Adoption of internet and mobile banking in the Zimbabwe commercial banking sector: The case of Standard Chartered Bank Zimbabwe.

By

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Dissertation submitted in partial fulfilment of the requirements for the degree of Master of Business Administration, Graduate School of Management, University of Zimbabwe

Supervisor: Mr. A. M. Chidakwa

July 2012
DECLARATION PAGE

I, ..........................................., do hereby declare that this dissertation is the result of my own investigation and research, except to the extent indicated in the Acknowledgements, References and by comments included in the body of the report, and that it has not been submitted in part or in full for any other degree to any other university.

__________________________ Date__________

Student’s Signature

__________________________ Name:________________ Date:__________

Supervisor’s Signature
DEDICATION

To my family who have always supported me in all I do and encouraged me to work hard in everything that I do. Special mention goes to the two lovely women in my life, my wife Anna and daughter Keara. I also will not forget the Lord Almighty who has guided me through life and has made me who I am today.
ACKNOWLEDGEMENTS

I am really grateful to my supervisor Mr. Chidakwa who afforded me time and invaluable guidance for my dissertation. I will carry your wise words with me for life. To the rest of the GSM staff who have taught me life lessons over the last 2-3 years I really appreciate your expertise and great work. To all the respondents who found time in their busy schedules to assist me, I would not have completed this work without your priceless input. It would also be unfair for me not to mention my fellow MBA colleagues who over the last few years have been an indispensible part of my academic life.
ABSTRACT

This study is an investigation into the criticality of adopting internet and mobile banking by commercial banks in Zimbabwe. It looks at the benefits these two alternative delivery channels offer and the challenges associated with them. Electronic banking has taken a leading role in the global economy and Zimbabwe like most developing economies has been lagging behind.

The research used a mixed approach. Questionnaires were sent to Standard Chartered Bank Zimbabwe (SCBZ) staff members. For selected critical staff members, clients and competing bank employees’ interviews were used to collect the data. The response rate was relatively high at 95%.

The study findings pointed out that it is crucial for SCBZ to fully adopt internet and mobile banking for sustainability and profitability. In addition to significant cost reduction, alternative delivery channels expand outreach to areas in which the traditional bricks and mortar approach is unfeasible. There also increase product diversification by making savings and remittance products convenient, efficient and profitable. Huge financial investments to cater for capital and revenue expenditure and security concerns are also pertinent and these projects need to be properly managed. The major challenges are risk and network security, poor national infrastructure and poor customer uptake.

As it adopts these two forms of banking SCBZ is recommended to leverage from experiences from local banks and use its global status to subvert potential pitfalls and associated risks. It is also recommended for all stakeholders, management and staff, customers, ICT industry and government through its various sections, to combine their efforts so that these two channels will be accessible to all for the benefit of the whole nation. The world has digitalised and no economy or company can survive without joining the electronic commerce bandwagon. Areas for future study are risk eradication and management in internet and mobile banking in developing countries and adoption of 100% internet banking institutions (virtual banks) in Zimbabwe.
# TABLE OF CONTENTS

## DECLARATION PAGE ............................................................................................................................... II

## DEDICATION............................................................................................................................................... III

## ACKNOWLEDGEMENTS ............................................................................................................................... IV

## ABSTRACT .................................................................................................................................................. V

## TABLE OF CONTENTS ............................................................................................................................... VI

## LIST OF TABLES .......................................................................................................................................... IX

## LIST OF FIGURES ....................................................................................................................................... X

## LIST OF ABBREVIATIONS .......................................................................................................................... XI

## CHAPTER ONE ........................................................................................................................................... 1

### INTRODUCTION...................................................................................................................................... 1

1.1 INTRODUCTION TO THE STUDY ................................................................................................. 1

1.2 BACKGROUND TO THE STUDY ............................................................................................... 1

1.2.1 Zimbabwe Environment Analysis ...................................................................................... 1

1.2.2 Banking industry .................................................................................................................. 6

1.2.3 Electronic Banking .............................................................................................................. 9

1.2.4 Internet Banking ................................................................................................................ 9

1.2.5 Mobile Banking .................................................................................................................. 10

1.2.6 Standard Chartered Bank Zimbabwe .................................................................................. 10

1.3 PROBLEM STATEMENT ................................................................................................................. 13

1.4 RESEARCH OBJECTIVES ............................................................................................................. 14

1.5 RESEARCH QUESTIONS ............................................................................................................... 14

1.6 RESEARCH HYPOTHESIS ........................................................................................................... 14

1.7 JUSTIFICATION OF RESEARCH ................................................................................................ 15

1.8 SCOPE OF RESEARCH ............................................................................................................... 15

1.9 DISSERTATION STRUCTURE ....................................................................................................... 16

1.10 CHAPTER SUMMARY .................................................................................................................. 16

## CHAPTER TWO ...................................................................................................................................... 17

### LITERATURE REVIEW ........................................................................................................................... 17

2.1 INTRODUCTION ............................................................................................................................. 17

2.2 DEFINITIONS OF KEY TERMS ...................................................................................................... 17

2.2.1 Types of Internet banking .................................................................................................... 20

2.3 BANKING .......................................................................................................................................... 20

2.3.1 Competitiveness .................................................................................................................... 21

2.3.2 Service delivery and quality .................................................................................................. 22

2.3.3 E-commerce and E-finance .................................................................................................. 23

2.4 INTERNET AND MOBILE BANKING DEVELOPMENT .................................................................. 25

2.4.1 International Stage ................................................................................................................ 25

2.4.2 African region ......................................................................................................................... 26

2.4.3 ICT Development: Zimbabwe Case ..................................................................................... 31

2.5 ALTERNATIVE DELIVERY CHANNEL’S MOTIVATION ............................................................... 33

2.5.1 Reasons for investing in ADC ............................................................................................. 33

2.5.2 Economic benefits ............................................................................................................... 36

2.5.3 Lessons from pace setters .................................................................................................. 39

2.5.4 Considerations when partaking in ADC .......................................................................... 41

2.6 CHALLENGES OF INTRODUCING THE TWO ADC FACILITIES .............................................. 42

2.6.1 Barriers to the increased uptake of e-banking ..................................................................... 45

2.7 BUSINESS MODELS .................................................................................................................... 46

2.7.1 Business Models and technology .......................................................................................... 47
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7.2</td>
<td>Brick and Clicks</td>
</tr>
<tr>
<td>2.7.3</td>
<td>Pure Internet based banks</td>
</tr>
<tr>
<td>2.8</td>
<td>CRITICAL EVALUATION OF LITERATURE</td>
</tr>
<tr>
<td>2.9</td>
<td>CHAPTER SUMMARY</td>
</tr>
<tr>
<td>3.0</td>
<td>RESEARCH METHODOLOGY</td>
</tr>
<tr>
<td>3.1</td>
<td>INTRODUCTION</td>
</tr>
<tr>
<td>3.2</td>
<td>RESEARCH DESIGN</td>
</tr>
<tr>
<td>3.3</td>
<td>RESEARCH PHILOSOPHY</td>
</tr>
<tr>
<td>3.3.1</td>
<td>Qualitative</td>
</tr>
<tr>
<td>3.3.2</td>
<td>Quantitative</td>
</tr>
<tr>
<td>3.4</td>
<td>RESEARCH STRATEGY</td>
</tr>
<tr>
<td>3.4.1</td>
<td>Research Strategy used by researcher</td>
</tr>
<tr>
<td>3.5</td>
<td>POPULATION AND SAMPLING TECHNIQUES</td>
</tr>
<tr>
<td>3.6</td>
<td>DATA COLLECTION</td>
</tr>
<tr>
<td>3.6.1</td>
<td>Primary Data</td>
</tr>
<tr>
<td>3.6.2</td>
<td>Secondary Data</td>
</tr>
<tr>
<td>3.6.3</td>
<td>Triangulation</td>
</tr>
<tr>
<td>3.6.4</td>
<td>Reliability and validity</td>
</tr>
<tr>
<td>3.6.5</td>
<td>Ethical Issues</td>
</tr>
<tr>
<td>3.7</td>
<td>LIMITATIONS</td>
</tr>
<tr>
<td>3.8</td>
<td>DATA ANALYSIS</td>
</tr>
<tr>
<td>3.9</td>
<td>CHAPTER SUMMARY</td>
</tr>
<tr>
<td>4.0</td>
<td>RESULTS AND DISCUSSION</td>
</tr>
<tr>
<td>4.1</td>
<td>INTRODUCTION</td>
</tr>
<tr>
<td>4.2</td>
<td>RESPONSE RATE AND RESPONDENTS</td>
</tr>
<tr>
<td>4.3</td>
<td>RESPONDENT PROFILING</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Banking experience</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Level of education</td>
</tr>
<tr>
<td>4.4</td>
<td>CONTRIBUTION TO BANK INCOME</td>
</tr>
<tr>
<td>4.5</td>
<td>ADOPTION OF INTERNET AND MOBILE BANKING</td>
</tr>
<tr>
<td>4.5.1</td>
<td>Appreciation of internet and mobile banking</td>
</tr>
<tr>
<td>4.5.2</td>
<td>Adoption of internet and mobile banking</td>
</tr>
<tr>
<td>4.5.3</td>
<td>Sustainability without adopting the two ADCs</td>
</tr>
<tr>
<td>4.5.4</td>
<td>Critical Success Factors for ADC implementation</td>
</tr>
<tr>
<td>4.5.5</td>
<td>Factors influencing adoption of new ADCs</td>
</tr>
<tr>
<td>4.5.6</td>
<td>Important ADC concept enablers</td>
</tr>
<tr>
<td>4.5.7</td>
<td>Criteria for ADC bank selection</td>
</tr>
<tr>
<td>4.6</td>
<td>BENEFITS OF INTERNET AND MOBILE BANKING</td>
</tr>
<tr>
<td>4.7</td>
<td>CHALLENGES FACED IN INTERNET AND MOBILE BANKING</td>
</tr>
<tr>
<td>4.7.1</td>
<td>Perceived Risk of Internet and Mobile Banking</td>
</tr>
<tr>
<td>4.7.2</td>
<td>Risk factors associated with Internet and Mobile Banking</td>
</tr>
<tr>
<td>4.7.3</td>
<td>Practical Risk Solutions</td>
</tr>
<tr>
<td>4.8</td>
<td>BUSINESS MODEL</td>
</tr>
<tr>
<td>4.8.1</td>
<td>Current Business Model</td>
</tr>
<tr>
<td>4.8.2</td>
<td>Current service delivery and product offer</td>
</tr>
<tr>
<td>4.8.3</td>
<td>Impact of current ADC Status</td>
</tr>
<tr>
<td>4.8.4</td>
<td>Financial Performance</td>
</tr>
<tr>
<td>4.8.5</td>
<td>Business Model Fit</td>
</tr>
<tr>
<td>4.8.6</td>
<td>Ideal Business Model</td>
</tr>
<tr>
<td>4.9</td>
<td>CHAPTER SUMMARY</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1.1 Corruption Perception Index ................................................................. 4
Table 1.2 SCBZ ownership .................................................................................... 10
Table 2.1 Bank presence in rural areas in Africa .................................................. 30
Table 2.2 Zimbabwe Internet Usage and Population Growth .............................. 33
Table 2.3 Development of mobile banking by device and type of banking services .. 39
Table 3.1 Sampling strata ...................................................................................... 57
Table 4.1 Response Rate ....................................................................................... 62
Table 4.2 Staff Profiling ......................................................................................... 63
Table 4.3 Appreciation of internet and mobile banking ........................................ 66
Table 4.4 Cost / Income Ratio for local banks ...................................................... 76
Table 4.5 Challenges faced in internet and mobile banking ................................. 78
Table 4.6 Bank performance ratios ...................................................................... 89
Table 5.1 Recommendations: SFA framework .................................................... 97
LIST OF FIGURES

Figure 1.1 Porters five forces model ................................................................. 7
Figure 2.1 Relation between E Commerce and E Banking ......................................... 24
Figure 2.2 Africa-Mobile cellular telephone subscription ('Thousands) ...................... 29
Figure 2.3 Increasing trend of Mobile Banking in Africa .......................................... 31
Figure 2.4 Relative costs for domestic payment through different bank channels ......... 35
Figure 2.5 Losers and winners in the future e-banking ............................................ 37
Figure 3.1 Research design ................................................................................. 51
Figure 4.1 Banking experience ............................................................................. 63
Figure 4.2 Level of education .............................................................................. 64
Figure 4.3 Contribution to Bank Income ............................................................. 65
Figure 4.4 Adoption of internet and mobile banking .............................................. 67
Figure 4.5 Sustainability without adopting the two ADCs ...................................... 68
Figure 4.6 Trends in voice and internet penetration .............................................. 69
Figure 4.7 Critical Success Factors for ADC implementation ................................ 70
Figure 4.8 Factors influencing adoption of new ADCs .......................................... 71
Figure 4.9 Important ADC concept enablers ....................................................... 73
Figure 4.10 Criteria for ADC bank selection ....................................................... 74
Figure 4.11 Benefits of internet and mobile banking ............................................ 75
Figure 4.12 SCBZ's Market Share ...................................................................... 78
Figure 4.13 Branch network numbers .................................................................. 81
Figure 4.14 Perceived Risk of Internet and Mobile Banking .................................. 82
Figure 4.15 Risk factors associated with Internet and Mobile Banking .................. 83
Figure 4.16 Practical Risk Solutions ................................................................. 84
Figure 4.17 Current business model awareness .................................................. 85
Figure 4.18 Current service delivery and product offer ....................................... 86
Figure 4.19 Impact of current ADC Status ......................................................... 87
Figure 4.20 Banks profits after tax ..................................................................... 88
Figure 4.21 Business Model Fit ......................................................................... 90
Figure 4.22 Ideal Business Model ..................................................................... 91
LIST OF ABBREVIATIONS

ADCs – Alternative Delivery Channels
ATM – Automated Teller Machines
CAPEX - Capital Expenditure
CZI - Confederation of Zimbabwe Industry
CIA - Central Intelligence Agency
e-banking – Electronic Banking
EIU - Economist Intelligent Unit
DFID - Department of International Development
i-banking – Internet banking
ICT – Information Communication Technology
ISP – Internet Service Provider
IT – Information Technology
m-banking – Mobile Banking
mFSP -Mobile Financial Service Providers
OPEX – Operational Expenditure
RBZ- Reserve Bank of Zimbabwe
SCBZ - Standard Chartered Bank Zimbabwe
CHAPTER ONE

INTRODUCTION

1.1 Introduction to the study

Economists hold different opinions regarding the importance of financial systems for economic growth. Emerging global economy, electronic commerce (e-commerce) and electronic business (e-business) have increasingly become a necessary component of business strategy and a strong catalyst for economic development (Kamel, 2005). The universal connectivity which the internet offers has made it an invaluable business tool. These developments have created a digital economy (ibid). This fast emerging economy is bringing with it rapidly changing technologies, increasing knowledge intensity in all areas of business, and creating virtual supply chains and new forms of business and service delivery channels (Shah & Clarke, 2009). There is strong belief that for any financial institution to be sustainable and to attain competitive advantage it needs to move along with technology. For banks it therefore means there is need to implement the new alternative delivery channels (ADCs) like mobile and internet banking.

Most studies have been done in developed economies and developing economies in Asia and Europe (Al-Sukkar & Hasan, 2005). The study and adoption of the above stated channels has not exactly been as intensive as would have been preferred in Zimbabwe. This is compounded by the fact that Zimbabwe has had a fair share of its challenges over the last couple of years. This research will study adoption by Zimbabwean banks of ADCs namely mobile and internet banking using Standard Chartered Bank as its study case.

1.2 Background to the study

1.2.1 Zimbabwe Environment Analysis

Whilst the rest of the world is being carried forward on the wave of e-commerce, its development in Zimbabwe has been slow. This is mainly due to reluctance and scepticism by customers to adopt this new phenomena which has led to immense changes in global commerce (Ndlovu, 2009).
A number of internet and electronic based products and services are now being offered locally and these include bill payments, banking, purchase of products and use of mobile telephones. There is limited usage by Zimbabweans of ICT regardless of the significant number of electronic ICT services on offer. The poor telecommunications infrastructure contributes a lot to this sceptic approach. The banking sector has not been spared either with many bankers having invested in e-banking facilities but the clientele seem to be more inclined to the traditional branch banking and products (Biti, 2011). The environmental assessment will be done using the PESTL analysis.

Political

Zimbabwe’s political situation has attracted keen international following over the last decade. Many believe the political decision to participate in the DRC war from 1998 to 2002 and the hefty payouts to the war veterans sparked this whole scenario. Another major political event that has had huge impact was the signing of the Indigenisation and Empowerment Bill into law by President Mugabe on 7 March 2008 after the draft was presented to parliament in July 2007. The law requires all white or foreign owned business to hand over 51 percent of their business to indigenous Zimbabweans. Many economists predict this law continues to plunge the country into deeper economic woes with mines and banks like SCBZ and Barclays Bank being directly impacted (Hawkins, 2011).

The decision to go into a Government of National Unity (GNU) greatly stabilised the country’s economic situation. Most companies were at a standstill from the period after June 2008 because of the impasse between the feuding political parties. After the gruesome elections of 2008, the GNU was born and this brought some sanity in the economy. It boosted industry confidence and most companies’ capacity utilisation greatly improved (Dendere, 2011). The sour bilateral relations with Britain and the West climaxed due to the land reform and Zimbabwe pulled out of the Commonwealth. The result was disastrous and most Western countries imposed various types of sanctions and restrictions since 2002 though some have been recently lifted. As a result business declined and companies closed, down streamed like SCBZ and Barclays or maintained their
current state. The international companies were disengaged from their mother companies and were asked to fend for themselves (CZI, 2010).

**Economic**

The economic factors which negatively impacted Zimbabwe include unstable exchange rates, hyperinflation, high nominal interest rates, low disposable income, shortage of cash and of foreign currency (Hawkins, 2011).

Zimbabwe’s economy used to be the envy of most African countries (Ndlovu, 2009). However, as alluded to previously, this changed significantly after a series of events which include the DRC war where millions of dollars were drained. World Bank (2009) reports indicated unemployment to have gone as high as 94%, poverty is widespread and the shortage of agricultural inputs and unpredictable rain patterns has seen the economy that used to rely mainly on agriculture and mining bleed. The shortage of foreign currency adversely affected the economic performance of the country. Productivity was also negatively affected by the breakdown in infrastructure, shortages of fuel, power and water (CIA World Fact book, 2010).

Hyperinflation was one of the main challenges between 2003 and 2008 resulting in the government suspending the Zimbabwe dollar and adopting multi-currency. As such in 2009 Zimbabwe recorded an economic growth for the first time in a decade (EIU Country data, 2010). There have been significant changes to the Forbes Worst Economies list since 2010 as countries like Ghana and Zimbabwe seem to have got their economic acts together and moved off the list. Zimbabwe has been named among 13 poor countries in Sub-Saharan Africa which have recorded an improvement in policy for growth and poverty reduction, the World Bank Country Policy and Institutional Assessment has reported. Three of the countries that improved the most classified as fragile states were Comoros, Ivory Coast and Zimbabwe (World Bank, 2012).

**Social**

Though on a recovery path the social situation in Zimbabwe presented one of the biggest challenges for the nation and the economy at large, therefore disrupting business activities. Corruption and non ethical business practises are at alarming
levels as evidenced in Table 1.1. Zimbabwe is placed at number 154 out of 182 countries in the Corruption Perception Index (Transparency International, 2011).

