

Evaluating the effectiveness of customer satisfaction management on automated deposit terminal services

by

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ABSTRACT

The technology evolution in the banking sector industry has brought about multiple self-service channels to customers. Most banking customers are using these channels to open, use and manage their accounts. The channels also serve as a form of research platforms that customers use to explore more about existing products that their banks offer. Customers use these channels to resolve issues and receive notification without physically visiting their banking branches. Today a number of customers are interacting with their financial institutions via these channels. However, not every customer has taken full advantage of these self-service channels. There are still many customers who still prefer the traditional way of banking, namely to visit their bank branch and let their banking transaction be facilitated through a bank teller. The banking sector continues to introduce, educate, inform and encourage its customers to make use of self-service channels, declaring them as quicker, cheaper, and more convenient ways for customers to transact with their financial institutions.

The main aim of this study was to evaluate the effectiveness of customer satisfaction management on Automated Deposit Terminal Services (ADT), which is one of the self-service channels that the banking sector provides to its customers. In the literature review, other similar self-service channels are discussed in detail, which include internet (online) banking, mobile/cell phone banking, telephone banking, automated teller machine (ATM) banking, electronic wallet and the Automated Deposit Terminal (ADT) banking, which is the system under review in this study. The study was conducted in the Gauteng Province, where 100 business customers were interviewed through self-administered questionnaires. The study revealed that, in general, there is a great need for self-service channels with the exception of telephone banking. There is also appreciation for these channels as they allow business customers to focus on their core business functions as banking can be done at any time of the day.

Overall, most business customers who are currently using the self-service channels are satisfied with the accessibility and efficiency of the ADT machine points. However, the areas where the system can be improved include the number of notes that can be deposited, the option that ADT machines be able to take coins and provide customers with loose change.

It can be concluded that if banks can take note of the limitations of the ADTs as cited in this study, this could be the new way of doing banking, which will see an increase in the number of people using the banking institution to save their money. It is recommended that banks conduct periodic mini-surveys on customer satisfaction in order to respond to customers' needs.

Key words: Automated Deposit Terminal, Customer Satisfaction, Management, Self-service, Business Customer

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DEDICATION

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LIST OF ABBREVIATIONS

ABSA:	Amalgamated Bank of South Africa
ADT:	Automated Deposit Terminal
IT:	Information Technology
TRM:	Technology Readiness Model
TAM:	Technology Acceptance Model
ATM:	Automated Teller Machine
FNB:	First National Bank
FICA:	Financial Intelligence Centre Act
FAIS:	Financial Intermediary and Advisory Service Act
SSC:	Self Service Channel
FSB:	Financial Services Board
SMS:	Short Message Services
CRM:	Customer Relationship Management
LCD:	Liquid Crystal Display
UV:	Ultraviolet

CHAPTER 1: NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

Banking is an important service in South Africa. There are four major banks that are dominating the banking industry in South Africa, namely Barclays/ABSA Africa group, FirstRand, Nedbank and Standard Bank. These banking institutions have attracted both local and global investment for South Africa (Roopnarain, & Van Velden, 2014:1).

Banks in South Africa are progressively buying into the Automated Deposit Terminal (ADT) concept as a way of migrating customers to the self-service channels. The reason for this migration is mainly to reduce teller demand and to provide business customers with a 24/7 deposit option. Most of the South African banks use these self-service channels to keep up with the increasing demands of the ever-increasing needs of customers. This forces banks to advance their technology systems. Thus, the major banks seriously invest into Information Technology (IT) systems to facilitate the customer value proposition and ensure that a stable platform is created for future expansion (Ackerman, *et al.*, 2014:2).

Ackerman *et al.* (2014:2) state that, significant IT costs are incurred in the electronic banking platforms. According to Metcalfe and PWC (2013:9) the current 2877 traditional branches that the “big four” banks operate, are forecasted to be reduced by 21% to only 2 285 in 2016. This is consistent with these banks’ stated intention to transfer more customers to electronic distribution channels.

The general consensus is that using self-service channels is less expensive, more user-friendly and convenient for customers (Kanchan& Capgemini, 2012:3). Many financial institutions have to focus on increasing customer satisfaction and customer retention through the improved quality of their services. Thus, the effective managing of ADT services will further assist banks to ensure that customers are satisfied with the self-service channel arena of services and in this way, will be focusing on increasing their customer satisfaction.

Therefore, this research focused on customer satisfaction towards ADT services that banks offer and recommend better practices to improve the general level of service in these institutions. Banks will be able to use the findings of this study to advance the

services of ADT's, which will enhance overall customer satisfaction of business clients who are making use of the ADTs.

1.2 MOTIVATION OF TOPIC ACTUALITY/CAUSAL FACTORS TO THIS STUDY

Recent advancement in technology and its impact on the banking sector posed the question if banks will move towards the new self-service technology away from traditional banking. This has resulted in many unhappy customers, as most retail banks have gradually been moving away from the human interface in branches by making use of self-service channels, sometimes without providing any assistance. This causes customers to switch between banks, inevitably reducing profits and negatively impacting customer relationships in banks (Bothma, 2012:1).

Customer satisfaction is the base for a customer's constant use of a particular bank's service. Satisfied customers are expected to tell others of their good experience and thus engage in positive word of mouth advertising. Dissatisfied customers, on the other hand, are likely to change banks and engage in negative talk. Customer dissatisfaction has a great psychological impact and even greater longevity compared to a good experience. It is estimated that two out of three times, customers will rather tell others about a bad experience than sharing a good encounter. Singh (2011:18) refers to this as the multiplier effect of bad service, because it does not only hurt the bottom line of the bank but also its reputation and, above it all implies, additional costs because of the existing and the potential customer loss. Singh, 2011:179 furthermore states that customer satisfaction can be considered as the essence of success in today's highly competitive banking industry where all the banks strive for quality in their product and service.

Customer's' satisfying experiences of ADT services offer greater value to the customers and simply interest them to accept advanced businesses with their banks. This topic affects all South African business owners who are making use of self-service channels that are available in the South African banking industry.

1.3 CAUSAL FACTORS

It is important that banks understand their customers' needs regarding the use of ADTs to deliver effective services that meet the customers' expectations. Furthermore, to understand the customers' specific needs and meeting these needs through the successful user friendly application of the ADT machines, will build trust with the

customers. This will then encourage customers to the next level of utilising electronic terminals as the same trust levels would have been established that they previously experienced through interaction with tellers. Strategic placement of ADTs is crucial as all customers will not be able to use ADTs, like those living in the rural areas compared to people from urban areas. Also, the number of people making use of ADTs at some localities will vary according to various factors like demographics such as technological competence (and ease and comfort using technology), age, access and population density to name a few. Finally, banks have to implement this migration of customers from in-branch tellers to ADTs and ensure a positive acceptance and satisfaction.

1.4 PROBLEM STATEMENT

Technology improvements have changed banking operations. Banks are now moving away from the traditional way of banking towards new self-service technology. Not all business customers feel safe when using ADTs or are willing to change in the way they have done banking throughout the years. There are those business customers who prefer human interaction and feel safer to use bulk telling services inside the branches rather than ADTs (Abdel-Razzaq, 2015).

Banks must ensure that ADTs have been secured to fulfil the customers' needs by way of applying true differentiation through a combined technology-people-centric catalyst. The unique South African consumer landscape calls for a fine balance between keeping up with providing the early adopters of technology with relevant financial solutions and experiences without losing sight of the hesitant users of self-service channels such as hesitant users of ADT's.

1.4 OBJECTIVES OF THE STUDY

The overall goal of this study has been divided into primary and secondary objectives, which are set out in the following sub-sections.

1.4.1 Primary objective of the study

The main objective of this study was to evaluate the implementation of customer satisfaction management for automated deposit terminal services.

1.4.2 Secondary objectives of the study

To achieve the primary objective above, the following specific objectives had to be met:

- to offer suggestions on how banks can improve customers' satisfaction;
- to determine the customer perceptions on the convenience of ADT services;
- to investigate the levels of trust that clients associated with the use of ADT services;
- to determine and evaluate the relationship between customer's demographics and attitude towards ADT services; and
- to measure customer satisfaction towards ADT services.

1.5 HYPOTHESIS STATEMENT

Two groups of hypothesis were tested:

H01: There is no association between a2 a3 a4 a6 a7 a10 a11 BY b1n1 b1n2 b1n3 b1n4 b1n5 b1n6 b2 b3 b4 c1 c2 c3 c4 c5 c6 c7 c8

Where:

A2 = gender

a3 = race

a4 = marital status

a6= where do you reside?

a7 = what line of business are you operating in?

a10 = what type of bank account do you operate?

a11 = which bank are you banking with?

By

b1n1 = ATM

b1n2= ADT

b1n3 = cell phone banking

b1n4 = online banking

b1n5 = telephone banking

b1n6 = e-wallet/cash send

b2 = do you feel hesitant to use self-service channels in any way

b3 = please choose the most appropriate reason why you are hesitant

b4 = would you use self-service channels in the future with more assistance or information?

c1 = years of using ADT

c2 = how much do you deposit in the ADT?

c3 = ADT are easy to use

c4 = do you feel hesitant to use ADT in any way

c5 = please indicate the most appropriate reason why you feel hesitant

c6 = ADT has reduced the frequency of my visit to the tellers

c7 = if to a moderate or large extent, choose the most appropriate reason

c8= tellers are still very important

H02: There is no association between a1 a5 a8 a9 a12 BY b3 c5 c7 c10 c12 c14 c16 c18

a1 = age

a5 = highest level of education

a8 = how long have you been operating in this line of business?

a9 = monthly turnover

a12 = how long have you been banking with them?

By

b3 = please choose the most appropriate reason why you are hesitant

c5 = please indicate the most appropriate reason why you feel hesitant

c7 = if to a moderate or large extent, choose the most appropriate reason

c10 = if to a moderate or to a large extent

c12 = if dissatisfied or highly dissatisfied, what can the bank improve on in order for you to feel completely satisfied in using ADT

c14 = it is cheaper to deposit at an ADT machine than making a deposit at a Teller

c16 = choose the commonest problem of ADT transaction

c18 = why? (overall rating of ADT services)

1.6 LIMITATIONS OF THE STUDY

During the study, the following limitations were identified and experienced:

- Empirical research and locations introduced limitations since only Gauteng based business customers with bulk deposits were surveyed.
- Only bulk deposits from R5, 000 (five thousand rands) were selected for this study.
- Literature consulted was generally on other self-service channels available in South Africa but not ADTs.

1.7 RESEARCH METHODOLOGY

The two approaches for research are known as quantitative and qualitative research. According to Creswell (2014:4) qualitative research is an approach for exploring and understanding the meaning that individuals or groups ascribe to a social or human problem. The approach involves a process where data is typically collected from the participants' setting. Also, data analysis is done inductively, which means that themes originate from specific ideas or items to the more general arguments. In the case of

qualitative research the researcher mainly focuses on interpreting or understanding the meaning of the data. On the other hand, quantitative research involves the testing of objective theories by examining the relationship between variables.

The purpose of quantitative research is to evaluate objective data consisting of numbers while qualitative research deals with subjective data that are produced by the minds of respondents or interviewees (i.e. human beings) (Creswell, 2014:8). This study applied a quantitative research design through the implementation of a structured questionnaire. This research design was the best option as the study aimed to gather answers from business customers who make deposits at the ADT machines. Banks market share is measured by volumes, i.e. number of customers and number of transactions made; therefore, the quantitative approach gives a proportion of the number of customers who make use of the ADT machine.

1.8 LITERATURE REVIEW

A literature review regarding the management of ADT services and the levels of satisfaction for customers using ADT services has been completed. Key words that were utilized for the literature review were: customers, customer satisfaction, clients, Automated Deposit Terminals, self-service channels, migration and customer service.

1.9 EMPIRICAL RESEARCH

1.9.1 Main survey

A survey was conducted among customers through a structured questionnaire compiled by the author to establish the respondents' banking needs. This will assist in improving ADT services and managing its services in future. Personal interviews with branch managers were conducted to obtain approval for conducting the survey. During these personal interviews, all branch managers were given a thorough overview of the aim of the study and what the survey would entail.

1.9.2 Measurement instrument

A comprehensive, structured questionnaire has been compiled for this research, based on the literature study.

1.9.3 Sample

A random sample was drawn from the database of the four major banks in South Africa covering the banks' various branches in Gauteng. These were then selected as the sample population for this study. The sampling size was fairly large (100) to represent the large spread of the businesses. The questionnaires were translated into the predominant languages spoken in Gauteng. The respondents were informed about the research; it was stated that the information provided was confidential and for research purposes and questions were phrased in such way that they were easy to understand. The questionnaire consisted mostly of closed questions and one open ended question. Sufficient time was given to the respondents to go through the questionnaire before they had to respond to any question. The participation in the survey was voluntary and they could stop at any time if they wish to.

1.9.4 Statistical analysis of the data

The statistical procedures used to interpret and analyse the data was done in cooperation and consultation with the Statistical Consultation Services of the North-West University Potchefstroom Campus through the application of SPSS 2016 and statistical software.

1.10 Layout of the study

The mini-dissertation is divided into the following four chapters:

Chapter One

This chapter describes the outline of the programme of the study in which the following were included: introduction, problem statement and significance of the study. It also provided an overview of the research methodology.

Chapter Two

This chapter provides a review of the literature on ADT, channel migration and the potential benefits they present. A literature study had been conducted, in which theoretical views of what self-service channels are, is discussed.

The literature review also includes an investigation into client and customer satisfaction. Definitions, benefits and various strategies are put forward in order to develop a strategy to assist banks to improve self-service channel service excellence.

Chapter Three

This chapter provides a description of the research design and methodology that were applied. It outlines the research process followed throughout the study as well as the research design. The chapter provides insight into the sampling method used, the development and pre-testing of the research instrument and the measures taken to ensure validity and reliability. In addition, the chapter describes the data collection procedures applied as well as the ethical considerations made during the survey process. It explains the techniques used to analyse the data.

Finally, the analysis of the empirical results as well as the findings are summarised in this chapter.

Chapter Four

The final chapter provides a conclusion and recommendations based on the previous chapters' research and findings.

1.11 CONCLUSION

New improvement in technology and its impact on the banking sector posed the question if banks will move towards the new self-service technology away from traditional banking. Most of the South African banks use these self-service channels to keep up with the increasing demands of the ever-increasing needs of customers. This forces banks to advance their technology systems. Thus, the major banks seriously investment into information technology (IT) systems to facilitate the customer value proposition and ensure that a stable platform is created for future expansion

1.12 CHAPTER SUMMARY

This chapter gave an overview of the proposed study as well as its layout and approach. The topics covered set out the broad overview of the banking industry and the causal factors driving the need for the executing this research. The chapter further covered the current problem statement, the research methodology, objectives and design employed.

The scope of the study, the significance as well as the limitations of the study was also covered.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The operating atmosphere of the banking industry has developed to be more active and competitive. In search of a competitive edge, banks are placing more emphasis on service quality and offer services that create customer satisfaction (Anani, 2010:12).

The objective of this chapter is to present an overview of literature on different self-services that are already applied in retail banking in South Africa. The chapter is divided into five main sections. Section one provides an overview of the banking sector and its origins in South Africa. The section also considers some trends in retail banking. The second section provides a definition of a self-service device, different self-service channels for delivering banking services, the benefits of using self-service channels and also challenges of using self-service channels.

The third section examines the two models that the researcher has identified as theoretical base for this study, namely the Technology Readiness Model (TRM) and Technology Acceptance Model (TAM). Section Four describes channel migration and explores the reasons for the importance of migrating customers from in-branch services with tellers to self-service channels. Section five drills down into the five most commonly used self-service channels in South Africa. A definite focus is now on Automated Deposit Terminals (ADTs) providing a thorough definition and understanding of the concept as well as looking into its benefits. The section delves into the ADT system overview and one of the South African bank's ADT screen flows. This is done to illustrate the whole process while a customer uses an ADT. This section also describes the factors of ADT that results in resistance from business customers but also provides solutions to assist business customers to use ADTs instead of branch tellers. The last section explains customer satisfaction and the importance of measuring customer satisfaction to ensure that banks take customers into account when product development is done and/or resources being considered for investment to increase customer satisfaction.

2.2 EVOLUTION OF RETAIL BANKING IN SOUTH AFRICA

Banking in South Africa has its roots in both the British and Dutch traditions. Banking can be traced back to the mother city, Cape Town. The British influence saw the roots of Standard Bank and Barclays in the early 1860s. The primary focus of these early banks was to provide safekeeping for people's money. As the need for banks grew, a number of banks emerged, including Allied, Volkskas and Trust Bank. A number of building societies also emerged to provide long term finance for housing and later other luxuries (Singh, 2004:188). These building societies included Saambou, United, SA Perm and NBS. The banking sector was hit with major fears in early 2002 with a run on Saambou accounts, which subsequently led to its closure. Furthermore, NBS was threatened by similar actions. However, the industry has stabilized and calm has been restored due to the intervention of First National Bank and Nedbank (Singh, 2004:188).

The banking system in South Africa is well regulated and is favorably with those of industrialised countries. Even though in the past the South African banking industry has been through a process of volatility, it has attracted various interest from other countries with a number of foreign banks coming to South Africa and others even acquiring stakes in major banks (The Banking Association South Africa, 2014:1). The World Economic Forum Global Competitiveness Survey conducted in 2013/14 ranked South Africa's banking sector third out of 148 countries. (The Banking Association South Africa, 2014:1). A number of changes are evident in the regulatory environment, product offerings, and the number of participants which resulted in a greater level of competition from smaller banks, which have targeted the low-income groups in the country and the previously unbanked market.

The traditional role of retail banking was established through the beginning of commerce as many as 5000 years ago, as people made first use of money (Gouws, 2012:9). As a result, this required customers to look for:

- ways to secure their cash, and
- ways to carry out transactions through a possible intermediary.

Consequently, the retail bank was established which meant that customers had access to essential financial services (Gouws, 2012:9). However, the beginning of the 21st century proposed a new digital era. This was evident in the decline in the importance of having a

physical branch for banks on district level. The physical branch was seen as just another channel to address the financial services need of the customer (SapientNitro, 2010). This new digital face of banking gave the entrance into a new revolutionary customer banking behaviour to be established and encouraged, and potentially enabled customers to no longer visit the branch premises to access and operate accounts but to make use of the convenience of the now digital options like applications for advanced mobile devices, smartphones and tablets (Gouws, 2012:10).

2.3 TRENDS IN RETAIL BANKING

The banking sector has turn out to be very competitive as the traditional differentiators such as a large branch and ATM networks, telephone banking, priority banking, and online banking no longer offer the competitive advantage. These days, customers expect banking services that are personalized, easy to use, and convenient and that can be accessible 24/7. (Bansal, 2013:6).

It is expected that retail banks across the globe will undergo a digital transformation within the next three to five years as customers increasingly prefer the use of digital channels to interact with banks. This will result in a radical change in how retail banks apply different channels to reach their customers. Banks have to tailor their branch network with new and different branch formats to match their specific needs and profiles of a customer in every location. These changes will assist banks to change their profiles, reduce costs and increase sales (Bansal, 2013:4).

The slow economic and organizational growth, the ever-growing customer needs and increased customer expectations as well as the rapid emerging range of customer options in banking services are all factors that threaten banks' traditional source of revenue and brought them to a critical junction (Deloitte, 2014:13). Banks need to improve technology to deliver speedy and personalized service to customers through numerous self-service channels, but still ensure a consistent experience across all channels (Bansal, 2013:6). Bansal further states that these changes have caused the following four technology trends in retail banking:

- improved spending on movement to improve the customer experience;
- improved emphasis on mobile remote deposit capture and mobile marketing to gain the competitive advantage;

- better influence of social media and social analytics tools to reinforce decision-making and increase workforce relationship; and
- improved importance on smooth multi-channel amalgamation to better serve customers (Bansal, 2013:7).

2.4 KEY CHANNEL-SPECIFIC TRENDS

According to Bansal (2013:5) there are the following key channel-specific market trends for retail banks globally:

- Exploit virtualization to see growth in operational competence in branches by providing supporting tools to build a paperless environment and simplify straight-through processing.
- Increase the number of image ATM installations to achieve the dual purpose of expanding customer convenience while also decreasing operating costs.
- Leverage the increased popularity of flexibility to better involve their customers and market their new products through new mobile applications.
- Each of these trends and challenges has multiple business and technology impacts for retail banks globally.

2.5 THE 21st CENTURY CUSTOMER

Today's banking customer lives in a complex, fast-paced, technology-driven environment. This is not the customer of a decade ago. This progressively well-informed, refined and difficult customer expects a banking relationship that provides convenience, customization, control, collaboration, convergence and consistency which, according to Deloitte (2014:3), contain the following:

- **Convenience**, in this instance, refers to have access to information and the ability to perform transactions through whichever channels of interaction a client prefers and chooses.
- **Customization**, in this context, means tailored solutions with a high degree of personalization based on individual profiles and preferences.
- **Control**, in this study, refers to the cumulative control over management of personal finances and purchasing decisions and that data and analytical tools also support.

- **Collaboration** refers the regular exchange of ideas and feedback on banking activities through online communities in real-time.
- **Convergence** refers to the technological innovation and adoption (e.g. smartphones) that increase the breadth and sophistication of tasks performed within and across channels (e.g. mobile, online).
- **Consistency**, in this instance, is a coherent and consistent experience with seamless integration across bank channels.

2.6 BANKING SECTORS

Currently the roles of banks are to act as intermediaries, channelling money from savers to borrowers. Banks accept deposits and use these funds to make loans to borrowers and also convert deposits (a liability for the bank) into assets (loans) (Gouws, 2012:12). The bank earns interest income by paying less interest on the deposits received than the interest they charge on loans made. Deposits from the public, mainly individuals and companies, remain the main source of funding for the banking sector (Gouws, 2012:12).

Banks pay interest on such deposits at lower rates than charged on loans and advances. For that reason, banks compete actively for deposits to finance their lending activities. The alternative would be to use available capital or borrow funds, usually at a higher rate. Alternatively, money could be borrowed from other banks or from the South African Reserve Bank.

Three sectors take part in the financial sector, namely the:

- banking and credit sector;
- investment and retirement sector; and
- insurance sector.

These sectors do not operate in isolation and, therefore, banks are involved in both the security (investment) and insurance business sectors (Gouws, 2012:13). Banking groups are allowed to actively trade in bonds and equities as part of their operations. The three sectors differ from each other as seen below:

Banks

The cost of banks liabilities (mainly deposits) is fairly certain, but the return on assets, such as loans and advances that cannot easily be converted into cash, is somewhat uncertain. This means that banks know how much they owe to lenders, but cannot be certain that all their assets will be repaid by borrowers (Gouws, 2012:13).

Insurers

Insurers have uncertain liabilities (premiums) as clients could default, in addition assured marketable assets (investments) can be sold in the secondary market and be converted into cash. The insurer uses amounts received from uncertain premiums (liabilities) to buy financial assets that have a certain and verifiable resale value (Gouws, 2012:12).

Investment and retirement organizations

These organizations have both certain liabilities (regular amounts paid by clients) and marketable assets such as financial instruments and investments that can be sold for a determinable amount in the secondary markets (Gouws, 2012:14).

2.7 LEGISLATIONS OF SOUTH AFRICAN FINANCIAL SERVICES

South Africa has a well-developed financial system with legislation governing the financial sector to meet international norms. It also provides a platform for the introduction of major foreign financial institutions into the local market (The Banking Association South Africa, 2011:8). The South African banking industry is currently made up of (South African Reserve Bank, 2016):

- 39 foreign bank representatives;
- 15 branches of foreign banks;
- 10 locally controlled banks;
- six foreign controlled banks;
- three mutual banks; and
- two banks in liquidation.

A list of banks is detailed in Annexure A.

2.8 THE MARKET SHARE OF THE MAJOR RETAIL BANKS

Literature studies completed over the years display a connection between market share and profitability, mainly in the service industry (Gouws, 2012:16). The outcome of these studies associated higher return on investment with the higher market share. Moreover, a profitable retail bank has the ability to build large branch networks to drive out smaller banks. However, this is only done if profitable when compared to the attracting of customers from other retail banks (Gouws, 2012:16).

The major banks that dominate the South African banking industry are Standard bank, Nedbank, First National Bank, Absa and Capitec. Each of these banks' market share is depicted both nationally in Figure 1.1 and for the Gauteng area in Figure 1.2. From Figure 1.1 and Figure 3 it is evident that Absa is the largest of the "big four" retail banks with 29% share in the market, followed by First National Bank with 24%, Standard Bank with 22%, Capitec with 11% and then Nedbank with a much lower 9%. The other 4% of the market is made up of various banks offering services to niche markets. The market share figures also indicate the stern competition within the retail banking industry, especially between Absa, FNB and Standard Bank.

