimbabwean banking sector with special reference on CBZ bank. May you kindly spare a few minutes of your busy schedule to give your opinions on this issue.

Please note that this research is for academic purposes only and will be treated with strictConfidentiality. The findings of this survey will not be used for any other purpose besides that

Intended for this research. For further clarifications regarding this study, please feel free to contact the Researcher on the following telephone numbers 0774 132 362 or email address:

#### jdeshe@cbz.co.zw

Your cooperation is essential for the results of the survey to be valid and reliable.

Yours faithfully

Joseph Deshe

MBA Student

## **APPENDIX 2: RESEARCH QUESTIONNAIRE**

## Customers' perceptions of electronic banking delivery channels (ATMS, Point of Sale and Internet Banking)

Α.	Questionnaire number.
1.	Respondent's age (number of years) 1 21-25yrs 2 26-30yrs 3 31-35yrs 4 above 35yrs
2.	Respondent's sex? 1 male 2 female
3.	Respondent's marital status? 1 single/ unmarried 2 married 3 divorced/widowed
4.	Respondent's highest level of educational level? 1 no formal education 2 primary education 3 secondary 4 High school 5 Professional course 6 university 7 Technical education
5.	What is your monthly gross income? 1 500 -1 000 2 1 000-2 0003 2 000-3 0004 3 000-4 0005 4 000-5 0006 above 5 000
6.	What is your employment status? 1 not working 2 own business 3 student 4 employed part time 5 employed full time.
7.	What is your level of computer literacy? 1  Don't know how to use a computer 2 Beginners 3 Advanced 4 Expert
8.	What is your preferred method of banking? 1 Visit branch 2 ATMs 3 Point of Sale 4 Internet Banking 5 Telephone Banking
9.	How long have you held an account with CBZ Bank (number of years)? <b>1</b> less than a year <b>2</b> 1-3 years <b>3</b> 4-5 years <b>4</b> 6-7 years <b>5</b> over 7 years
US	AGE OF ELECTRONIC BANKING DELIVERY CHANNELS
10.	How frequently do you use the following banking channels?
	1. Weekly 2.once fortnightly 3.monthly 4.rarely5.never
10.	1 Automated Teller Machines (ATMs)

	·	,	
10.2 Point of Sale			
10.3 Internet Banking			

10.4 Telephone Banking	
10.5 Mobile Banking	
10.6 Branch	
10.7 Ecocash	

#### B1. E-BANKING SERVICES (ATMs, Point of Sale and Internet Banking)

- How long have you been using this service?
   1□Less than 3 months 2□3-12 months 3□above 12 months 4□Never
- 2. How did you get to know about e-banking services?
  1 friend/relative 2 Bank advertising 3 Bank employee 4 Other
- What service do you normally use e-banking services for?1 Balance enquiry 2 Mini Statement
   3 Marketing Services 4 Download or print statement 5 Interbank transfers 6 Internal transfers
   7 Utility Bill Payment
   8 Other specify
- 4. What is your level of satisfaction with e-banking services?
  1 Very unsatisfied 2 Unsatisfied 3 Neutral 4 Satisfied 5 Very Satisfied

## Use the scale provided to indicate your disagreements or agreement with the following statements about Electronic banking delivery channels (EBDCs)

C.1	SECURITY	Strongly disagree	Disagre e	Neutral	Agree	Strongly Agree
1	I feel safe providing my personal information about my banking through electronic banking					
2	I am confident with the security aspects of electronic banking					
3	I am confident that my bank provides security to prevent unauthorized intrusion					
4	My electronic banking transactions with the bank are always accurate					
5	Electronic banking is just as secure as traditional banking					
6	My bank has honest dealings and has a good reputation					
C.2	TRUST	Strongly disagree	Disagre e	Neutral	Agree	Strongly Agree
1	I can rely on electronic banking for					

	executing my transactions					
2	My bank keeps its promises and					
2	commitments on electronic banking					
3	With electronic banking , technical					
	errors are rare					
4	Electronic banking is very trustworthy					
5	My bank provides explanation for a problem on electronic banking					
	transactions					
6	I am very satisfied with the level of					
	security on electronic banking channels					
C.3	QUALITY OF CONNECTION	Strongly disagree	Disagre e	Neutral	Agree	Strongly Agree
1	My bank's electronic banking channels load fast					
2	Electronic banking channels do not freeze after I have entered my login					
	details/PIN					
3	The bank's electronic banking channels are always available for business					
C.4	QUALITY OF SERVICE	Strongly	Disagre	Neutral	Agree	Strongly
1	The bank's electronic banking	disagree	е			Agree
I	The bank's electronic banking channels provide telephonic contact					
	details					
2	The bank's electronic banking					
	channels have customer support staff					
3	available online and telephonicallyMy bank is easily accessible by					
5	telephone					
4	My bank's electronic banking channels					
	show detailed information of my					
	transactions					
5	My bank's electronic banking channels provide accurate transaction					
	information					
6	My bank quickly resolves problems					
	which I encounter with electronic					
	banking transactions					
C.5	ACCESS	Strongly	Disagre	Neutral	Agree	Strongly
0.5		disagree	e	Neutral	79.66	Agree
1	Information on my bank's electronic					
	banking channels is well organized and easy to follow					
			1		ļ	
2						
2	Using the bank's electronic banking channels does not require a lot of effort					

	banking channels effectively meet my needs					
•		Ctuonalu	Discours	Neutral	A	Ctronally
C.6	CONVENIENCE	Strongly disagree	Disagre e	Neutral	Agree	Strongly Agree
1	Branch banking involves too much queuing					
2	Electronic banking channels make it easier for me to do my banking					
3	Electronic banking is convenient in terms of 7 days and 24 hour service					
4	Electronic banking saves time					
C.7	PERCIEVED COST	Strongly disagree	Disagre e	Neutral	Agree	Strongly Agree
1	I use electronic banking channels because they have lower transactions fees or no cost at all.					
2	I use electronic banking channels because of lower service charges					
C.8	COMMUNICATIONS	Strongly disagree	Disagre e	Neutral	Agree	Strongly Agree
1	I use electronic banking because of bank promotions					
2	I feel electronic banking is consistent with my self-image					
3	I use electronic banking because of positive word of mouth					
C.9	PERCEIVED EASE OF USE	Strongly disagree	Disagre e	Neutral	Agree	Strongly Agree
1	Electronic banking is easy to use					
2	My bank provides assistance on electronic banking					
3	It is easy for me to find what I want on my bank's electronic banking channels					
C.10	PERCEIVED USEFULNESS	Strongly disagree	Disagre e	Neutral	Agree	Strongly Agree
1	I am aware of the usefulness of electronic banking					
2	I intend to use electronic banking in future					
3	I expect to use electronic banking in future					
4	I am determined to use electronic banking in future					
		•	•		•	·
C.11	ATTITUDE	Strongly disagree	Disagre e	Neutral	Agree	Strongly Agree

1	I feel using electronic banking is a wise idea			
2	I feel using electronic banking is a good idea			
3	I like to use electronic banking			

#### D.1 State any other challenges in the use of electronic banking delivery channels?

#### **D.2** What can the bank do to improve the usage of electronic banking delivery channels?

#### Thank you very much for your time.