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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>154</td>
<td>Zimbabwe</td>
<td>2.2</td>
<td>2.4</td>
<td>1.8</td>
<td>2.1</td>
<td>2.4</td>
<td>2.6</td>
<td>2.3</td>
<td>2.3</td>
<td>2.7</td>
</tr>
<tr>
<td>143</td>
<td>Nigeria</td>
<td>2.4</td>
<td>2.4</td>
<td>2.7</td>
<td>2.2</td>
<td>2.2</td>
<td>1.9</td>
<td>1.6</td>
<td>1.4</td>
<td>1.6</td>
</tr>
<tr>
<td>64</td>
<td>South Africa</td>
<td>4.1</td>
<td>4.5</td>
<td>4.7</td>
<td>4.9</td>
<td>5.1</td>
<td>4.6</td>
<td>4.5</td>
<td>4.6</td>
<td>4.4</td>
</tr>
<tr>
<td>24</td>
<td>United States</td>
<td>7.1</td>
<td>7.1</td>
<td>7.5</td>
<td>7.3</td>
<td>7.2</td>
<td>7.3</td>
<td>7.6</td>
<td>7.5</td>
<td>7.7</td>
</tr>
<tr>
<td>1</td>
<td>New Zealand</td>
<td>9.5</td>
<td>9.3</td>
<td>9.4</td>
<td>9.3</td>
<td>9.4</td>
<td>9.6</td>
<td>9.6</td>
<td>9.5</td>
<td>9.5</td>
</tr>
</tbody>
</table>


Pre-dollarisation and post-dollarisation social factors have changed as evidenced below. Population changes have a direct impact on organisations. The country over the past decade has witnessed a significant number of people leaving the country for either political or economic reasons. Brain drain is another contributory factor to the failed economy as it leads to low production (World Bank, 2009). The emigrants have been from all stages of the demographic structure of Zimbabwe and include both the employed and the unemployed. The effect of brain drain on the digital revolution is devastating. It is proving difficult for the nation to change its economic fortunes as skilled and trained personnel are leaving. This is a far reaching problem which does not just affect the ICT sector thus authorities should devise methods to lure skilled personnel back (Ndlovu, 2009). Falling birth rates in the world and in Zimbabwe coupled by high death rate mainly attributed to the AIDS scourge is resulting in decreased demand and greater competition as the number of consumers fall (Sibanda, 2008).

Of concern are consumer beliefs and attitudes towards technology and innovation. The more familiar a consumer is with technology the more positive are beliefs he or she seems to hold about an object. More Zimbabweans are becoming computer-literate by the day however there is still limited knowledge on the benefits offered by use of the internet. This has translated to using internet for email only (Chamisa, 2011). They has been some increase in banking sector deposits which serves to highlight increasing confidence in the banking sector especially considering the immense challenges it has faced of late like cash
shortages and bank closures and curatorship. However the country’s ratio of money to GDP supply is well below the average for Sub-Saharan Africa. According to ITU (2011) the penetration rate for Zimbabwe is currently at 72% up from 3% in 2009.

**Technological**

Technology is one of the most vital areas which firms should invest in in-order to survive in any industry. Zimbabwe lags behind in technological advancement and this has put a serious dent in its ability to make productive business ventures with the technically advanced nations. Econet is one of the few firms that are trying to compete technologically with the rest of the world (CZI, 2011). Zimbabwe’s poor quality products and ability to manufacture exportable products can only improve if firms advance technologically. The country needs innovative and bright ideas and technology offers such. Only a few years back Kingdom and Trust Bank emerged to be the power houses of financial innovation introducing new products like internet banking amongst others (RBZ, 2012). The basic internet connectivity in Zimbabwe is very poor and the bandwidth infrastructure is sub standard implying e-commerce initiatives are inhibited. It makes it difficult to do business with the outside world. Globally information technology environment changes rapidly (World Bank, 2009).

**Legal**

This is a thorn area in most economies and Zimbabwe is no exception. At one point in time the rule of law had become unbearable and no economy can be sustainable in such a situation (DFID, 2004). Efficient economies require infrastructure of laws, conventions and regulation. Most importantly investors need to have confidence in the financial system and this can be allayed if there is a strong legal background where everyone is below the rule of law (Levine, Loayaza & Beck, 2000). At the same time there should not be too much regulation, as was the case with RBZ when they put statutory reserve requirements at 50% resulting in banks having reduced ability to lend and also a severe cash crisis in December 2007. Some laws like the Indigenization and Economic Empowerment Bill passed in 2008 are also having ongoing impact on the Zimbabwean economy (Hawkins, 2011).
1.2.2 Banking industry

Financial service is one of the largest and most important industries in any economy and within this, banking is the largest sector. There are several types of banks, such as retail banks, commercial banks, investment banks and credit unions. Increasingly other types of businesses such as supermarkets are also offering financial services (Johnson, 2008). Banks exist in a wide range of sizes and differ in the type and number of services they provide. Commercial banks dominate this industry, offering a full range of services for individuals and businesses, from safeguarding money and valuables to the provision of loans, credit, and bill payment services (Claessens, Glaessner & Klingebiel, 2002).

The banking sector is pivotal to the revival of the economy and it provides credit to industry. Information Technology (IT) is turning into the most important factor in the future development of banking, influencing banks’ marketing and business strategies. In recent years, the adoption of ADCs like i-banking and m-banking has been on the rise. There are used more and more as distribution channels because of regular IT developments and intensive competitive banking markets (Sullivan & Ward, 2005).

Thompson (2003) says driving forces behind the rapid transformation of banks include influential changes in the economic environment, innovations in IT, innovations in financial products, liberalization and consolidation of financial markets, deregulation of financial inter-mediation. These and other factors make it complicated to design a bank’s strategy. The process is threatened by unforeseen developments and changes in the economic environment and therefore, strategies must be flexible to adjust to these changes. Banking has never been more central to humanity than it is today. Gates (2008) announced that, “banking is essential, banks are not” (para. 4). IT has fundamentally transformed the global complexion and the face of the banking industry. Internet banking has presented to banks new opportunities like 24/7 banking and low costs and challenges like increased risk and security (Saythe, 2009).

Biti (2011) states that the local banking sector has been sluggish in implementing e-banking facilities baring the huge amount of benefits it offers to banks and their
clients. This industry has faced daunting cash shortages from October 2007. He goes on further to state that the banking system remains vulnerable with weak capitalisation, raising non-performing loans and tight liquidity situation.

The inception of the inclusive government in 2009, ushered in economic reforms and a sustainable multiple currency regime. As such the banking sector witnessed a crisis of depositor confidence and capitalisation, as the Zimbabwe dollar was rendered worthless. However, despite a modicum of economic stability being restored, the banking sector has been affected by a liquidity crunch that has led to short-term lending with concomitant high interest rates (RBZ, 2011).

**Porter’s five forces model in the local banking industry.**

![Porter's five forces model](image)

**Figure 1.1 Porters five forces model**


**Industry Rivalry**

ESAP in 1991 resulted in an adverse increase in the number of banks in the country resulting in adverse competition. In 2003/2004 about 10 banks were closed by the RBZ for various reasons including weak management and liquidity challenges (RBZ, 2012). The past banking and economic crisis have resulted in intense competition between the current players as they jostle for the clientele. A number of people had and have resorted to keeping their money away from the bank and this has further decreased the available deposits. At present there are 17 commercial banks in the country of which only 4 are foreign owned (ibid).
Potential Entrants

Entry of new competition has become relatively less of a concern to existing banks due to the fact that the RBZ and local economists like Hawkins (2011) believe that Zimbabwe is already over banked. In addition the capital requirements and other requirements required by the regulator in order for a bank to attain or retain a trading license have proved quite stringent. Commercial banks like Genesis, Royal, ZABG and Kingdom found it difficult to raise the USD12.5 million capital required by 1 April 2012, which was an extended deadline. Interfin and Genesis are also facing well publicised sustainability constraints whilst Royal has surrendered is banking license. In general the start up costs for a bank are relatively high and getting a chunk of the market share in this already established industry is also quite difficult (RBZ, 2012).

Threats of substitutes

Banks are essential in any economy but new developments have seen competition coming in from various sources. Loan sharks and microfinance firms are a threat considering the strict lending policies of most banks that require collateral and credit rating. Products like Econet’s EcoCash and Netone’s Isikwama are infiltrating into the banking sector’s territory and eating into the market share by offering convenience to the customer (Chulu, 2012, p.8). Other traditional competitors include Western Union which now offers domestic money transfers. However for now some products and services like RTGS and Custom Declaration Forms (CD1s) are protected and are only accessed through banks.

Bargaining power of buyers

There are some blue chip companies which every bank wants to have in their portfolio and these include Delta, Schweppes, Econet and Old Mutual. These companies tend to flex their muscles and use their strategic position of being multi-banked to play the banks to their benefit. Their directors also tend to utilise the company’s position to have their own individual benefits as clients in the priority banking. These can get preferential rates and treatment knowing the banks require to keep their accounts. However, for the mass market it is usually a different situation all together with the clients bargaining power next to non-
existent. Banks interest and service charges for mass market is not negotiable and the RBZ has given banks an ultimatum to adjust these to the clients benefit. Most service charges and fees are more or less the same and there are determined by the bank's management (RBZ, 2012).

**Bargaining power of suppliers**

In banking suppliers can be taken to mean the depositors as well as other suppliers of day to day requirements like stationery. For the latter this varies with the size of bank and orders. Bigger banks like Stanbic can negotiate with suppliers for favourable prices better as compared to the smaller ones. In turn companies like Fidelity Printers who supply the whole banking sector and other industry have better bargaining power than the smaller indigenous firms who will do anything to gain market share. Specialist service suppliers like software firms and hardware suppliers like NCR for ATMs have relatively some element of power as switching costs are usually inhibitive for the banks (CZI, 2011).

**1.2.3 Electronic Banking**

Riyadh (2009) states that e-banking in under developed countries is in the early stages of development. Most banking in developing countries is still done the conventional way. However, there is an increasing growth of online banking, indicating a promising future for online banking in these countries. The major sub divisions of e-banking are internet banking and mobile banking.

**1.2.4 Internet Banking**

According to Kannabira & Nayaran (2005) e-banking has been in use for some considerable period in the shape of ATMs and telephone banking. The internet has however improved and expanded its shape and now comes in as an improved delivery channel for banking that offers convenience to the banks and its clients. Their definition for internet banking is the use of electronic channels to deliver products and services of varying magnitude: small value especially consumer banking and retail outlet and the bigger value corporate banking products and services. Sullivan and Wang (2005) see i-banking as an IT development which has seen clients being able to do their banking whilst not visiting bank premises.
1.2.5 Mobile Banking
Mobile banking (m-banking) is the activity whereby a customer uses their mobile phone to interact with their bank either directly or indirectly through Mobile Financial Service Providers (mFSP). The customer issues instructions, authenticates themselves and or receives information through their mobile phone (Poon, 2008).

1.2.6 Standard Chartered Bank Zimbabwe
SCBZ is a division of Standard Chartered PLC of Britain. It arose from a merger of the Standard Bank and the Chartered Bank in 1869. The latter had been incorporated in England in 1853 by Royal Charter while the former was incorporated in 1862 under the banner Standard Bank of British South Africa Limited. The first office of the bank was opened in 1863 in Port Elizabeth. After several amalgamations with some already existing Banks in South Africa, the Bank expanded rapidly moving northwards into Zimbabwe, then known as Southern Rhodesia. It established a pioneering presence in Zimbabwe in 1892 (SCBZ, 2012).

SCBZ overhauled its business operating system in 2010. The system upgrade thus enabled the bank the opportunity to offer to its customer’s alternate delivery channels (ADCs), mainly mobile banking and internet banking in addition to ATM service. These value added services will enhance their competitiveness and service quality in this critical but risky sector especially in Zimbabwe. SCBZ has always been an innovation leader with the first visible form of electronic innovation in Zimbabwe surfacing in the early 1990s when SCBZ and Central Africa Building Society (CABS) installed ATMs.

Table 1.2 SCBZ ownership

<table>
<thead>
<tr>
<th>Ownership</th>
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</thead>
<tbody>
<tr>
<td>Standard Chartered Holdings (Africa)</td>
<td>88%</td>
</tr>
<tr>
<td>Standard Chartered Holdings (International)</td>
<td>3%</td>
</tr>
<tr>
<td>Standard Chartered Bank</td>
<td>9%</td>
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</tbody>
</table>

**Group strategic intent:** To be the world’s best international bank leading the way in Asia, Africa and the Middle East.

**Brand promise:** Here for good

**SCBZ SWOT Analysis**

SWOT is the tool to be used to audit SCBZ and its environment (SCBZ, 2012).

**Strengths**

SCBZ is well established with a long and rich history coming from the nearly 120 years of service in Zimbabwe during which it continues to be dedicated to the country and positively contributes to the Zimbabwe economy.

- SCBZ has a diverse array of products and services which include but are not limited to personal account transactions, bancassurance, loans and shared distribution products.
- SCBZ has always spearheaded creative product offering which include foreign exchange, fixed income sales and distribution. The trading desks, foreign exchange and fixed income are unsurpassed market makers and provide depth and liquidity to local markets. Customers access traditional, as well as structured, products in areas of lending, trade finance, cash management and treasury. Clientele also have access to cross border payments, treasury services, trade finance and custodial services. All these are supported by electronic funds transfer, reporting and cash management systems.
- In addition to ATMs it was the first to introduce other customer conveniences such as phone banking. These have contributed to making the banking practices in Zimbabwe comparable to the best in the world.
- Its large balance sheet gives a natural position as a major player in wholesale money markets. The Bank is an Authorised Foreign Exchange Dealer, and also holds a Primary Dealership in Money Markets.
- There is a strong case to support that SCBZ is amongst of the country’s top financial institutions. It boasts of about 70,000 in Personal Banking, and more than 250 prime corporate clients.
- Wide branch network coverage with 24 branches all over strategic locations.
Weakness

- Bureaucracy as most decisions eventually are done after consulting the regional and international head offices.
- Its size makes costs higher and more complex to manage and implement projects.
- Rigidity mainly due to the above two points.

Opportunities

- Part of the SCB Global group a leading and well established global bank with operations in more than seventy countries and a network of over 1,700 branches, employing in excess of 73,000 people.
- Financial and intellectual backing from group.
- Well established and recognised international brand hence attracts many depositors because of its achievements. Accolades, some of which are stated below, help strengthen the brand increasing the opportunity to grow further.
  a) Three 2012 Euromoney Awards for Excellence: Best Cash Management House in Africa, Best Flow House in Africa and Banker of the Year for Peter Sands the Group CEO.
  b) African Banker Annual Awards 2012: Bond Deal of the Year for the Senegal Sovereign Bond.
  c) Global Finance Best Supply Chain Finance Providers in Africa 2012.
  d) Global Sustainable Bank of the Year from the Financial Times and the IFC (World Bank Group) 2012.
  g) Bank of the Year by The Banker Magazine for 2003 and 2004.
  h) Banker Award for Bank of the Year in 2005.
  i) Voted into the top 100 banks in Africa by a London based African business publication.
- Anticipated growth in the economy.

Threats

- Indigenization and Economic Empowerment Act
- Increased competition
- The innovation gap already too wide to close.
Brain drain as staff leave to join local or international competitors after undergoing intensive training.

1.3 Problem Statement

E-banking is key to promoting development as it improves competitiveness, helps in innovation and promotes growth. It has revolutionised the way of banking in several aspects. The benefits that it has offered to the institutions that have adopted it include: reduces transaction costs, speeds up customer services and introduces new products and services to consumers, financial inclusion to the poor and goes beyond geographical impediments like distance and other customer conveniences. Foreign banks have higher capital and more liquidity, but lower profitability than domestic banks so they need to work extra hard and smart to be competitive. Lower profitability is usually due to bureaucracy which leads to delayed adoption of changes to specific national economies.

In the post multi-currency era SCBZ has not fully consolidated its position as a market leader in the local banking industry. This is partly attributed to lagging behind in offering modern ADCs which their competitors are already pursuing. In addition to the incompatible system, financial and economic reasons have resulted in SCBZ not being a fore-runner when it comes to i-banking and m-banking. The Indigenisation and Empowerment Bill keeps making investing into such innovations a major concern considering SCBZ’s ownership structure.

The question is not any more whether the emergence of e-banking has been a threat or an opportunity as those who have decided to protect themselves from the threats instead of using the opportunities are determined to vanish from the marketplace. If SCBZ sticks to its current situation of not being technologically competitive as has been the case over the past few years it will continue to lose some financial and economic benefits. The gap might become too big to close resulting in its brand counting for nothing when it comes to profitability and competitiveness.

It is against this background and the realisation that although a number of research studies on adoption of new alternative delivery channels have been
carried out. It appears that not all financial institutions have fully appreciated their importance, and no specific study on alternative delivery channels for SCBZ has been done. This has prompted the researcher to undertake this study.

1.4 Research Objectives

The primary objective is to establish whether there is need for commercial banks to adopt internet and mobile banking for sustainability and profitability.

Sub objectives:

a) To determine benefits SCBZ is set to attain if it invests in these two alternative delivery channels.

b) To explore likely challenges that SCBZ will face if it is to implement the two e-banking options.

c) To establish suitability of ICT based business model(s) for SCBZ.

d) To come up with recommendations that will ensure competitive advantage is attained.

1.5 Research Questions

The primary question is: Is there need for SCBZ to adopt internet banking and mobile banking?

Other questions include:

a) What are the benefits SCBZ will attain if it ventures into these two forms of alternative delivery channels?

b) What challenges are likely to be faced and how can they be dealt with?

c) Which ICT business model(s) will be most suitable?

d) What recommendations will help SCBZ achieve its vision and mission?

1.6 Research Hypothesis

If SCBZ exerts enough funds and effort into these ADCs it will regain its lost market share and improve on its competitive advantage and enhance its strong brand.
1.7 Justification of Research

SCBZ should strive to regain market share that it has lost to the more technologically responsive institutions. Taking this route seriously and considering it as they formulate business strategy is definitely one way of achieving this. The increase in internet enabled mobile devices, and particularly the software stacks and applications that run on those devices along with high speed mobile networks will offer much greater opportunity to deliver banking services beyond current offering.

Furthermore the government through its various ministries has been supporting and encouraging the financial and ICT sectors to spear head the use of paperless transactions which these ADCs can deliver. The launch of broadband internet and other telecommunication structural enhancements has expanded the availability of internet and mobile services in the country and it can only mean an accelerated growth in i-banking and m-banking.

Thus the launch and full establishment of alternate service will go a long way in achieving the banks’ vision and mission thus SCBZ is the main beneficiary of this study. It will disclose expectations and concerns and also expose challenges that are bound to be faced during and after implementation as it will also research on other banks experiences. Other financial institutions especially those that have also not adopted this route can also find this study very useful with similar benefits.

RBZ as a regulator for all banks and the government through ministries like the ICT and Finance are also set to gain something from this study. It reveals some issues which the national strategies and policies are to address comprehensively. The concerns of the public and challenges being faced by banks in trying to digitise the economy are of paramount importance as well.

1.8 Scope of Research

The study will concentrate on the SCBZ arguably one of the biggest commercial banks in Zimbabwe. The research will be mainly confined to Harare as most decisions are done in Harare at the head office and the 8 greater Harare
branches also contribute to about 70% of the clientele and 80% of business and profit. However the other branches in other towns will be also be taken into consideration as they are very significant to the bank. Furthermore the two forms of ADCs that will be studied are mobile and internet banking and the study will look at the past five years as that is when local banks started to really utilise these ADCs.

1.9 Dissertation Structure

The remainder of the research is structured as follows:

Chapter 2 Literature review, here the researcher will look at how internet and mobile banking are affecting and impacting the international and regional banking sectors. Business models being applied in other economies are also considered.

Chapter 3 Research methodology will look deeper into the way the researcher approached the study explaining the selected design and strategy.

Chapter 4 Findings in this chapter center on the objectives stated in chapter 1. It summarises opinions of the studied target.

Chapter 5 Recommendations and conclusion are found in the penultimate chapter where the researcher gives possible solutions and also identifies areas needing further study.

1.10 Chapter Summary

The opening chapter aimed at introducing the research therefore it started by highlighting on the background on the research. There is a current summary of the Zimbabwe situation and how it got there. The chapter then zeroed in on the local banking sector. SCBZ was also briefly discussed before covering the problem statement, research objectives and questions, research hypothesis, justification of the research then finally the scope of research.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Literature review is the synthesis of material of other researchers relevant to the researcher’s area of study. It is a way of acknowledging the work done by other people prior to the study in the same area as the study. It is a concise overview of what has been studied, argued, and established about a topic, and it is usually organized chronologically or thematically (Neill, 2007). It evaluates previous and current research in regard to show how relevant and/or useful it is and how it relates to the research. The writer attempts to show what has been studied in the field, and also where the weaknesses, gaps, or areas needing further study are. The review should therefore also demonstrate to the reader why the writer’s research is useful, necessary, important, and valid (Rowley, 2002).