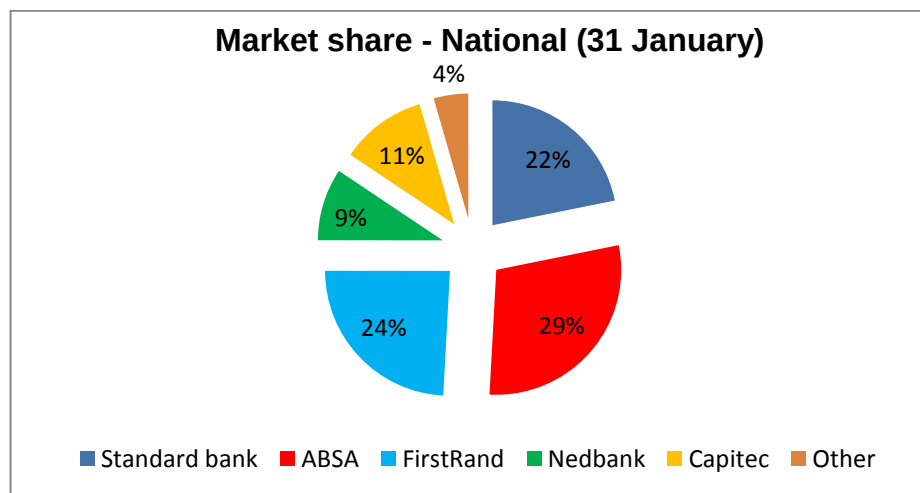


Figure 1. 1: Retail banks in SA's national market share as at 31 January 2016

Source: ABSA Business Planning and Commercial Awareness Tool, 2016

Absa is the largest of the major banks in the Gauteng province as it holds 31% of the market, tailed by First National Bank with 26%, Standard Bank with a 20% of market share, Nedbank with 10% and Capitec with the lowest share in the market at 9%. The other 3%

of the market is made up of various banks. These statistics are graphically illustrated in Figure 2 below. Figure 1.1 and 1.2 clearly state that the bank with the higher national market share also has a higher provincial market share.

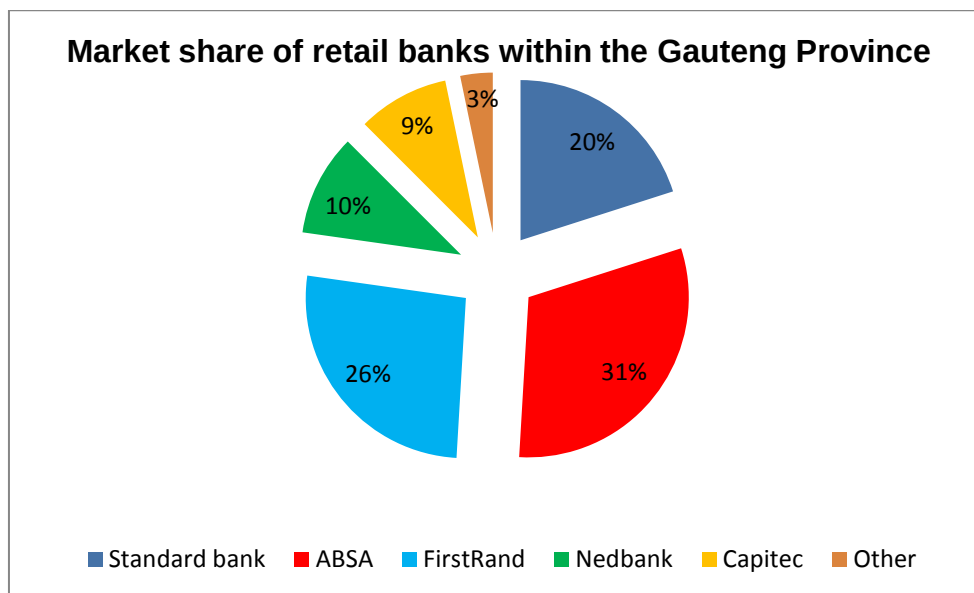


Figure 1. 2: Retail banks' market share within the Gauteng province as at 31January 2016

Source: Source: ABSA Business Planning and Commercial Awareness Tool, 2016

2.9 TOTAL LIABILITIES

Total liabilities of the banking industry declined in September 2013, but there was a 3% increase between December 2014 and March 2014 as shown in Figure 1.3.

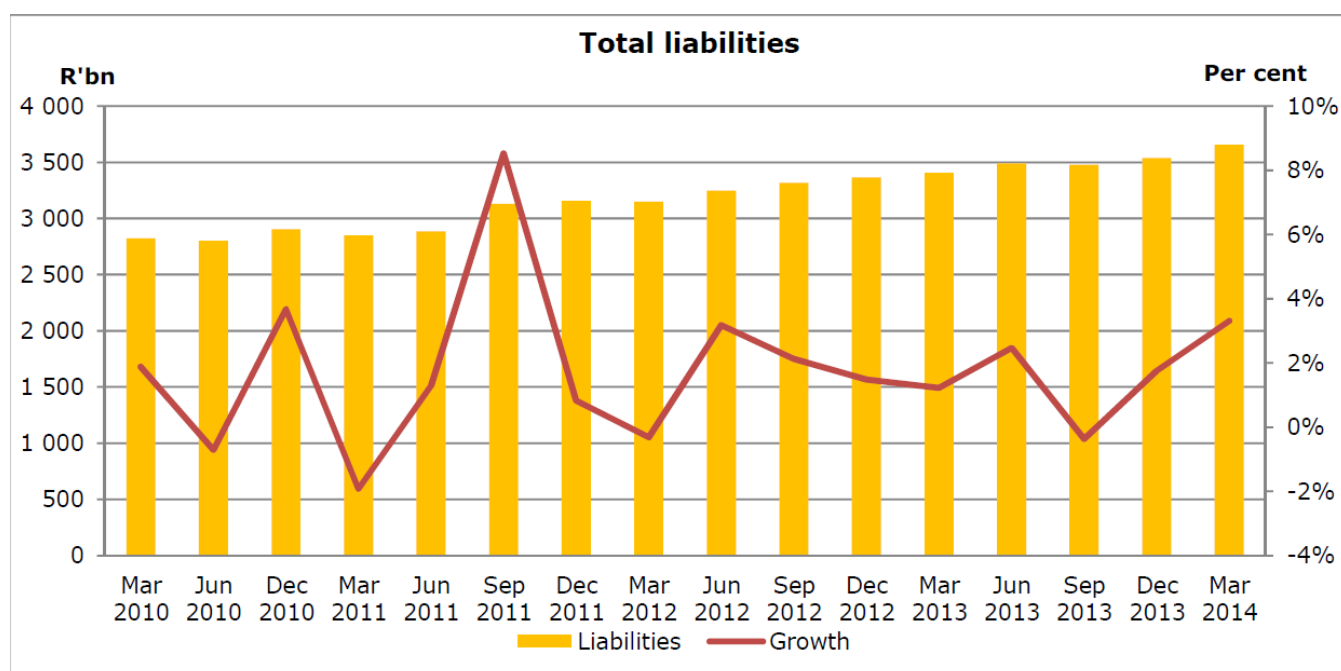


Figure 1. 3: Total liabilities of the banking sector

Source: The Banking Association South Africa, 2014:3

2.10 BRANCHES AND ATMs

In Table 1.1 consists of a list of banks indicating how many branches and how many ATMs each of the banks have in South Africa currently.

Table 1. 1: Number of branches and ATMs

Bank	No of branches	No of ATMs
Absa	892	10 000
Capitec	500	2 168
First National Bank	775	4 969
Nedbank	2 272	2 716
Standard Bank	705	8 100
Total	5 144	27 953

Source: Source: ABSA Business Planning and Commercial Awareness Tool, 2016

2.11 EMPLOYMENT IN BANKING

The banking sector in South Africa employs over 160 000 people (Figure, 1.4), mostly in administrative and clerical capacities (The Banking Association South Africa, 2014:7). The four major banks represent the bulk of this statistics and add up to about 85% of the total number of employees. The majority of employees are based in the Gauteng province (61%), with the Northern Cape recording the least employees (1%) (The Banking Association South Africa, 2014:8).

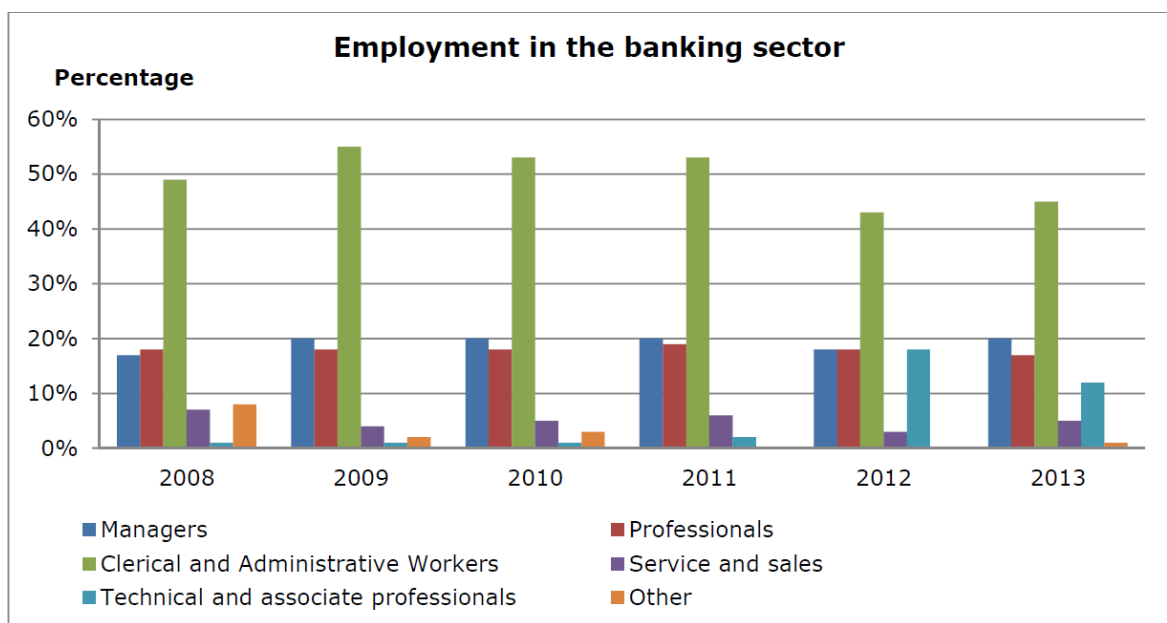


Figure 1. 4: Employment in the banking sector

Source: The Banking Association South Africa, 2014:7

The introduction of new technology in banking over the years has also caused a reduction on clerical and administrative workers because most banks are investing on business intelligence systems and also keeping up with the changes in banking when technology is concern. In the long run, businesses might not require admin personnel.

2.12 REGULATION

The South African banking industry is well regulated to warrant appropriate errors over its operations. The Banking Association South Africa (2014:8) confirms that the following, among other, are legislations that affect the banking industry:

- The Banks Act;
- The National Payment System Act;
- The Financial Intelligence Centre Act (FICA);
- The Financial Intermediary and Advisory Service Act (FAIS);
- The National Credit Act;
- The Consumer Protection Act;
- The Home Loan and Mortgage Disclosure Act; and
- The Competition Act.

Furthermore, banks have to conform to Basell III and the King Code on Corporate Governance. There are also numerous ombudsmen tasked with completing speedy and effective dispute resolution for banks and their customers in a reasonable, fair and private manner.

In the outcome of the 2008 global economic disaster, several strategies have been declared by international standard-setting organizations to address the important weaknesses that this crisis revealed (The Banking Association South Africa, 2014:8).

These contained of the new adjustments to the Basel III in term of which banks are expected to hold more capital of higher value and have sufficient liquid assets to cover loss of funds (The Banking Association South Africa, 2014:8). South Africa, a member of G20, has to obey with the new changes. Basel III was effected in January 2013 and SA banks were previously well organized for the influence of the new framework. In the wake of the 2008 global economic disaster, the banks relooked their strategies or modified pricing due to improved capital and liquidity requirements (The Banking Association South Africa, 2014:8).

Moreover, the National Treasury has recommended a twin-peaks governing structure to warrant a harmless monetary sector. Under a twin peaks model of monetary regulation, the SA Reserve Bank will be liable to oversee the safety and soundness of banks, insurers and financial conglomerates and macro-financial stability. However, the Financial Services Board will be responsible for the supervision of market conduct (The Banking Association South Africa, 2014:8). A phased methodology to the implementation will take place and will initiate with the representation of applicable regulation to form the relevant regulators.

2.13 SELF-SERVICE CHANNELS (SSCs)

Self-service channels are systems in branch banking whereby customers perform many routine banking transactions themselves without going into a branch to a bank teller. Self-service banking lowers the cost of serving the customer and provides greater client convenience because the customers are no longer restricted to doing their banking during banking hours and have access to their accounts through automated teller machine networks.

2.13.1 Different self-service channels for delivering banking services in South Africa

The evolution of the Internet has forced banks to improve on the services that are being offered to their customers by using various technologies (Simuchimba, 2011:9). Many industries now deploy and utilize self-service channels so that their customers could perform transactions at a convenient time and location (NCR, 2010:1).

Across the world, the self-service phenomenon has flashed a trail as fast growth in technologies like broadband and smart phones revolutionized the way people do business (Merchants, 2013:1). In South Africa, however, a different picture still exists. Supply and demand factors are affecting the evolution of self-service in South Africa. The adoption of this widely used phenomenon varies across different channels, industries and markets, compared to the world's developed countries where self-service has grown across the board (Merchants, 2013:1). Customers need incentives to adopt the new self-service channel, especially as it requires additional knowledge and a shift in their behaviour (Merchants, 2013:3).

The technological changes have brought about several improvements to the banking industry. Some of these can be identified as convenient for banking, enhanced customer access and awareness, quick or faster practice and transmission of information, decrease of fraud levels and better risk management (Kwashie, 2012:21).

Traditional retail banking is viewed as the strongest and most consistent in the market sector. Banks therefore believe that an important change in strategy and positioning is essential to contest aggressively in this sector. There is a wide range of self-service channels that gives a client the suitability of banking anywhere, anytime 24/7 without having to go into a branch. Self-service channels are available at the bank electronically

and can be accessed from outside the branch without the help of a bank official. There are six most commonly used self-service channels in the branch-banking sector in South Africa, namely Internet (online) banking, mobile banking, telephone banking, Automated Teller Machines (ATMs), Automated Deposit Terminals (ADTs) and Electronics wallets. These channels have created a win-win situation by extending greater convenience and multiple options for customers while providing tremendous cost advantages to the banks (Singh, 2011:178). However, South African banks seem to struggle to get clients on board to use these services.

2.13.2 Benefits of using self-service channels

Technology and the Internet have changed the way people do their banking. Customers now can bank anytime, anywhere without having to visit a branch or rely on regular banking hours. Using self-service channels is more secure and cost effective, plus a customer has the benefit of being rewarded for using these channels (Standard Bank, 2015).

Self-service channels reduce queues in the banking hall as customers are able to bank from wherever they are located and do not need to enter into a bank branch. The adoption of self-service channels makes it easier for customers to use more cost-effective services such as mobile banking, internet banking, ATM and ADT through providing customers 24-hour access (Simuchimba, 2011:12).

Self-service channels offer a lot of advantages to banks, individual customers as well as business customers. Internet banking allows banks to collect additional and detailed information about their customers online without having to use printed questionnaires or interviews. The information collected can help banks to easily design new, customized products and services for their customers (Simuchimba, 2011:13). Mobile banking makes it easier to anticipate questions and prepare answers for quick questions (Simuchimba, 2011:13).

2.13.3 Challenges of using self-service channels

The use of self-service channels also presents unique challenges that need to be addressed. No human interaction is applied as it is not a face to face transaction taking place. In a face to face situation it is easier for the teller to guide a conversation and keep control. A customer may miss the personal service of interacting with a teller and is not

able to ask for information that he/she needs (Simuchimba, 2011:13). The needs and requirements of customers may not be met in the information that the self-service channel provides, whilst when interacting with a teller questions can be answered. It is thus evident that one major challenge is that the self-service channels are not designed to meet all of a customer's information preferences (Simuchimba, 2011:13). Therefore, it is imperative that customers are proficient in for the use of the self-service channels so that they can do so with confidence. Investing huge sums of money to buy new technologies is one of the challenges faced by some banks as there is also need to train employees and the users of the self-service channels (Simuchimba, 2011:13). Some people are computer illiterate and need to be shown how to use a computer or even a mobile phone (Simuchimba, 2011:13). Training employees and customers on how to use the self-service channels may enhance their confidence as they would have the right technological know-how.

Some customers don't even want to make use of Internet banking as they perceive to be too exposed to fraud. There is also the danger of password decrypting and theft of password when users do not take care to manage their passwords securely (Simuchimba, 2011:14). The online world should be entered with caution and one should take security measures as hacking is a reality. Thus, sensitive financial information cannot be displayed where anyone can have access to it. This makes Internet banking to be perceived as insecure (Simuchimba, 2011:14).

2.13.4 Factors affecting self-service channels adoption and use

There are many factors that contribute to or detract from customer adoption and customer satisfaction (Hsieh, 2005:79). Some of these are:

- quality of the product;
- services that the organizations and banks offer;
- cost of the product or service;
- design of the self-service channel;
- the self-service channels' ability for services recovery (even if the client is causing it);
- the way the bank promotes /advertises the self-service channels;
- the way the bank manages and prevents self-service channels failures;
- alternative choices for the same service (which the bank or competitors offer); and

- the bank's ability to keep the self-service channel updated and to continuously improve the self-service channel.

The introduction and acceptance of new technology brings numerous questions to the customer's mind. In this regard, it can be said that self-service channels are an effective way to decrease costs and to increase customers for a bank; it can also go the other way, and customers can refuse to try out the new self-service channel, or try it once and then rather choose the opposition's or competitor's services (Hsieh, 2005:79). Most importantly to determine is what the customers value most, and how the new self-service channels could provide in or fulfil that value (Hsieh, 2005:79). It is very important to communicate the self-service channels to the customers and let them know about the self-service channels existence. Once they know it's there the banks have to concentrate on attracting the customers to try their SSC (Hsieh, 2005:79-80).

2.14 CUSTOMER SATISFACTION WITH SELF-SERVICE CHANNELS

There are numerous aspects that can affect the customer's perception of benefits received using self-service channels (Hsieh, 2005:79). What customers want from self-service channels mostly resembles what they received during the face to face interaction with a teller. According to Hsieh (2005:80) there are lessons that banks should heed in order to provide excellent service which include:

- listen to customers - conforming to a bank's policy is not quality, conforming to the customer's specification is;
- reliability - if a service is untrustworthy, regrets and pleasant staff cannot compensate for it;
- basic service – nothing elegant, no empty promise; just give your customers the basics;
- service design – quality will be compromised if one of the following fails: employees, equipment and the physical environment;
- employee research – employees of the banks experience the systems every day; they are the performers of the service and a valued source of developments; and
- servant leadership – servant leadership have to inspire and enable their servers to do their best; set an example as the leader.

This will ensure that banks have a competitive advantage and also will grow market share.

2.15 THE TECHNOLOGY READINESS MODEL

Companies (including banks) adopt new technologies to improve the efficiency of various works and processes (Johansen, 2012:34). Technology readiness talks about people's tendencies to embrace and use innovative technologies to accomplish goals in their personal and work life (Parasuraman, 2000:308). It is a mixture of positive and negative technology-related views. These views are expected to differ among individuals (Johansen, 2012:34).

Banks in developing countries are increasingly relying on innovative technologies such as mobile banking, telephone banking, internet banking, ATMs and ADTs to penetrate existing markets and to create new markets (Berndt *et al.*, 2010:47). In South Africa, the banking industry is regarded as sophisticated. Providing banking facilities to the unbanked in South Africa remains a challenge as is the case in other developing markets (Berndt *et al.*, 2010:47). Even though banks initiate better ways of doing banking, it also suggests that customers have to adapt to time and changes as well as adopt new technology available.

2.16 TECHNOLOGY ACCEPTANCE MODEL

One of the eminent models associated with technology acceptance and usage is the Technology Acceptance Model (TAM), initially recommended by Davids in 1986 (Park, 2009:151). TAM provides a basis with which one traces how external variables influence beliefs, attitude and intention to use. TAM posited two cognitive beliefs, namely perceived usefulness belief and perceived ease of use (Park, 2009:151). Generally based on TAM, one's definite use of a technology system is subjective directly or indirectly by the user's interactive intention, attitude, perceived usefulness of the system and the general perceived ease of the system (Park, 2009:151). TAM also proposes that external factors affect the intention and actual use of technology through mediated effects on perceived usefulness and perceived ease of use (Park, 2009:151). This model is illustrated through a diagram in Figure 1.5.

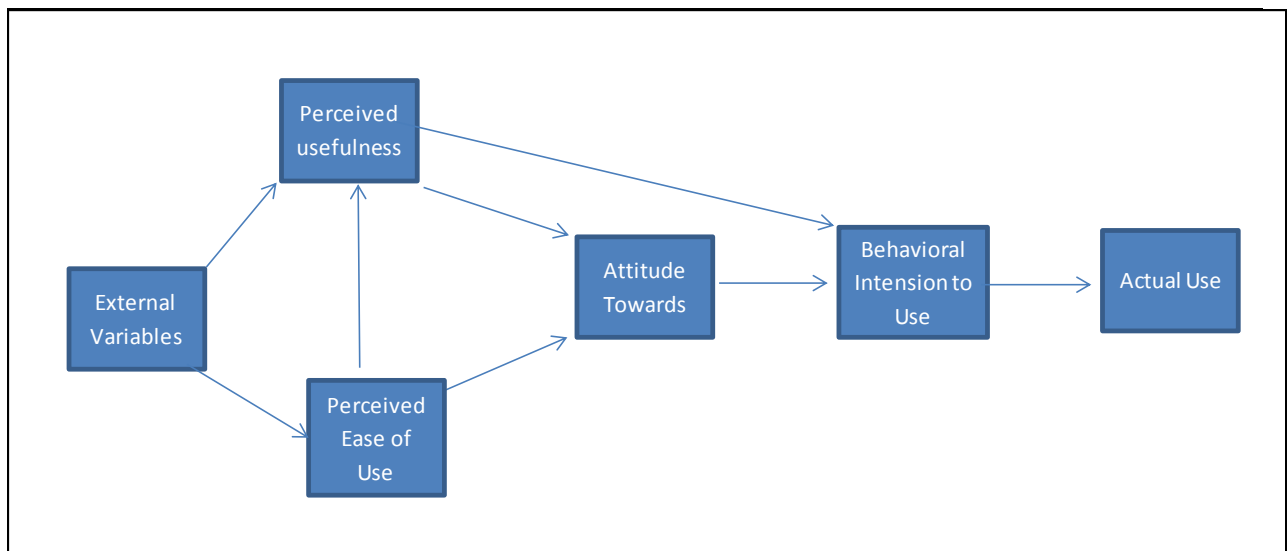


Figure 1. 5: Original technology acceptance model (TAM)

Source: Park (2009:151).

2.17 DEFINING CHANNEL MIGRATION

Channel migration is approximately creating choices that complement rather than substitute a system or process. The success of channel migration is in the ability to convince clients to move over to the new channel via peers, incentives and the educating of both the staff and clients (McMurdo, 2012:5). Clients tend to react better to change when it is a gradual process, rather than jumping from A to Z (McMurdo, 2012:5). Migration needs to feel like a journey. In effect, the journey needs to be managed step by step through a well-founded logic of the purpose and reason the client should want to use an alternative system or process and in this study's case, channel (McMurdo, 2012:5). Channel migration should be approached in line with how people think. If staff is not real believer of other channels of banking, trained-up and well experienced on why the new channel offers more choice and superior suitability, it will be difficult for them to convince clients that it is the way to go (McMurdo, 2012:5).

The straightforward part of customer migration is to first move those customers who want to go. These are the innovators and the early adopters (McMurdo, 2012:5) but there is often more of a struggle afterwards. The key lies in identifying who will be the most difficult customers to move over to the new self-service channel (and in many cases, it is not those customers one would expect). It is often not the senior customers (60 years and older) who are most reluctant to use a self-service channel (McMurdo, 2012:5). It may well be customers from a younger age group who do not want to lose face by not being acquainted

with the technology or any of the other above stated perceived reasons (McMurdo, 2012:5).

2.17.1 The reason for migration to self-service channels

The days when customers did all of their business in a bank branch are over. Nowadays, most customers use multiple self-service channels to research products, open, use and manage their accounts, resolve issues and receive notifications (Marous, 2013:20). Today's banking customer can interact with their financial institutions through more channels than ever, and the channels selected/offered have an impact on bank revenues as well as customer satisfaction (Marous, 2013:20).

Banks now provide their customers with the convenience of inexpensive, 24/7 access to banking services (Kapare *et al.*, 2013:310). A drop in the ratio of customers visiting banks with a growth in other channels of distribution will also decrease the queues in the banking halls. Increased availability and accessibility of more self-service channels help bank administration in reducing the expensive branch network and its associate staff overheads. In return, bank employees and office space that are released in this way may be used for some other profitable ventures (Kapare, *et al.*, 2013:310).

It is essential for banks to initiate more strategic ways to migrate customers from more expensive self-service channels to less expensive channels. If the customers are able to see that these initiatives are for saving on charges for their own benefit, the bank will earn more trust from their customers. This will result in less complaining about high charges for banking services. It is also much cheaper to deposit at an ADT than depositing to a teller. If something does not offer benefit to the customer or it is difficult to use, then migrating customers will be significantly impacted (NCR, 2010:2). If customers realize the value and usability of the ADTs, it will encourage them to use them.

2.18 FIVE MOST COMMONLY USED SELF-SERVICE CHANNELS IN THE BRANCH BANKING SECTOR IN SOUTH AFRICA

There are five self-service channels that are commonly used in South Africa, namely Internet banking, mobile/cellular banking, telephone banking, Automated Teller Machine (ATM) banking, Electronic wallets and Automated Deposit Terminal (ADT) – which is the self-service channel under review in this study. These channels and their benefits will be discussed below.

2.19 INTERNET (ONLINE) BANKING

Internet banking in South Africa started in 1996. The start was fairly slow, but customers were attracted to the convenience, safety and low costs of online banking (Singh, 2004:190). Online banking is conducted within a closed network which permits the customer to perform transactions from any terminal with access to the Internet. Currently, Internet is one of the most preferred methods in transacting as well as for customers to link to financial service providers (Hudgins & Rose, 2015:114). Most banks allow customers to access their account information and conduct routine banking business via secured websites (Koch & MacDonald, 2010:25). Internet banking also makes it possible for the bank's customers to manage their finances through checking their online accounts regularly whenever they are online. Some banks made it possible for bills to be paid online. This saves the customers a lot of time and the hustle of paying their bills in queues (Simuchimba, 2011:11-12). The main appeal of internet banking is its simplicity, because customers can conduct their banking business practically at any time and place that has web access (Koch & MacDonald, 2010:25).

Customers looking for the elasticity and ease offered by internet banking will be enticed to banks offering the best services (Anani, 2010:30). Current customers can be sold different products that they do not have in their portfolio (Anani, 2010:30). This can lead to increase capability to retain customers. Customer relationship management (CRM) can be simplified by the data developed and seized on the corporate database (Anani, 2010:30). The weakness of Internet banking is that felons succeed in gaining access and steal account information from individuals and then quickly deplete the individuals' account balances (Koch & MacDonald, 2010:25). The numbers of Internet users have increased dramatically, but most of them are reluctant to provide sensitive personal information to websites because of the lack of trust in the security in mobile banking (Dixit, 2010:1).

Security is a major concern in Internet banking (Simuchimba, 2011:12). As the number of products and services offered via the Internet grows rapidly, customers are more and more concerned about security and privacy issues (Simuchimba, 2011:12). The bank officials are to be held responsible at times because in most cases they work with the syndicates in obtaining customer information.

2.19.1 Benefits of using online banking

Online banking is known for the following benefits it provides (*Standard Bank, 2015*)

- set up new beneficiaries;
- pay beneficiaries;
- transfer money between accounts;
- check account balances;
- download statements;
- buy prepaid airtime or electricity;
- pay outstanding traffic fines; and
- set up future recurring payments.

The study seeks to confirm the above list and possibly get more benefits from the business customers for using online banking.

2.20 MOBILE/CELL PHONE BANKING

Mobile banking is the provision of banking services, notably a bank account which can be accessed via a mobile phone (Simuchimba, 2011:10). In general, it is banking done via a mobile phone. Mobile banking is a popular banking channel among people who have cell phones. Mobile banking is also known as Short Message Service (SMS) banking or M-banking and has been facilitated using restrictions of passwords for security reasons (Simuchimba, 2011:10). The successful and fully operational functioning of the mobile banking service as a benefit to the bank and customers requires an efficient and working telecommunication network. Banks and telecommunication networks sign agreements on how the mobile banking services will be provided to the customer. The agreement outlines how much the customer is charged on each transaction and how much goes to the telecommunication network (Simuchimba, 2011:11). The user of a mobile banking service must be a customer to both the bank and the telecommunication network. Banking transactions over mobile phones are usually performed by sending an SMS requesting a financial transaction, it travels to the SMS centre of the customer's cellular service provider and from there it goes to the bank's system. Then the customer receives the response that is sent by the bank via the service provider, all within a few seconds. Thus, it can only be successful if banks establish agreements with telecommunication companies (Simuchimba, 2011:11) i.e. MTN, Vodacom and Cell C as these are the mobile phone

network providers in South Africa. With mobile banking a customer can conduct any financial and nonfinancial transaction effortlessly and surely (Bindu, 2014:22). Mobile banking is secured because banks have ensured that adequate security is provided when issuing a personal identification number (PIN) which the customer is admonished not to share with a third party.

The use of cell phones to conduct banking business will speed up transaction processing and increase customer convenience (Koch & MacDonald, 2010:25). Imagine the increased convenience if customers are able to review their deposit accounts activity, make loan payments and small denomination purchases with their cell phone instead of using a computer or having to go to an ATM (Koch & MacDonald, 2010:25). Different self-service channels appeal to different types of customers. Typically, younger customers prefer channels that offer the greatest convenience, for example to never have to enter into a branch, whilst the more senior customers often prefer face-to-face contact (Koch & MacDonald, 2010:25).

2.20.1 Benefits of using mobile banking

Mobile banking is known for the following benefits it provides (*Standard Bank, 2015*)

- pay beneficiaries;
- transfer money;
- check account balances;
- buy airtime;
- convenience;
- Banking services at your fingertips;
- cost effective;
- bank 24/7, gives power to take control of your banking; and
- compatible with most phones.

The study seeks to confirm the above list and possibly get more benefits from the business customers for using mobile banking.

2.21 TELEPHONE BANKING

Telephone banking is among the common channels to link customers with financial service providers today. Many financial experts believe that phones will be the key

financial delivery device in the near future because numerous altered services can be promoted, brought and certified at a low cost via phone (Hudgins & Rose, 2015:117). Telephone banking allows customers to do some of their banking activities over the telephone. Furthermore, a customer is screened thoroughly before any transaction may be performed on their account, security checks are to be done to verify if the person making a call is the account holder or not.

Many financial service providers have call centres to help their customers in obtaining account information and in carrying out transactions, saving clients the inconvenience of going into the branch (Hudgins & Rose, 2015:118). These call centres manage increasing numbers of calls. Banks also empower these centres to provide information to customers. Questions can be answered and it provides a cross-selling opportunity to the parties which in turn also assist in building a long-term business-customer relationship.

2.21.1 Benefits of using telephone banking

Telephone banking is known for the following benefits it provides (*First National Bank, 2016(b)*):

- customers can call anytime from anywhere;
- customers have access to an automated service that they can personalise to suit their needs;
- customer can set up, change and cancel stop orders;
- customers can order chequebooks;
- customer can make monthly payments;
- it is quick and easy;
- the customer's bank accounts are only a phone call away;
- customers do not have to queue for services;
- customers can control their banking from anywhere and anytime; and
- it is safer because customers do not have to walk with cash.

(*First National Bank, 2016(b)*)

The study seeks to confirm the above list and possibly get more benefits from the business customers for using telephone banking.

2.22 AUTOMATED TELLER MACHINE (ATM) BANKING

Automated Teller Machine (ATM) banking is one of the first technology based self-service banking channels that banks have introduced (Diakoet *al.*, 2012:255). Most bank customers under the age of 60 have already used an Automated Teller Machine (ATM). ATMs are electronic telecommunications systems that offer some bank services without human involvement (Koch & MacDonald: 2010:25). ATM is the first well known machine to provide electronic access to customers (Odusina, 2014:1). With the introduction of the ATM, banks are now able to assist customers outside the banking hall. ATM services play a key role to minimize customers' time and energy (Tulasi *et al.*, 2014:100).

The ATM services that banks offer, have evolved and have become better and more advanced (Simuchimba, 2011:10). In general, customers are provided with a plastic card that is encoded with an identifier that allows an individual to insert the card in the ATM to withdraw cash, make deposits, take advances on credit cards and check account balances (Koch & MacDonald: 2010:25). ATM is a specialized form of a self-service channel and delivers secure financial transactions to clients all over the world (NCR, 2010:1)

2.22.1 Benefits of using an ATM

The Automated Teller Machine is known for the following benefits it provides (*Standard Bank, 2015*):

- The customer can withdraw cash at any time, day or night and the banks do not need to be open for the service to be provided.
- ATMs offer the accessibility to various locations. Customers can withdraw cash at any bank that their ATM card is linked to.
- Customers do not need to fill out withdrawal and deposit slips as is required at the bank.
- ATMs are faster than going into the bank and queues are most of the time shorter because of more ATMs available in close proximity.
- Customers can withdraw cash at ATMs in foreign countries.

The study seeks to confirm the above list and possibly get more benefits from the business customers for using ATM.

2.23 ELECTRONIC WALLETS

An electronics wallet is the banking service that allows a customer to send money to anyone with a valid South African identification number (First National Bank, 2016(c)).

2.23.1 Benefits of using electronic wallets

Electronic wallet is known for the following benefits it provides (*First National Bank, 2016(c)*):

- A customer can withdraw all or some of the cash from electronic wallets without needing a bank card.
- Money is transferred securely and immediately.
- Customers get an SMS after receiving cash into ewallets.
- Customers can buy prepaid airtime, data and prepaid electricity.
- Customers can check the wallet balance or get mini-statements.

The study seeks to confirm the above list and possibly get more benefits from the business customers for using Electronic wallets.

2.24 AUTOMATED DEPOSIT TERMINAL

The Automated Deposit Terminal (ADT) is a 24/7 self-service banking terminal which accepts cash deposits using an ATM (Chandra & Rajeshkumar, 2014:42). ADTs are like tellers that are on duty every day, enabling one to deposit cash and have it cleared immediately whenever it suits one. These deposit services are available 24 hours a day, seven days a week.

2.24.1 Benefits of the ADT

ADTs offer important benefits to both banks and their customers. The foremost to highlight is that these terminals enable customers to deposit cash at a time and place which is suitable for the customer. Thus, customers are not restricted to banking hours for cash deposits. ADTs also reduce the cost of deposit services. Furthermore, there is the potential for a further spin out of benefits for the customer when banks share their ADTs and allow customers from other banks to access their accounts with a deposit through its ADT (Kapare *et al.*, 2013:309). These terminals also help with the migration of deposits

from tellers. This is important because with fewer customers in the branch, tellers will have a better chance to focus on the client-business-relationships. ADTs remain among the most important banking automation technologies for banks and their suppliers. This technology has the potential to significantly reduce banks' cash and cheque handling costs by enabling the migration of routine teller transactions to self-service terminals. This would free up time and resources for the more value-added transactions and services.

With an ADT installed, counting cash and processing transactions will no longer be the main point of the teller's job. Instead, tellers can fulfil other roles, such as spend more time with customers and promote good quality service and customer satisfaction. First National Bank have started by up-skilling their tellers to become multi-skill consultants so that they can relieve in the Financial Advisory and Intermediary Services (FAIS) roles to increase and speed-up the process of sales. This also results in customer satisfaction.

ADT is good for business customers as these customers deposit large amounts of cash each day. Using ADTs will extend their business day as they could schedule their own banking hours. Below are other benefits when using ADTs (First National Bank, 2016(a)).

- It saves the customer time; customers do not have to queue in a branch to make a deposit which results in improved client satisfaction.
- The service is available 24 hours a day, seven days a week; most ADTs are available outside of normal trading hours.
- The customer can deposit cash without the need for a card or identity document/ passport.
- After cash deposits had been done, the customer's account will be instantly credited with the cash that was deposited.
- The cost of cash deposits made at an ADT is cheaper than making a cash deposit in a branch.
- ADTs are easy to use with a user-friendly interface, making it very simple to use. Customers can simply touch the screen and follow the step by step guide;
- ADTs detect fake notes.
- The ADT is absolutely safe. Each transaction has a distinctive, traceable number.
- A unique receipt slip is issued after each deposit that was made to use if any queries or concerns should arise.

The study seeks to confirm the above list and possibly get more benefits from the business customers for using ADTs.

2.25 ADT SYSTEM OVERVIEW

The hardware consists of a LCD screen for the display of options that could be selected and to enable the entering of account information (Kapare, *et al.*, 2013:309). It displays the number in which the cash is to be deposited and then guides the client to the next step. The carriage pass the currency notes one by one from where the customer has inserted it to where a camera captures the appropriateness of each image of every type of note. Every note is passed through UV light to detect the originality of note which consequently results in acceptance and rejection of faulty notes (Kapare, *et al.*, 2013:309).

Spindle is used to push notes from the carriage to the storage container of notes. The counter is provided to count the cash. The LCD screen shows the new balance of the client's account and provides a printed receipt (Kapare, *et al.*, 2013:309).

2.26 ADT SCREEN FLOWS

The following section illustrates, through photographic images, the flow of the ADT process with short sentence descriptions to indicate the actions taken at each screen shot.

Photo 2. 1: One of the big banks in South Africa's ATMs with ADTs



Source: Majombozi (2015:18)

In the first step the customer should press the cardless banking or cardless services button on the screen. In this case the customer does not require a card to use the ADT services.

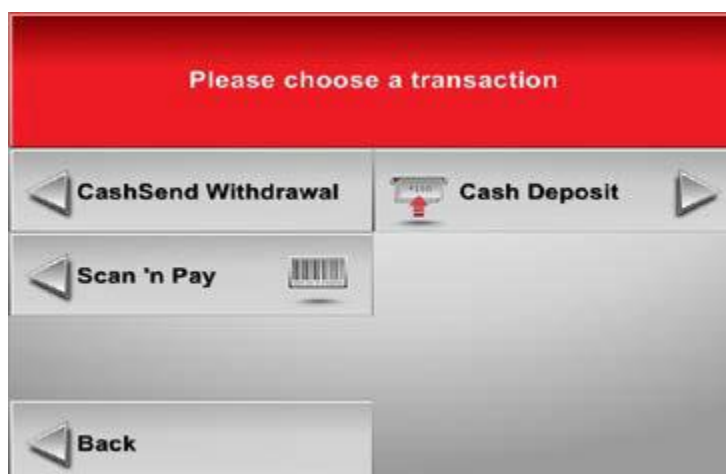
Photo 2. 2



Source: Majombozi (2015:18)

In step two the customer should select cash deposit from the transaction menu.

Photo 2. 3



Source: Majombozi (2015:19)

After this screen the following screen will be displayed:

Photo 2. 4



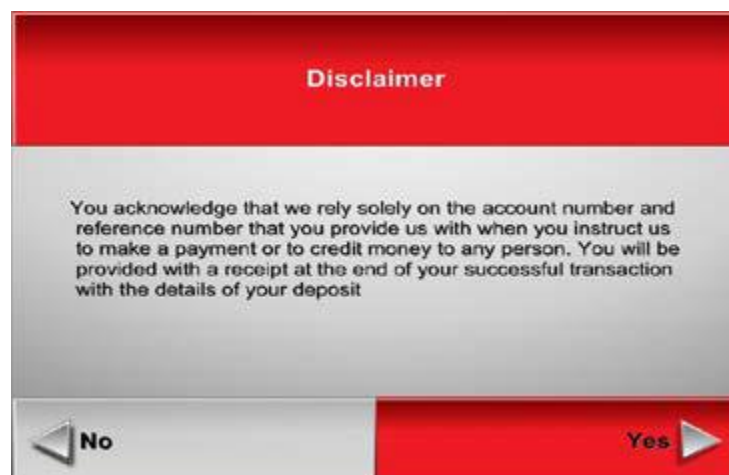
Source: Majombozi (2015:19)

The customer should now select his/her preferred language in which the transaction should be done. For the purpose of this study, English was selected.

A disclaimer screen will appear. If the customer is in agreement, he/she must select the “yes” option to continue. In this example “yes” was selected.

Note: should the customer select “no”, the transaction will automatically be cancelled.

Photo 2. 5



Source: Majombozi (2015:20)

Photo 2. 6



Source: Majombozi (2015:20)

After the customer confirmed to the disclaimer, the above screen appears and the customer needs to enter the account number to which the cash must be deposited.

The next screen will request the confirmation of the account number.

Photo 2. 7

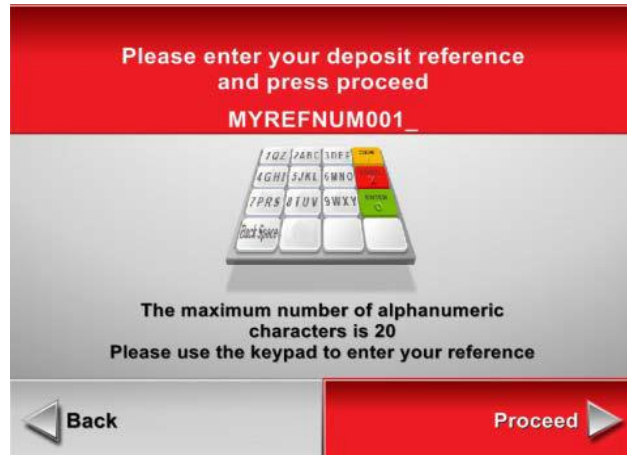


Source: Majombozi (2015:21)

The customer now needs to press yes if the account number is correct in order to continue.

The following screen will appear for the customer to provide the reference that should appear on the account holder's statement:

Photo 2. 8



Source: Majombozi (2015:21)

Note: By design, both alpha-numeric characters can be entered. Number of characters cannot exceed 20 characters.

The customer needs to press “proceed” in order to continue with the transaction.

The screen will guide the customer further in the process flow to insert the cash into the cash-accepting slot. Customers do not have to put notes in an envelope.

Photo 2. 9



Source: Majombozi (2015:22)

Next a “please wait” screen will be displayed while the ADT validates the notes that have been inserted.

Photo 2. 10



Source: Majombozi (2015:22)

After the validation, the amount of cash that was deposited needs to be confirmed.

Photo 2. 11



Source: Majombozi (2015:21)

The customer should continue by pressing “proceed” on the screen. The ADT process is now almost completed and the next screen is only to give final confirmation of the payment details and reflects information like the photo below.

Photo 2. 12

R10	R20	R50	R100	R200
R0	R0	R50	R0	R0

Deposit amount	R50
To account	4047488881
Reference	MYREFNUM001

CancelProceed

Source: Majombozi (2015:24)

The customer will confirm the final payment details by pressing “proceed”. A marketing screen will then be displayed while the transaction is being processed.

A screen will prompt the customer to take his/her receipt after the completion of the previous action.

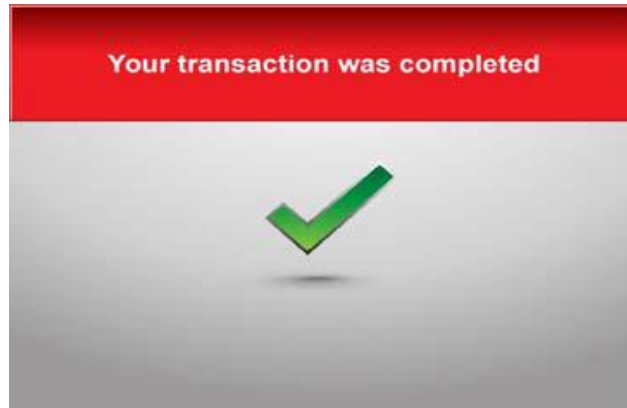
Photo 2. 13



Source: Majombozi (2015:26)

As the customer takes the receipt, a screen will display the confirmation that the transaction was completed.

Photo 2. 14



Source: Majombozi (2015:27)

A final screen will appear as a thank you note to the customer and also to end the transaction.

Photo 2. 15



Source Majombozi (2015:27):

2.27 FACTORS OF ADT RESISTANCE BY THE BUSINESS CUSTOMERS

There will always be customers who adapt slower than others with the introduction of new technology and services. There will be the group of customers that will use a certain channel only for a short time and even those that will refuse to adapt at all and just continue with the known and traditional services. There are many reasons why business customers do not feel comfortable to use ADTs. Some fear the unknown, as in what would happen if their money goes missing. Business customers do not have confidence or do

not feel comfortable in using ADTs because it can only take notes and not coins, specifically in instances where customer's business receives typically or mainly coins. For other customers, it is an inconvenience to use ADTs because they cannot deposit large amounts into the machine. This is still a great challenge for ADT services, as it is not designed to take a large number of notes, but only 38 notes at a time and a maximum of R8000. Hence, certain customers prefer to use tellers inside the branch because they can be assisted at once regardless of the number of notes they have to deposit. In this instance, safety also plays a major role because customers may be followed and robbed while depositing notes into the machine.

In other cases, head offices do not approve ADT receipts and require the stamped ADT receipts or a receipt book that a teller has signed.

2.28 CUSTOMER SATISFACTION

Customer satisfaction has for a long time been a buzz word for business people in order to differentiate their organization in the league of successful dealings. Due to the increase of stern competition in every product line, the retaining of customers had become much more difficult than before. Thus, customer retention in the long term is only possible through customer satisfaction (Paulraj & Renuka, 2014:333).

Banks usually offer more or less the same products and services; thus, a competitive edge on other parameters needs to be created to enhance customer satisfaction and loyalty (Sindwani & Goel, 2015:1). This is important and inevitable as the only organizations (and in the case of this study, banks) that will be able to survive and compete in future, will be those that succeed in satisfying their customers' needs and retained their loyalty (Sindwani & Goel, 2015:1). Today almost every bank is using technology to deliver services to customers.

The concept of customer satisfaction has a central position in marketing. It is one of the major outcomes of marketing and links the purchase process and usage of the product or service to attitude change, recurrence purchase and eventually brand reliability of the customer (Sabir *et al.*, 2014:1016). Customer satisfaction could be described as the state of mind that customers have about a product or service after they have used that product or service which the company had offered. Customer satisfaction is greatly influenced by the customer's expectations before the product or service has even been bought (Sabir

et al., 2014:1016). Customer satisfaction can be described as that state of mind of a customer feeling content when the product or service which a client had received, corresponds with the pre-conceived expectation the customer had about that specific product or service (Saarnio, 2011:9). However, getting the product or service to meet these expectations is not that simple. Nowadays there is much more information available to customers through the Internet, confronting banks and organizations with more challenges in offering customer satisfaction (Saarnio, 2011:9). Banks need to differentiate their offerings and persuade customers to buy just their products or services instead of what their competitors have to offer. Thus, it is important that the bank that wants to succeed, not only attracts customers through offering ADTs with similar service offerings that all other banks offer, but has to differentiate its ADT from its competitors. Possible differentiators could be offering different languages, increasing the number of notes that can be deposited into the machine or even initiate a more innovative way of allowing the business customers to be able to deposit coins into the machine (specifically aimed at business customers from the taxi environment).

Customers may receive satisfying service experience from other banks as well (Saarnio, 2011:9). That is why the bank with the competitive edge will be the one that has something to offer that is beyond its competitors. The unique service offering has to create a certain image in customer's minds in order to get their interest and later their loyalty (Saarnio, 2011:9). The bank also has to create a product and service that will fulfil an expectation of prospective customers that it is worth buying. If customers sense that they obtained more than just the product or service they have bought, they would be willing to pay more (Saarnio, 2011:9).

Customers will spread positive information about the bank when they have received what were expected and is satisfied with the service experience (Saarnio, 2011:9). However, if a customer is dissatisfied, negative word of mouth will most likely be spread more.

Generally, customer satisfaction converts to more revenue for banks and their market share can increase (Angelova & Zekiri, 2011: 236). Literature highlights the importance of customers and the main worry of marketing is to link with customers by constructing a solid customer relationship in order to meet their prospects (Angelova & Zekiri, 2011: 237). In this regard, firstly, the traditional organization pyramid will be discussed (Figure 2.1). This pyramid suggests that managers view customers only as a way to gain profit. On the top one finds the top management (like the president of a company or chief executives),

followed by middle management in the second front and front-line people and clients at the bottom (Angelova & Zekiri, 2011: 237). In these top-down structures the flow of communication is also most of the time formal and in a structured way. The drawback of such a model is that decision making takes place at the top while it is the frontline people who know the customers and have built customer relationships.

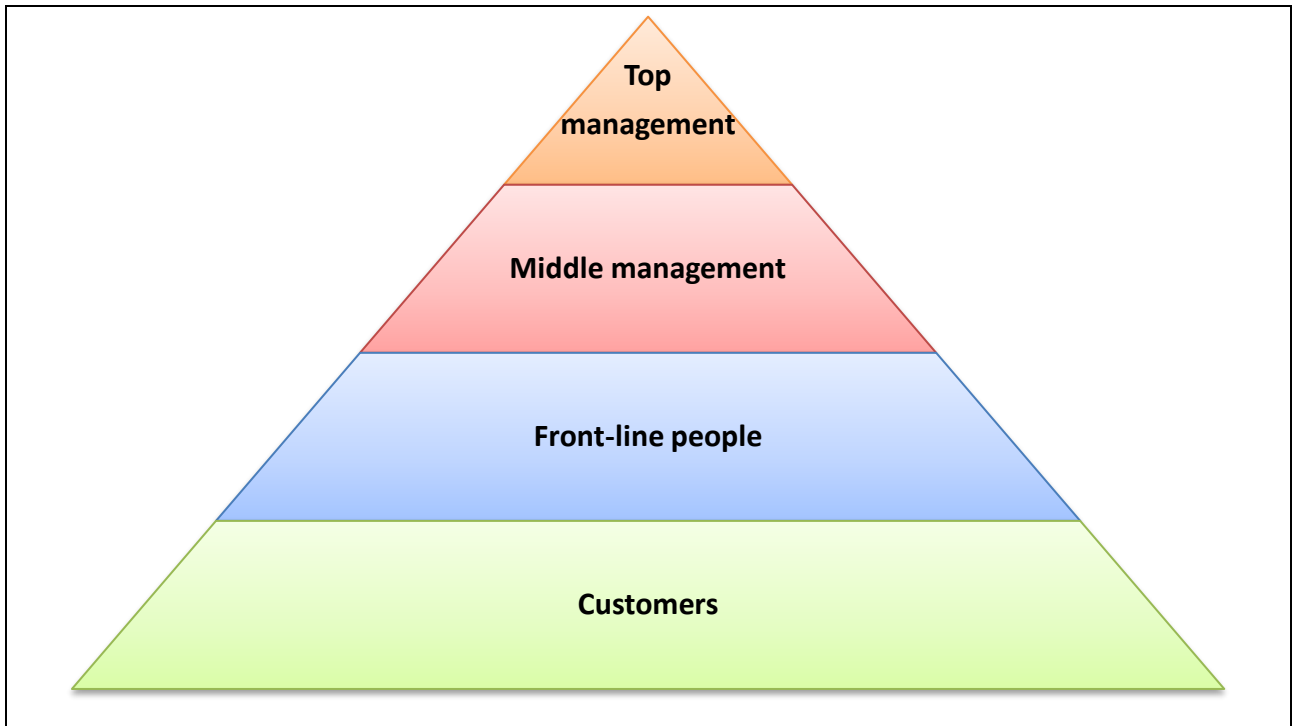


Figure 2. 1: Traditional organizational chart

Source: Angelova and Zekiri (2011:237)

In Figure 2.2 the inverted pyramid is presented where the customers are at the top, and most important, followed by the front-line people who meet, serve and satisfy customers; then the middle management follows to support the front-line in order to serve customers well. At the base is top management focusing on hiring and supporting middle management and steering the company strategically through business decision making (Angelova & Zekiri, 2011, 237). For the customer-centered companies (and in this instance, banks), customer satisfaction is both a goal and a marketing tool. Therefore, companies (banks) need to be concerned about the customer satisfaction level as social media enables quick spread of either good or bad word of mouth marketing to the rest of the world (Angelova & Zekiri, 2011, 237).