For this research the thematic organisation approach is used where it groups related work together and discusses trends and developments rather than focusing on one item at a time. Literature will be grouped and discussed in terms of the themes or topics there cover. After defining key terms the researcher will look at banking in general deliberating on sustainability and service delivery. The study will then focus on i-banking and m-banking discussing how the phenomena has developed, challenges being experienced and also technology based business models being utilised.

The financial industry, whom the banking sector falls under are being changed by ADCs like m-banking and i-banking. The changes centre on the actual product/service, its packaging, its delivery to clients and how they use it. Banks and other businesses are turning to IT to improve business efficiency, service quality and to attract new customers (Kannabira & Narayan, 2005).

2.2 Definitions of key terms

1. ADC allows bank customers access to facilities 24/7. With the immense rise in paper less banking over the past 3 to 4 years it has now become
imperative for banks to keep abreast with latest technology in order to provide customers with these convenient and time saving solutions (Adesina, 2010).

2. Daniel (1999) and Karjaluoto, Mattila and Pento (2002) state that banks now use various technology: internet, video, telephone, and WAP, as they offer their products to their clientele. This wide and modern technology has revealed unpreviously thought of advantages in bank distribution channels. Karjaluoto et al. (2002) went further to indicate that in banking the internet has stood head and shoulders above all other technologies as a distribution channel.

3. E-banking is the term used for new age banking system. E-banking is also called online banking and it is an outgrowth of personal computer (PC) banking. It uses the internet as the delivery channel by which to conduct banking activity, for example, transferring funds, paying bills, viewing current and savings account balances, paying mortgages and purchasing financial instruments and certificates of deposits (Chimeke, 2006).

4. E-banking is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. The following terms: PC banking, internet banking, mobile banking, virtual banking, online banking, home banking, remote e-banking, and phone banking all refer to one form of e-banking or another. PC banking, internet and mobile banking are the most frequently used designations. It should be noted, however, that the terms used to describe the various types of e-banking are often used interchangeably (Sathye, 2009).

5. Corrocher (2002) defines e-banking as a system allowing individuals to perform banking activities at home, via the internet or even via mobile telephones. Many banks offer both conventional branch banking and online banking, whilst some are pure online banks with no branches at all. However these full time online institutions still allow clients to do the standard bank transactions like fund transfers, enquiries, utility payments, and stop-orders. Account details are accessible 24/7 from any location. Updates can be in real-
time or batched according to specified periods. For ease of record keeping banks system have interfaces with accounting programs.

6. According to Gurau (2002) e-banking is basically the banking industry's attempt to jump on the e-business band wagon. E-banking is a term that attempts to broadly describe today's alternate delivery channels. Even if different banks and vendors describe this differently, but if you are offering on-line banking, you can certainly say that you are into e-banking.

7. E-banking includes familiar and relatively mature electronically-based products in developing markets, such as telephone banking, credit cards, ATMs, and direct deposit. It also includes electronic bill payments and products mostly in the developing stage, including stored-value cards like smart cards/smart money and internet-based stored value products (Aladwani, 2001).

8. Mobile banking is the implementation of banking and trading transactions using an internet-enabled wireless device like mobile phones, PDAs and handheld computers. Thus mobile banking (m-banking) is a subset of i-banking (Nath, Shrick & Parzinger, 2001).

9. Bankable Frontier Associates (2008) define m-banking is the activity whereby a customer uses their mobile phone to interact with their bank either directly or indirectly via Mobile Financial Service Providers (mFSP). The customer issues instructions, authenticates themselves and or receives information through their mobile phone.

10. Mobile payment is where customers issue instructions from their mobile phone that initiates a payment to a third party. The instructions can be to their bank, to a merchant or to a Payment Service Provider for the payment of a specified amount to a specified beneficiary on the customer's behalf. Where an m-banking relationship is in place this will include m-payment. Where an m-payment relationship is in place this does not imply that a banking relationship is part thereof, only that electronic access is available to a value store like a bank account owned by the customer and that customer can issue payment instructions relating to the value store for execution (Ayo et al., 2007).
Burelli (2012) states that M-banking is now spreading fast across the world. As handset functionality increases, mobile financial services are converging with i-banking. The two elements of the mobile channel that make it distinctive relative to other e-banking channels like internet banking or point of sale devices are:

a) The mobile handset, which comes with a wide range of functionality from basic standard handsets to advanced feature phones and smart phones;

b) The mobile network, which includes all the links carrying a data message from a handset to the mFSP or vice versa and the methods used to communicate between the handset and the mFSP.

Both these elements contribute to a different risk environment for m-banking (Bankable Frontier Associates, 2008)

2.2.1 Types of Internet banking

Goi (2005) and Poon (2008) identify three functional levels of i-banking that are currently employed in the marketplace namely informational, communicative and transactional i-banking. Firstly there are informational websites where the bank uses a standalone server to advertise its products and services. As there is no direct link between the server and banks systems network risk is low. The next level is Communicative/Simple transactional websites, these offer limited interfacing between banks systems and their clients. Allowed interface are e-mail, account inquiry, loan application or static data updates whilst funds transfer are not permitted. Lastly Advanced Transactional websites offer maximum interaction as clients are allowed to do all online transactions which include electronic money transfer to and from their accounts, bill payments amongst other activities.

2.3 Banking

Banks play an important role in the economic life of the nation. The health of the economy is closely related to the soundness of its banking system. Although banks create no new wealth their borrowing, lending and related activities facilitate the process of production, distribution, exchange and consumption of wealth (Claessens et al., 2002). Banking is an essential part of an economic
system, without which modern trade and commerce would almost be impossible. Banking promotes savings for all people in different walks of life and it also promotes investments in industry, agriculture and trade. It is a core element in foreign trade. The world needs a modern, effective but simple banking system for progress and prosperity (Pohjola, 2002).

2.3.1 Competitiveness
Competitiveness is a firm’s or a nation’s ability to offer products and services that meet the quality standards of the local and world markets at prices that are competitive and provide adequate returns on the resources employed or consumed in producing them. Competitiveness is a comparative concept of the ability and performance of a firm, sub-sector or country to sell and supply goods and/or services in a given market (Thompson & Strickland, 2003).

Banks should be committed to providing a service that will exceed the needs of their discerning consumers, with particular focus on innovation and a strong passion for financial health. Banks offer its services to all levels of the society by providing various products that suit particular target clients. The banks need to keep introducing ground breaking changes in this constantly changing and highly competitive business environment and embrace new technology. Competitive advantage is achieved through focused and innovative business operations (Porter, 1985). When it comes to competitive differentiation, Kotler (2009) believes that it is the creation of a solution that you can position so as to set your company and hosted services apart from your competition. Banks and all firms in general can achieve differentiation through value-added services, pricing approach, packaging, support, unique messaging, quality, direct/indirect sales channel methods, the business model, demand generation methods, or customer experience (ibid).

According to Porter (2005), gaining competitive advantage is key for profitability and sustainability. Banks need to position themselves to beat competition by any ethical and legal means possible. Being innovative and technologically up-to-date is one of the key elements even in the financial and banking industry when it comes to prosperity. A competitive advantage exists when the firm is able to deliver the same benefits as a competitor but at a lower cost or delivering
benefits that exceed those of competitor products. Competitive advantage is attained when a bank implements a value creating strategy not simultaneously implemented by any current or potential competitors (Barney, 1991).

2.3.2 Service delivery and quality

Banking falls under the quite sensitive service industry where focus is more towards delivering service to the customer in the manner they want and prefer. The service industry is one of the three main industrial categories of a developed economy, the others being manufacturing and primary goods production such as agriculture, or extraction such as mining and fishing (Rotschedl, 2002). The industry comprises of companies that primarily earn revenue through providing intangible products and services and is also called service sector or tertiary sector. A service, as opposed to a good, has its use inseparable from its purchase as a service is bought and consumed simultaneously. It does not possess material form, and thus cannot be smelt, heard, tasted, or felt. The use of a service is inherently subjective, in that due to the human condition, all persons experiencing a service would experience it uniquely (Selden, 1997).

Banking products are more or less identical thus differentiation can come out by the manner the product is offered and presented to the clients. ADCs have proved a winning strategy in banks and ever since traditional banking was developed alternate methods have been considered. Options include ATMS, Talking ATMs, Mobile branches, Agency tellers, PC Banking, Telephone Banking.

ITGI (2003) outlines the basic principles of IT value as the on-time and within budget delivery of appropriate quality, which achieves the benefits that were promised. In business terms, this is translated to: competitive advantage, elapsed time for order/service fulfilment, customer satisfaction, customer wait time, employee productivity and profitability. The task for management is not just the provision of IT and IT services to business, but to ensure that the benefit and value of any investment are leveraged (Peppard & Ward, 1998).

Poon (2008) suggests that IT can assist to enhance service quality by increasing convenience, collecting service performance information for management use,
and offering extra services. IT based services are essential for a service provider to remain competitive. Service delivery via the advent of new products and options for various channels through IT applications has emerged as an important attribute in satisfying customers. In addition it has also been reported that more than 70% of the defection of customers in the banking sector is due to the dissatisfaction with the quality of services delivered.

The provision of IT based service options in itself does not guarantee customer satisfaction. IT based services can affect customers perception of service quality either positively or negatively (Sohai & Shanmugham, 2004). Berkley and Gupta (1994) developed a model to describe how IT can be used to improve service performance. Through case studies they discussed in detail where IT had been used or could be used to improve specific service quality dimensions including reliability, responsiveness, competence, access, communications, security, understanding and knowing the customers and quality control.

2.3.3 E-commerce and E-finance

The theory of diffusion of innovation is a model developed to predict factors influencing adoption of information system. IT diffusion emphasises the importance of perceived relative advantage and improved organisational performance as enablers of adoption of new innovation (Al-Sukkar, 2005). According to Rogers (2003), the greater the perceived relative advantage the faster the adoption. The diffusion of innovation theory says that potential adopters evaluate an innovation based on innovation attributes such as relative advantage, compatibility, complexity (ease of use), trial-ability, and observability. All the attributes were found to be positively related to its rate of adoption, while the perceived complexity of an innovation is negatively related to its rate of adoption.
Figure 2.1 Relation between E Commerce and E Banking


With increasing competition within the banking industry banks have limited room to outperform other players in the industry and the substitutes. The technological wave is taking along with it all sectors and industry and as banking affects all other segments of the economy it cannot be left out. It has joined the bandwagon with a lot of ICT developed earmarked for the banking sectors benefit. E-banking using internet and mobile devices is the latest obsession but ICT is not limited to this aspect only (Berger & Gensler, 2007). Thus, in order to fully utilise e-commerce and e-business banks should take note and implement the various available technological innovations. Quick adoption of these ensures better results with less work. It is ideal to always be up to date with the rapid pace of technological innovation.
2.4 Internet and Mobile Banking development

2.4.1 International Stage

1981 saw New York’s biggest banks: Chase Manhattan, Manufacturers Hanover, Citibank and Chemical start offering online services via the videotex system. However it failed to live up to the hype. Only Minitel (France) and Prestel (UK) systems were a success (Bradley, 2003). Hannan (2008) goes on further to say Nottingham Building Society clients were the first users of online services in UK and the Bank of Scotland assisted in its set up in 1983. The highest utilisation of internet banking, with up to 75% of all banks availing it, is in countries like Austria, Korea, Singapore, Spain, and Switzerland. Furthermore the Scandinavian countries are really up on the internet use spectrum, as a third of Finland and Sweden bank clients experience the convenience of e-banking (Chang, 2003).

From the onset the marginal cost of i-banking transactions was a tiny fraction of the cost of branch banking. It was this statistic that launched dozens of standalone internet banks. As a result, European banks have poured billions of Euros into building direct channels like the web, upgrading branches and call centers, and trying to integrate all these channels. Major financial futurists predicted bright prospects to e-banking (Kerem, 2003). After some years of excitement it appeared that the banks’ long-awaited rising profits from this area would not be yielded. Globally, internet banks are faltering with most in Europe and America either re-adopting elements of traditional branches or closing down. This situation requires a profound analysis to be able to understand the real cost of e-banking and e-bank transactions in particular (Maholtra, 2007). Ernst and Young, a consultancy company, reckons that the internet cut British banks’ costs by a mere 0.1% in 1999 while they were, somewhat heroically, hoping for a 25% cut (Forrester Research, 2008).

Raza (2010) indicates that there are about 4 billion unbanked people in the world, which is more than two thirds of the population of low and middle-income countries. In Pakistan, the ratio of financial exclusion is even higher. In spite of the availability of an enabling policy environment, and government and donors-
supported incentives, the existing outreach is about 12%. The country like the rest of Asia is striving to develop inclusive financial systems which provide low income and marginalised communities with increased access to viable financial services. This will allow them to become a critical component in, and contribute to, the country’s economic development. The escalating importance of the ICT sector has drawn interest from a number of companies from the likes of Finland and other countries. Not wanting the emerging markets ICT to lag behind The World Bank in collaboration with Nokia have initiated schemes to augment ICT development (ITU, 2011).

M-banking may still be in its infancy but it is growing at a phenomenal pace. For Standard Chartered Bank, Singapore, the growth rate of active users utilising its i-banking services was 33% between 2010 and 2012. The growth rate of active users for its m-banking services was a whopping 92% from 2010 to 2012. But the rise of m-banking also means banks need to do more to assure customers their money is safe when they transact online or via mobile (Haeger, 2012). Over the past two decades, the mobile phone has expanded its appeal from high end niche to mass market. In doing so, mobile technology now supports a rich ecosystem of mass market mobile services, with financial services among these. It would appear that mobile payment and m-banking services, after many years of anticipated development, are well on the way to establishing themselves as mainstream propositions within the financial services landscape. Together they are estimated to generate transaction revenues of over US$1.6 billion out of US$45 billion (Burelli, 2012).

2.4.2 African region
According to Mensah (2011) Africa is in danger of being left behind on a new and growing worldwide market that reached US$1.7 trillion as far back as 2004, that year’s total value of e-business transactions. The process of innovation, driven by transformation in business supply chains and the growth of online marketplaces, has widened and intensified in all parts of every major economy. A major way of improving livelihood of people in emerging markets is to enhance availability of financial services. Unfortunately the minority of citizens have the services as about 2.7 billion of the emerging markets population cannot get these services.
The number of individuals in Africa, Latin America and Asia who have mobile phones but have no bank account is over a billion. However they is an expected improvement for Africa as the statistic is supposed to go down from 2.7 billion as of now to 1.7 billion by 2012 (Ondiege, 2010).

Most Africans have challenges in getting banking facilities and only 20% of the families have bank accounts. In 2007, only about 30% of Kenyan households had bank accounts; and in 2006 Benin had 35 bank branches to serve a populace of 7 million. Limited access to financial services in Africa stems mainly from deficient infrastructure, physical-geographical isolation or inaccessibility and financial illiteracy (Chitura et al., 2008).

Al-Sukkar and Hasan (2005) state that Sub-Saharan Africa is the last continent to embrace ICTs such as the internet and mobile technologies. A decade ago only a very limited number of countries had local internet access but now the situation is quite different. Internet penetration is on the increase in Sub-Saharan Africa with most countries depending on public and commercial internet access points who exploit this opportunity by charging exorbitant fees for their services. Despite this monumental growth in ICT adoption, fundamental problems of erratic power supply loom large. Inadequate telecommunication infrastructure has also continued to hinder the continent from uninterrupted access to innovative IT applications such as e-government, e-commerce, telemedicine, teleconferencing and tele-democracy. The current level of ICT penetration has brought renewed interest in the investment and innovative use of ICT for modern development. When looking at deposit institution penetration, at 16.6% Sub-Saharan Africa has the least global rating whilst the developing countries are as high as 63.5% (ITU, 2011).

The Nigerian banking industry went through a consolidation exercise that left Nigeria with 25 banks out of an initial 89 banks (Chimeke, Evwiekpaefe & Chete, 2006). They went on to note that the ability of 25 banks to satisfy and retain their customers in the post consolidation era will no doubt depend largely on the development of their IT infrastructure. Within the last decade, all the banks have transformed from manual to automated systems involving the use of various e-
banking and e-payment systems. In 2008, the use of e-payment systems in Nigeria accounted for N360 billion (USD 2.2 billion) worth of transactions up by 35% from 2005. The banks’ investment in IT infrastructure has been corroborated by users’ acceptance of the systems despite their concern about network security and security of the system (Adesina & Ayo, 2010). In South Africa, the DRC, Zambia and Kenya for instance, m-banking is availing financial services to markets where the traditional banks were not geographically present. The additional functionalities include account opening, balance enquiry, utility bill payment, fund transfer thus provide facilities for day to day activities. Mobile phones usage has gone beyond e-banking with other public services like election supervision and public health message delivery (Chitura et al., 2008).

Sullivan and Wang (2005) are of the opinion that in the past 30 years 3 ICT sector products, PCs, mobile phones and the internet, have revolutionised the world. The developing countries have been affected most by the mobile phone. From 1998 to 2009, penetration wise Africa witnessed a huge leap to 42.82 from 0.53 per 100 people. Like many African countries the following witnessed tremendous raise in mobile penetration from 2003 to 2009 (per 1000 people): Algeria jumped from 45.4 people in 2003 to 937.94 in 2009; Botswana 248.09 to 961.19; South Africa from 359.88 to 926; and Kenya from 46.80 to 486.52. Over the same period the average price of a 2G handset tumbled from 2003 by 100% to USD75 (Ondiege, 2010).

Chulu (2012) states that in Africa there are more than 500 million mobile phone subscribers, a 103% jump from the 2008 figure of 246 million. Fixed telephones number was first exceeded in 2000 by that for mobile phones. Nigeria, South Africa, Kenya, and Ghana are the main markets in Africa in terms of mobile phones. The main investors in the continent’s mobile industry are South Africa’s MTN, India’s Bharti Airtelband and France Telecom who have invested US $1.4 billion in consumer spending. Africa has one of the largest population growth and urban migration rates. According to Mensah (2011), in 2009 a total of $355 million was used by the Sub-Saharan Africa mobile network players to upgrade its infrastructure. In 2015 this spending is likely to go as high as $1.45 billion. Kenya and Rwanda have taken major steps in assisting ICT infrastructure
ventures with Kenya having ploughed in excess of USD 80 million in TEAMS (The East African Marine System). Africa is now considered as the fastest emergent continent in the ICT sector growth. As shown below mobile phone penetration has exploded since 2000 (Chulu, 2012).

![Graph showing mobile phone subscription in Africa]

**Figure 2.2 Africa-Mobile cellular telephone subscription ('Thousands)**


Even though the mobile phone revolution is moving ahead some African nations are lagging behind. In a bid to achieve 100% mobile penetration economies like South Africa (88%), Algeria (81%) and most of North Africa are close. However some nations like Ethiopia, Burundi, the Central African Republic, Eritrea and Rwanda are still way off as they are all below 7%. The reasons for this include low salaries, poor literacy levels and large signal black spots. These challenges are made worse by high taxes e.g. Tanzania and Uganda are at 30% (Mensah, 2011). The rural population who account for more than 60% of Africa’s total population have no access to banking services. The rural commercial bank branch network is still underdeveloped as shown on the Table 2.1.
Table 2.1 Bank presence in rural areas in Africa

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>28</td>
<td>128</td>
<td>357.1</td>
</tr>
<tr>
<td>Angola</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>270</td>
<td>550</td>
<td>107.4</td>
</tr>
<tr>
<td>Cameroon</td>
<td>20</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Chad</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Comoros</td>
<td>50</td>
<td>92</td>
<td>84</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>32</td>
<td>2662</td>
<td>8218.8</td>
</tr>
<tr>
<td>Gabon</td>
<td>5</td>
<td>6</td>
<td>120</td>
</tr>
<tr>
<td>Kenya</td>
<td>1133</td>
<td>2056</td>
<td>81.5</td>
</tr>
<tr>
<td>Lesotho</td>
<td>0</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Libya</td>
<td>359</td>
<td>380</td>
<td>8.4</td>
</tr>
<tr>
<td>Madagascar</td>
<td>850</td>
<td>1166</td>
<td>35.6</td>
</tr>
<tr>
<td>Mauritania</td>
<td>n.a.</td>
<td>1</td>
<td>n.a</td>
</tr>
<tr>
<td>Mauritius</td>
<td>186</td>
<td>268</td>
<td>44.1</td>
</tr>
<tr>
<td>Mozambique</td>
<td>394</td>
<td>90</td>
<td>-77.2</td>
</tr>
<tr>
<td>Namibia</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>19</td>
<td>556</td>
<td>2826.3</td>
</tr>
<tr>
<td>Seychelles</td>
<td>20</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>12</td>
<td>31</td>
<td>158.3</td>
</tr>
<tr>
<td>Swaziland</td>
<td>0</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>12</td>
<td>46</td>
<td>283.3</td>
</tr>
<tr>
<td>Uganda</td>
<td>287</td>
<td>416</td>
<td>44.9</td>
</tr>
</tbody>
</table>

From: WDI 2010, CGAP Report data 2010

2.4.2.1 Regulation /Monopoly/Licensing

Telecommunications and media regulation in the majority of African governments is too strict. This becomes as a major obstacle in reducing the digital divide and is more of a hindrance to advancement and growth in technology. The main fear is loss of control over information movement as they feel it is a threat to their institutions and operations (Ndlovu, 2009).