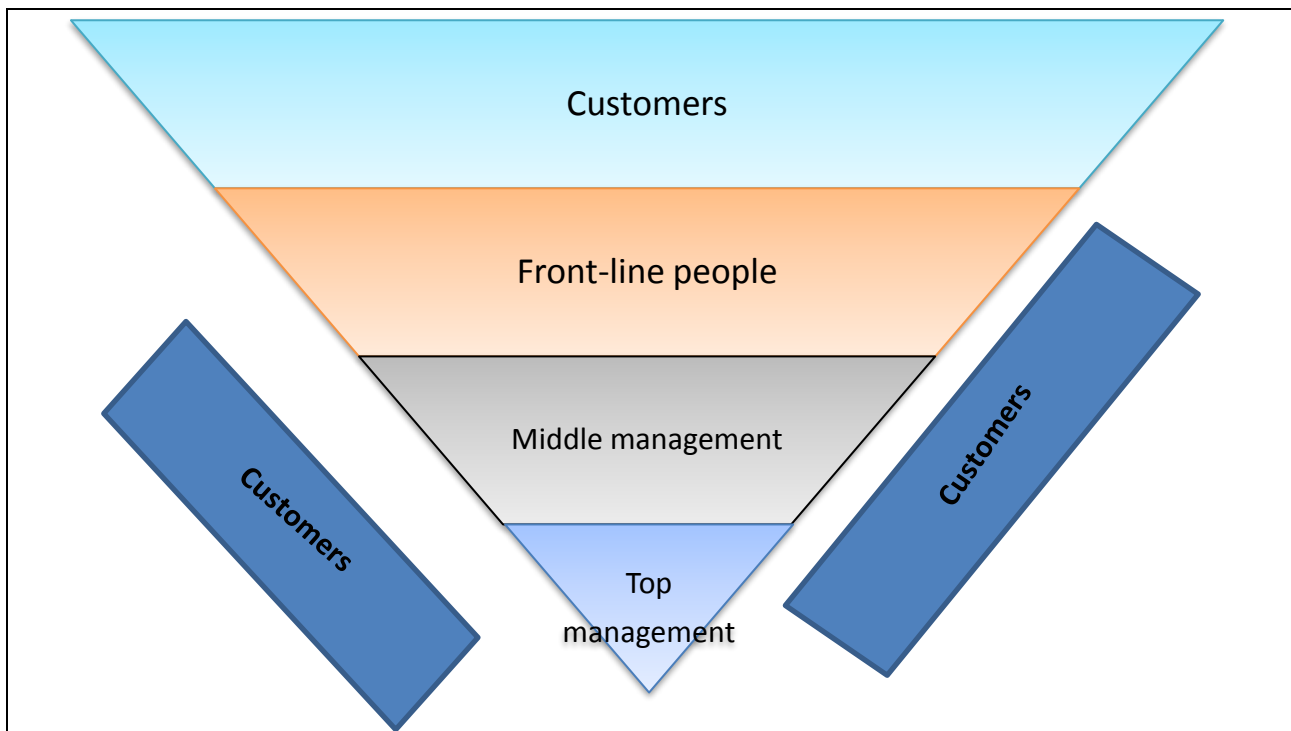


Figure 2. 2: Modern customer-oriented organization chart

Source: Angelova and Zekiri (2011:237)

2.28.1 Factors affecting customer satisfaction

There are many factors that can affect customer satisfaction such as being friendly, and providing quick and quality service. Every customer is an individual with a different background and there are many factors that have an impact on an individual's evaluation of satisfaction (Saarnio, 2011:9).

Other factors influencing expected service encounter or a product are the media (social, electronic, film, television, radio and magazines), advertising, promotional campaigns and direct sales. Consequently, all these elements that affect people every day also build the customer's satisfaction framework (Saarnio, 2011:9).

2.28.2 The importance of customer satisfaction for retail banking

Each company's goal is to be profitable. When a company has loyal customers, who are constantly making use of their product or service, that company is bound to achieve high revenue (Saarnio, 2011:9). Customers turn out to be loyal when they are satisfied, and satisfied customers are customers that return to buy more (Saarnio, 2011:9). Satisfied customers spread positive word of mouth which originates more customers and then

companies will sell more products or services and gain higher profits. If the banks can ensure that the functions that the ADTs perform, will make the lives of the business customers more convenient and save them time, the satisfied customers will tell the other business customers to use ADTs. However, if the business customers are displeased with the ADTs functionalities, it will be easier for them to spread the word of unreliability and non-convenience of the ADTs as depicted in Figure 2.3.

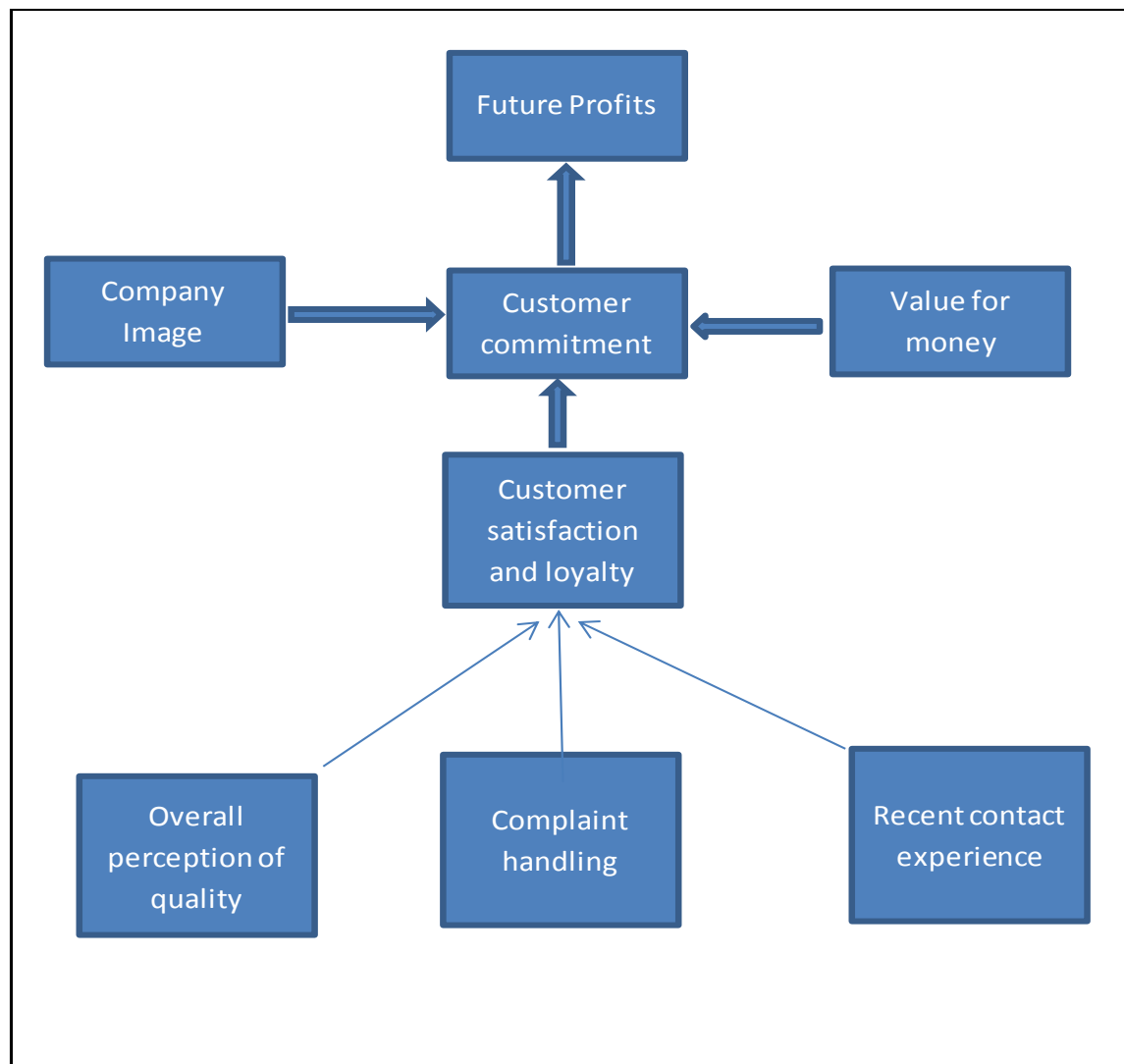


Figure 2. 3: A client satisfaction model

Source: Szwarc (2005:28)

In order to satisfy customers, different elements of business processes should be executed and maintained (Saarnio, 2011:9). The implementation of client evaluation is one way to determine customer satisfaction. In implementing such an evaluation, the recent contact experience can be evaluated as well as the type of service or interaction

the customer had received. Another tool to use is complaint handling which could show a customer that the bank cares about its customers and would do anything to keep them satisfied (Saarnio, 2011:9).

2.28.3 The importance of measuring customer satisfaction

Content customers are dominant in demanding the best performance and financial earnings. In many places in the world, business organizations have been elevating the role of the customer to that of a key stakeholder. Customers are viewed as a group of people whose satisfaction with the enterprise must be incorporated with the strategic planning efforts (Kanojia & Yadav, 2012:93). Forward-looking companies (and banks) are finding value in directly measuring and tracking customer satisfaction as an important strategic success indicator. Evidence is mounting that placing a high priority on customer satisfaction is critical to improve a company's (bank's) performance in the global market place. A better understanding of customers' perception will enable companies (and banks) to determine the actions required to meet their specific customer's needs. The companies (and banks) can identify their own strengths and weaknesses, where they stand in comparison to their competitors and chart out the path of future progress and improvement. Customer satisfaction measurement helps to promote an increased focus on customer outcomes and stimulate improvements in the work practices and progresses used within the company (and banks) (Kanojia & Yadav, 2012:93). A customer satisfaction survey reveals easily whether customers are satisfied or not. Usually unsatisfied customers do not complain directly to a company (or in this case to the bank) but will just change to another service provider (Saarnio, 2011:9). The regular execution of customer satisfaction surveys will enable companies (and banks) to follow the level of customer satisfaction to change their operations if needed (Saarnio, 2011:9).

The use of formal surveys emerged by far as the best method of periodically assessing customer satisfaction (Anani, 2010:33). In order to measure customer satisfaction, it is important to know what to measure (Kanojia & Yadav, 2012:93). As customer satisfaction is such a complex concept and people attach different meanings to the definition of "to be satisfied", literature confirms broad themes that have been constituted through research and evaluation and include contentment/happiness, relief, achieving aims, happiness with outcomes, and no hassles engaging in business (Kanojia & Yadav, 2012:93). The knowledge of such broad themes is important in order to have criteria to measure customer satisfaction.

2.29 CONCLUSION

There are five most common used self-service channels in the branch banking sector in South Africa. The banking industry has become very competitive as the traditional differentiators such as a large branch and ATM networks, telephone banking, priority banking and online banking no longer offer the competitive edge. Nowadays, customers across all segments expect highly tailored, convenient and reliable service along with 24/7 accessibility. It is anticipated that retail banks across the world will suffer a digital transformation within the next three to five years as customers gradually prefer the use of digital channels to interact with banks. This will result in a fundamental change in how retail banks apply different channels to reach their customers. Banks have to modify their branch network with new and different branch plans to match their specific customers' profiles and needs in each location. These changes will help banks transform their distribution profile, reduce costs and increase sales.

2.30 CHAPTER SUMMARY

Chapter 2 provided the literature research as foundation to the empirical study. The chapter deals with three major components, namely the concept of retail banking in South Africa, self-service channels available in South Africa and the study was about the ADTs and the customer satisfaction. Customer satisfaction is of key importance in retail banking because it is the base for a customer's continued use of a specific bank's service. Customers expect highly personalised, convenient and reliable service along with 24 hours and seven days a week accessibility.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The previous chapter has given a detailed layout of literature on studies and research already applied to and done on the themes relevant to the topic of this study. This chapter focuses on the research methodology that was followed to arrive at the research objectives. Furthermore, in this chapter the data collection methods and the procedures that were applied to obtain the needed information are explained in detail.

The chapter also expands on the path that was followed to give the reader an outline of the data that had to be collected, the methodology that was the best applicable for the data collection and finally an explanation on the process followed for data analysis and interpretation. The approach that was used to investigate the research problem is also documented. Thus, in future other researchers will be able to use this study as a reference in similar and/or related research settings or topics.

3.2 RESEARCH METHODOLOGY

Scientific knowledge has three core features, namely it is obtained by means of systematic observation, control is exercised in the process of obtaining the information and the results can be replicated (Welman *et al.*, 2005:9). Non-scientific knowledge on the other hand is obtained by means of authority, opinions of peers, traditions, debating and accidental observations (Welman, *et al.*, 2005:9).

There are two distinct approaches within research methodology, namely the quantitative and qualitative approaches. These research approaches allow researchers the frameworks to explore unexplained phenomena as well as those which were previously explained but misunderstood (Welman, *et al.*, 2005:9). Through the use of methods and techniques that are scientifically defensible researchers may come to conclusions that are valid and reliable (Welman, *et al.*, 2005:9-10). Qualitative research uses structured methods to evaluate objective data, whereas quantitative research uses more flexible methods to investigate subjective data (Welman, *et al.*, 2005:10).

Given the above, in business and management research the quantitative and qualitative strategies are mixed to obtain a more observable and objective point of view. Facts are

collected through the use of counting and statistics (quantitative) and then the perceptions of those involved about the collected statistics and facts are being obtained (qualitative).

3.3 RESEARCH DESIGN

Two research designs namely qualitative method and quantitative method (which was applied for this research) will be discussed.

3.3.1 Qualitative method

Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to the subject matter. Qualitative research is by definition exploratory (Acaps, 2012:7). This is an approach which is applied when there is the need to explore and understand the meaning that individuals or groups ascribe to a social or human problem (Creswell, 2009:4). It is used when researchers do not know what to expect, how to define an issue, or when there is a lack of understanding about an emergency's impact on the affected populations. Qualitative approach is one in which the inquirer often makes knowledge claims based primarily on constructivist perspectives (i.e., the multiple meanings of individual experiences, meanings socially and historically constructed with an intent of developing a theory or pattern) or advocacy (i.e. political, issue-oriented, collaborative, or change oriented) or both (Creswell, 2003:18). It also uses strategies of inquiry such as narratives, phenomenologies, ethnographies, grounded theory studies, or case studies (Creswell, 2003:18). The researcher collects open-ended questions, emerging data with the primary intent of developing themes from the data (Creswell, 2003:18). This research supports the inductive style which means the researcher focuses on individual meaning and supports the importance of rendering the complexity of a situation (Creswell, 2009:4).

3.3.2 Quantitative method

Quantitative research methods are characterized by the collection of information which can be analysed numerically, the results of which are typically presented using statistics, tables and graphs (Acaps, 2012:4). The quantitative approach is also known as the positivist approach. The aim of the quantitative research method is to test pre-determined hypotheses and produce generalizable results (Acaps, 2012:5). Using statistical methods, the results of quantitative analysis can confirm or refute hypotheses about the impact of a disaster and ensuing needs of the affected population (Acaps, 2012:5). It can also

measure impact according to humanitarian indicators. The data are collected with an instrument that measures attitudes and the information is analysed using statistical procedures and hypothesis testing (Creswell, 2009:16). Conclusions made from the analyses of quantitative data indicate how many are affected, where the greatest area of impact is and what are the key sector needs.

The quantitative approach primarily applies post-positivist appeals for developing knowledge (i.e. cause and effect, reduction to specific variables and hypotheses and questions, the use of measurement and observation and the test of theories), employs strategies of inquiry such as experiments and surveys and collects data on predetermined instruments that yield statistical data (Creswell, 2003:18). Those who engage in this form of research holds assumptions about testing theories deductively, build-in protections against bias, control against alternative explanations and prefer to be able to generalize and replicate findings (Creswell, 2009:4)

3.4 THEORETICAL FRAMEWORK

Figure 3.1 illustrates the entire description of strengths and weaknesses of qualitative and quantitative research methodologies (Choy, 2014:100-101). The left side and right side comprise detailed strengths and weaknesses of both qualitative and quantitative research approaches. The middle of qualitative and quantitative research approaches is top-down linked to show the better research results to be achieved for a single research through the complementary approach by both qualitative and quantitative approaches but not combining the process of both research methodologies into a single research (Choy, 2014:100-101). Furthermore, the top-down connection also advocates that both research results are totally based on the separation of both qualitative and quantitative research methodologies, only comparing the research results as reference under the same research topic (Choy, 2014:100-101). The outline of the theoretical framework has been illustrated through the figure below:

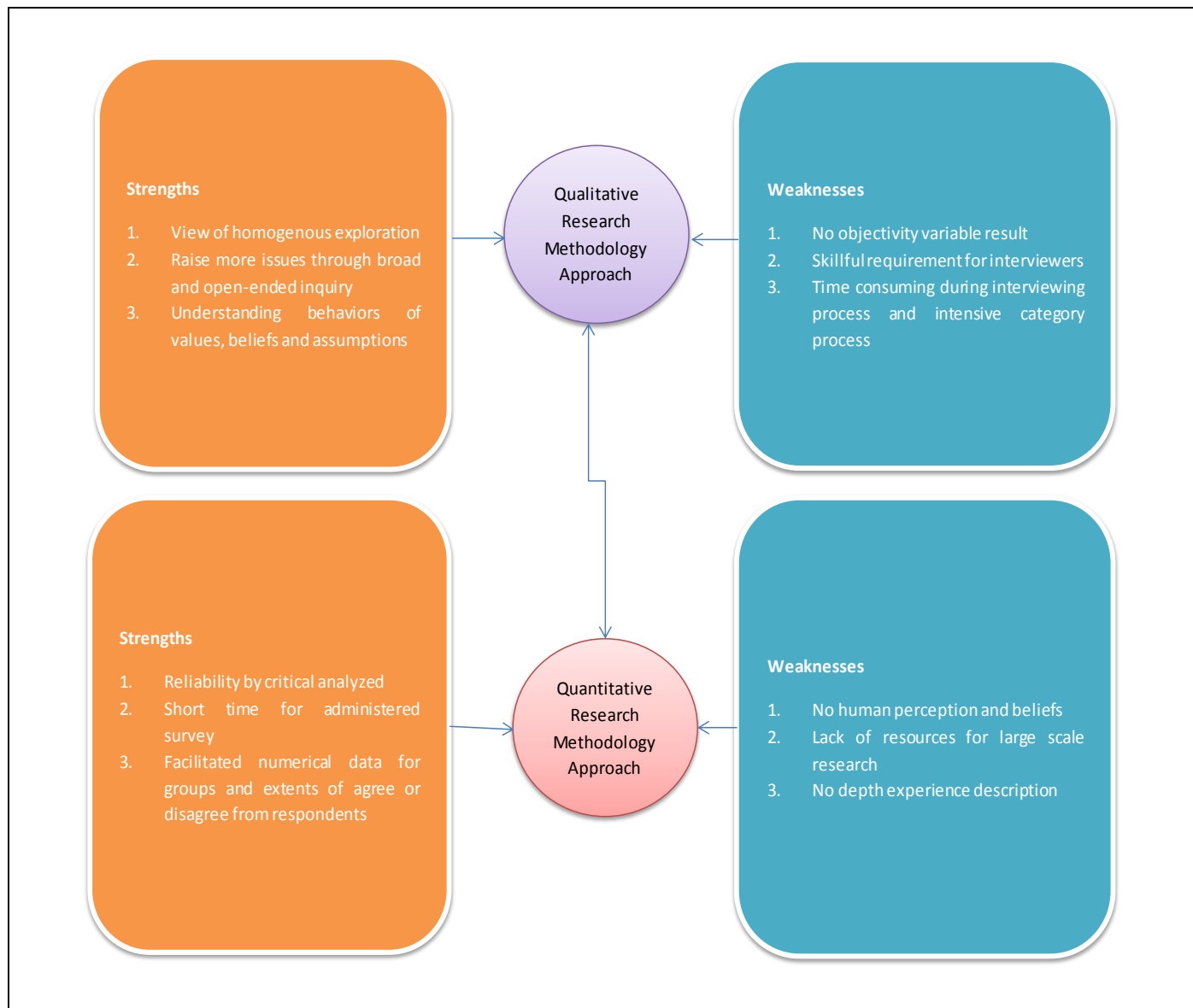


Figure 3. 1: Strengths and weaknesses of qualitative and quantitative research methodologies

Source: Choy (2014:100-101)

A quantitative research design was used for this study, also known as the positivist approach (Welman, *et al.*, 2005:6). The positivist approach embraces that research must be restricted to what can be witnessed and measured empirically, which occurs independently from the feelings and views of individuals. This natural-scientific approach strives to formulate laws that apply to populations and explain the causes of objectively observable and measurable behaviour (Welman, *et al.*, 2005:6). By applying structured questionnaires, the researcher intended to take note of the frequency of responses to be able to determine the actual quantitative findings regarding the extent to which business

customers are satisfied with the ADT services (or whether would they rather prefer to use a teller inside the branch).

Furthermore, the problem statement and research objectives posed to be answered better through a quantitative approach as it would be the most appropriate manner through which to gauge the business customers' satisfaction level regarding ADTs services.

3.5 POPULATION AND SAMPLING

Welman *et al.* (2005:56) distinguish as follows between the types of probability samples and non-probability samples:

Examples of probability samples are

- simple random sample;
- stratified random sample;
- systematic sample; and
- cluster sample.

Non-probability samples include:

- accidental or incidental sample;
- quota sample;
- purposive sample;
- snowball sample;
- self-selection sample; and
- convenience sample.

For this study probability sample was applied. The cluster sampling method was chosen and used. Retail banking business customers was the population and the cluster from which the final sample was identified. Cluster sampling happens when the researcher draws pre-existing, heterogeneous groups from the population. All the members of the selected clusters eventually constitute the sample (Welman *et al.*, 2005:65).

The population of the study consists of business customers of the four major banks in South Africa who are users of the ADTs services. The banks include ABSA, First National Bank, Nedbank and Standard Bank. These banks were chosen because they offer ADT

services to their business customers. The study took place in Gauteng province, South Africa. The Gauteng province is the most cosmopolitan province of South Africa, often considered the financial hub of Africa.

3.6 THE RESEARCH INSTRUMENT

A self-administered, paper-based questionnaire was applied, which was designed to reach the aims of the research study. The questionnaire was designed with three sections (A, B and C). Section A of the questionnaire dealt with the biographical information of the respondents, which is to screen prospective customers to determine their line of business and whether they are customers of the four major banks in South Africa. Section A, furthermore, focused on the demographic information of customers (age, gender, marital status, level of education and turnover).

Section B of the questionnaire dealt with the self-service channels, which was mainly to determine the type of self-service channels customers use, how often they make use of the selected channels and also to gather information about their hesitancy in using the self-service channels offered in branch banking in South Africa.

Finally, section C of the questionnaire dealt with the customer satisfaction with ADT which was to measure the relevant designs of interest. These different options were usefulness and ease of use, trust and satisfaction with the ADT services.

The data collected was examined to make sure they were of good quality. The questionnaires were examined to see if they were properly filled in and completed. The data was laid in a manner that would make analysis easier. The data collected was presented using tables and analysed using percentages. A total of 150 questionnaires were sent out and 100 were filled correctly. A successive response rate of 68% was achieved for the questionnaires.

3.7 DATA COLLECTION

Meetings with the branch managers at selected branches were conducted where the data was collected. The branch managers were made aware of the purpose of the questionnaires and were asked to go through the questions to ensure that they were in line with the study and that they were not going to discriminate against the customers.