2.4.2.2 E-Banking Success Stories in Africa

Mensah (2011) reflected that only 19% of the adult population in Kenya has access to a formal bank account and banking services in Kenya are largely restricted to urban populations. Cellular operators are providing banking services in the country with M-PESA and MKESHO by Safaricom and ZAP by Zain. The latest partnership between Equity Bank and Safaricom to launch the M-KESHO account is the perfect showcase of convergence between the mobile phone and banking. This convergence has the potential of bringing over 18 million Kenyans into formal banking services. In October 2010, Safaricom and Barclays Bank of Kenya signed a partnership, which allows Barclays account holders to deposit and withdraw to and from their MPESA accounts. The M-PESA agents who bank
with Barclays Bank will also be able to purchase e-float for their daily operations. This is the eighth bank, after Family Bank and Kenya Commercial Bank among others, to partner with M-PESA either as an agent or a super agent, denoting the growing co-operation between the mobile money services and mainstream banks (Chulu, 2012).

**Figure 2.3 Increasing trend of Mobile Banking in Africa**


In South Africa First National Bank (FNB) has the highest m-banking customer base, above 2 million clients which translates to about 90,000 clients monthly. In 2009, FNB had ZAR7.2 billion transaction from m-banking coming from 56 million transactions. Their key to success is the ability for clients to send funds to individuals in South Africa (Ondiege, 2010).

**2.4.3 ICT Development: Zimbabwe Case**

The digital divide is set to widen even further for Zimbabwe if the country does not up its effort to develop solutions for challenges being faced. A proper and professional analysis is required to understand the problems so that workable solutions to help achieve goals can be formulated. If this is rushed, short term solutions to close the digital divide will be implemented and these potentially have
negative ripple effects like resource wasting and the country’s development can even step backwards instead of forwards (Chulu, 2012).

In Zimbabwe the mobile penetration rate measuring the number of active mobile phone users within a specific population rose from below 10% to above 50% by the end of 2010. Despite the proliferation of mobile phones in the nation, financial transactions conducted using this platform has been calculated at 1% in 2010. Market watchers contend that developing markets are predominantly cash societies and it is proving increasingly difficult for policy-makers to promote e-commerce platforms, particularly using mobile phones. In addition the current bandwidth constraints plaguing the countries are making it difficult to establish reliable communication platforms for e-commerce. It is believed that the establishment of more redundant links with the submarine cables will allow the country access to more bandwidth (Chamisa, 2011).

ITU (2011) indicates that although Zimbabwe was noted for outstanding or above-average improvements on the ICT access sub-index it faces a number of obstacles in ICT development like most African nations. The problems associated with rolling out ICT developments include: expensive equipment, poor data and voice networks infrastructure, power cuts, limited bandwidth, regulation, censorship, licensing, skilled labour migration, lack of IT experts and below standard websites. The expensive PCs and internet make their penetration very low. ICT equipment rely on availability of electricity thus the limited supply of power and unplanned for power cuts negatively impact ICT strategies. This electricity supply challenge implies that there can be no meaningful digital revolution (Chitura, 2008).

The limited national bandwidth needs to be addressed urgently thus resources should be directed at availing of broadband access. The inadequate access points are not helping the situation at all and to make it worse some monopolies have not delivered on their promise of availing cheap and reliable communication to the Zimbabwe mass. Telone, Powertel and Transmedia whose parent company or origin are PTC, ZESA and ZBC have the infrastructural capability to reach the whole country (Ndlovu, 2009).
UNDP (2002) ranked Zimbabwe amongst the first 11 nations with considerable internet usage in 2002. This emanated from above 35 000 dial-up internet subscribers with accounts with the country’s six major internet service providers. These 6 were AfricaOnLine, Ecoweb, Telconet, Zimbabwe Online, Zimweb and ComOne. The UNDP report shows that of the four million African Internet subscribers, above 60%, are from Zimbabwe and South Africa combined, 250 000 from North Africa whilst the rest are from the other 50 African nations. In 2009 Zimbabweans who actually used the internet was relatively high at 1 500 000. However the continued expansion of internet cafes and ICT development was negatively affected by the high cost of computers and general unrest in the country (Mensah, 2011).

### 2.5 Alternative Delivery Channel’s Motivation

#### 2.5.1 Reasons for investing in ADC

Alternatives like online delivery will continue to become more cost effective and thus greatly assist cost to income ratios. Pavlou (2003) notes that banks have turned to the internet in a bid to strengthen their market share as e-banking has revolutionised the perception of IT strategies. Those banks that do not adopt e-banking are set to lose clients and also the price of investing in e-banking is lower.

---

**Table 2.2 Zimbabwe Internet Usage and Population Growth**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Users</th>
<th>Population</th>
<th>% Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>50,000</td>
<td>14,712,000</td>
<td>0.3%</td>
</tr>
<tr>
<td>2002</td>
<td>500,000</td>
<td>13,874,610</td>
<td>3.6%</td>
</tr>
<tr>
<td>2005</td>
<td>820,000</td>
<td>12,247,589</td>
<td>6.7%</td>
</tr>
<tr>
<td>2008</td>
<td>1,351,000</td>
<td>12,382,920</td>
<td>10.9%</td>
</tr>
<tr>
<td>2009</td>
<td>1,481,000</td>
<td>11,392,629</td>
<td>13.0%</td>
</tr>
<tr>
<td>2010</td>
<td>1,810,000</td>
<td>11,523,640</td>
<td>15.7%</td>
</tr>
<tr>
<td>2011</td>
<td>2,150,000</td>
<td>11,596,895</td>
<td>18.50%</td>
</tr>
</tbody>
</table>

From US Census Bureau, 2011
than sticking to branch banking. Studies by Jasimuddin (2004) in Saudi Arabia also pointed out that even though banks established web sites e-banking services to clients are still limited.

In addition to transaction cost cutting, better service delivery and being responsive to market demands these channels have made banks not so fussy about geographical location and banking hall closing time. (Sullivan & Wang, 2005). Delivery of service in banking can be provided efficiently only when the background operations are efficient. An efficient background operation can be conducted only when it is integrated by an electronic system. Banking customers get satisfied with the system when it provides them maximum convenience and comfort while transacting with the bank. Internet enabled electronic systems facilitate the operation to attain these results (Chang, 2003).

Internet bank services are used actively; most of the payment transactions are concluded via e-channels. The growth of the self-service has been exponential but access to internet is blocking further increase of the share of internet payments (Kerem et al., 2003). Most of the consumers who start banking online do it because they need to pay bills frequently and they would like to do it with minimum effort. Besides that people use i-banking to closely monitor their financial matters, view account balance and check receiving payments from other parties (Chimeke et al., 2006).

According to Nath et al. (2001) a chief benefit for the banks offering m-banking and i-banking services is better branding and better responsiveness to the market. Those banks that offer such services are perceived as leaders in technology implementation resulting in them enjoying a better brand image. Other benefits are possible to measure in monetary terms. The main goal of every company is to maximise profits for its owners and banks are not any exception. Automated e-banking services offer a perfect opportunity for maximizing profits. According to a survey by Booz, Allen and Hamilton, an estimated cost providing the routine business of a full service branch in USA is $1.07 per transaction, as compared to 54 cents for telephone banking, 27 cents for ATM banking and 1.5 cents for internet banking (Pyun et al., 2002).
The main benefit from the bank customer's point of view is significant saving of time by the automation of banking services processing and introduction of easy maintenance tools for managing customer's money.

According to BankAway (2001) and Gurau (2002) the main advantages of e-banking for corporate customers are as follows:

- Reduced costs in accessing and using the banking services.
- Increased comfort and time saving as transactions can be made 24 hours a day, without requiring the physical interaction with the bank.
- Quick and continuous access to information. Corporations will have easier access to information as, they can check on multiple accounts at the click of a button.
- Better cash management. E-banking facilities speed up cash cycle and increases efficiency of business processes as large variety of cash management instruments are available on internet sites. For example, it is possible to manage company’s short-term cash via internet banks (investments in over-night, short- and long term deposits, in commercial papers, in bonds and equities, in money market funds).
Private customers seek slightly different benefits from e-banking. In the study on online banking drivers Aladwani (2001) finds, that providing faster, easier and more reliable services to customers were amongst the top drivers of e-banking development.

BankAway (2001) sees the following as the main benefits from e-banking for private customers:

- **Reduced costs:** in terms of the cost of availing and using the various banking products and services.
- **Convenience:** All the banking transactions can be performed from the comfort of the home or office or from the place a customer prefers.
- **Speed:** The response of the medium is very fast; therefore customers can actually wait till the last minute before concluding a fund transfer.
- **Funds management:** Customers can download the history of different accounts and do a “what-if” analysis on their own PC before affecting any transaction on the web. This will lead to better funds management.

Another reason to use e-banking is that it attracts high value customers. E-banking often attracts high profit customers with higher than average income and education levels, which helps to increase the size of revenue streams. For a retail bank, e-banking customers are therefore of particular interest, and such customers are likely to have a higher demand for banking products. Most of them are using online channels regularly for a variety of purposes, and for some there is no need for regular personal contacts with the bank’s branch network, which is an expensive channel for banks to run (Berger & Gensler, 2007).

### 2.5.2 Economic benefits

The impact of the New Economy on the entire economic growth has been studied in several research projects. Pohjola (2002) shows, that the contribution of the use of ICT to growth output in the Finnish market sector increased from 0.3% points in the early 1990s to 0.7 points in the late 1990s. However, unlike the US, there has been no acceleration in the trend rate of labour productivity in Finland.
According to a research conducted in Estonia by Aarma and Vensel (2001), bank customers use bank office services on average 1.235 times per month, and wait in queue in bank office on average for 0.134 hours. However, making payments via e-banking facilities rather than in the bank offices create overall economy savings in the amount of 0.93% of GDP. Average distance to the nearest bank office is 4.14 km, which takes approximately 0.21 hours to travel. Estonian GDP in 2001 was 10 billion kroons and average hour wage 35.40 kroons. There are 0.5 million citizens, who use brick-and-mortar bank facilities in Estonia (Emor, 2002). There are similar traits between Estonia then and Zimbabwe now and the uniqueness of Estonia’s situation make it an interesting country case to look at.

Sathye, (2009) believes if the amount of cash in circulation decreases, the efficiency of banking sector will increase, as:

- client banking costs decreases (less cash fees to pay),
- shop keeper / service provider costs will decrease (no need for incasso service and cash accounting), and
- bank costs decrease (cash storage, less checking and processing costs).
A survey by the TechWeb News in 2010 found e-banking to be the fastest growing commercial activity on the internet. In its survey of internet users, it found that 13 million Americans carry out some banking activity online on a typical day, a 58% jump from late 2005 (TechWeb News, 2010). The broadening of online banking could not have come at a better time as it is concurrent with the widening of high-speed broadband connections and better appreciation from the internet users. Another factor in e-banking growth is that banks have discovered the benefits of e-banking and have become keener to offer it as an option to customers.

Next generation m-banking services will offer better products that have user friendly menu driven instructions, instantaneous access, safety and real time transaction processing but lesser session cost. Financial institutions will get improved levels of client satisfaction and loyalty by providing anywhere, anytime banking (Pavlou, 2003). Maholtra (2007) purports that these institutions are to prepare to unveil more services on mobile devices as mobile networks are upgraded with such technology as WAP, GPRS and UMTS who will support more advanced multimedia services. Clients will have 24/7 financial control as they can access bank statements, do money transfers, be notified of any significant account activity e.g. large withdrawal or overstepping of pre-set thresholds.
### Table 2.3 Development of mobile banking by device and type of banking services

<table>
<thead>
<tr>
<th>Device Type</th>
<th>Features on phones and smartphones</th>
<th>Tablet-specific features, i.e. no smartphone app 'stretched' to fit onto larger screen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile</td>
<td>Tablet applications are more prevalent (likely due to larger screens). Tablet used as extension of web-banking, development of applications for tablet both for customers as well as financial advisor/consultant use. Bank-centric business models only.</td>
<td>Use of specific tablet limited to access to internet-based services. Tablet used as tool for bank consultants and instrumental in some branch redesign initiatives. Bank-centric business models predominant.</td>
</tr>
<tr>
<td>Tablet</td>
<td>Smartphone and tablet services are mainly extensions of existing platforms. However, net tablet services are emerging and beginning to provide a more extensive range of services to customers. Bank-centric business models only.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Private banking</th>
<th>Corporate banking</th>
<th>Retail banking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial services provided to high net worth individuals</td>
<td>All financial services targeting large enterprises</td>
<td>Consumer- and SME-facing financial services</td>
</tr>
</tbody>
</table>


### 2.5.3 Lessons from pace setters

Other m-banking services, such as WAP, have some technical limitations that prevent its wide spread adoption (Jaruwachirathanakul, 2005):
- mobile phone interface is not very convenient and user-friendly (the screen is small, it is difficult to handle long texts);
- it is quite difficult to input data through mobile phone (mobile phones are getting smaller in size, and the size of the buttons is decreasing as well);
- limitations on data transfer such as slow speed (even GPRS systems allows connection with a speed comparable to modem data transfer speed); and expensive connections;
- limitations on security as scripting is less secure than internet bank script and possible SIM card copying).

Studies have identified lack of trust as one of the main impediments to customer’s usage of online financial application (Casalo, Flavian & Guinaliu, 2007) and (Nath et al., 2003). Riyadh (2009) also found risk toward using the internet as one of the factors influencing intentions to adopt i-banking services. Kassim et al. (2006) showed that trust does not only affect the intent to use e-banking but serves as an antecedent to commitment to e-banking. Casalo et al., (2007) and Adesina et al., 2010, found that trust played a key role in continued use of e-banking.

Hannan (2008) goes on further to name organisation reputation as one of the factors for determining adoption of i-banking in Singapore. The study found that organisation reputation of the bank is most important in choosing an m-banking or i-banking service in Singapore. The variety of services offered and familiarity with the bank are also important criteria. Clients prefer a bank that offers a one stop shop with a full house of facilities and functionalities. The size of the bank is another point to consider as bigger banks are associated with stability and financial muscle which implies customers have more confidence with the institution (Pyun et al., 2002).

Today, financial service institutions that offer services over the internet or mobile devices are keen to accelerate the adoption process. They know that the cost of delivering the service over the internet is much less than delivering the same service over-the-counter (Sathye, 2009). Although start up costs for an i-banking channel can be high, once a certain volume is reached it starts being profitable once a critical mass is achieved. There is strong belief that trust, compatibility, and ease of use are key predictors of customer’s intention to continue using i-
banking and m-banking services. Late adopter opportunities also exist and commercial banks in countries like Ethiopia and Zimbabwe should take advantage of already developed best and existing software applications (Poon, 2008).

2.5.4 Considerations when partaking in ADC
Kerem (2003) notes that when it comes to adopting these ADCs there is need for proper management and they should be a long term view which sees these as long term investments. Bradley and Stewart (2003), list the following as factors that affect ADCs uptake: magnitude of the company, structure of the company, entry of new competition and quantity of companies who have adopted it in the industry. Maholtra and Singh (2007) also have the same view. E-banking is not a niche application to computer fans and innovative adopters, and a profound research is needed to map its consumer base and the impact of e-banking on the development of bank-customer relationships in the value creation process.

Cyber security is a global challenge that requires global and multi-dimensional response with respect to policy, socio-economic, legal and technological aspects. E-banking applications represent a security challenge as they highly depend on critical ICT systems that create vulnerabilities in financial institutions, businesses and potentially harm banking customers. It is imperative for banks to understand and address security concerns in order to leverage the potential of ICTs in delivering e-banking applications (Berger & Gensler, 2007).

The findings in the work of Ayo (2010) reveal that perceived ease of use and perceived usefulness are not only predecessor to e-banking acceptance. There are also factors to retain customers to the use of e-banking system such as organizational reputation, perceived risk and trust. Sohail and Shanmugham (2004) mentioned that age, educational qualification, accessibility to the internet, awareness of e-banking and customers’ resistance to change were significantly affecting the adoption of e-banking. Ganet et al. (2006) mentioned that demographic variables like age, gender, marital status, ethnic background, educational qualification, employment, income and area of residence influence consumer decision making process in e-banking adoption.
Financial institutions are trying to be innovative by introducing new banking products in line with the changing taste of consumers. Out of a possible user base of about 4 million people in Zimbabwe, only a quarter can access the internet. However some ICT players believe the figure could be more than half. There is rampant under-utilisation of the internet in emerging markets with e-mail being its main domain of use (Chamisa, 2011).

2.6 Challenges of introducing the two ADC facilities

Human tellers and automated teller machines continue to be the banking channels of choice in developing and under developed countries. Only a small number of banks employ m-banking and i-banking. Among the middle and high income people in Asia questioned in a McKinsey survey, only 2.6% reported banking over the internet in 2000 (Poon, 2008). In India, Indonesia, and Thailand, the figure was as low as 1%; in Singapore and South Korea, it ranged from 5% to 6%. In general, i-banking accounted for less than 0.1% of these customers’ banking transactions, as it did in 1999. The internet is more commonly used for opening new accounts but the numbers are negligible as less than 0.3% of respondents used it for that purpose, except in China and the Philippines where the figures climbed to 0.7 and 1.0%, respectively (Sullivan and Wang, 2005).

Casalo et al. (2007) state that the slow uptake cannot be attributed to limited access to the internet since 42% of respondents said they have access to computers and 7% said they have access to the internet. The chief obstacle in Asia and throughout emerging markets is security. This is the main reason for not opening online banking or investment accounts. Apparently, there is also a preference for personal contact with banks. Access to high-quality products is also a concern. Most Asian banks are in the early stages of i-banking services, and many of the services are very basic. Most rural areas in Africa, where the majority of small and medium businesses are concentrated, have no internet facilities and thus are unable to engage in e-commerce activities. Most countries in Africa, except South Africa, have internet infrastructure only in their major cities (Chitura et al., 2008).
The weakness of this technological development is that e-banking is not only exposed to the same conventional banking risks but it also complicates them. The risks include but are not limited to governance, legal, operational, and reputational risk. It also adds its own unique challenges. As a stop gap measure regulators have customised their policies to achieve the main objectives: ensuring the safety and soundness of the domestic banking system, promoting market discipline, and protecting client rights and the public trust in the banking system. Policymakers are now more prepared for increased potential influence of macroeconomic policy on movements of capital (Kamel, 2005).

Bradley & Stewart (2003) listed the following as key factors that have stalled adoption and diffusion of online banking: exorbitant implementation costs, low client demand, security concerns, unuser-friendly interfaces, redundant current systems and unavailability of expertise. Security is an important consideration that encompasses the safety of the transfer and the chance of the transfer being intercepted. Information security is pertinent because to make any transaction over the internet or mobile phone, clients are required to provide personal details. Such information in the wrong hands could be abused (Kerem, 2003).