Self-administered questionnaires were used in collecting data for this study. These questionnaires were administered to 100 business customers of selected banks (ABSA 17, First National Bank 42, Standard Bank 16, Nedbank 11 and Capitec Bank 14). The customers were also made aware of the purpose of the questionnaire and the contact persons of the North-West University were made available for any verification. Each customer was asked to complete the questionnaire and comment on the content of the questionnaire.

Four stages were followed regarding the questionnaire content:

- Stage one involved the introductory cover letter that explained the rationale of the study, details of the North-West University and assuring the respondent that the information will be treated with confidentiality.
- Stage two covered questions regarding the respondents' demographics (age, gender, race, marital status, educational level, type of business line, turnover, type of bank account, years account in operation, and the banks which respondents bank with).
- Stage three focused on the self-service channels that are available to respondents.
- Stage four directed questions to respondents about their levels of satisfactions with regard to ADT services.

Customers that resided outside the ADT and ATM area of the banking passages were also approached. The full questionnaire is attached as an addendum.

3.8 DATA ANALYSIS

After all the data were collected, the data analysis process commenced. All the statistical analyses were completed by the Statistical Consultation Services of the North-West University on the Potchefstroom Campus, using the IBM SPSS version 23.

3.9 FINDINGS

This chapter also presents the findings of the study. The purpose of the study was to evaluate the implementation of customer satisfaction management for automated deposit terminal services. Firstly, demographic results like respondents' gender, age, tenure and length of time in business are analysed. Then the greater part of the results focuses on the findings of the study to understand respondents' use of ADT machines and describe

factors and aspects of ADT self-service machines that drive customer satisfaction. Findings also investigate the levels of trust among business customers regarding the use of ADT services to inform how banks can proactively adjust or change their ADT business processes.

The findings of the study are arranged according to the questionnaire topics and questions as it were presented in the questionnaires and linked to the research objectives. Analysis was done by applying the statistical software package SPSS 2016.

3.10 DESCRIPTIVE STATISTICS

The first part of this section focuses on the descriptive statistics and explanations mainly based on frequency tables, followed by inferential statistics for the testing of hypotheses.

3.11 BIOGRAPHICAL INFORMATION

This section presents the profiling of respondents who took part in the study.

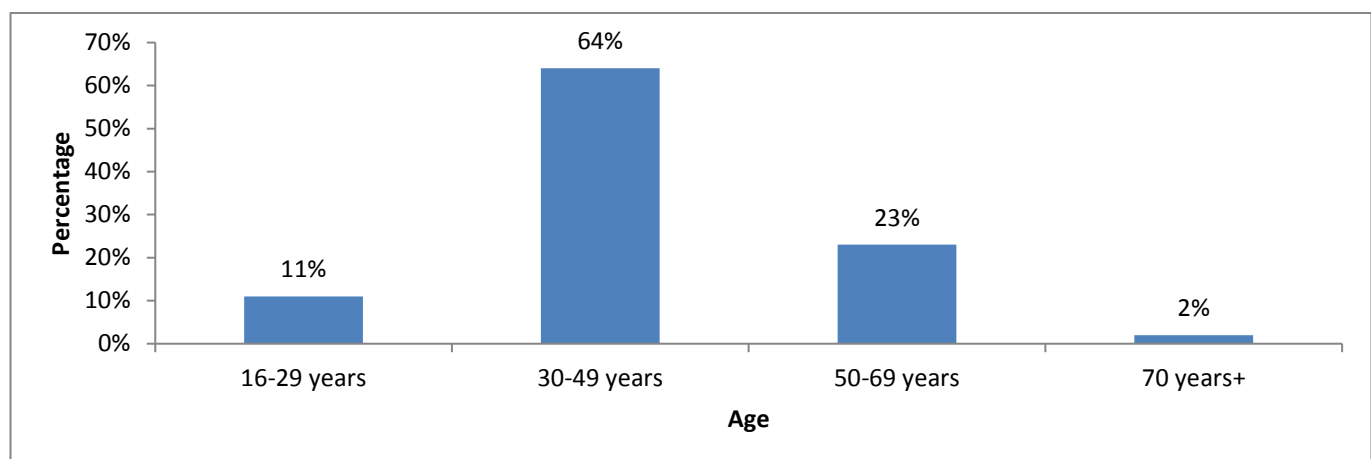


Figure 3. 2: Age of respondents

From Figure.3.2 it is evident that the majority (64%) of respondents are between the ages of 30 and 49 years. Some (11%) are youths between 16 and 29 years, 23% were 50 to 69 years and the minority (2%) proof to be in the age group 70 years and older. This denotes that the majority of business customers who participated in the study are between the 30 and 69 years. The dominant population of this study consisted of business customers with buying power from emerging middle class who have behavioural patterns. These are customers born in the era of technology and the older generation who are adopting or adapting to technology and they're mostly driven by lifestyle.

The next question presents the gender of respondents.

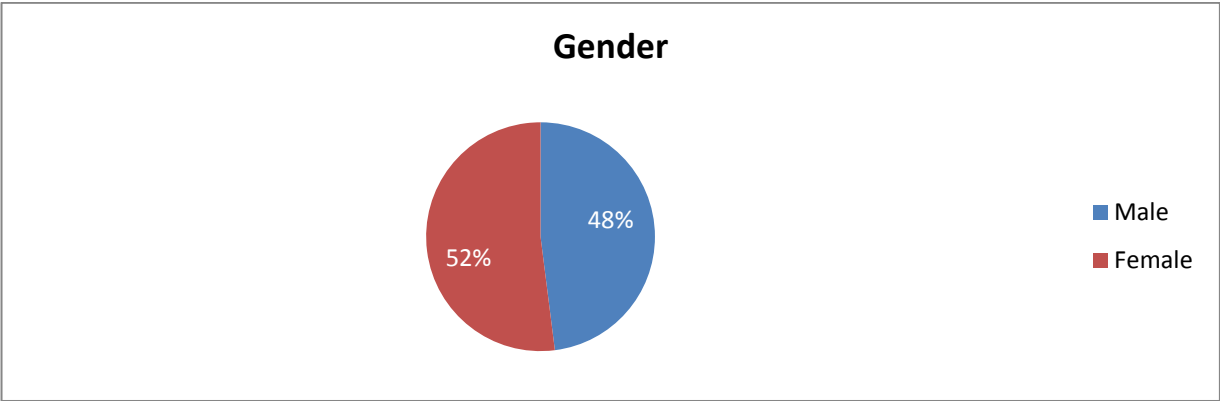


Figure 3. 3: Gender of respondents

Figure 3.3 shows that 52% of respondents are female and 48% male. The study population represented the demographics of South Africa, in term of which women are slightly more than males.

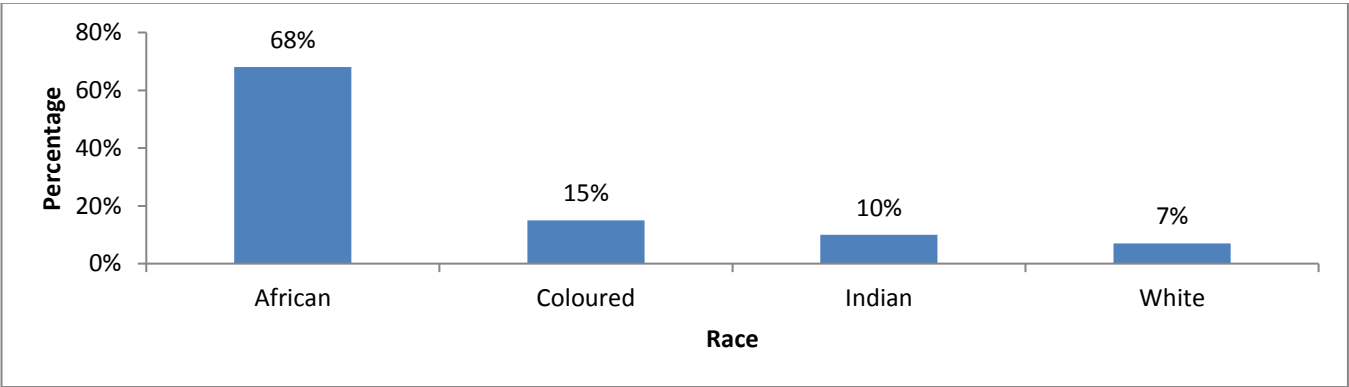


Figure 3. 4: Race of respondents

Figure 3.4 illustrates that black Africans constitutes the majority of the respondents (68%), while 15% are coloured, 10% Indian and 7% white. The respondents consist of the representation from the racial available in South Africa; everybody is represented on the sample that was used in the study.

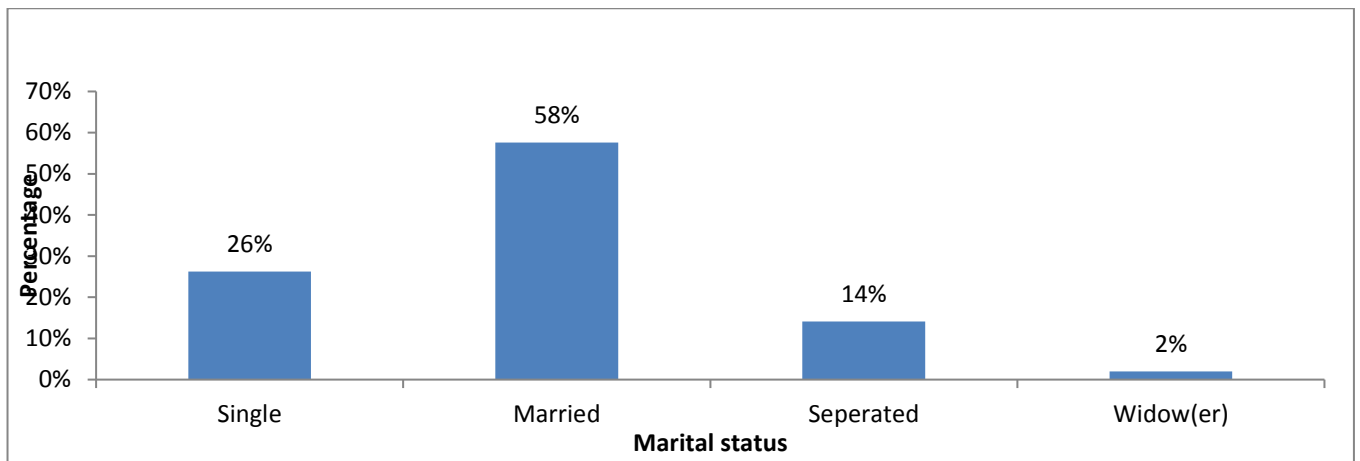


Figure 3. 5: Marital status of respondents

As shown in Figure 3.5, 58% of the respondents are married, 26% single, 14% are separated and 2% widowed. The study shows that the majority of the respondents are the customers who have buying power and who are most likely to transact with a banking institution.

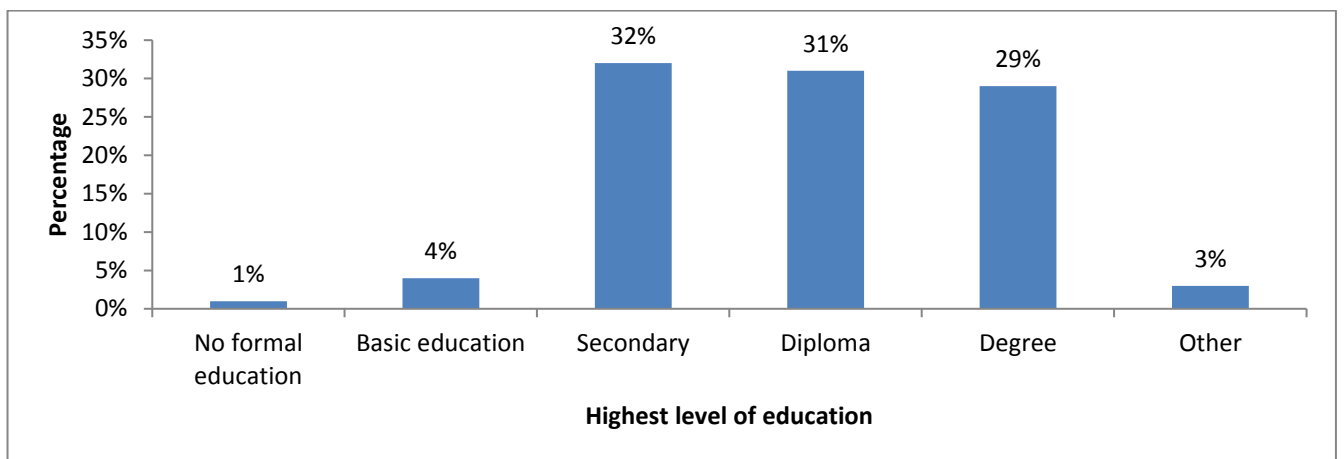


Figure 3. 6: Highest level of education of respondents

It is evident from Figure 3.6 that a small number of respondents (5%) only had basic or no formal education, while 32% completed high school, 31% finished their studies and received diplomas, 29% completed degrees and 3% had achieved other forms of educational qualifications. The study shows that 60% of the respondents have post matric, they are more likely to have encountered some form of computer literacy in their studies and, therefore, they would have quality opinion on the usage of ADTs.

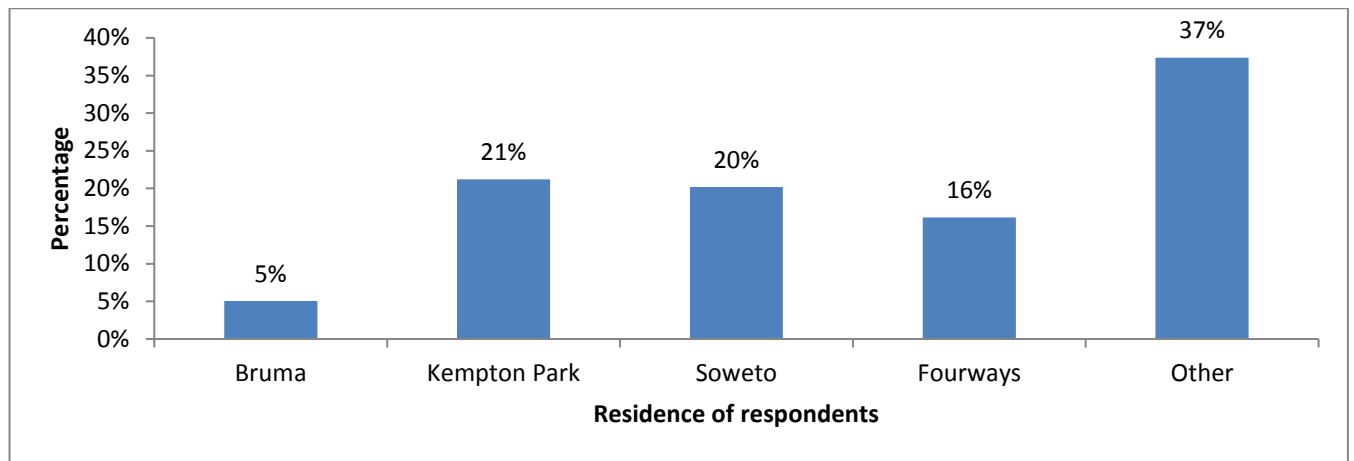


Figure 3. 7: Residence of respondents

Figure 3.7 indicates that 21% of respondents are residing in Kempton Park, 5% in Bruma, 20% in Soweto, 16% in the Fourways area, while the majority (37%) are from other areas not mentioned in the questionnaire. The study shows that there was a preference of use by location from the respondents because others preferred using ADTs that are closer to home or close work. They preferred to use ADTs that are closer to work because they did not want to carry money and make deposits at an ADT closer to home; they prefer the ADTs closer to work.

3.12 BUSINESS INFORMATION

This section profiles the business length of operation, type and banking patterns.

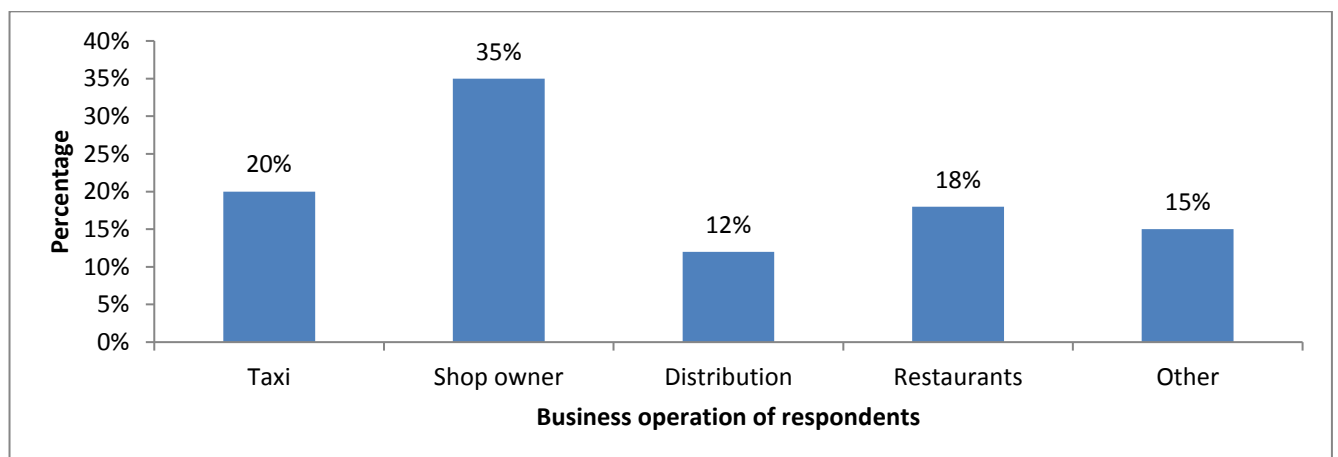


Figure 3. 8: Business operation of respondents

Figure 3.8 illustrates that several (20%) respondents are taxi operators, 35% own retail shops, 12% are in distribution, 18% operates in restaurants and 15% are doing functioning in other business practices. The study denotes that ADTs are not suitable for all

businesses. The majority of the respondents are from the retail side of the business, they receive cash on a regular basis and security becomes a factor in their line of business. A total of 20% of the respondents were from the taxi industry; they work long and odd hours and ADTs are convenient for their line of business.

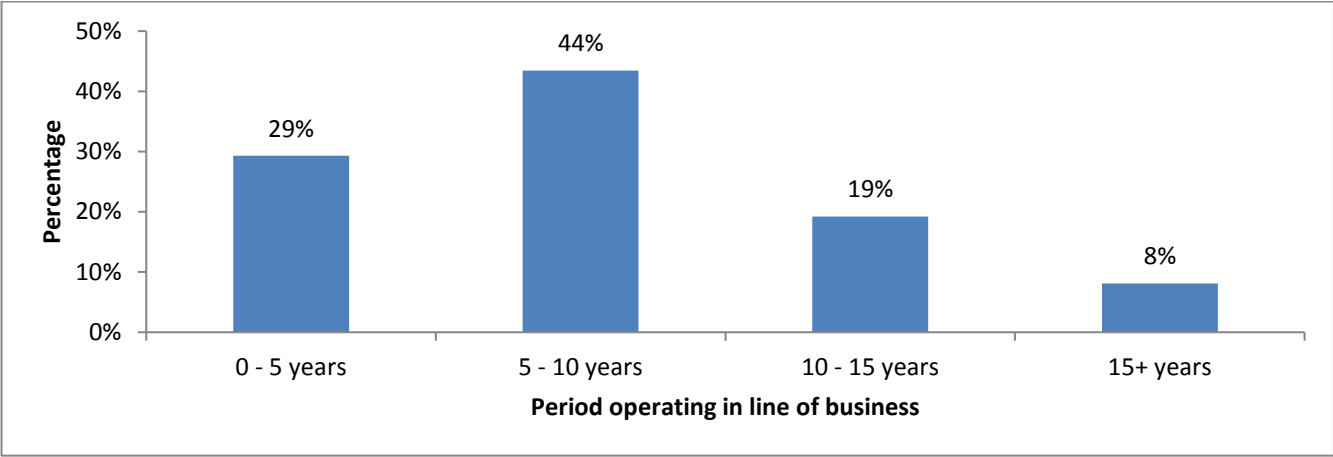


Figure 3. 9: Period operating in line of business

From Figure 3.9 it is clear that the majority of respondents (71%) operated in their line of business for at least five years, and 29% had been in their line of business for five years or less. 27% of the respondents had a solid relationship with the banks because they have been banking with them for between 10 and more than 15 years and there is likelihood that they prefer the human interaction with the tellers because of the long relationship they have with them, whereas the respondents who have been in business for between 0 and 10 years are the emerging entrepreneurs who are not really concerned about the face to face interaction with the tellers.

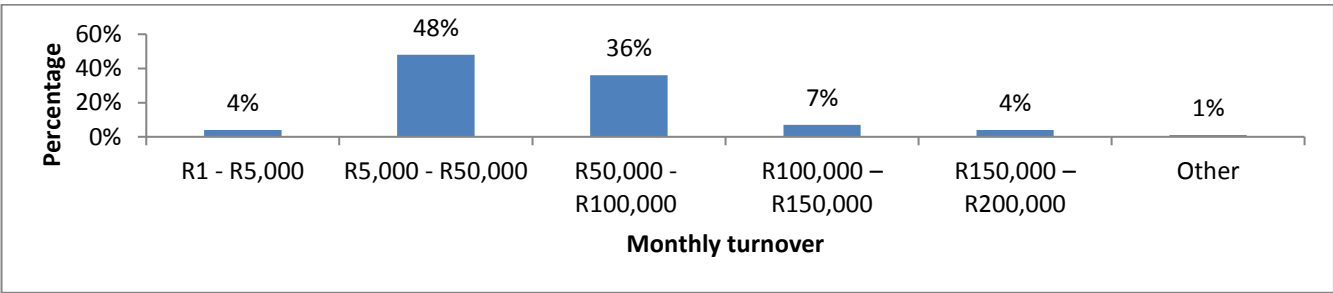


Figure 3. 10: Monthly turnover

As shown in Figure 3.10, a very small percentage (4%) were small businesses with a monthly turnover of R5000 or less, almost half of the businesses (48%) were in the R5000

to R50000 monthly turnover bracket, 36% were realising between R50000 and R100000 while the rest (12%) had at least R100000 monthly turnover.

The next question solicits the type of bank accounts that respondents are using to do banking transactions for their businesses.

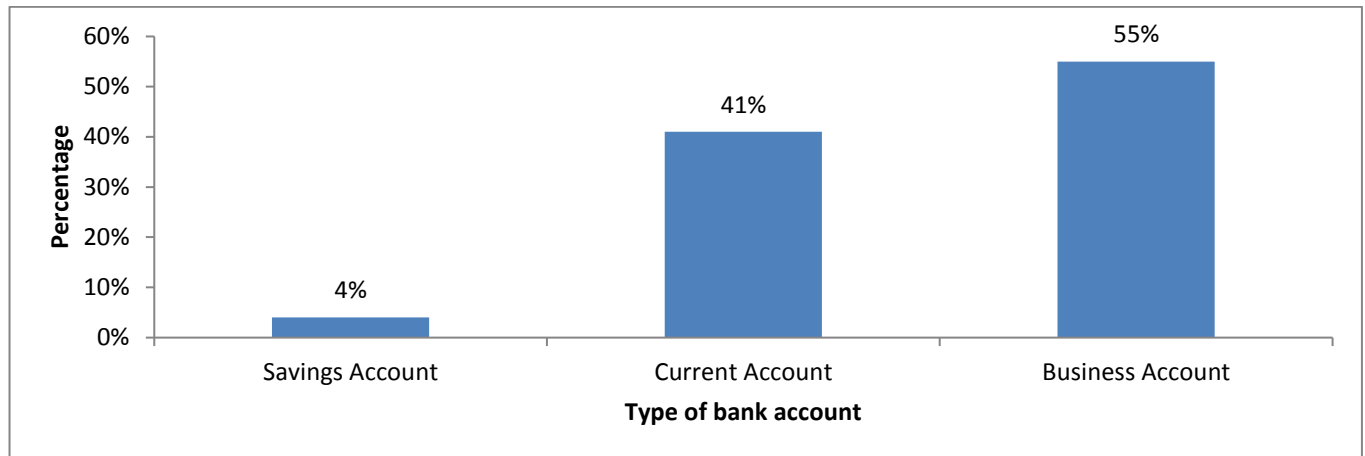


Figure 3. 11: Respondents' type of bank account

Figure 3.11 specifies that just more than half of business owners (55%) designate business accounts for their business activities, 41% use current accounts for their business activities and a small percentage (4%) apply a savings account. This denotes that business customers primarily need business accounts to record their financial transaction, to be able to create their financial statements and manage account information; other business customers prefer to use current accounts even though it is easier to use business accounts for the business.