Another key hindrance to higher uptake rates is the high expenditure of business solution development. Implementation of e-business solutions can require millions, a prize business ventures including banks currently regard as a luxury. Hannan (2008) says that in addition to costs, time to implement and get accustomed to online banking can be too long and at the same time minimal functionalities are being offered. Furthermore, use of cheques via online banking is problematic as a client will need to do a request about three weeks in advance of payment. On the day of request if money is withdrawn from the account interest will be lost. Other deposits besides direct deposits need to be physically done. Traveller’s and cashier’s cheques are examples of services not viable for online banks.

It is also difficult to calculate the unit price for e-channel transactions. According to Forrester Research (2008), only 13 out of 25 European banks were able to measure the fully allocated costs per different distribution channels. The research
of 13 banks showed that on average online transactions cost 14 times less than those made by branch tellers. Most of these banks had applied activity-based costing to map the evolution of channel costs over time.

Regulators commonly list additional risk considerations arising from the use of the mobile channel. These include: the higher possibility of loss of device, the restricted screen and keypad of the device, the information security of the end-to-end network, the availability and reliability of the communications network, and the use of outsourced service providers. However, these factors do not in themselves make use of m-banking more or less risky than other forms of e-banking (Bankable Frontier Associates, 2008).

E-banking exposes banks to higher legal risks. This channel has no geographical limitations hence banks can expand easily into new markets better. However they might not have adequate knowledge of the local laws and regulations, for example whether there is need to acquire a local license or not (Gurau, 2002). In cases when no licenses are required an online only bank can easily lose track of regulatory changes made by host nation supervisors and this can have adverse effects. This increases the chances of the bank unintentionally violating customer protection laws such as data protection and gathering. Losses through lawsuits or other jurisdiction crimes can result from this (Pavlou, 2003).

Money laundering has been enhanced by e-banking since this channel offers anonymity which this crime thrives on. After the account has been opened the account holder can disappear from the face of the bank as transactions can be done from wherever and by whoever has been given the credentials by account owner (Pavlou, 2003). Claessens (2002a) has the notion that to counter combat money launderers, a number of nations have put in place specific guidelines on client identification. Know your customer require verification of identity and physical address before an account is authorised for opening and then transaction monitoring. A concern was raised in a report issued in 2010 by the Organization for Economic Cooperation and Development's Financial Action Task Force. Since e-banking goes beyond geographical boundaries, which nations regulator has the mandate to investigate and sanction money laundering
violations? According to the task force the best option is to coordinate legislation and regulation internationally so that safe havens for criminal activities are abated (ITGI, 2003).

Banks are also facing a new wave of competition. Hirst (2012) believes services traditionally the domain of the banking sector can now be taken over by other firms. Firms like Google and PayPal are competing with banks through new and cheaper technology. Similarly, BankSimple in the US and the mooted arrival of Movenbank, a paperless, cardless, fee-free bank, are utilising social media such as Facebook to challenge traditional banks (Shah & Clarke, 2009).

2.6.1 Barriers to the increased uptake of e-banking

Adam (2008) lists the following as some of the barriers to the increased uptake of e-banking technology.

i. Lack of awareness and understanding of the value of e-banking
ii. Lack of ICT skills and knowledge
iii. Financial costs
iv. Infrastructure – relative to teledensity
v. Security – ensuring security of payments and privacy of online transactions and lack of security.
vi. Other privacy and security related issues
   • Tax evasion
   • Privacy and anonymity
   • Fraud adjudication
   • Legal liability on credit cards
vii. Legal issues
   • Existing legal systems not sufficient to protect those engaged in e-banking transactions.
   • Reference to writing, document, and signature refer to things in paper form
   • Uncertainty regarding whether the courts will accept electronic contracts or electronic signatures as evidence.
2.7 Business Models

This business organisation model is a way for directors, executives, senior staff and consultants to analyse and evaluate organizations more effectively. It represents the important elements and issues within an organization (Andrew, 1980). Using the business model enables a single method of analysis to be used. The model should be straightforward, easy to apply but comprehensive and at the same time applying to virtually every form of organisation and their internal units or departments. In fact, the business organisation model holds true for organisations of all types, every size and all periods in their development cycle. Therefore business models can be used as an organisation grows and develops, even if it changes its nature (Humell, 2010).

According to Dess and Lumpkin (2003) business model describes the rationale of how an organisation creates, delivers and captures value. Lynch (2003) define business model as a summarisation of the core business decisions and trade-offs employed by the company to earn a profit. A business model converts innovation to economic value for the business and spells-out how a company makes money by specifying where it is positioned in the value chain. It draws on a multitude of business subjects including entrepreneurship, strategy, economics, finance, operations, and customer success. Thompson and Strickland (2003) emphasise that in the most basic sense, a business model is the method of doing business by which a company can sustain itself that is, generate revenue.

Business model is the firm’s core logic for creating value and making money (Mcmillian & Tampoe, 2000). It is evident that there exists a substantial amount of literature and business models with varying perspectives including strategy, value configurations, and components of business models and frameworks of business models. A business model is the answer to the question “How do you intend to make money?”. It is the plan for how a company will generate sufficient revenue to meet its expenses and earn a profit (Chen, 2009).
2.7.1 Business Models and technology

The development of the internet and its entrance into the contemporary economy has influenced in practise all aspects of its functioning as well as the organisations operations within its confines. In the case of companies, new business models aimed at the utilisation of possibilities connected with their functioning in the electronic space have become some of the key aspects of the impact of this global network and the opportunities that have arisen with its development as a new technology and as a global business platform. In many cases these models were based on the replication of those functioning in the real world, but very often taking into consideration the specific opportunities available in the electronic space (ITGI, 2003).

Focus on Return On Income reveals that ICTs provide a very limited return unless accompanied by changes in organisational structures and business processes. These changes also need to be followed by a diversification of service offerings, with many banks introducing new product lines such as credit cards, stock brokerage and investment management services. This transformation of business from an old company to a new agile electronic corporation is not easy and requires a lot of innovative thinking, planning and investment (Shah & Clarke, 2009). Two main models may be identified in the use of banking portals online.

2.7.2 Brick and Clicks

Classic banks start to cross-sell bank products via a website in order to reach new clients and diversify their distribution channels (click and mortar). Nearly half of US banks were using transactional websites at the beginning of 2002 (Johnson, 2008). Many people see the development of e-banking as a revolutionary development, but broadly speaking, e-banking could be seen as another step in banking evolution. It gives consumers another medium for conducting their banking. However it is a bit farfetched to believe that the revolutionary channel will entirely substitute the traditional channels, the trend is pointing towards a mixed bag where clicks (e-banking) and mortar (branches) co-exist (Flavian et al., 2006). In Malaysia, however, despite the authority’s encouragement to the public to adopt m-banking and i-banking, traditional branch-based retail banking remains the most common method for conducting
banking transactions. In addition to this, Riyadh (2009) found that, although more than 80% of their respondents were aware of internet banking, less than 10% were currently using the services.

2.7.3 Pure Internet based banks

An alternative strategy is the creation of a pure internet bank without the support of a network of physical branches. Virtual banks are internet based financial institution that offers deposit and withdrawal facilities, and other banking services, through ATMs or other devices. It operates without having a physical (brick and mortar) walk-in premises. Only a few banks have adopted a pure online business model. After the initial internet hype faded, some were forced to exit the market via liquidation or acquisition; others developed a mixed model and opened physical branches (Jabnoun & Al-Tamimi, 2002). Only a few pure online banks were able to achieve profits and survive. We observe instead banks integrating pure online banks in the banking group where a pure internet bank is part of a banking group but perceived by clients as an external. This is innovative bank. Internet-only banks historically have underperformed branching banks, leading some to conclude that this business model is not viable (ITU, 2011).

However, automated production technologies like the internet are likely to exhibit substantial scale economies so although internet-only banks tend to grow fast, most are still relatively small operations, and thus may be operating below efficient scale. The empirical analysis demonstrates that profitability gaps do shrink as internet-only banks get larger, and that (regardless of scale) the more successful internet-only banks are the ones that practice basic cost control. The results offer a number of insights for e-commerce firms in general, and more specifically suggest that internet-only banking models may be viable when executed efficiently (DeYoung, 2002).

2.8 Critical Evaluation of Literature

Most of the literature that has been covered is focusing on e-banking in North America, Europe and Asia. Little has been covered about Africa and there is limited mention in relation to the commercial banking sector. The study seeks to
establish the adoption of internet and mobile banking in the local commercial banking sector. The definitions vary by author but all literature seems to point towards that all industry need to implement the new e-banking solutions that is i-banking and m-banking. This will ensure banks remain sustainable and offer the customer desired service convenience which goes a long way in improving on company performance and profit. The various challenges and problems emanating from use of these modern delivery channels depend also on the extent of use and banking industry development, structure and competition.

2.9 Chapter Summary

This chapter aimed at pre-empting studies on previously done research which are related to the researcher’s topic. Literature seems to point out that there is need to venture into such products by banks in order to survive but there should be care in the sense that the local environment over the last 10 or so years has been very unique. As such the researcher has to be always have at the back of their mind the fact that operating environments of these scenarios are usually more stable as compared to Zimbabwe’s. The chapter looked at the historical progression of internet and mobile banking and also touched on the importance of banking looking at its competitiveness and service delivery. Benefits and challenges and ICT based business models for banks were also discussed.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter looks at how the whole research was approached, the research methodology. It starts by revealing the research design and philosophy. These two will guide the rest of the chapter where the research strategy will be explained, with data collection and analysis being other focus areas. In short this chapter looks at the practical steps through which the researcher passed in their journey to find answers to the research questions. Each operational step in the research process states researcher’s choice from a multiplicity of methods, procedures and models of research methodology which will help to best achieve the objectives (Dawson, 2002).

3.2 Research Design

There are various schools of research with differing assumptions and different criteria of what counts as good research. At the same time there are different research designs which are independent of the various schools of research. The researcher came up with a design that is complete, consistent with assumptions and criteria of the school of research and credible in terms of the norms of the research community the work he seeks to contribute to, the banking sector. The research design is about ensuring that the pieces fit together and produce a consistent and coherent picture as shown in Figure 3.1.

DeVaus (2001) argues that the function of a research design is to ensure that the evidence obtained enables the answering of the initial question as clearly as possible. He defines it as the theoretical structure within which a study would be conducted. The main objective of research design is to timeously and effortlessly assist in data collection of appropriate details at a low cost. Good research design prevents manipulative use of data by taking into account possible alternative explanations and enabling comparisons and judgments’ between them (Kumar, 2005).
3.3 Research Philosophy

Leedy (2005) mentions that there are the two forms of research paradigms which are qualitative and quantitative. These paradigms determine research approach, methods of data collection, type of data analysis and methods of data presentations. Qualitative research aims at understanding as it answers primarily to how questions whilst quantitative research aims at (causal) explanation. It answers primarily to why questions. Nature of the project, the type of information needed, the context of the study and the availability of resources (time, money and human) entails choice between the two. Both qualitative and quantitative research can aim at description of social reality and are complementary, not contradictory (Hathaway, 1995).

Factors which determine the research method to make use of include time period, researcher's familiarity and inclination, funding, type of population and resource availability (Badenhorst, 2007). In this study the researcher is well acquainted with the banking sector and its operations and SCBZ, the population, is a big player in this industry. However, there were time and monetary constraints to be taken note of thus the need to limit target audience using
location criterion. IT initiatives like email and telephones made the constraints more manageable.

For the purposes of this research, the researcher used the mixed method approach where both the quantitative and qualitative methods were simultaneously utilised. This is mainly to benefit from advantages of both with the former being more pronounced. Quantitative is useful because of objectivity and reliability, whilst qualitative gives researcher a holistic view of the phenomenon under investigation. In addition it has the ability to deduce descriptive information from primary and secondary data as well as to depict the emotional side of the participants (Babbie, 2004).

Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process (Dawson, 2002). As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central principle is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone (Cresswell, 2003). The next two sub sections further solidify the need to use the mixed method approach.

3.3.1 Qualitative
Qualitative research can be defined as multi-method in focus, involving an interpretive, naturalistic approach to its subject matter (Denzin & Lincoln, 1994). By being part of the situation the researcher finds out a lot. Quantitative researchers Miles, Huberman and Kerlinger (1994) state that, "Qualitative data does not exist thus everything will either be 1 or 0" (p. 40). On the contrary Campbell (2000) asserts "all research ultimately has a qualitative grounding" (p. 40). However both concur with the fact that the two research methods work hand in glove frequently. Qualitative research can focus too much on individual outcomes loosing the relation to the bigger situation or potential causes of the outcome.
3.3.2 Quantitative

It attempts to understand meanings that people give to their deeds or to social phenomena. Quantitative research involves making useful descriptions of observed phenomena and explaining the possible relationships between descriptive surveys, longitudinal developments, correlational and ex post factors research designs (Leedy, 2005). It is generally an iterative process whereby evidence is evaluated; theories and hypothesis are refined and tested. Quantitative research generates reliable population based and generalised data and is well suited to establish cause and effect relationships. Quantitative research enables the research and description of social structures and processes that are not directly observable. It is well-suited for quantitative description and comparisons between groups and areas (Booth, Colomb & Williams, 2003).

3.4 Research Strategy

Research strategy according to Fossey et al. (2007) is the methodology or plan followed to find information on a subject or research topic. The determination of the research strategy helps the researcher to identify the appropriate way for collecting data and to ensure the success of study in the accomplishment of the objectives and aim. Each research strategy has got it own pros and cons and this will depend on type of research question, focus on contemporary as opposed to historical phenomena and amount on control researcher has on actual behavioural events. There are various methods used in research and these include experimental, longitudinal, cross-sectional, case study, survey, exploratory and observation (Dawson, 2002).

3.4.1 Research Strategy used by researcher

Case Study

A case study is an extensive examination of a single instance of a situation of interest. The approach implies a single unit of analysis such as company, in this instance SCBZ, or a group of workers, an event, a process or individual. Case studies are often described as exploratory research used in areas where there are a few theories like adoption of IT based initiatives like i-banking and m-
banking, or a definition of body knowledge. In exploratory case studies, existing theory is used to understand and explain its happening which is the ideal strategy in this study (Kumar, 2005).

Booth et al. (2003) maintain that a case study investigates a contemporary phenomenon within its real-life context and boundaries between the phenomenon and its context may not be clearly evident. It answers how and why questions and defines topics broadly rather than narrowly. The researcher needs to know why there is need to implement the two ADCs and how it can be done looking at the challenges and risks. In addition to either having single case source or multiple sources of evidence it covers contextual condition, not just the phenomenon of study. A case study research may be exploratory, descriptive or explanatory at the same time it may be positivist or interpretivist. Case studies are particularly useful in depicting a holistic portrayal of a client's experiences and results regarding a program (Kothari, 2007). The former is more fitting in this study as the basis of banking is to ensure clients experiences are known for continuous improvement.

According to Robson (1993), case studies have a considerable chance to generate answers to why, what and how during an in-depth study of a situation. He further argues that a case study approach allows several data collection techniques for example questionnaires, interviews, observation and documentary analysis to be used at the same time. In this study all but the observation technique are utilised and it proves quite handy and informative. The case study is used to organise a wide range of information about SCBZ and the contents are analysed by seeking patterns and themes in the data. Further analysis is done through cross comparison with other players in the commercial banking sector McNamara (2011).

Limitations to the case study method are noted, with theorists arguing that there can be a bias in results, either via the inherent limitations of a single method, or due to the effect of the researcher on the situation itself (Denzin, 1970, p. 13). This was one reason why the researcher adopted the mixed method approach and triangulation. However, the case study results also presented a challenge when researcher intended to make a generalisation of the findings to a broader
scale as variations in situations can result in different outcomes. Zimbabwean commercial banking sector players differ and thus Barclays and CBZ outcomes will not necessarily match with that for SCBZ.

In addition the nature of the study called for a cross sectional approach by observing different functional areas of SCBZ at a particular point in time. As such retail, corporate, SME, operations, finance and IT departments were all involved. According to Saunders et al. (2007, p. 96) cross sectional studies allow a research to be completed in a short time as a snap shot approach thus was ideal because of the inevitable time constraints. A longitudinal approach was not taken as it is more time consuming. The case study strategy helped the researcher to investigate the real world information and to relate them with the objectives.

3.5 Population and Sampling Techniques

The population is any set of people or events from which the sample is selected and to which the study results will generalise or all the members of the group that you are interested in. All the employees at SCBZ, totalling 776, will form the population for this study. It looks at the full complement of people individuals, organisations, groups and communities who provide the researcher with information or collect information about them (DeVaus, 2001).

When we are studying a very large target group as in this study, it is usually not possible to obtain observations from all. Therefore, it was ideal to study a sample of the group (population) which represents the larger whole. A sample is a subset of the population that is usually chosen because to access all members of the population is prohibitive because of time, money and other resource constraints. A key issue in choosing the sample related to whether the staff members chosen are representative of the population. There was a risk that the units selected in the sample do not represent the population, sampling error (Kumar, 2005). To minimize the risk the researcher could have opted to use random sampling though this would result in choosing candidates who are not so ideal in terms of knowledge, job title, location and accessibility. As such quota sampling was seen as a better option.
3.5.1 Sampling methods

There are many sampling methods and these can be classified under two umbrella terms probability sampling and non probability (purposive) sampling methods. The major sampling methods as viewed by Badenhorst (2007) are random, systematic, stratified, convenience, judgment sampling, snowball sampling and quota sampling.

**Quota sampling** is the non probability equivalent of stratified sampling. Like in stratified sampling, the researcher first identifies the strataums and their proportions as they are represented in the population. Then convenience or judgment sampling is used to select the required number of subjects from each stratum. Strata are members of the population unique in that they share at least one common characteristic. The researcher first identifies the relevant strataums and their actual representation in the population. It reduces sampling error. This differs from stratified sampling, where the strataums are filled by random sampling (Booth et al., 2003).

**Judgement Sampling** is where the sample is selected because they are convenient. The researcher selects the sample based on judgment. This is usually an extension of convenience sampling (Kothari, 2007).

3.5.2 Sampling method used by the researcher

To select participants for the study, quota sampling which is the non probability version of stratified random sampling was used. The population was divided into two or more relevant and significant strata based on one or a number of attributes. These individuals were identified from SCBZ staff. The attributes to select the 70 employees were level of management, unit/department and location as shown on Table 3.1. Most responses were from top and middle management as they were the decision makers and were well informed. More emphasise was put to the business units, Wholesale/Corporate Banking and Consumer/Retail Banking, as they are the face of the bank and interact with the clients. The other service units like IT, Operations. Finance and Human Resources (HR) were also involved. In terms of location, 80% of the respondents were from Harare and this
only affects Wholesale Banking and Consumer Banking as all others strata are based in Harare.

Quota sampling was also be used to select the 20 customers to be interviewed, the first criteria for division being Retail or Corporate customer. For these the sampling was from the selected top 200 and top 100 customers respectively and 10 from each stratum were targeted. Judgment sampling was used to select the employees of 10 of the competing commercial banks.

**Table 3.1 Sampling strata**

<table>
<thead>
<tr>
<th>Employee Level</th>
<th>Consumer Banking</th>
<th>Wholesale Banking</th>
<th>IT</th>
<th>Operations</th>
<th>Finance and HR</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>8%</td>
<td>2%</td>
<td>40%</td>
</tr>
<tr>
<td>Middle Management</td>
<td>13%</td>
<td>13%</td>
<td>7%</td>
<td>5%</td>
<td>2%</td>
<td>40%</td>
</tr>
<tr>
<td>Low management and General Staff</td>
<td>7%</td>
<td>7%</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30%</strong></td>
<td><strong>30%</strong></td>
<td><strong>20%</strong></td>
<td><strong>15%</strong></td>
<td><strong>5%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

If properly applied quota sampling is accurate, easily accessible and divisible into relevant strata. Thus, a perfect representative sample should exactly represent the population from which it is taken. As it is important to ensure that the sample is a true representation of the population from which it is drawn the above divisions were adhered to. Having finalised on the sample the next step was to decide how to get the respondent’s views and opinions.

**3.6 Data Collection**

**3.6.1 Primary Data**

Primary data will be collected using questionnaires and interviews.

*Questionnaires*

Questionnaires are one of the most popular methods of conducting scholarly research. The aim of a questionnaire is to gather information for purposes of research for market surveys, analysis or even to corroborate other research findings. For the sake of consistence all respondents are to answer to the same questions in the same order (Patton, 2005).
It provided a convenient way of gathering information from SCBZ staff. Saunders et al. (2007) state that questionnaires give the respondents the independence to select appropriate answers without any outside influence. The researcher gave the respondents ample time to fill up as some got free time during breaks or after hours depending on work pressure and type of job done. Rushing respondents would have resulted in not so accurate feedback. However, some of the critical respondents who were not finding the time or need to fill the questionnaire ended up having interview based questionnaires with the researcher taking them through. This instrument also proved to be quite a cheap and feasible way of gathering data. The audience acknowledged that the instrument was easy to understand and not time consuming, thus this increased the response rate.

**Interviews**

Face to face interviews with senior management and some strategically positioned middle management like Head Remote and Proximity Banking were used to obtain the critical data in-depth. Interviews were also done with other banks influential and informed employees and also with the selected top customers who were more affected by e-banking. In turn their business significantly affects the sustainability and profitability of the bank, those classified as top tier clients. The centralised location of managers in Harare ensured there was easy access to the interview targets which was convenient for the study. An interview guide was used to conduct the interviews but this did not act as a restriction as there was room for flexibility depending on interviewee’s openness. Interviewer gave the respondent the room to clarify on certain issues, so as to understand them and attain the most accurate data for analysis (Babbie, 2007).

To ensure the interviews yielded desired results the interview settings and place were chosen so as not to distract the interviewee and they were given the option to choose desired venue. Half were comfortable with their offices while the other preferred a neutral venue away from disturbances and office pressures. From the onset the reason of having the interview was explained and the aspect of confidentiality and unanimity was well elaborated to try to entice as much valuable information as possible. In addition to recording the interviews only after
consent was given, the format of the interview was also pre-discussed with interviewees (Leedy, 2005).

3.6.2 Secondary Data
The research used the following data collection techniques for secondary data: internal bank information, relevant banking and finance publications, newspapers, financial magazines, bank annual reports, bank literature, bank records, on-line databases, direct observation of the infrastructure, banking industry reports, articles and publications from RBZ, government and other financial publishers like the Monetary Policy, Fiscal Policy and ITU reports. It was a cheap method of gathering information. However, some of the information was out of date with more recent information not yet published. Literature searches over the internet were the fastest and most convenient, whilst library literature searches were minimal as they tend to take long. Secondary data availed to the researcher background information, current trends and other views and perspectives.

3.6.3 Triangulation
Denzin (1970) defines triangulation as the combination of methodologies in the study of the same phenomenon. In triangulation the researcher used a combination of methods: questionnaires to quickly collect a great deal of information from a lot of people, and then interviews to get more in-depth information from certain respondents to the questionnaires. In turn case studies could then be used for more in-depth analysis of unique and notable cases. Triangulation involves the use of different approaches, methods and techniques in the same study. It overcame the potential bias and sterility of a single method approach. The researcher used questionnaires, documentary analysis and interviews in the case study.

3.6.4 Reliability and validity
The designed data collection kit was tested for reliability and validity on a pilot basis with 6 randomly selected members of staff, before the data was gathered.

Piloting of research instruments
After designing the questionnaire and interview guides there were piloted to see if there were obtaining the required result. Six staff members were asked to read
through and fill out to see if there were any ambiguities which might not have been noticed. A detailed discussion was made with the six test users and constructive criticism was given on the length, structure, sequence of the questions and wording on the questionnaire and interview. The instrument’s questions and organisation were altered accordingly. The pilot test also allowed the researcher to determine how much time was required to complete the questionnaire and interviews and also eliminate some of the questions which users were not answering.

3.6.5 Ethical Issues
Ethical issues concerning research participants which were taken into consideration included that when collecting information the researcher was not to pressurise participants. Also each and every time before any interview or questionnaire was done there was need to seek consent from the respondent. No incentives were provided and when soliciting for sensitive information appropriate manner was practised. In addition there was never any intent to intentionally cause harm of what form what-so-ever to the participant and maintenance of confidentially was taken note of with no names or contact details obtained from the participants.

On the part of the researcher the ethical issues which were of paramount interest were that of avoiding bias of any form. The researcher chose a fitting research methodology as it was unethical to intentionally use an inappropariate one like a biased sample, invalid instrument or drawing wrong conclusions. Reporting was done correctly avoiding changes to serve personal interest and the collected data was not to be abused in any way whatsoever (Kothari, 2007).

3.7 Limitations
The effectiveness of the data is prone to errors of perception, subjectivity and deliberate deception by the subjects of the study. As such the researcher tried to ensure to the best possible manner that they got responses from the right respondents and also used other means to verify accuracy of responses given. Cost of the research limited the comprehensiveness of the study hence the limitation of concentrating on reachable and limited staff only. The most ideal
situation would have been to interview all staff but administrative and financial
costs would have been unmanageable. To cut on costs accessible staff was used
but the selected sampling method was strictly adhered to so as to ensure
diversity and representativeness. In addition cheaper communication routes like
telephones and emails were used for follow up and distribution to out of Harare
participants.

Some subjects of the study refused to participate or provided inaccurate or
outdated information on their company because they considered it confidential or
feared it could get into the wrong hands and be abused. Trying to get financial
implications and profitability due to internet and mobile banking from other banks
was very difficult. To try to circumvent this, the researcher tried as much as
possible to create a friendly and conducive environment and continually
emphasised aspects of unanimity and confidentiality.

3.8 Data Analysis

Results will be analysed using a variety of statistical methods ranging from simple
graphing to the use of statistics. These help to enable analysis of relationships of
a number of independent variables, controlling other factors, including analysis.
Statistical Package for Social Sciences (SPSS) version 17 will be used as it is
quite appropriate for the data collected.

3.9 Chapter Summary

This chapter looked at various elements of research methodology and design
which includes description, comparison, classification and explanation. The time
dimension whether longitudinal or cross sectional needs to be also taken
cognisance of and a number of measurements whereby one considers the
prospective or retrospective ones. Other key elements dealt with were target
population, research units and methods of data collection available and selected.
CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter describes the findings and analysis of the research on a concept by concept basis. Telephone calls and e-mail follow-ups were done on questionnaires which had inconsistencies in responses. Data processing included screening spoilt and invalid questionnaires. The Statistical Package for Social Sciences (SPSS) was used in the analysis of data gathered. Presentation of the data was done using descriptive statistics in the form of tables, bar graphs and pie charts to simplify the analysis and enhance communication. The resulting descriptive statistics are compared and contrasted across categories of firm resources and relevant literature reviewed where applicable. Since the research was mixed method, some tests were done on the sample sizes and on the validity of findings. The information which could not be subjected to meaningful quantitative analysis had qualitative comments being used.

4.2 Response Rate and respondents

Table 4.1 Response Rate

<table>
<thead>
<tr>
<th>Classification</th>
<th>Target</th>
<th>Responses Received</th>
<th>Response Rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB Staff</td>
<td>70</td>
<td>65</td>
<td>93</td>
</tr>
<tr>
<td>SCB Customers</td>
<td>20</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Other Banks Staff</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>OVERALL</td>
<td>100</td>
<td>95</td>
<td>95</td>
</tr>
</tbody>
</table>

The response rate for each target group is shown in the table above. Interviews were used for selected SCBZ staff, customers and other bank staff whilst the questionnaire was used for the rest of SCBZ staff. To improve the response rate the interviewer administered questionnaires to critical staff who could not get spare time to respond. The rest of the staff members who were easier to get responses from were self administered. The overall response rate of 95% is adequate to warranty validity of research results presented in this chapter. This is
supported by Wegner (1993) who states that a sample greater or equal to 30 respondents is adequate to draw conclusions on the population.

4.3 Respondent Profiling

The study had to ensure that it got responses from the correct people. This would ensure that accurate data was collected and the population was well represented with sampling bias being as low as possible. Table 4.2 and Figure 4.1 show the profiles of the respondents.

Table 4.2 Staff Profiling

<table>
<thead>
<tr>
<th>Employee Level</th>
<th>Consumer Banking</th>
<th>Wholesale Banking</th>
<th>Technology</th>
<th>Operations</th>
<th>Finance and HR</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management</td>
<td>7%</td>
<td>7%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>20%</td>
</tr>
<tr>
<td>Middle Management</td>
<td>17%</td>
<td>17%</td>
<td>10%</td>
<td>7%</td>
<td>3%</td>
<td>54%</td>
</tr>
<tr>
<td>Low management and General Staff</td>
<td>8%</td>
<td>3%</td>
<td>8%</td>
<td>5%</td>
<td>2%</td>
<td>26%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>32%</td>
<td>27%</td>
<td>20%</td>
<td>14%</td>
<td>7%</td>
<td>100%</td>
</tr>
</tbody>
</table>

AGE DISTRIBUTION FOR RESPONDENTS

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-20</td>
<td>3%</td>
</tr>
<tr>
<td>20-30</td>
<td>13%</td>
</tr>
<tr>
<td>30-40</td>
<td>25%</td>
</tr>
<tr>
<td>40-50</td>
<td>33%</td>
</tr>
<tr>
<td>50+</td>
<td>17%</td>
</tr>
</tbody>
</table>

4.3.1 Banking experience

![Figure 4.1 Banking experience](image)
As shown on Figure 4.1 the 10-15 years’ banking experience has the most of the respondents and is closely followed by 5-10 years. This shows that the respondents have relatively a lot of experience in the banking sector with 5% actually having more than 30 years in banking. Most respondents, 38%, have been in the current position for 5–10 years, 27% have got 0–5 years experience whilst 20% have got 10-15 years experience in current position. Cross tabulation revealed that employees in lower ranks are relatively new in their current positions but as the level of management improves there is limited position change. Most senior managers have been in their positions for 15-20 years and a significant portion has over 20 years banking experience. Thus, the experience is considerably adequate as they have required knowledge on SCBZ and banking in general.

4.3.2 Level of education

In addition to the respondent profiling the study also looked at the highest level of education achieved by the respondents as there is a relationship between education and level of uptake of IT.

![Pie chart showing level of education]

**Figure 4.2 Level of education**

A total of 49% of the employees have undergraduate degrees whilst only 3% have got primary schooling and these are the low ranking staff most of whom have worked for SCBZ for many years. A significant portion of the 18% who have
postgraduate degrees are in the top management levels. Those with diploma qualifications are a substantial 24%. This shows that the educational levels at SCBZ are quite high and this provides a good platform for bank growth, technology uptake and acceptance of change. Education pre-disposes people to information about internet and mobile banking and its benefits and thus influences the adoption of e-banking (Pikkarainen, 2004).

4.4 Contribution to Bank Income

There is need to see how banks are earning their income hence the study needed to look at how the bank earns most of its income. From this, the contribution which ADCs are bound to make to bank income can be determined.

![Figure 4.3 Contribution to Bank Income](image)

A total of 64% of the respondents stated that non-interest income is a major contributor to the bank’s income and only 30% said that interest income is a major contributor. On the contrary 24% say interest income contributes a low portion and 9% say non-interest income plays a minor part in contributing to bank income. This leaves 46% and 27% saying there is moderate contribution from interest income and non-interest income respectively.
SCBZ like most banks is relying on non-interest income and this has attracted the bank regulator who has put across measures to reduce bank charges and fees. Most banks are offering 0% interest for current and savings accounts (RBZ, 2012). In 2011 besides having a small deposit book of US$250m which was the fourth highest in the banking sector and is slowly growing, SCBZ made the highest non-interest income, of US$46million, mainly due to a specific loan recovery. The near 0% cost of funds boasts performance. Of the interest income of US$14.5m, interest expenses were a mere US$48,000 (BancABC, 2012).

4.5 Adoption of Internet and Mobile Banking

The main focus of the study was to establish the need or not for the bank to fully implement internet and mobile banking.

4.5.1 Appreciation of internet and mobile banking
It was essential for the researcher to establish the extent of the understanding of both internet and mobile banking.

Table 4.3 Appreciation of internet and mobile banking

<table>
<thead>
<tr>
<th>Understand I-Banking</th>
<th>Value</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Values</td>
<td>Yes</td>
<td>95</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Understand M-Banking</th>
<th>Value</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Values</td>
<td>Yes</td>
<td>95</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

As shown on Table 4.3 all the respondents are aware of both internet and mobile banking. This is attributable to the drive and constant talk about the ICT based products in the market and the well published desire by all banking institutions to take up this form of banking.

4.5.2 Adoption of internet and mobile banking

This was a key question in the research. The results summarised in Figure 4.4 looks at how critical respondents perceived the need to adopt the two ADCs.
The criticality of adopting both forms of banking is evidenced by a total of 94% of respondents who see this as being either critical or very critical. No one stated that it is not critical whilst only 6% see it as something that can be or cannot be adopted. Documentary analysis also reveals that nationwide there is increase in e-banking in Zimbabwe. A cumulative total of mobile and internet transactions of 457,513 valued at $193,13 million were processed from January to November 2010. Of the $193,13 million, internet transactions accounted for 99%, while mobile payments were 1% of the same amount (Biti, 2011). ZOLife estimates indicate that 85% of the world’s internet users had carried out online transactions as the amount of global trade conducted electronically has grown beyond expectations with widespread internet usage (Chulu, 2012).

The above clearly shows that there is a strong view that it is very vital for the bank to adopt internet and mobile banking. The banking sector will also need to leverage on ICT to offer banking services to remote areas. Zimbabwe’s economic recovery has also in turn led to improvements in e-banking statistics. To further support the criticality of these modern ADCs the Zimbabwean government has put efforts at encouraging their adoption. The government views them as indispensable tools to alleviate poverty and facilitate a state-transformation aiming at effective and efficient service delivery.
Many ICT policy frameworks and e-Government projects have been commissioned. The Industry and Commerce Ministry is encouraging financial and retail institutions to invest in e-commerce since the multi currency period presents a good platform for Zimbabwe’s e-commerce growth. If these institutions take the lead the economy has a chance to catch up with the rest of the world (The Standard, 5 June 2011, p. 4). Consistent with these developments, the RBZ approved the establishment of mobile phone banking initiatives in the country with the goal to promote electronic payments and financial inclusion. Kingdom Bank has been awarded the Top ICT Supportive Bank of the Year by the Ministry of ICT at the Zimbabwe ICT 2011 Achievers Awards.

4.5.3 Sustainability without adopting the two ADCs
The study sought to establish the extent to which a bank will be able to sustain its operations without adopting ICT based products. The study findings are summarised in Figure 4.5.

![Figure 4.5 Sustainability without adopting the two ADCs](image)

Figure 4.5 shows that a moderate 27% feel that the bank will remain sustainable even if it does not adopt internet and mobile banking channels. A colossal 61% maintain that SCBZ needs to implement these two fully for it to remain sustainable; however, the other 12% could not really make up their mind.
In support of what the respondents said SCBZ will struggle to be sustainable if it continues lagging behind in offering internet and mobile banking. The ICT sector remains one of the fastest growing sectors of the economy with Zimbabwe being ranked 124 out of 152, jumping four places from the 128 it was in 2008 (ITU, 2011). The voice penetration rate or tele-density has improved, reaching 72% in 2011, of which mobile penetration accounted for 65%, making Zimbabwe one of the countries with the highest rates alongside South Africa, Botswana, and Mozambique. However, the internet penetration rate at around 13%, remains below the international levels of 26.6%, although above the regional average of 11%. Cumulatively, the three local mobile service providers share close to 8.1 million subscribers, up from 7.7 million last year (ibid).

The incidence of e-commerce and mobile banking is an exciting ICT development for Zimbabwe, which together with the coming of full 3-G technology will revolutionise business in Zimbabwe. Figure 4.6 shows the trends in voice and internet penetration, based on volumes of subscribers over the years to 2011. Nearly all other banks have joined the internet and mobile banking bandwagon and SCBZ should fully join too.

![Figure 4.6 Trends in voice and internet penetration](image)

*Figure 4.6 Trends in voice and internet penetration*

From Biti. (2011). Ministry Of Finance
4.5.4 Critical Success Factors for ADC implementation

For successful implementation of internet and mobile banking there are some essential factors required. The study findings on this are shown in Figure 4.7.

Figure 4.7 Critical Success Factors for ADC implementation

Figure 4.7 indicates that 40% of the respondents see capital funding as the most critical success factor whilst competent human skill is key with a score of 33%. Change management at 24% was also popular and they were a few other mentioned factors which include risk management, stable network connectivity, motivation and leadership style, customer education and technological advancement.

For successful implementation of i-banking and m-banking there is need for capital funding to acquire hardware, software, and other implementation and running costs. Though IT related costs are declining there are still on the high especially in developing countries like Zimbabwe. Ondiege, (2010) also highlighted that developments in Africa’s IT infrastructure due to stiff competition in the broadband service providers coupled by investment in undersea cables is pushing telecommunication prices downwards. In turn mobile telephone service providers have publicized internet service price declines. The new technology of
underground and underwater fibre optic cables is a chief infrastructural development. However, technology based enhancements require competent human skills to establish and support. Many projects have failed because of mismanagement of the change thus critical planning and managing change resistance are key to successful roll out.

### 4.5.5 Factors influencing adoption of new ADCs

The factors that influence the decision to take up internet and mobile banking are summarised in this section.

![Figure 4.8 Factors influencing adoption of new ADCs](image)

<table>
<thead>
<tr>
<th></th>
<th>Top two</th>
<th>Bottom two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of business</td>
<td>58%</td>
<td>42%</td>
</tr>
<tr>
<td>Organisational structure</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Entry of new competition</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Number of previous adopters</td>
<td>40%</td>
<td>60%</td>
</tr>
</tbody>
</table>

**Figure 4.8 Factors influencing adoption of new ADCs**

The combined total for the top two shows the size of business at 58%, and organisational structure at 55%, standing out as the most essential factors influencing adoption for internet and mobile banking. Number of previous adopters, 60%, and entry of new competition, 52%, dominate in the bottom two categories making them viewed as the lesser important.

The outcome supports the assertion that the bigger the bank the bigger the need for adoption of such technological enhancements (Jaruwachirathanakul, 2005).
SCBZ is one of the biggest commercial banks in the country and this further shows that it should spearhead such initiatives. A properly structured organisation of which SCBZ is can incorporate such developments. What makes it even easier for it is that a number of its sister banks in the SCB Group who share a standardised structure are already enjoying the e-banking fruits (Haeger, 2012). If one looks at the current local banking industry it shows that the issue of entry of new competition will not be so pertinent. No new players are getting into the commercial banking sector but they are actually being forced out by stringent licensing requirements for example Interfin, Royal and Genesis. However there is stiff competition coming in the form of mobile telephone players’ EcoCash (Econet), Isikwama (Netone) and TextaCash (Telecel). The fact that most local commercial banks have already adopted e-banking signifies the importance of number of previous adopters to SCBZ as it urgently needs to catch up.

4.5.6 Important ADC concept enablers
The vital concepts to be considered when looking at ADCs were studied and results are shown in this section.
Figure 4.9 Important ADC concept enablers

For the perceptions on ADC concepts the combined total for the top two shows relative advantage, 60%, being most important. Customer/organisational relationship, 55%, and ease of use, 51%, where closely behind and organisational performance stood at a distant fourth at 33%. Just like the Omani banking industry study by Khalfan et al. (2006), this research also found that SCBZ manager’s valued the four concepts and concurred that they provide a wider appreciation in implementing e-banking. If managers’ perceive something new to offer relative advantage they frequently adopt it. Thus, by considering the competitiveness and benefits that can be attained from an innovation it becomes imperative to adopt it (Rogers, 2003).

Businesses tend to adopt new technologies if it presents an opportunity to improve its relationship with customers. As such SCBZ should enhance its client relationships through IT adoption and in turn it must be well thought-out in relation to client trust, fulfilment and loyalty. Also in line with the findings by Ayo (2010) the study reveals that perceived ease of use and perceived usefulness are predecessors to e-banking acceptance.