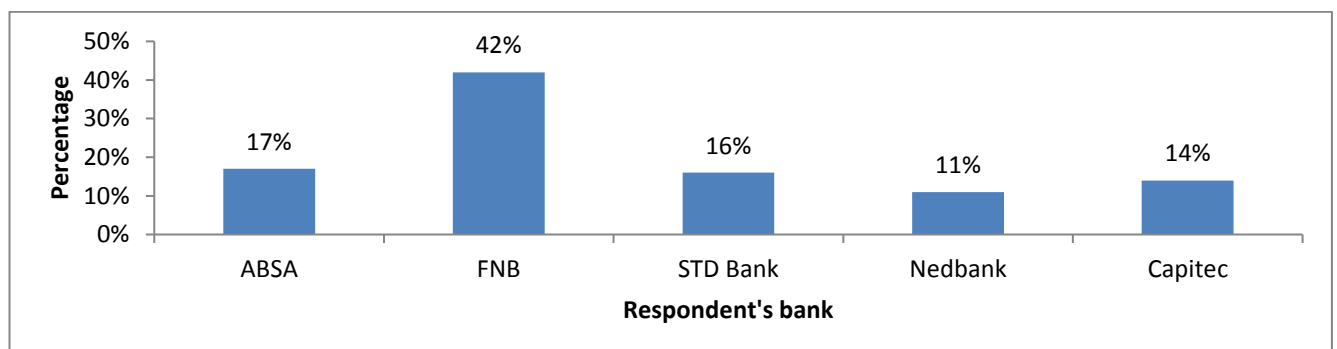


Figure 3. 12: Respondents' bank

Figure 3.12 confirms that the majority (42%) of businesses bank with FNB, followed by ABSA (17%), Standard Bank (16%), Capitec (14%) and Nedbank (11%). This clearly

shows the representation of all the banks in South Africa. The fact that the majority of the respondents are banking with FNB, is mainly because FNB is the first bank in South Africa to introduce ADTs. Their customers were exposed to ADTs before other banks. hence the higher percentage of customers. All other banks started introducing ADTs after FNB.

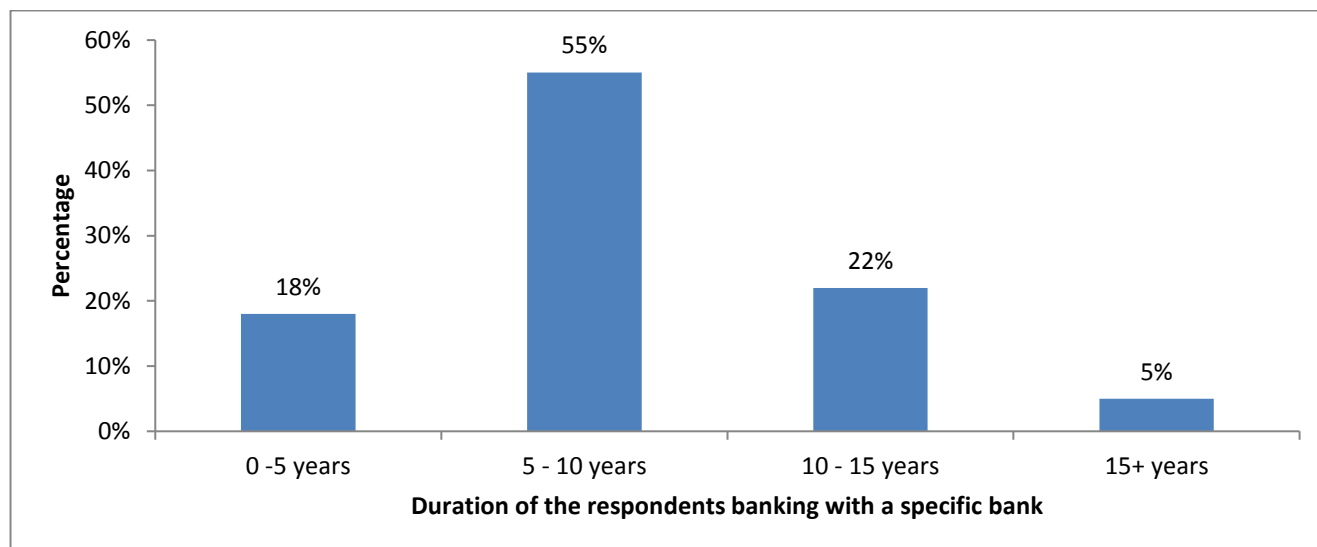


Figure 3. 13: The duration respondents have banked with a specific bank

Figure 3.13 specifies that 55% of business accounts already operates for 5 to 10 years, 18% for 5 years or less, while 27% had a banking relationship with their institutions for at least 10 years. The study consists of respondents who were relatively loyal (0-10 years), strongly loyal (10-15 years) and loyal (15 years and above) to their banks.

Furthermore, it was important to determine this group of business people's frequency of the use of self-service channels that the banks in South Africa offer.

The demographic information from the study reveals that the majority of the respondents that use ADTs are between 30 and 49 years, of which 52% are females and 48% are males. Furthermore, it is evident that the majority of ADT users are African and about 58% of them were married. The highest level of education of respondents is either secondary diploma and/or a degree (average of about 31%). The respondents reside around the Johannesburg metro with few from the Ekurhuleni metro. Quite a number of respondents (35%) are shop owners. Taxi owners (20%) make up the second largest group in terms of occupational role that make use of ADTs. The least represented was from the distribution industry at 12%. The majority of the respondents had been in business for five to 10 years followed by those who are still in the starting phase of just kicked-off with a business to

five years. Generally, most of the respondents have a monthly turnover of about R5000 to R100 000.

The study results show that the majority of respondents have business accounts from which can be reasoned that most respondents are business people and/or entrepreneurs. In terms of respondents' preference to banking institutions, 42% of the respondents prefer using FNB. These respondents have been with their banks for about 5 to 10 years.

3.13 GENERAL SELF-SERVICE CHANNEL USAGE

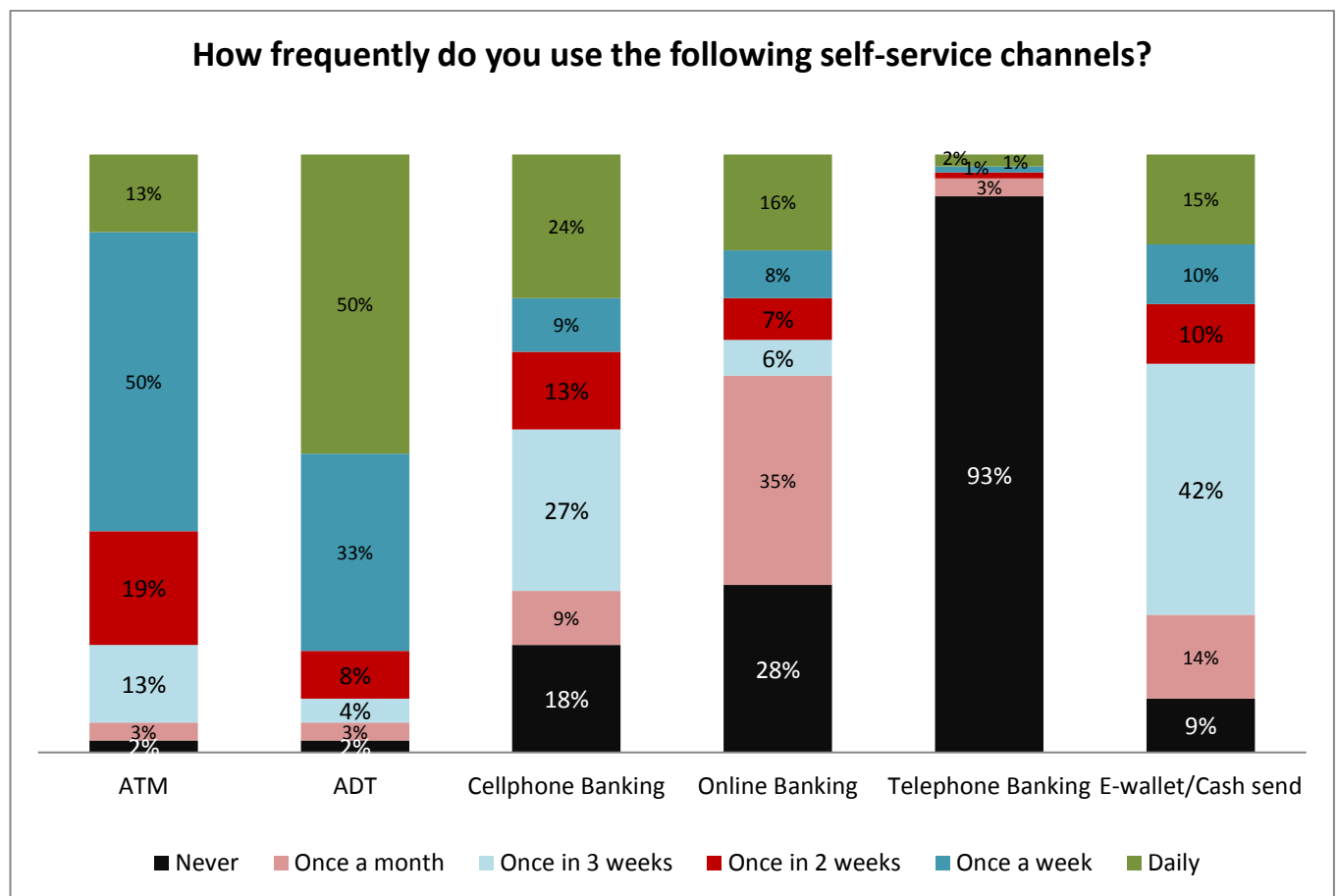


Figure 3. 14: Frequency of respondents' use of self-service channels offered by Banks

Figure 3.14 clearly shows that telephone banking is the least popular self-service channel to be used among business respondents; online banking is not attractive to 28% of respondents. Cell phone banking and e-wallet/cash send services is not used by 18% and 9% of respondents respectively. On the other hand, half of the respondents (50%) use ADT services on a daily basis. Cell phone banking attracts a quarter of businesses, online banking (16%), cash send (15%) and ATMs (13%) every day.

Once every month business customers are utilising the online banking platform. ATMs have their highest traffic once every week. Cash send/ewallet realises its highest traffic from business people once every three weeks when 42% of respondents use cash send.

The study denotes that other than the ADTs' usage by business customers, it is most likely for other business customers to use cell phone, online banking, ewallet, telephone banking and ATMs. Even though other channels may be popular in varying degrees, they're not the preferred channel for daily use, whereas ADT is. The only substitute for ADTs is the teller.

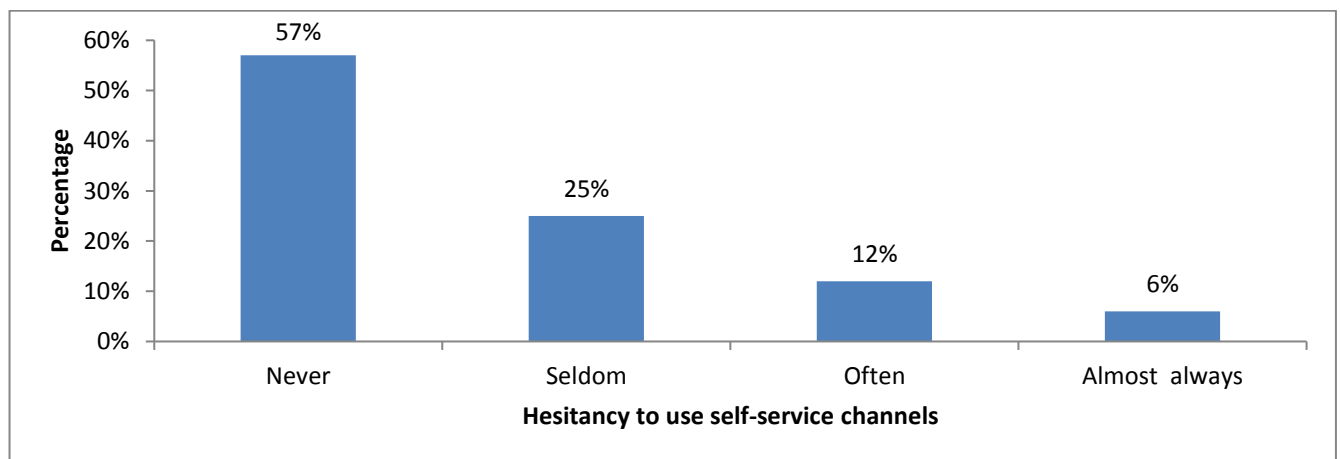


Figure 3. 15: Hesitancy to use elf-service channels

Figure 3.15 verifies that 57% of respondents are confident to use self-service channels, 25% seldom hesitate to use the self-services, 12% often felt hesitant to use the self-services and 6% always felt a sense of hesitance to use the banking's self-service channels. In general, this means that the respondents are getting the desired value from the self-service channels; they have embraced the new form of banking and they're curious of what the self-service channels can do to better their banking needs.

Respondents gave the following reasons for generally be hesitant to use self-service channels.

- prefer face to face interaction;
- security violation for self-service channels;
- lack of assistance by bank officials; and
- language or cultural barriers.

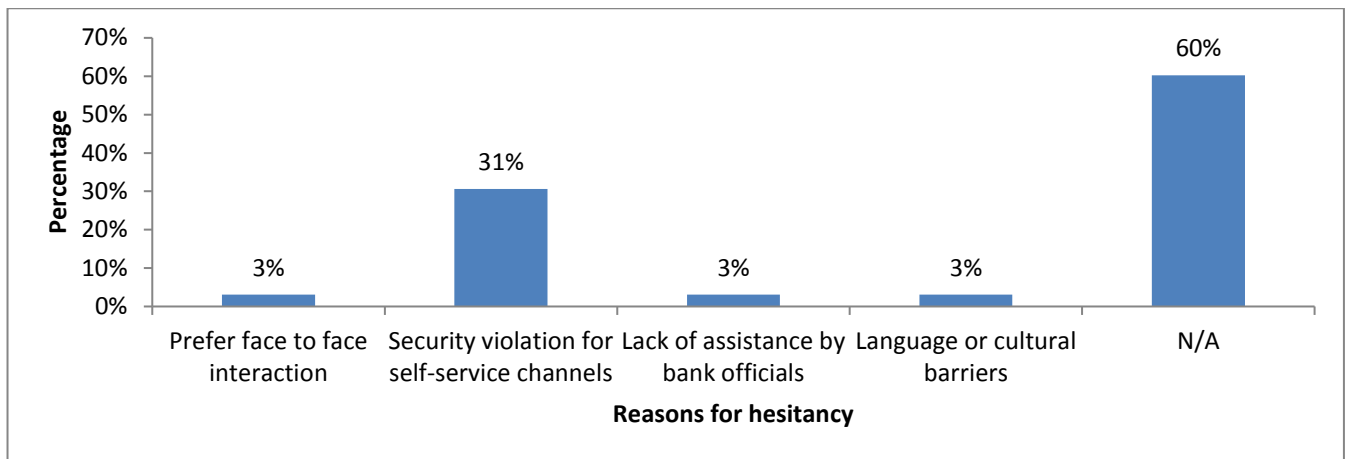


Figure 3. 16: Reasons for hesitancy on the use of ADTs

Figure 3.16 illustrates that 31% of businesses are not sure of the safety and security features of self-service channels. It is evident that 3% would want help from bank officials, while an equal proportion would prefer the old fashioned face-to-face interactions to do their banking business. Another 3% has issues with the language medium that is used. Nevertheless, 60% of businesses do not hesitate to use self-service channels. This means that the most propelling reason for hesitancy is around the issue of security; there is no significant other factors because they have equal proportion. 60% of the respondents are less concerned about face to face preference, security violation and lack of assistance by bank officials nor language or cultural barriers.

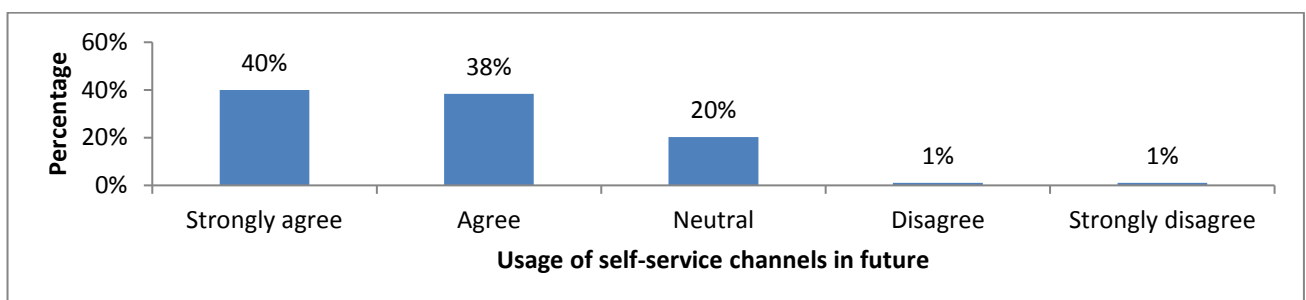


Figure 3. 17: Usage of self-service channels in future

Figure 3.17 verifies that although 20% of respondents indicate a neutral opinion about the use of self-service channels with more assistance or information, the majority (78%) of respondents agreed to make use of the service when there is more assistance. A small fraction (2%) would not change their patterns of self-service channel usage under any circumstances. Figure 3.17 illustrates that the majority of respondents will indeed make use of self-service channels in future when there is more assistance or information available (78%). The majority of the respondents would appreciate more information or

awareness. Banks must make an effort to create awareness and train bank staff to migrate business customers to the channels and not assume that the channels would be adopted involuntarily.

3.14 CUSTOMER SATISFACTION WITH ADT SELF-SERVICE

This section considers the ADT usage, satisfaction and the associated customer challenges.

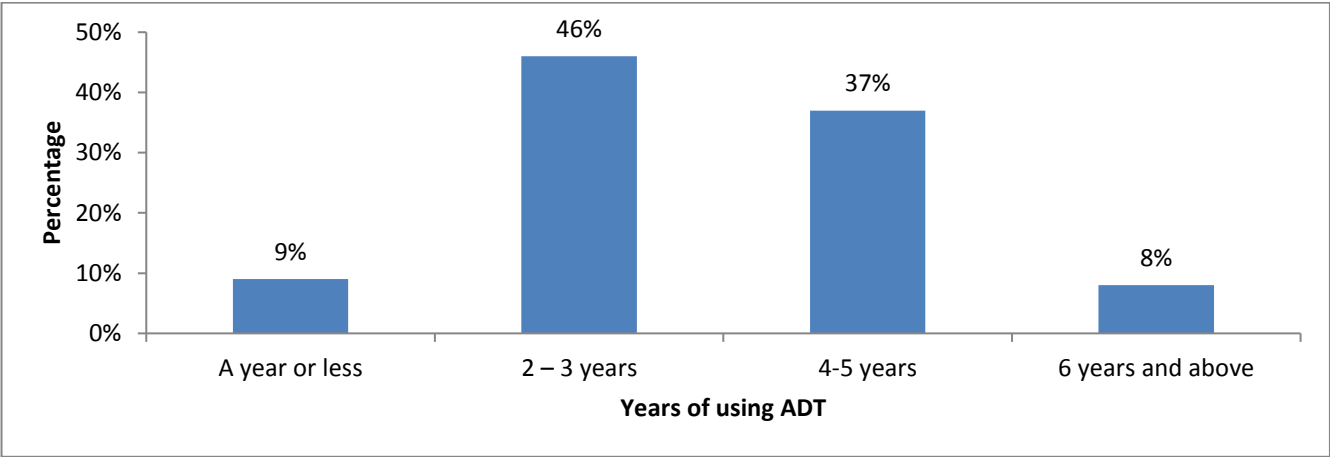


Figure 3. 18: Years of using ADT

Figure 3.18 clarifies that the majority (83%) of ADT users have used this service channel for 2 to 5 years. Only 9% of respondents have used ADT for a year or less and 8% have used this service for 6 years or more. This correlate with the number of years that the respondents have been in business; thus, the ADT is a service they had been using since the inception of their businesses.

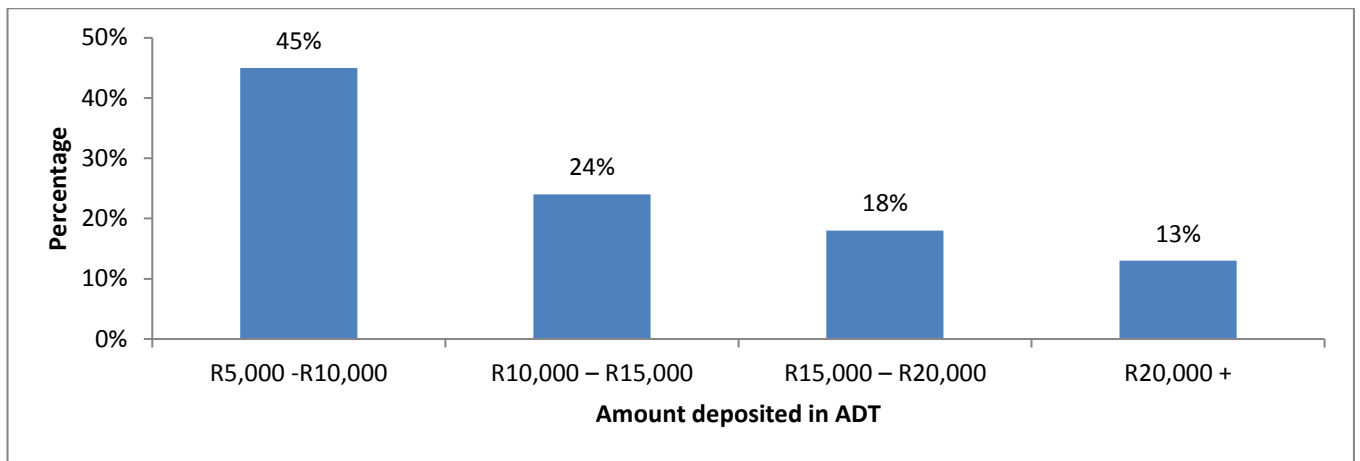


Figure 3. 19: Amount deposited in ADT

It is evident from Figure 3.19 that the majority of respondents (45%) make bulk deposits between R5000 and R10000 in the ADT, while 24% of respondents also make bulk deposits of R10000 to R15000. The rest of the respondents (31%) deposit at least R15000 and more in the ADTs. These customers would use bulk tellers or even cash in transit services because it becomes riskier to carry large amounts of cash to deposit at an ADT and also because of the limitation on the number of notes that a customer can deposit in the machine.

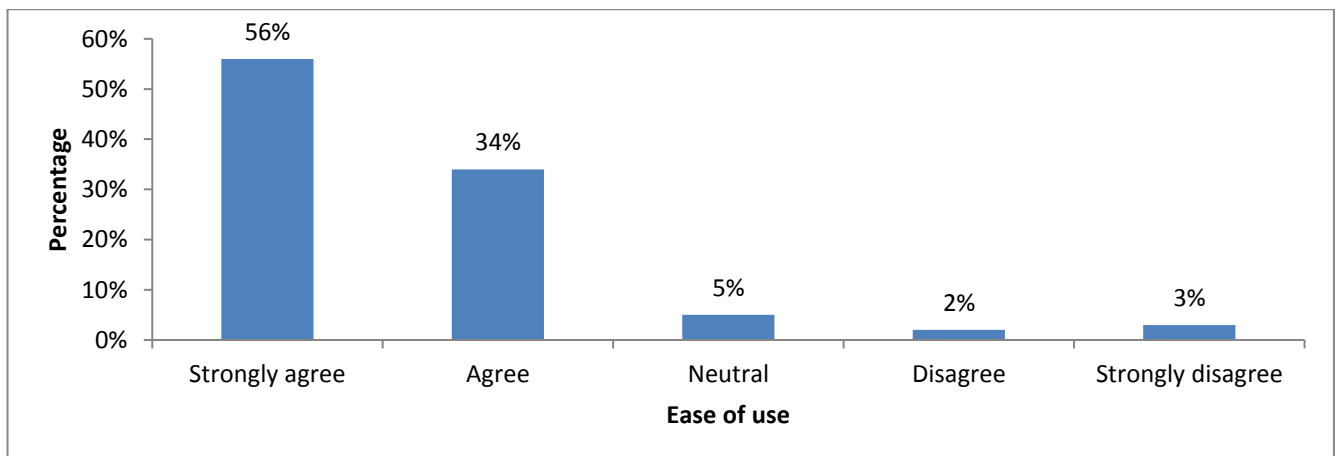


Figure 3. 20: Ease of use

Figure 3.20 indicates that 90% of business customers agree that ADT services are easy to use. 5% remain neutral to the statement and 5% stated that they have difficulties using ADT machines. This means that with more assistance and information, more business customers would use the ADT machines. It will be easy to migrate the 5% who are of the view that it is not easy to use ADTs. This could mean that the South African banks have

created a user-friendly interface, but there is still room for improvement for the 5% that disagree and 5% that remain neutral.

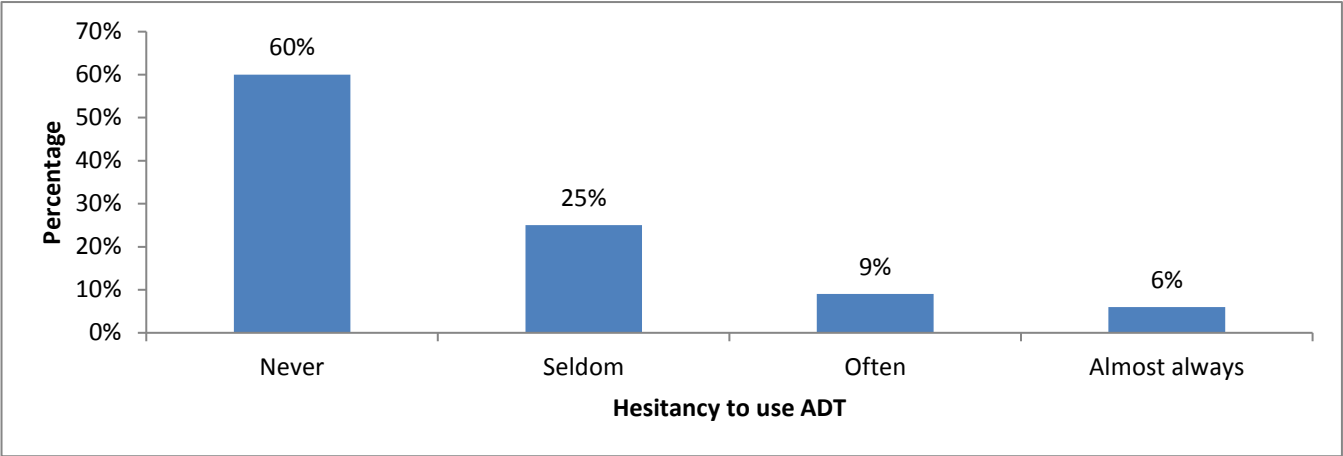


Figure 3. 21: Hesitancy to use ADT

Figure 3.21 shows that 60% of ADT users are confident to use this service, 25% are seldom hesitant, 9% feel often hesitant and 6% feel almost always hesitant using the ADT self-services. The results confirm the confidence that respondents have in using ADTs. In general, this means that the respondents are getting the desired value from ADT services, they have embraced this new form of banking and they're curious of what the ADT can do to better their banking needs.

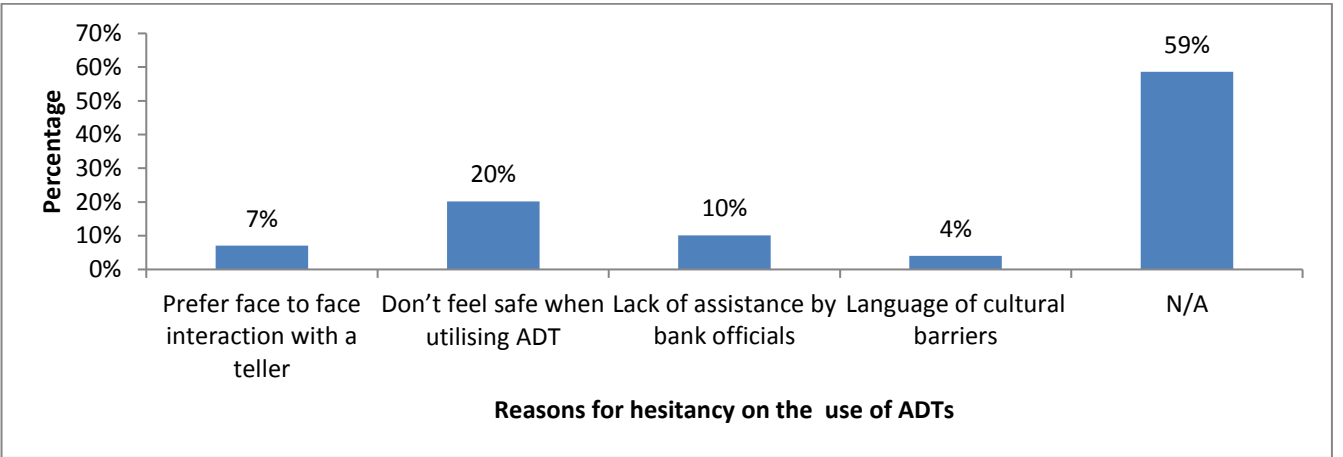


Figure 3. 22: Reasons for hesitancy on the use of ADTs

As Figure 3.22 indicates, just like the general self-service usage, ADT users are also sceptical about the safety of ADT machines; 17% would prefer assistance from bank officials or face-to-face service, while 4% of the respondents indicated language still as a cultural barrier. This means that the most propelling reason for hesitancy is around the

issue of safety when using the ADT. Most of the respondents (59%) were less concerned about face to face preference, security violation and lack of assistance by bank officials nor language or cultural barriers.

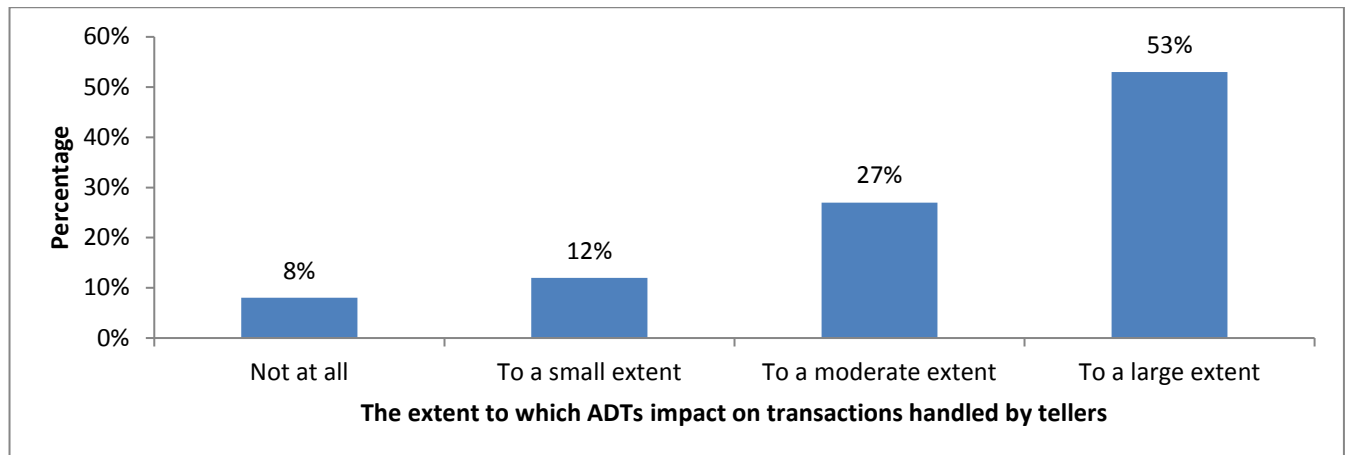


Figure 3. 23: The extent to which ADTs impact on transactions handled by tellers

Figure 3.23 shows that 53% of businesses have realised a reduction in face-to-face teller visits by utilising ADTs. The remainder of respondents (47%) indicate other reasons to visit the banking hall after using the ADT machine. Figure 3.14 shows that 50% of business customers use ADTs daily while 33% use ADTs once a week. This means that the respondents prefer to use ADTs at a time which is more convenient to them and as steered by the nature and location of their respective businesses. There is a room for South African banks to address the reasons for hesitancy. They must also invest more on awareness and they must sensitize the customers on the economic factors of using cheaper self-service channels like ADTs as oppose to tellers.

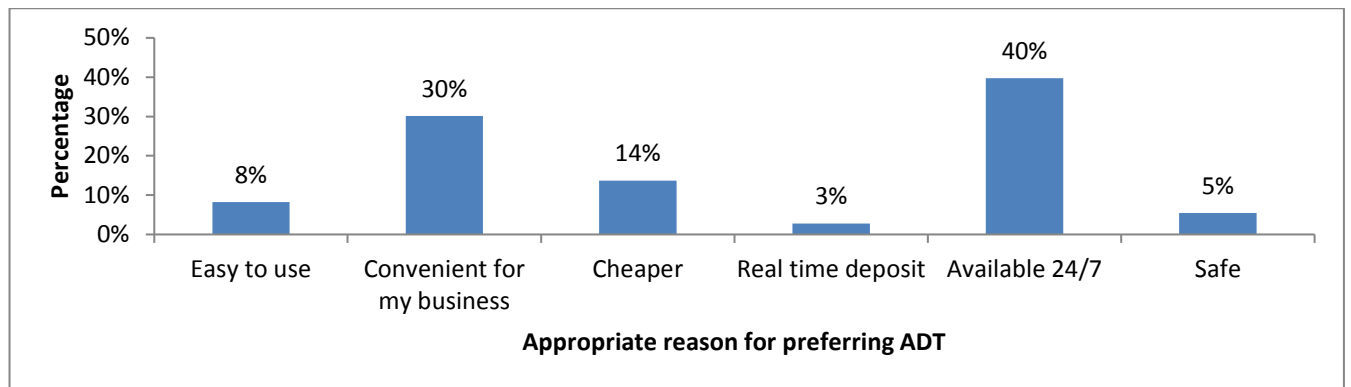


Figure 3. 24: The most appropriate reason for preferring ADT

Figure 3.24 illustrates that respondents indicate the most popular (40%) reason for the uptake of ADT services by businesses is its availability of service 24 hours of the day. Convenience also plays a great role and 30% of respondents show that it would not disturb their business activities during the day. Some of respondents (14%) chose it because it is cheaper, while 8% preferred it as it is easy to use and 5% of respondents indicate safety as the prime reason for usage. The real-time deposit feature only attracted 3% of respondents. The majority of business customers prefer ADTs because it is convenient and it is available outside their normal business hours. This means they can focus on managing their businesses and attend to their customers during the day and do their banking later. This also means that the functionality of ADTs needs to be operational at all times outside banking hours to leverage on the convenience. There must be ADT custodians who must be on standby to attend to problems that an ADT could encounter after hours.

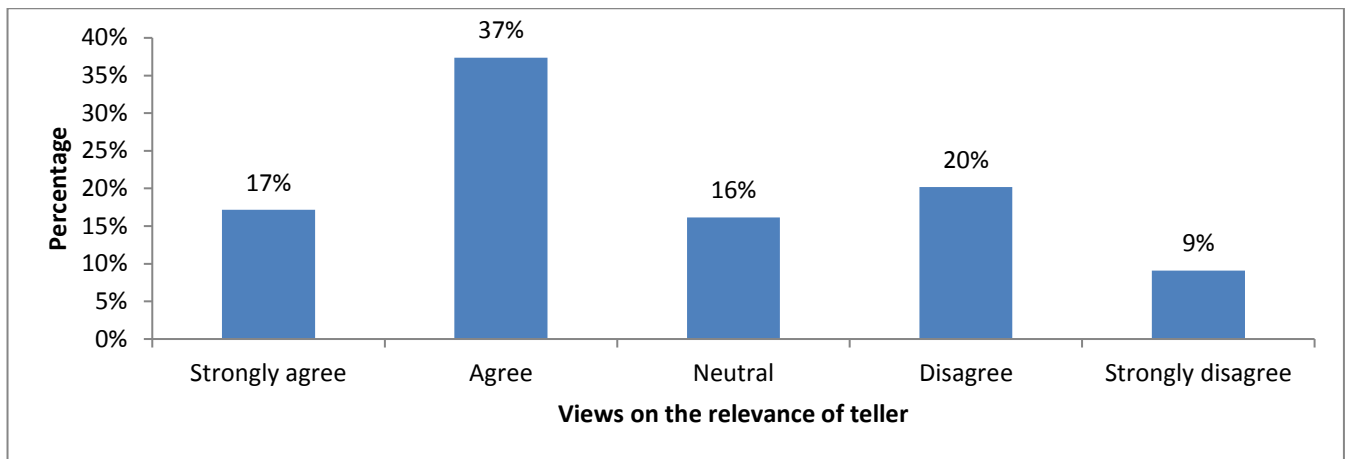


Figure 3. 25: Views on the relevance of tellers

According to Figure 3.25 54% of businesses attest that ADT machines do not substitute or threaten the role of bank tellers, 16% are not sure and 29% feel that they could do without bank tellers if ADT machines are available. The study indicates that tellers are perceived to be still important. There is room for banks to play on the mind-set of customers because the ADT is quicker and more efficient than a teller, while three tellers' jobs can be done by one ADT machine.

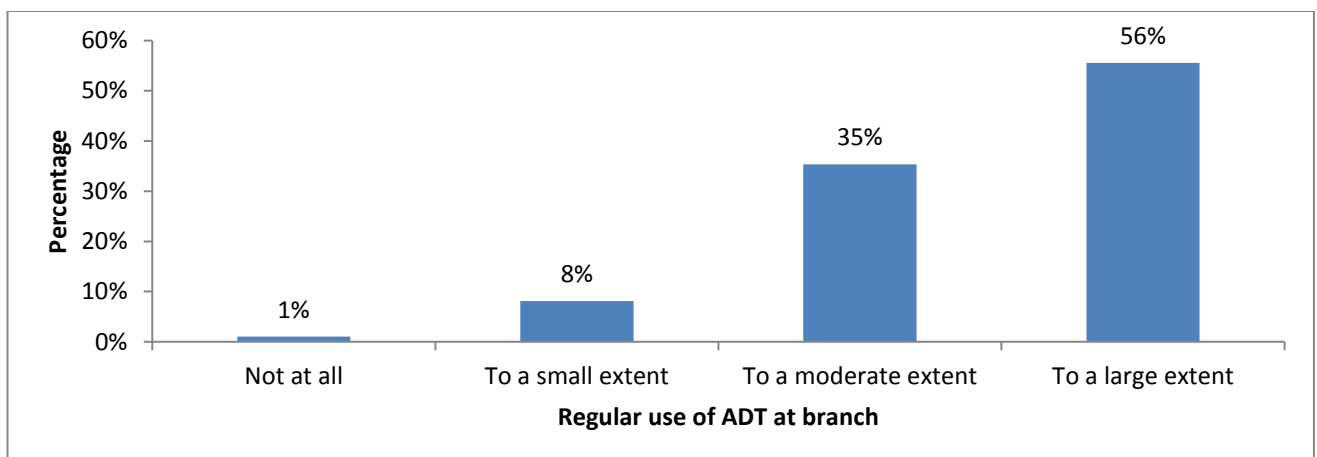


Figure 3. 26: Regular use of ADT at branch

Figure 3.26 shows that 91% of respondents are using their usual ADT machines. There is coloration between the frequency a particular branch is used and the proximity of the branch, for example it is close to the respondents' business or home. The study also reveals that respondents consider safety and convenience when using a specific ADT terminal. Safety is important and therefore proximity is crucial, as business clients do not want to carry lots of cash for long distances before they reach the ADT terminal.

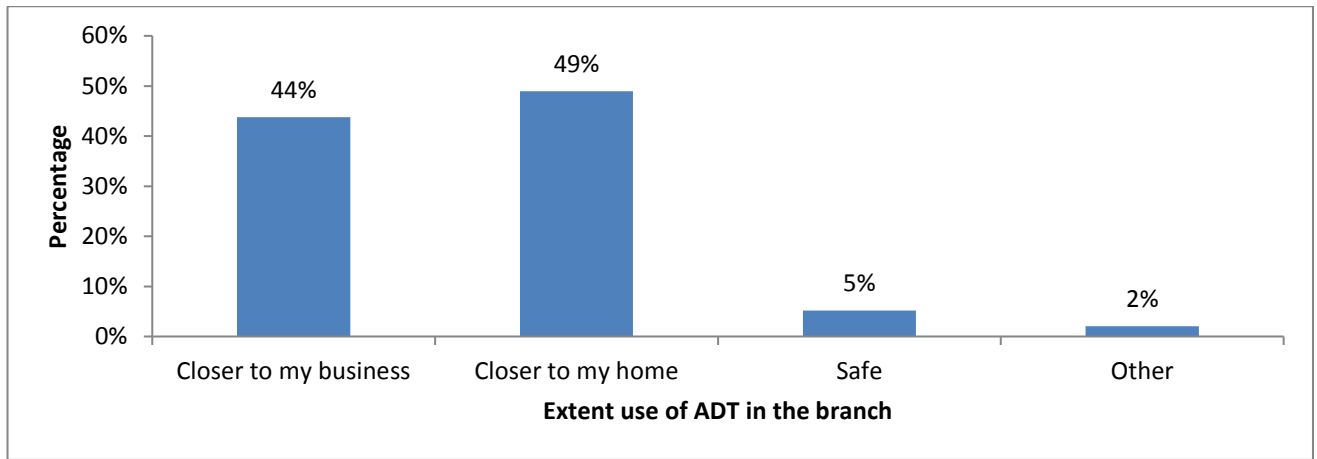


Figure 3. 27: The extent use of ADT in the branch

Figure 3.27 illustrates the main reason for constant and frequent use of the particular machines to be the proximity to their place of residence (49%) or their place of business (44%), while 5% state that the particular ADT machine make them feel safe. The study indicates that a business customer, who operates businesses closer to home, would prefer to use ADTs closer to home, while customers who are operating their businesses closer to their businesses, would use ADTs closer to work.

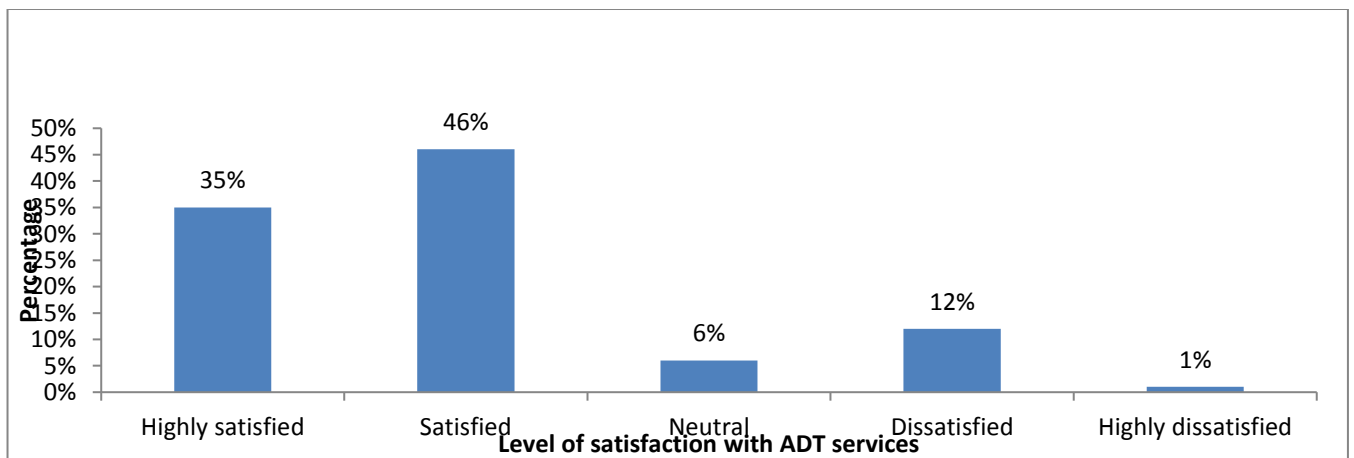


Figure 3. 28: Level of satisfaction with ADT services

Figure 3.28 shows that while 13% of respondents had issues with their current ADT services, the majority (81%) of respondents are satisfied with their current service provider.

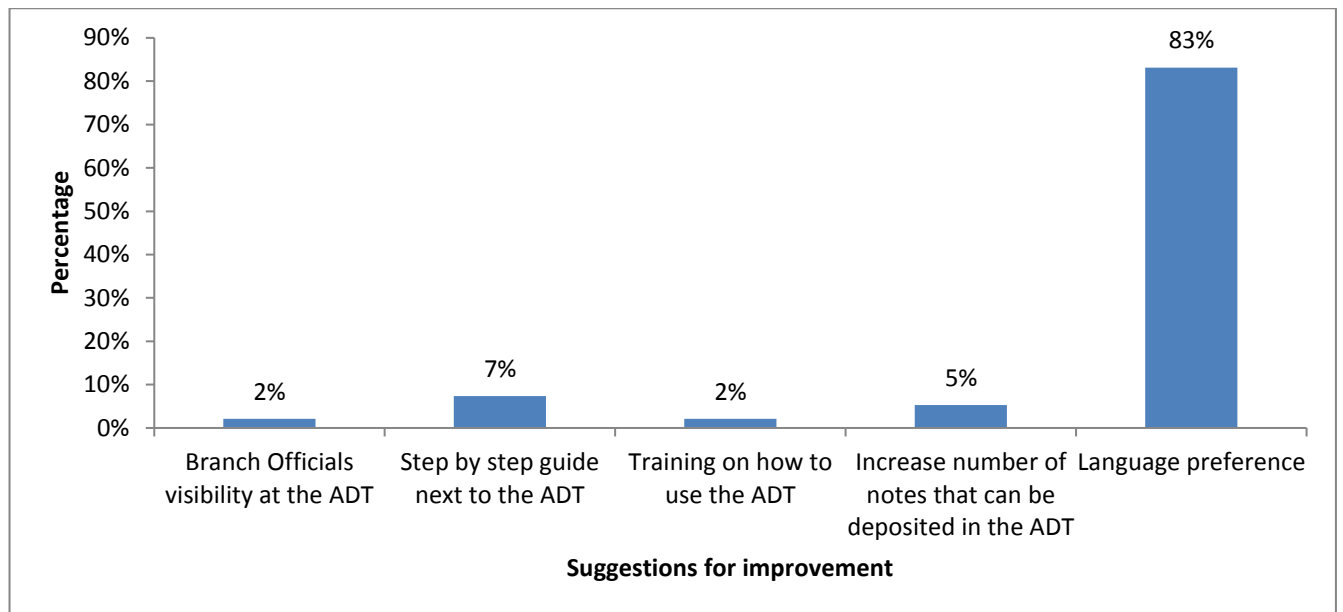


Figure 3. 29: Suggestions for improvement

Figure 3.29 displays language as the immediate issue for dissatisfaction which banks should investigate (83% of respondents indicate it as the most important item to be improved). Results also show that 9% need a step-by-step guide or training on how to use ADT machines, while 2% of respondents request better visibility of bank officials. From this table, it is evident that 5% of respondents need an increase in the number of notes that could be deposited in the ADT machine. The study indicates that banks have room for improvement to closely look at the languages offered on the ADT machines; they must ensure that they cater for the diversity of the South African customers.

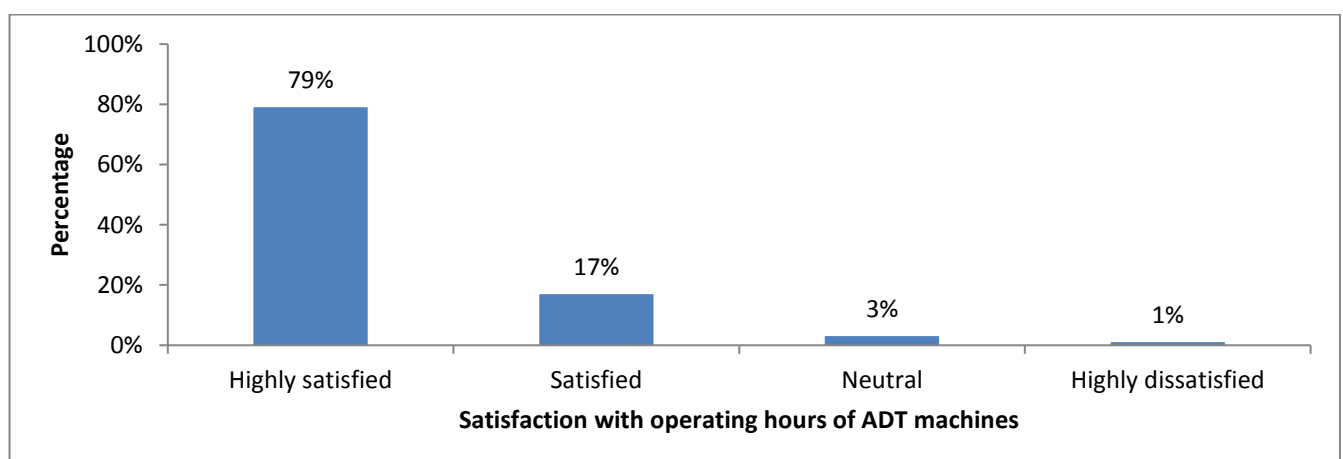


Figure 3. 30: Satisfaction with Operating hours of ADT machines

Figure 3.30 proves that 96% of respondents are satisfied with the accessibility of ADT machine points and only 1% not satisfied. This shows that business customers can access

the ADT machines at any time convenient to them as some business operates until late. This means ADT machines are located either close to businesses or homes of the respondents therefore making them safer and more convenient for the user.

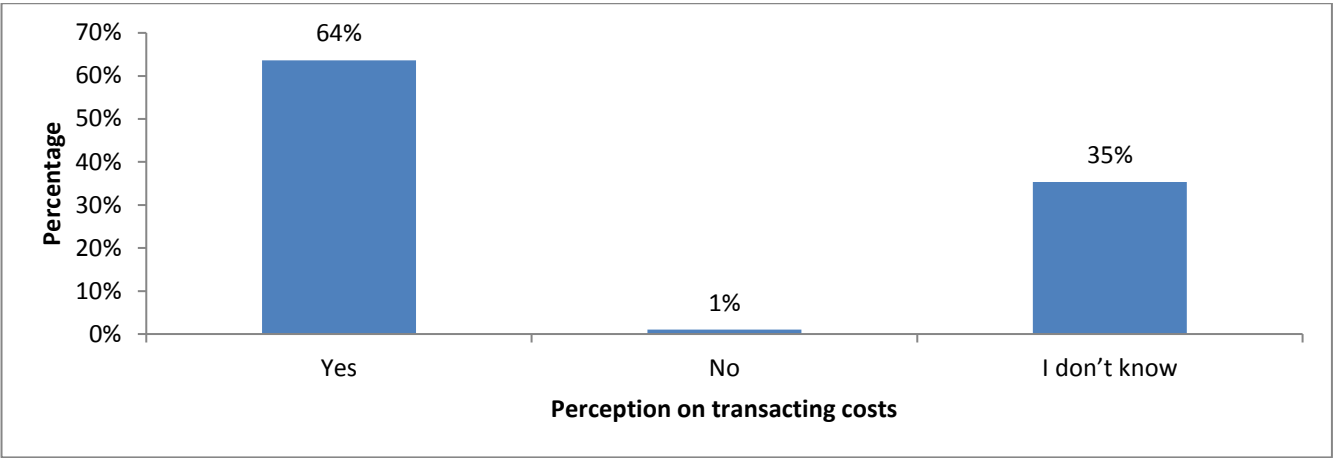


Figure 3. 31: Perceptions on transacting costs (ADT machine vs. a teller)

Figure 3.31 shows that the majority of respondents (64%) agree that it is cheaper to deposit at an ADT machine, and 35% did not know the difference in charges when an ADT machine is used and/or a bank teller service used. The study indicates that there is room for creating awareness to business customers regarding pricing.