Unlike literature the desire to improve organisational performance is not considered critical in enhancing change in technology. La & Kandampully (2002) feel a bank can gain competitive advantage in the market if they fully utilise ICT to enhance performance. (Soliman & Janz 2004) share the same sentiments about IT’s role.

4.5.7 Criteria for ADC bank selection

Clients need to make a decision on a bank to bank with and the criteria looked at is summarised in Figure 4.10.

When choosing a bank to use because of i-banking and m-banking results indicate it is more vital to look at the variety of services offered first. Reputation of the bank stands at a distant second with 39%. Further back there is size of bank, 12%, and familiarity with the bank, 9%, which are seen not to be key when choosing a bank.
The implications are that SCBZ needs a diverse and broad range of products and services in order to keep and attract customers and e-banking offers increased number of services and products. These were unheard of during the branch banking era where banks had limited boundaries and the source of competitive advantage was not easy to obtain (Kamel, 2005). The better the banks reputation the more comfortable it is for the customers and the more marketable a bank will be. Size of the bank is associated with stability, thus, clients will feel safer and secure in creating and maintaining a banking relationship. Knowing or being familiar with a bank either through previous banking, working or association through other people is not key to bank selection. However, customer referrals are fundamental especially to high value clients and many banks have achieved success because of such strategies.

4.6 Benefits of internet and mobile banking

The study also needed to establish the key benefits that internet and mobile banking is set to bring to a bank that adopts the two channels. Figure 4.11 gives a summary of the study findings.
The most prominent benefits are convenience to customers (94%), decongestion of banking halls (79%) and better branding and market responsiveness (67%). No one states that any of these three have got low benefits. The next set of highly rated benefits is operational efficiency (61%), cost effective channel (58%) and attracts high value customers (52%). The rest are below 50% in ranking when it comes to being major benefits. The benefits that came out as the least favoured are financial inclusion to the poor and remote (36%), attracts high value customers (9%). International and financial inclusion was the highest ranked (55%) when it came to average benefits.

In line with BankAway (2001) convenience to customers which mainly centers around 24 hour banking from anywhere leads the pack. Customer loyalty and high service quality are also closely related to the convenience. Decongestion of banking halls leads to reduced running costs. Less staff is required for repetitive tasks and these can in turn be directed to sales and less branch space is required indicating reduction in rent and furniture costs. The desire of low transactional costs provides an opportunity for m-banking to develop in emerging markets like Africa. If this void is filled a number of citizens will be assisted in
financial services access as mobile phones are more accessible in Africa and the penetration rate is on the increase.

Table 4.4 shows that SCBZ is doing relatively well in cost management, 25% reduction in cost income ratio from 2010, considering that revenue generation is very difficult in this current business environment. Thus the cheaper and cost efficient channels can further improve on this. If properly set up the mobile phone can be convenient to the bank clients. It can serve as a virtual bank card where customer and institution information can be securely stored, thereby avoiding the cost of distributing cards to customers and as a point of sale (POS) terminal or even as an ATM. Working as an internet banking terminal the mobile phone device and wireless connectivity bring the internet terminal into the hands of otherwise unbanked customers (Bankable Frontier Associates, 2008).

### Table 4.4 Cost / Income Ratio for local banks

<table>
<thead>
<tr>
<th>Bank</th>
<th>Dec 2010 (%)</th>
<th>Dec 2011 (%)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>BancABC</td>
<td>75.9</td>
<td>68.4</td>
<td>-10%</td>
</tr>
<tr>
<td>Barclays</td>
<td>105.8</td>
<td>94.7</td>
<td>-10%</td>
</tr>
<tr>
<td>CBZ</td>
<td>58.2</td>
<td>63.8</td>
<td>10%</td>
</tr>
<tr>
<td>FBC</td>
<td>80.0</td>
<td>76.9</td>
<td>-4%</td>
</tr>
<tr>
<td>SCBZ</td>
<td>73.4</td>
<td>54.9</td>
<td>-25%</td>
</tr>
<tr>
<td>Stanbic</td>
<td>70.7</td>
<td>67.1</td>
<td>-5%</td>
</tr>
<tr>
<td>Kingdom</td>
<td>80.0</td>
<td>107.0</td>
<td>34%</td>
</tr>
<tr>
<td>MBCA</td>
<td>83.8</td>
<td>79.5</td>
<td>-5%</td>
</tr>
<tr>
<td>Ecobank</td>
<td>4703.5</td>
<td>808.8</td>
<td>-83%</td>
</tr>
<tr>
<td>TN Bank</td>
<td>81.7</td>
<td>86.8</td>
<td>6%</td>
</tr>
<tr>
<td>NMB</td>
<td>94.7</td>
<td>74.4</td>
<td>-21%</td>
</tr>
<tr>
<td>ZB Bank</td>
<td>91.9</td>
<td>78.1</td>
<td>-15%</td>
</tr>
<tr>
<td>MetBank</td>
<td>79.1</td>
<td>77.9</td>
<td>-2%</td>
</tr>
<tr>
<td>FBC B. Society</td>
<td>89.4</td>
<td>60.1</td>
<td>-33%</td>
</tr>
<tr>
<td>POSB</td>
<td>76.3</td>
<td>80.0</td>
<td>5%</td>
</tr>
<tr>
<td>CABS</td>
<td>54.9</td>
<td>57.7</td>
<td>5%</td>
</tr>
</tbody>
</table>


A technologically up to date bank will improve its brand status and its marketability and this can be evidenced by Kingdom and Interfin some years back and Econet (CZI, 2011). SCBZ needs to re-establish its top of the market position and such initiatives will rebuild its brand. As there will be lesser human
intervention, errors are bound to decline leading to operational efficiency and running costs reduction and like all other banks cost cutting measures are a top priority. High value customers, that is the priority banking customers and blue chip companies, are totally for the idea of convenient banking and these are the clients that banks are supposed to keep happy for business sustainability.

SCBZ should take this opportunity to reach the physically and geographically inaccessible clients especially those in the rural areas were over 60% of Africa’s population resides. Banks can now reach these millions of prospective clients, with virtually no access to banking facilities. The rural commercial bank branch network is still underdeveloped. However, since more than 50% of the adult population in Africa has access to mobile telephone, mobile banking could enable the rural population to have access to financial services as demonstrated by the case of Kenya and South Africa (Ondiege, 2010).

The research results support the view by Adam (2008) who purports that e-banking can improve a bank’s efficiency and competitiveness, so that existing and potential customers can benefit from a greater degree of convenience in effecting transactions. This increased level of convenience offered by the bank, when combined with new services, can expand the bank’s target customers beyond those in traditional markets. Figure 4.12 reveals the decline in SCBZ’s market share on three fronts loans and advances, total assets and total deposits. As supported by Mensah (2011) engaging in the ADCs has got direct positive impact on the last two and these will eventually push up the latter as there will be more loanable funds available.
4.7 Challenges faced in Internet and Mobile Banking

The study also sought to establish the challenges faced in adopting and implementing the ADCs. The study findings are summarised in Table 4.5.

Table 4.5 Challenges faced in internet and mobile banking

<table>
<thead>
<tr>
<th>Rank</th>
<th>Description</th>
<th>Ranked as number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1, 2</td>
</tr>
<tr>
<td>1</td>
<td>Risk and network security</td>
<td>39%</td>
</tr>
<tr>
<td>2</td>
<td>Funding</td>
<td>36%</td>
</tr>
<tr>
<td>3</td>
<td>Poor infrastructure</td>
<td>33%</td>
</tr>
<tr>
<td>4</td>
<td>Poor customer uptake/demand</td>
<td>24%</td>
</tr>
<tr>
<td>5</td>
<td>Incompatible systems</td>
<td>24%</td>
</tr>
<tr>
<td>6</td>
<td>Unstable economic and political environment</td>
<td>15%</td>
</tr>
<tr>
<td>7</td>
<td>Financial and technological illiteracy</td>
<td>6%</td>
</tr>
<tr>
<td>8</td>
<td>Incompetent skilled staff</td>
<td>9%</td>
</tr>
<tr>
<td>9</td>
<td>Physical-geographical inaccessibility</td>
<td>6%</td>
</tr>
<tr>
<td>10</td>
<td>Project too complex</td>
<td>3%</td>
</tr>
</tbody>
</table>

As indicated on Table 4.5, risk and network security is the major impediment as it was ranked in the top two 39% of the time. It was at number three and four 33%
of the time implying it was in the top four in 72% of the responses. In addition only funding at 64% and poor infrastructure at 60% were ranked by over 50% of the respondents. However, poor customer uptake and demand was close at 48% and incompatible systems were also recognisable at 42%. The project being too complex was the lowest rated as a challenge at 3% with physical-geographical inaccessibility next at 21%.

As would be expected risk and network security and funding came out as the top challenges. SCBZ is to ensure it obtains funds to attain its own modern and technologically up to date equipment that also enhances risk management and network security and infrastructure. The top three are generally accepted as critical in internet and mobile banking and will need to be properly managed for the banks’ success. The results are in line with Bradley and Stewart (2003) and Kerem (2003) findings on most important issues delaying the adoption or diffusion of e-banking. These are security, lack of user-friendly technology, customer demand, high initial set-up costs, redundancy of existing high-cost legacy systems and lack of suitable skills.

Of major note is the fact that banks will manage their risk concerns differently because bank size and infrastructure vary and also change in technology is unpredictable. SCBZ’s approach to risk management will differ from other banks. Omani banking industry studies by Khalfan et al. (2006) rated security concerns highly when looking at issues faced in adopting e-banking.

The national infrastructure is poor and needs a combined effort from all stakeholders involved: ICT industry, financial sector, mobile operators, and government via its ministries like ICT, Finance and RBZ. The stakeholders need to share costs and invest in network technologies such as optical fibre that support transmission of large quantities of data. Overhauling the infrastructure entails high CAPEX and OPEX which points towards investing in higher capacity technologies. Congregation of voice and data networks calls for a well structured approach to unify communication. Shah and Clarke (2009) also agree that for it to happen the network infrastructure should be steadfast, high-speed and vigorous. Remote areas struggle to access electronic services like the mobile telephone
connection, internet or even basic e-mail because of poor or non-existent telecommunications infrastructure.

The mobile financial services market is enjoying strong growth rates. However, it still shows many characteristics typical of any early stage industry. Despite over 20 years in development, there are high levels of market fragmentation as well as challenges related to limited interoperability and an increasing number of market players. Within the mobile services segment, the pace of development has rapidly accelerated in line with the deployment of more sophisticated devices and new infrastructure technology (Burelli, 2012).

Most local banks have also revealed that there is relatively poor uptake on these new banking forms and this seriously dents the profit as these initiatives are volume dependent. Econet which has the largest subscriber base in Zimbabwe is still to offer SCBZ mobile banking functionalities. Furthermore, what can make the customer uptake a bigger problem for SCBZ is the fact that the majority of its clients are the older generation. Statistics are in line with Sohail and Shanmugham (2004) assertions that the older generation has a low uptake of internet and mobile banking. The other major reason why SCBZ is taking long to incorporate these two ADCs was the use of legacy DOS based banking systems (Bankmaster and Branchpower) which could not support the ADCs.

A crippling business environment over the last decade due to the unstable economic and political environment has led to difficulties in the local banking sector. The situation is further compounded for foreign owned entities like SCBZ as it is difficult to put in place long term investments and plans. For SCBZ the issue of competent skilled staff is not much of a problem. It has access to internationally experienced SCB Group personal who are now experts as they are dedicated to this type of work. They support such projects and initiatives for the whole group with over 70 countries in all continents. There is also information sharing in the form of meetings, e-learning, training, workshops amongst other methods. All these have been used to ensure staff competency is adequate. Globally many IT initiatives have failed because of lack of adequate knowledge by implementers (Hannan & MacDowell, 2008).
Physical and geographical accessibility of SCBZ is still vital considering that for e-banking registration clients need to access a physical branch, thus a wide branch network is still crucial. Figure 4.13 compares banks branch network coverage and SCBZ is ranked sixth out of the seventeen financial institutions. Furthermore when there are challenges on the electronic platforms there will be need to get branch assistance. Relating to the issue of poor infrastructure some areas are still inaccessible when it comes to mobile reception and internet access.

Figure 4.13 Branch network numbers

Financial and technological illiteracy by both the banks and clients greatly affects adoption of the ADCs in SCBZ and developing countries in general. Some banks could not transfer basic banking principles into the electronic channels leading to the documented losses and crisis. The ADC implementation can potentially be a big and complex project therefore requires proper management for successful rollout. SCBZ has enough experience in managing projects and the 2010 system overhaul project was as big as they can be. As such coupled, with the expansive international support from the group and well trained local staff there is enough reason to state that the challenge of the project being complex will not be the case for SCBZ.
4.7.1 Perceived Risk of Internet and Mobile Banking

Another important aspect which the study looked into was the risk that is assumed to come with these two ICT based banking products. Figure 4.14 shows the results.

![Perceived Risk of Internet and Mobile Banking](image)

**Figure 4.14 Perceived Risk of Internet and Mobile Banking**

Risk associated with internet and mobile banking is on the high side with a total of 54% indicating so whilst only 13% thought it is not risky. A considerable 33% of the respondents argued that the risk is moderate meaning it is at acceptable levels.

E-banking benefits are evident but on the other hand the risks are perceived to be on the high side. Since inception and as commonly agreed on the international scene this type of banking is not really trusted. Users find it difficult to trust completely mechanised systems when it comes to financial matters. It is one of the key impediments of its uptake by customers especially those of the older generation who have been SCBZs cash cow over the last decades. A simple mistake, like clicking a wrong button especially considering the small size of mobile gadgets, may create a big problem. The reported international scandals involving the internet have not helped improve this perception and it is a really big area to be dealt with.
4.7.2 Risk factors associated with Internet and Mobile Banking

The researcher investigated the factors that are related to internet and mobile banking risk. The study findings are presented in Figure 4.15.

Data and financial loss through phishing, stands way up at 82% amongst the risk factors associated with i-banking and m-banking. Resistance to change is also sizeable at 24%. Besides password sharing which is at 9% the other risk factors are seen to be minute. However, no one had the perception that there are no risks associated with internet and mobile banking. Only 3% believe that there is a danger of disintegration from the rest of the banks’ business.

Phishing is the attempt to acquire potentially sensitive information via email, instant messages, cellphones or through fraudulent websites and social networking websites (Pavlou, 2003). These common e-banking problems lead to unauthorised and criminal transactions being conducted and eventually lead to a bank’s image and reputation being tainted. Mobile and internet banking has introduced new headaches for country authorities as they fight to regulate and monitor the financial system in a bid to design and implement viable macroeconomic policies. The Business Software Alliance, a software piracy
watchdog group, rated Zimbabwe highly when it comes to software piracy, indicating that 87% of software used in Zimbabwe is pirated. This element is a very critical issue in the ICT sector which the e-banking revolution greatly relies on (Johnson, 2008).

4.7.3 Practical Risk Solutions

For the identified risks, practical solutions to mitigate them were also identified in the study.

![Figure 4.16 Practical Risk Solutions](image)

**Figure 4.16 Practical Risk Solutions**

Client authentification and client education stand out as the two most prominent risk solutions with 58% and 55% respectively. Use of security firewalls, 45%, and encryption, 33% are also favoured solutions. Digital certificates were chosen by 15% of the respondents as a method to deal with the identified risks.

Data confidentiality is vital to SCBZ’s sustainability intent thus it is crucial for the bank to ensure that customer’s data and transactions are safe. This can be achieved by ensuring that only authorised clients access the data. Client
education is required to support the security measures in place and SCBZ can use alternatives like online banking tutorials to help educate their clients. Most losses occur when customers do not follow simple but critical rules like password sharing or leaving PCs and mobile devices unlocked. Any leakage of information regarding client password or pin number and banking transactions can allow computer hackers to gain access to clients' bank accounts. Security firewalls and encryption are gaining increasing popularity. As digital certificates are a relatively new method and not yet fully understood it explains why they are still ranked low. By having various levels of protection in their systems, SCBZ will gain their clients confidence and this is good for business continuity.

4.8 Business Model

In order to cover all the objectives the study looked at the business model which SCBZ is currently using and will need to use to incorporate these two ICT products.

4.8.1 Current Business Model

A total of 83% knew the current business model, 8% don’t know it whilst only 9% are not sure. Shah & Clarke (2009) state that if a company passes adequate knowledge to its employees it is bound to perform better. The high appreciation of
the current business model by SCBZ really helps it achieve its organisational goals as the employees know what tool they are using to drive the business forward. This is supported by assertions by Chen (2009) because business models show how a company intends to make profits. Chances of excelling are increased by sharing vital information with the right employees. The few who are not sure or did not know the business model are the lower ranking staff.

4.8.2 Current service delivery and product offer

The study also investigated the respondents view on how they perceived the banks current product offering and quality of service delivered to the clients and Figure 4.18 shows this.

![Current Service Delivery](image)

**Figure 4.18 Current service delivery and product offer**

Only 12% of the respondents thought that SCBZ lags behind in terms of service delivery and product offer whilst no one thinks SCBZ is getting it completely wrong. The other 36% of the respondents indicate that the bank is average on these two aspects. However 52% are reasonably impressed by the service delivery of which 16% are really impressed.

Jabnoun & Al-Tamimi (2003) did a study in UAE banks were they analysed services quality. Results showed that it is a key factor in defending market share, and it revealed that human skill is still critical in service quality. As such the
advent of these forms of banking which remove the element of human service is against what customers tend to call for. There is, therefore, need for SCBZ to balance human interaction and continuous and quality service delivery. The constant interaction with staff in branches meets socialisation needs of humans but 24 hour service is also required by the same customers. The banking sector falls under the service industry where service quality and product offer is important for customer loyalty and ultimately business sustainability and profitability. By offering these extra delivery channels which increase customer options SCBZ is bound to improve on its service delivery and quality.

4.8.3 Impact of current ADC Status

In order to evaluate the current business model the study looked at how the current status of ADC in the bank affects other aspects of the bank. Figure 4.19 summarises the findings.

Figure 4.19 Impact of current ADC Status

Service delivery stands out as the most affected factor by the current status of the ADCs at a combined total of 67%. The next most impacted are bank stature and customer loyalty at 52% and 45% respectively. Business sustainability, 33%, and profitability, 30%, were seen to be moderately affected.
The limited offering of e-banking negatively impacts on service delivery most. Banking in remote places with no branch representation and 24 hour services will not be possible. SCBZ traditionally was a leader in innovation with facts such as being the first to introduce ATMs and phone banking to Zimbabwe providing evidence. Thus the lag in technological leadership affects the banks current stature. Since nearly all other banks now extensively offer these banking platforms customers are bound to be forced to move to competing banks. The SCBZ brand is accustomed to customer loyalty but there is a danger this might weaken if the current status is maintained. Profitability and business sustainability are affected but not to the extent of the others. Customer loyalty is at 3% on very low impact but the bank should not take a laid back approach.

4.8.4 Financial Performance

To establish the sustainability and profitability without the ICT based products, the study analysed financial performance of banks offering and not offering internet and mobile banking. Figure 4.20 and Table 4.6 summarise the findings.

**Figure 4.20 Banks profits after tax**

From SCBZ. (2012). www.standardchartered.com
In 2011 SCBZ profit after tax is USD21.99 million which was ahead of other banks except CBZ. This was a jump of 162% from the 2010 figure whilst the 2009-2010 change was a huge 225%. NMB, ZB, MBCA and BancABC also achieved Profit After Tax growth of above 100% in 2011 from 2010. This growth is driven by the credit recovery and solid Net Income Ratio. SCBZ had the highest ROE of 51%, up by 67% from 2010, because of the USD6.3 million specific provision recovery compounded by the strong growth in its fee and commission income.

Table 4.6 Bank performance ratios

<table>
<thead>
<tr>
<th></th>
<th>NPL/Total Loans (%)</th>
<th>Avg Cost of Funds (%)</th>
<th>Return on avg IEA (%)</th>
<th>Return on Equity (ROE) (%)</th>
<th>Return on Assets (ROA) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec-10</td>
<td>Dec-11</td>
<td>Dec-10</td>
<td>Dec-11</td>
<td>Dec-10</td>
</tr>
<tr>
<td>BancABC</td>
<td>0.9</td>
<td>3.1</td>
<td>5.0</td>
<td>7.7</td>
<td>17.4</td>
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<tr>
<td>Barclays</td>
<td>1.2</td>
<td>1.7</td>
<td>1.2</td>
<td>1.1</td>
<td>15.1</td>
</tr>
<tr>
<td>CBZ</td>
<td>1.1</td>
<td>2.8</td>
<td>4.6</td>
<td>4.8</td>
<td>10.0</td>
</tr>
<tr>
<td>FBC</td>
<td>0.8</td>
<td>3.3</td>
<td>3.9</td>
<td>7.7</td>
<td>30.8</td>
</tr>
<tr>
<td>StanChart</td>
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<td>2.9</td>
<td>0.0</td>
<td>0.0</td>
<td>9.0</td>
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<tr>
<td>Stanbic</td>
<td>2.1</td>
<td>5.1</td>
<td>0.2</td>
<td>—</td>
<td>8.6</td>
</tr>
<tr>
<td>Kingdom</td>
<td>1.5</td>
<td>7.7</td>
<td>8.5</td>
<td>8.4</td>
<td>32.6</td>
</tr>
<tr>
<td>MBCA</td>
<td>4.8</td>
<td>1.6</td>
<td>2.4</td>
<td>2.1</td>
<td>15.2</td>
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<tr>
<td>Ecohancing</td>
<td>4.7</td>
<td>15.4</td>
<td>26.0</td>
<td>8.9</td>
<td>33.8</td>
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<tr>
<td>TN</td>
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<td>1.7</td>
<td>14.3</td>
<td>10.9</td>
<td>42.8</td>
</tr>
<tr>
<td>NMB</td>
<td>1.4</td>
<td>2.8</td>
<td>5.9</td>
<td>7.4</td>
<td>25.9</td>
</tr>
<tr>
<td>ZB Bank</td>
<td>1.3</td>
<td>3.5</td>
<td>6.5</td>
<td>6.2</td>
<td>27.7</td>
</tr>
<tr>
<td>POSB</td>
<td>2.3</td>
<td>3.1</td>
<td>6.3</td>
<td>5.1</td>
<td>25.8</td>
</tr>
<tr>
<td>FBC &amp; Soc</td>
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<td>0.0</td>
<td>7.0</td>
<td>9.6</td>
<td>25.6</td>
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<tr>
<td>Tresi</td>
<td>0.0</td>
<td>0.0</td>
<td>6.0</td>
<td>15.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>2.4</td>
<td>3.5</td>
<td>12.5</td>
<td>8.6</td>
<td>30.2</td>
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<tr>
<td>CABS</td>
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<td>0.0</td>
<td>3.7</td>
<td>7.8</td>
<td>9.0</td>
</tr>
<tr>
<td>Industry Avg</td>
<td>1.8</td>
<td>3.3</td>
<td>15.9</td>
<td>21.4</td>
<td>2.5</td>
</tr>
</tbody>
</table>


These figures show that SCBZ is performing relatively well in the market. It has outperformed all banks, except CBZ, that have fully fledged internet and mobile banking and having been operating with these ADCs for a considerable period. This seems to indicate that SCBZ does not necessarily need to adopt fully pledged internet and mobile banking. It is not the case however, as the results might be taken to show that if SCBZ adopts these two ICT based products it can regain its top position and even increase the profitability gap with its competitors.
As alluded to earlier it will be able to tap into the young and upcoming market segment who are ready to take up technological innovations.

4.8.5 Business Model Fit

There was need for the researcher to establish whether the current business model will allow internet and model banking to fit in. Figure 4.21 shows the findings.

![Business Model Fit](image)

**Figure 4.21 Business Model Fit**

If the bank maintains the current business model, 55% of the respondents are confident the two banking channels will fit right in whilst 36% are not so confident about this. The remaining 9% are more than sure that these two will not fit into the picture.

The respondents and Humell (2010) have a contrasting view. The respondents believe that the current business model will not need to be changed to allow the two ADCs to fit in. Such major IT enhancements which impact on every part of business will need an adjustment in the current business model. However, the considerable figure of 36% who are not sure needs to be worked on as it can lead to a potential challenge on change management and resistance to change.
4.8.6 Ideal Business Model

Figure 4.22 shows that the majority, 80%, sees the bricks and clicks (mixed approach) as the most suitable business model to engage while only 5% see becoming a fully fledged virtual bank being the best way to go. A moderate 10% are not confident with both models and prefer sticking to the traditional branch model whilst the remaining 5% are not sure which business model is ideal for profitability and business continuity.

![Ideal Business Model Pie Chart](image)

**Figure 4.22 Ideal Business Model**

In line with Adam (2008) experience in Scandinavia, arguably the most advanced e-banking area in the world, the results appear to confirm that the future is clicks and mortar banking. Customers want full service banking via a number of delivery channels. The future is therefore ‘Martini Banking’ (any time, any place, anywhere, anyhow). Those for the traditional model feel it best suits SCBZ considering its older generation client base and the business environment it is operating in. The 100% virtual banking is still too early for SCBZ looking at the national situation and amount of investment it has done to establish its physical presence.
4.9 Chapter Summary

The chapter concentrated on the research findings hence the data collected from staff, customers, competing banks and documents was analysed and discussed. The first part briefly highlighted the response rate and respondent profiling. It then focused on source of income for SCBZ before getting into the critical aspects related to the research objectives. These covered adoption and implementation of internet and mobile banking, challenges, risks, benefits and business models. Financial information was also included to add weight to the deliberations. The next chapter gives recommendations and conclusions of the findings discussed in this chapter.
CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the research conclusions which are based on the findings discussed in chapter 4. From the conclusions, recommendations aimed at assisting SCBZ management and other beneficiaries mentioned in section 1.7 will be made. The chapter also briefly states areas for further study.

5.2 Conclusions

The results as analysed in chapter 4 point towards the following conclusions:

5.2.1 Internet and mobile banking benefits

- The most crucial benefit is the convenience ADCs offer to clients. All other benefits directly or indirectly feed from this.
- SCBZ will need to offer a full package in terms of product and service offering if it is to maximise on the additional ADCs.
- ADCs will decongest banking halls and enhance brand growth, market responsiveness and operational efficiency. For SCBZ these are key elements in order to achieve its vision and mission.
- This presents a win-win situation for all stakeholders: all management and staff, customers, ICT industry and government through its various sections. The only exception will be mobile operator products like EcoCash and Isikwama and competing banks who will lose market share.

5.2.2 Challenges

- The most critical issue to be dealt with is risk and network security. Client’s personal and company financial information needs to be guarded.
- Funding is pertinent but for SCBZ its annual financial performance and global presence puts it in a favourable position.
- Other key potential challenges are the poor national infrastructure and potential poor customer uptake. SCBZ needs to be wary of the former as its main market is the older generation who are not so technologically savvy.
5.2.3 Risk associated with internet and mobile banking

- Internet and mobile banking are both rated as high risk and this is one of the reasons that customer uptake is relatively low.
- Data and financial loss through phishing is the most feared risk factor and this is closely related to resistance to change.
- The traditional and basic mitigation methods are preferred and these include client authentification, client education and installation of security firewalls. The more recent risk mitigation methods like digital certificates are not popular.
- The risks related with internet and mobile banking need to be identified, managed and controlled by SCBZ. In addition to organisational reputation, perceived risk and trust are factors used to retain customers to the use of e-banking systems.

5.2.4 Business model

- There is high appreciation of SCBZs current business model by staff members from all levels implying critical information is filtering down to the shop floor.
- Current product offering and service delivery is well received and highly rated by staff and customers.
- Service delivery, bank stature and customer loyalty are impacted the most by the current ADC status.
- However, business sustainability and profitability are relatively less impacted as other fundamental characteristics of SCBZ are still intact. These include strong brand name, strong customer base and international backing.

5.2.5 Adoption of internet and mobile banking

- Internet and mobile banking is now a necessity for commercial banks if they intend to remain competitive and viable in the banking sector.
- If not properly funded and managed the adoption projects will not be successful. It is essential to ensure that required human skill is available to implement and provide support.
There is enough support for the adoption from all stakeholders: all management and staff, customers, ICT industry and government through its various sections.

SCBZ strengths that is its size, global reach, financial stability, strong brand, good reputation, and solid organisational structure point towards success after full adoption of these two ADCs.

5.3 Recommendations

The following recommendations are drawn in line with the conclusions above:

5.3.1 Internet and mobile banking benefits
a) In order to maximise on the benefits SCBZ must offer a full package in terms of product and service offering. For example in mobile banking these include: Airtime top up, Balance Enquiry, Internal and Interbank Funds Transfer, Mini Statement, Bill Payment, Cheque Book Request, Statement Request, Password Change and Exchange Rates. The bank must offer products and services that aim to complement and benefit people’s lifestyle and behaviour so as not to lose market share and demand for their product or service. As such SCBZ should utilise the mobile phone which is accessed by many Zimbabweans and it can also work as a virtual bank card, point of sale terminal, ATM or internet banking terminal.

b) An aggressive marketing campaign is required considering that nearly all other banks are offering and marketing their ADCs. This is set to improve public awareness and service quality offered as banks compete for a larger chunk of the market share. The marketing campaign should also educate the SCBZ clientele on benefits of using internet and mobile banking whilst enlightening them on the potential risks and methods of mitigating and protecting themselves.

5.3.2 Challenges
a) All challenges must be identified and full proof solutions put in place. Assistance should be attained from the parent bank in the form of knowledge sharing and funding of the ADCs adoption project. To further manage costs, a segmented approach can be used were high capacity technologies like fibre
can be set up in demanding zones while less expensive technologies can be used in lesser demanding zones.

b) A national work force involving all stakeholders should be set up to deal with national problems which include: poor national infrastructure, high equipment cost, inadequate access technologies (data and voice), erratic electricity, poor national and international bandwidth, regulation and licensing, censorship and control, brain drain and lack of skilled manpower. To enhance the coordinated approach the central authority should develop national risk policies and these are to be shared with all banking institutions. The policies should address aspects like reducing the level of risk. Since e-banking crosses national boundaries, internationally coordinated legislation and regulation is necessary to avoid manipulation by criminals.

5.3.3 Risk associated with internet and mobile banking

a) The bank should provide a robust, secure infrastructure to positively authenticate internet and mobile customers. To achieve this, a SCBZ risk committee must be assigned to continuously study and investigate new threats and come up with solutions for each threat. It will work hand in hand with the SCB Group committees who operate in more technically advanced economies. They have more expertise as they meet bigger threats than the local ones. The committee must ensure multiple risk protection methods are applied and new methods are also adopted after being rigorously tested.

5.3.4 Business model

a) The most ideal business model after full adoption of the ADCs is the bricks and clicks model. It is the most fitting ICT business model in the current environment in terms of service quality and product offer. The current business model aspects that have helped SCBZ maintain its strong brand name, strong customer base and good financial performance should not only be maintained but also improved for continued sustainability. Adequate Communication and staff education should be done to the shop floor level.

5.3.5 Adoption of internet and mobile banking

a) ICT has taken over the business environment thus SCBZ and every other bank need to implement these two ADCs in order to remain sustainable and
profitable. The adoption projects need to be properly managed. SCBZ should rely on its experience and international support to provide funds and human skill to run the project and provide support. The bank should capitalise on late adopter opportunities and take advantage of existing tried and tested hardware and software solutions. Skipping less efficient technologies and moving directly to more advanced ones will accelerate development. The bank has no option but to fully adopt and implement internet and mobile banking.

5.4 Evaluation of the recommendations

The Suitability-Feasibility-Acceptability (SFA) framework developed by Johnson and Scholes is used to evaluate the recommendations. The evaluation uses three key success criteria. Suitability deals with the overall rational thus answers to, would it work? Feasibility looks at resource availability (funds, human skill, time and information) thus, can it be made to work? Acceptability looks at stakeholders expectations and the expected performance outcomes so it answers to, will they work it? (Johnson & Scholes, 2008). Furthermore, the key stakeholders in the study are SCBZ and its clients hence the evaluation will be aware of the influence of the key stakeholders in the adoption and effectiveness of the recommendations. Table 5.1 summarises the results of the evaluation.

Table 5.1 Recommendations: SFA framework

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>S</th>
<th>F</th>
<th>A</th>
</tr>
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<tbody>
<tr>
<td>5.3.1.a Offer full internet and mobile banking package in terms of product and service offering.</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>5.3.1.b Aggressive marketing campaign</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>5.3.2.a Cost management and identification of challenges and solutions with the aid of SCB group</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>5.3.2.b Co-ordinated national workforce and policies</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.3.a SCBZ risk committee to provide a robust, secure infrastructure with multiple protection methods</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>5.3.4.a Deploy bricks and clicks ICT business model and build on other well established business model pillars</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>5.3.5.a To adopt internet and mobile banking</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>
The evaluation shows that besides the co-ordinated national workforce and policies all other recommendations are implementable thus would be effective in enhancing SCBZ’s competitiveness, sustainability and profitability.

5.5 Areas for further Study

An interesting area for future study is risk eradication and management in internet and mobile banking in developing countries. Furthermore the adoption of 100% internet banking institutions (virtual banks) in Zimbabwe can prove quite revealing.

5.6 Chapter Summary

As bandwidth costs decreases and internet usage improves in Zimbabwe, e-commerce would become an important part of the economy. In addition to significant cost reduction, alternative delivery channels expand outreach to areas in which the traditional bricks and mortar approach is unfeasible, and also increases product diversification by making savings and remittance products convenient, efficient and profitable. When properly integrated into existing banking operations internet and mobile banking can lead to substantial cost savings and higher profitability. Strategic alliances with insurance companies, mortgage companies and stock brokerage firms can lead to additional business opportunities that otherwise would go unrealised. Banks are able to retain customers more effectively when offering services that are value added. Even though e-banking offers banks new business and a host of benefits to clients, it compounds conventional banking risks.

This chapter summarised the conclusions on whether a commercial bank in Zimbabwe, SCBZ, needs to adopt internet and mobile banking. Recommendations to help SCBZ in making informed and strategic decisions that can help build on its strong brand and competitive position where also tabled before areas for further study were noted.
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Research Questionnaires for Banking Institutions in Zimbabwe

This is an independent study on adoption of alternative delivery channels (ADC) by banking institutions in Zimbabwe. It will focus on internet and mobile banking. The information gathered will be used for academic purposes and will be treated as confidential. The questionnaire may take 15 minutes to complete.

Section A: Demographic information

1. Department: .......................................................... ........................................
2. Position Held: .......................................................... ........................................
3. Age: ............... .......................................................... ........................................
4. Length of service in banking sector: ............... .......................................................... ........................................
5. Number of years in current position: ............... .......................................................... ........................................
6. Highest level of education: 1. Primary school
2. Secondary School
3. Diploma
4. Undergraduate degree
5. Postgraduate degree

7. How does each of the below contribute to the total bank income? Circle your choice using the following ratings for each option:

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<th>Average</th>
<th>Major</th>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Non interest income</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Section B: Adoption and benefits

8. What do you understand by

8a. Internet banking
8b. Mobile banking

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

9. How critical is it for the bank to adopt internet and mobile banking?
1 Not at all critical 2 Not critical 3 Moderate 4 Critical 5 Very critical

10. Circle your preferred rating for each of the benefits of adopting internet and mobile banking.

<table>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Cost effective channel</td>
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<tr>
<td>Operational efficiency</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Decongestion of banking halls</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Financial inclusion to the poor and remote</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>International financial inclusion</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Better branding &amp; responsiveness to the market</td>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Attracts high value customers</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
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</tr>
</tbody>
</table>

11. Circle the critical success factor(s) of implementing these two ADC.
1. Competent human skill
2. Capital
3. Change management
4. Other (Please Specify) : ...........................................................

12. Rank the factors that influence their adoption by banks (1=lowest; 4=highest)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rank</th>
</tr>
</thead>
</table>
| Organizational structure  | [    ]
| Size of business          | [    ]
| Number of previous adopters | [    ]
| Entry of new competition  | [    ]

13. Rank in order of importance the following enablers of concepts in e-banking adoption.

(1= lowest; 4= highest)

<table>
<thead>
<tr>
<th>Enabler</th>
<th>Rank</th>
</tr>
</thead>
</table>
| Perceived relative advantage                 | [    ]
| Perceived organisational performance         | [    ]
| Perceived customer/organisational relationship | [    ]
| Perceived ease of use                        | [    ]

14. Circle the most important criteria in choosing a internet & mobile banking service provider
1. Reputation of the bank
2. Variety of services offered
3. Familiarity with the bank
4. Size of the bank

108
Section C: Associated challenges and risks

15. Rank the top four challenges in order of importance. \((1=\text{lowest}; 4=\text{highest})\)
   - Funding
   - Unstable economic and political environment
   - Poor infrastructure
   - Poor customer uptake/demand
   - Incompatible systems
   - Project too complex
   - Incompetent staff
   - Physical-geographical inaccessibility
   - Financial and technological illiteracy
   - Risk and network security

16. Suggest practical solutions to the constraints identified in question 15.
   ........................................................................................................................................................................
   ........................................................................................................................................................................
   ........................................................................................................................................................................

17. Rate risk perceived with internet and mobile banking.
   1 Very low  2 Low  3 Moderate  4 High  5 Very high

18. Indicate the most critical risk factor(s) associated with internet and mobile banking.
   1. Data loss and Financial loss through phishing
   2. Password sharing
   3. Resistance to change
   4. Dis-integration from rest of business systems
   Other (Please specify)
   ........................................................................................................................................................................
   ........................................................................................................................................................................
   ........................................................................................................................................................................
   ........................................................................................................................................................................

19. What is the ideal solution(s) for the risk?
   1. Client Authentication
   2. Digital certificates
   3. Encryption
   4. Security firewalls
   5. Client education
   6. Other (Please Specify)
   ........................................................................................................................................................................
   ........................................................................................................................................................................
   ........................................................................................................................................................................
   ........................................................................................................................................................................
Section D: Business Model i.e. summarisation of the core business decisions and trade-offs employed by the company to earn a profit.

20. How would you rank the bank in terms of service delivery and product offering?

21. How is each of the following affected by the current internet and mobile banking status?

<table>
<thead>
<tr>
<th>Service Delivery</th>
<th>Very low</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Very high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks Stature</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Impact on profit</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Business Sustainability</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Customer loyalty</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

22. What is the bank’s current business model?

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.........................................................................................................................................................................
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23. Is the current business model sustainable enough to cater for the two forms of banking?
   1. Yes  2. Not sure  3. No

24. Can the bank remain sustainable without adopting internet and mobile banking?
   1. Yes  2. Not sure  3. No

25. Which business model will be ideal after fully implementing internet and mobile banking?
   1. Traditional Branch Model  2. Mixed Approach  3. 100% internet banking

26. Any other comment relating to adopting internet and mobile banking by commercial banks in Zimbabwe?

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END OF QUESTIONNAIRE
THANK YOU FOR YOUR VALUED SUPPORT!
Interview guide for other banks

1. For how long has your bank been using e-banking?
2. What do you think are the major benefits the bank is getting from internet and mobile banking?
3. What is the revenue contribution made by these electronic channels?
4. Were there any implementation challenges?
5. How were these resolved?
6. Are any new challenges emanating? Which are these ones?
7. How do you compare your internet banking with those of other institutions?
8. What are the major strengths & weaknesses of your current e-banking system?
9. What do you think can be done to improve your e-banking system?
10. Electronic channels are associated with high risk, how have you fared on this?
11. What is your view on the customer uptake?

Interview Guide for Customers

1. How would you describe your relation with SCB?
2. How would you describe the bank’s service?
3. What would you want to see SCB introducing in order to make your banking enjoyable?
4. How frequently do you feel the need to access banking facilities outside their operating hours?
5. Do you understand the terms internet and mobile banking?
6. What benefits would internet and mobile banking offer to you?
7. Would you move to another bank seeking internet and mobile banking only?
8. Are you comfortable with the idea of internet and mobile banking?
9. What risks do you perceive to come with this form of banking?
10. How can the risks be addressed to your satisfaction?
11. Would you bank with a purely virtual bank? Why?