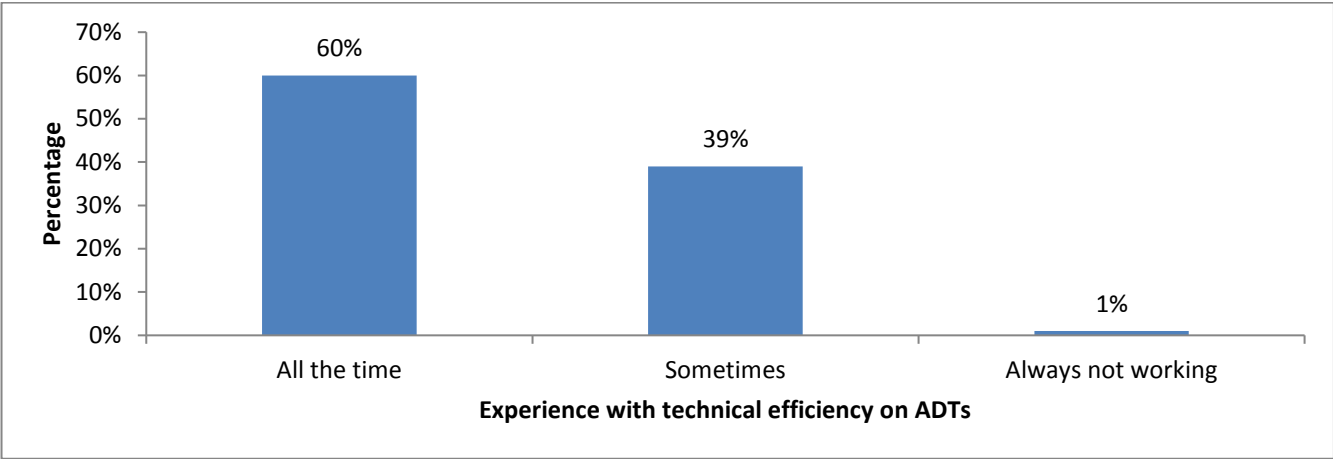


Figure 3. 32: Experience with technical efficiency on ADTs

Figure 3.32 portrays that 60% of ADT machines are in a good working order all the time, 39% could have issues with it at times, while 1% indicates that it is not working most of the time. 40% of the respondents had issues with ADTs because they would sometimes find ADTs not working or always not working; this could relate to hesitancy issues. If something is constantly not working, one would be hesitant to use it in future.

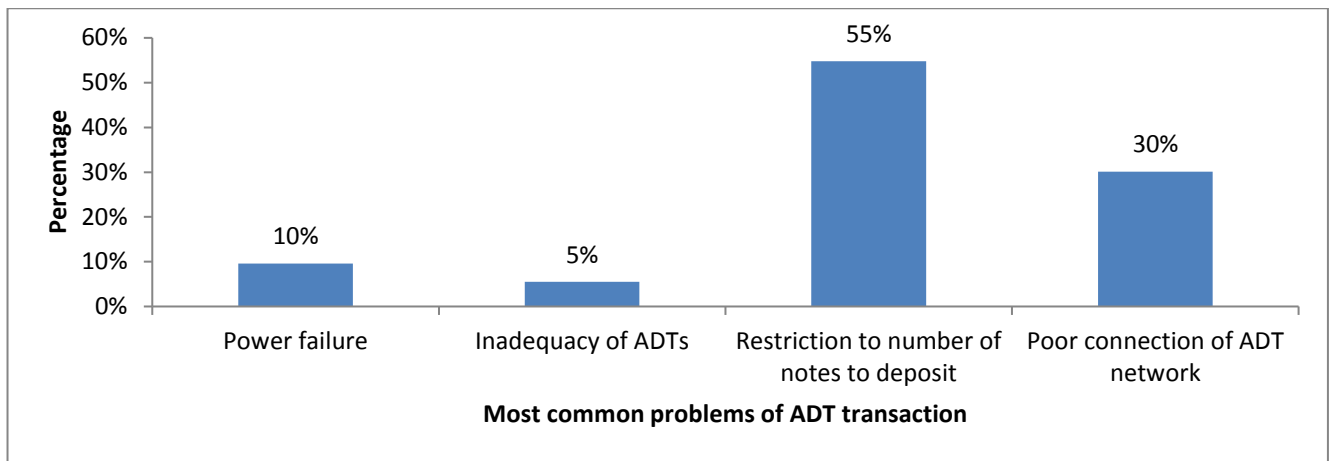


Figure 3. 33: Most common problems of ADT transactions

Figure 3.33 indicates that the most prominent concern for 55% of respondents is the restriction on the number of notes a machine can take at a time; 30% of respondents feel that the most common problem of ADT transactions is poor connectivity; 10% of respondents feel the problem is rooted in power failures and 5% of respondents believe it is the underservicing of ADT machines as well as that no ADT machines are placed in certain essential locations.

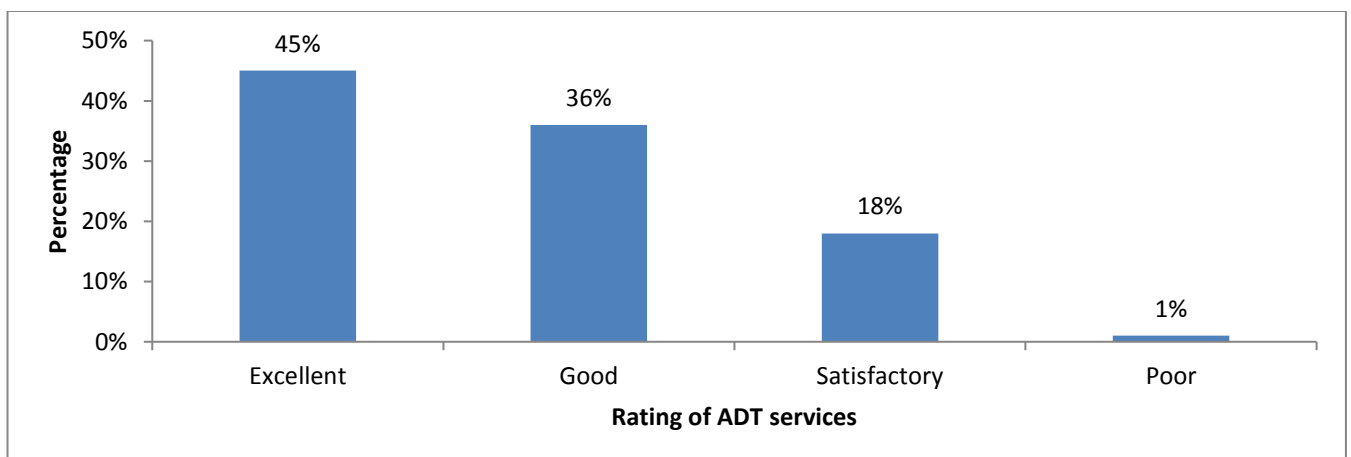


Figure 3. 34: Rating of ADT services

Figure 3.34 shows the overall rating for ADT services; 45% of respondents rate it excellent, 36% of respondents rate it good, 18% of respondents rank it just satisfactory with 1% of respondents indicating the service as poor. This means that the fact that the customers varying the degree of satisfaction of ADT services indicates that the banks need to address some issues pertaining to ADT issues of efficiencies, connection, number of notes deposited in the machine and coins that can be deposited in the machine. This would assist banks to be able to create ADTs for different locations, e.g. ADTs that are

able to take notes as well as coins and situated at a taxi rank or an area dominated by shop owners.

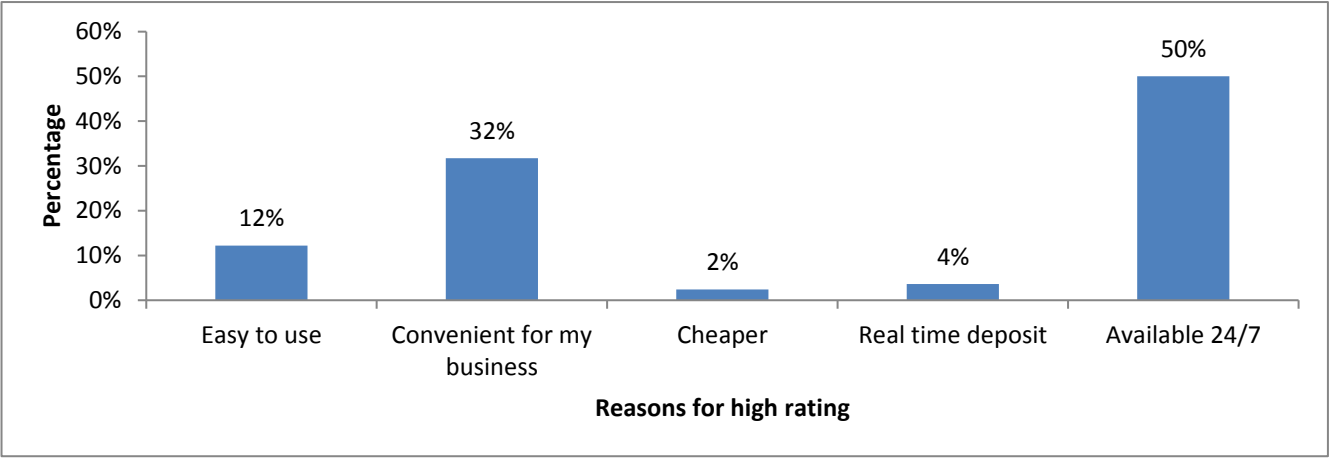


Figure 3. 35: Reasons for high rating

Figure 3.35 verifies the availability of ADT self-service during any time of the day as the top reason for businesses choosing it as a service as being excellent or good. Other respondents (12%) mentioned ease of use and cheaper to transact (2%), while 4% like the real-time deposit aspect. The majority (50%) of business customers rated ADT service high because it is convenient, it is available 24 hours every seven days of a week and it is easy to use. This means business customers can focus on better managing their businesses and attending to their customers during the day and do their banking activities later at a time convenient for them.

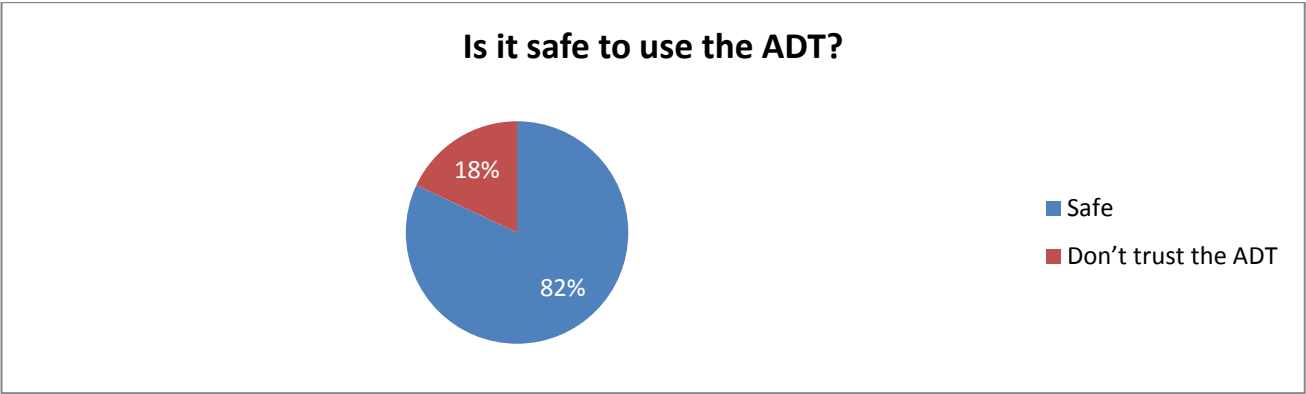


Figure 3. 36: Safety on use of ADT

Figure 3.36 illustrates that the majority of respondents (82%) trust the ADT services as safe to use against only 18% of respondents lacking trust in the safety aspect of the services. The safety is linked to the location of ADTs which is generally located in places

that will give the business customers the sense of protection and security. Important in this instance is also the fact that the ADT machines should be accurate in the calculations and should immediately send a verification message of the transaction that has been done.

3.15 INFERENCE STATISTICS

Hypothesis testing using the effect size finds a measure for practical significance to decide whether a statistical significant difference between two means holds. In this section the measures of association between nominal variables are used to quantify the strength of the relationship.

3.15.1 Hypothesis statement

Two groups of hypothesis were tested;

Hypothesis 1

H01: There is no association between a2 a3 a4 a6 a7 a10 a11 BY b1n1 b1n2 b1n3 b1n4 b1n5 b1n6 b2 b3 b4 c1 c2 c3 c4 c5 c6 c7 c8.

H11: There is at least one pair of variables that is associated.

Hypothesis 2

H02: There is no association between a1 a5 a8 a9 a12 BY b3 c5 c7 c10 c12 c14 c16 c18.

H12: There is at least one pair of variables that is associated.

3.16 MEASURES OF ASSOCIATION

The two measures of association used in this section are the following:

- 1) Phi coefficient, which takes values between -1 and +1 indicating the sign of the direction of the relationship, i.e. negative or positive;
- 2) Cramer's V, which is between 0 and +1 with values close to 1 indicating no association.

In the end the absolute value of measures of association is interpreted as the effect size giving the practical significance of the relationship. Cohen (1988) gives the following guidelines for the interpretation of the effect size in the current case:

(a) Small effect: $d=0.2$, (b) medium effect: $d=0.5$ and (c) large effect: $d=0.8$.

Date is considered as practically significant, since it is the result of a difference having a large effect. The following notes are important in the interpretation of findings in this study:

The effect size is given by the phi coefficient and independent of sample size. To this end, Cohen (1988) gives the following guidelines for the interpretation:

(a) Small effect: $w=0.1$, (b) medium effect: $w=0.3$, (c) large effect: $w=0.5$.

A relationship where $w \geq 0.5$ is considered as practically significant.

Table 3. 1: Reference for variable names

a1	Age
a2	Gender
a3	Race
a4	Marital status
a5	Highest level of education
a6	Where do you reside?
a7	What line of business are you operating in?
a8	How long have you been operating in this line of business?
a9	Monthly turnover
a10	What type of bank account do you operate?
a11	Which bank are you banking with?
a12	How long have you been banking with them?
b1n1	ATM
b1n2	ADT
b1n3	Cell phone Banking
b1n4	Online Banking
b1n5	Telephone Banking
b1n6	E-wallet/Cash send
b2	Do you feel hesitant to use self-service channels in any way
b3	Please choose the most appropriate reason why you are hesitant
b4	Would you use self-service channels in the future with more assistance or information?
c1	Years of using ADT
c2	How much do you deposit in the ADT?
c3	ADT are easy to use
c4	Do you feel hesitant to use ADT in any way?
c5	Please indicate the most appropriate reason why you feel hesitant
c6	ADT has reduced the frequency of my visit to the tellers
c7	If to a moderate or large extent, choose the most appropriate reason
c8	Tellers are still very important
C9	Do you regularly use ADT at this branch?
c10	If to a moderate or to a large extent
c11	Are you satisfied with the current ADT services of your bank?

C12	If dissatisfied or highly dissatisfied, what can the bank improve on in order for you to feel completely satisfied in using ADT?
C13	I am satisfied with the accessibility (operating hours) of ADT machines
c14	It is cheaper to deposit at an ADT machine than making a deposit at a Teller
C15	Do you find ADT working?
c16	Choose the commonest problem of ADT transaction
C17	How do you rate ADT services?
c18	Why? (for overall rating of ADT services)

It is important to note that the researcher will only show results that are statistically significant, i.e. where the null hypothesis is rejected.

3.17 ADT SERVICES FREQUENCY OF USE

This section presents the hypothesis testing results for ADT services specifically.

a7 = What line of business are you operating in?

B1in2 = ADT.

Table 3. 2: Business type and frequency of use of ADT services

Cross tabulation

			b1n2						Total
			1.00	2.00	3.00	4.00	5.00	6.00	
a7	1.00	Count	0	0	0	0	1	19	20
		% within a7	0.0%	0.0%	0.0%	0.0%	5.0%	95.0%	100.0%
	2.00	Count	0	0	1	5	14	15	35
		% within a7	0.0%	0.0%	2.9%	14.3%	40.0%	42.9%	100.0%
	3.00	Count	0	0	1	2	4	5	12
		% within a7	0.0%	0.0%	8.3%	16.7%	33.3%	41.7%	100.0%
	4.00	Count	0	1	1	0	7	9	18
		% within a7	0.0%	5.6%	5.6%	0.0%	38.9%	50.0%	100.0%
	5.00	Count	2	2	1	1	7	2	15
		% within a7	13.3%	13.3%	6.7%	6.7%	46.7%	13.3%	100.0%
	Total	Count	2	3	4	8	33	50	100
		% within a7	2.0%	3.0%	4.0%	8.0%	33.0%	50.0%	100.0%

Symmetric measures

	Value	Approximate significance
Nominal by Nominal	.677	.001
Phi	.338	.001
Cramer's V	100	
N of valid cases		

Result: Cramer's V 0.338 is between 0.3 and 0.5 therefore the effect size is moderate and Chi-square significance $0.001 < 0.05$. This means there is no practical significance meaning that no immediate or drastic changes to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between business type and frequency of use of ADT services.

The results of the study show that one relation between background variables is significant for frequency of use of ADT services (from hypothesis 1). The relationship between lines of business is significant. Taxi customers, shop owners, distribution and restaurant business customers use ADT services daily, once a week or twice a week. This is mainly due to the convenience associated with ADT services, especially considering that there is

a high risk of theft associated with business clients who collect cash every day from their business.

On the other hand, there is not a significant relationship between frequency of use of ADT services with the respondent age, gender, race, marital status, level of education, place of residence, length of business operation, monthly turnover and type of bank account used or the bank that a customer uses. This implies that update of ADT services is not limited by the above factors. Once an ADT service product is designed attractively and marketed appropriately, any customer who deals with cash daily is likely to adopt it. It also means that banking industry players have not outdone each other in developing innovative ways of improving ADT services.

A2 = Gender.

C14 = It is cheaper to deposit at an ADT machine than making a deposit at a teller.

Table 3. 3: Gender and the perceptions on whether using and ADT machine is cheaper.

Cross tabulation						
a2	1.00	Count	c14			Total
			1.00	2.00	3.00	
		% within a2	24	1	23	48
			50.0%	2.1%	47.9%	100.0%
	2.00	Count	39	0	12	51
		% within a2	76.5%	0.0%	23.5%	100.0%
Total		Count	63	1	35	99
		% within a2	63.6%	1.0%	35.4%	100.0%

Symmetric measures			
		Value	Approximate significance
Nominal by Nominal	Phi	.283	.019
	Cramer's V	.283	.019
N of valid cases		99	

Result: Cramer's V 0.283 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.019 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is an association between gender and the perceptions on whether using an ADT machine is cheaper.

The results indicate that females are more likely to be alert about the cost of ADT services than male customers. In fact, more males are not even sure of the difference in cost between a teller and the ADT services.

A6 = Where do you reside?

C5 = Please indicate the most appropriate reason why you feel hesitant.

Table 3. 4: Place of residence and reasons for the general feeling of hesitancy when considering using self-service channels.

Cross tabulation

a6			c5					Total
			1.00	2.00	3.00	4.00	5.00	
	1.00	Count	0	1	1	2	1	5
		% within a6	0.0%	20.0%	20.0%	40.0%	20.0%	100.0%
	2.00	Count	0	4	2	0	15	21
		% within a6	0.0%	19.0%	9.5%	0.0%	71.4%	100.0%
	3.00	Count	4	4	1	1	10	20
		% within a6	20.0%	20.0%	5.0%	5.0%	50.0%	100.0%
	4.00	Count	0	3	1	0	12	16
		% within a6	0.0%	18.8%	6.3%	0.0%	75.0%	100.0%
	5.00	Count	3	8	4	1	20	36
		% within a6	8.3%	22.2%	11.1%	2.8%	55.6%	100.0%
Total		Count	7	20	9	4	58	98
		% within a6	7.1%	20.4%	9.2%	4.1%	59.2%	100.0%

Symmetric measures

		Value	Approximate significance
Nominal by Nominal	Phi	.549	.021
	Cramer's V	.274	.021
N of valid cases		98	

Result: Cramer's V 0.274 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.021 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between place of residence and reasons for the general feeling of hesitancy when considering using self-service channels. Although the majority of customers across all places of residence do not feel hesitant about using an ADT service, customers from Soweto just want to see a teller or would not feel very safe. Customers from Fourways also worry about safety.

A6 = Where do you reside?

C14 = It is cheaper to deposit at an ADT machine than making a deposit at a teller.

Table 3. 5: Place of residence and whether clients think ADT deposits are cheaper.

Cross tabulation					
a6			c14		
			1.00	2.00	3.00
1.00	Count		1	1	3
	% within a6		20.0%	20.0%	60.0%
2.00	Count		17	0	4
	% within a6		81.0%	0.0%	19.0%
3.00	Count		6	0	14
	% within a6		30.0%	0.0%	70.0%
4.00	Count		13	0	3
	% within a6		81.3%	0.0%	18.8%
5.00	Count		26	0	10
	% within a6		72.2%	0.0%	27.8%
Total		Count	63	1	34
		% within a6	64.3%	1.0%	34.7%

Symmetric measures			
		Value	Approximate significance
Nominal by Nominal	Phi	.615	.000
	Cramer's V	.435	.000
N of valid cases		98	

Result: Cramer's V 0.435 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.000 < 0.05$. This means there is no practical significance meaning that no drastic measures to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between place of residence and whether clients think ADT deposits are cheaper. Customers from Bruma, Soweto and Kemptonpark are less likely to be aware of the cost advantage of using ADT services.

A7 = What line of business are you operating in?

C4 = Do you feel hesitant to use ADT in any way?

Table 3. 6: Business type and a feeling of hesitancy to use ADT services.

Cross tabulation

a7			c4				Total
			1.00	2.00	3.00	4.00	
	1.00	Count	13	3	2	2	20
		% within a7	65.0%	15.0%	10.0%	10.0%	100.0%
	2.00	Count	17	13	3	2	35
		% within a7	48.6%	37.1%	8.6%	5.7%	100.0%
	3.00	Count	12	0	0	0	12
		% within a7	100.0%	0.0%	0.0%	0.0%	100.0%
	4.00	Count	12	6	0	0	18
		% within a7	66.7%	33.3%	0.0%	0.0%	100.0%
	5.00	Count	6	3	4	2	15
		% within a7	40.0%	20.0%	26.7%	13.3%	100.0%
Total	Count	60	25	9	6	100	
	% within a7	60.0%	25.0%	9.0%	6.0%	100.0%	

Symmetric measures

	Value	Approximate significance
Nominal by Phi	.483	.025
Nominal Cramer's V	.279	.025
N of valid cases	100	

Result: Cramer's V 0.279 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.025 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between business type and a feeling of hesitancy to use ADT services. Distribution customers never feel hesitant about using

ADT machines. 40% of customers in "other" businesses almost and always feel hesitant about using ADT machines.

A7= What line of business are you operating in?

C8= Tellers are still very important.

Table 3. 7: Business and perception on the importance of bank tellers in the era of ADT services.

Cross tabulation

			c8					Total
			1.00	2.00	3.00	4.00	5.00	
a7	1.00	Count	5	5	7	3	0	20
		% within a7	25.0%	25.0%	35.0%	15.0%	0.0%	100.0%
	2.00	Count	5	9	8	7	6	35
		% within a7	14.3%	25.7%	22.9%	20.0%	17.1%	100.0%
	3.00	Count	2	5	1	3	1	12
		% within a7	16.7%	41.7%	8.3%	25.0%	8.3%	100.0%
	4.00	Count	1	8	0	7	2	18
		% within a7	5.6%	44.4%	0.0%	38.9%	11.1%	100.0%
	5.00	Count	4	10	0	0	0	14
		% within a7	28.6%	71.4%	0.0%	0.0%	0.0%	100.0%
Total	Count	17	37	16	20	9	99	
	% within a7	17.2%	37.4%	16.2%	20.2%	9.1%	100.0%	

Symmetric measures

	Value	Approximate significance
Nominal by Nominal	Phi	.578
	Cramer's V	.289
N of valid cases		99

Result: Cramer's V 0.289 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.007 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between business and perception regarding the importance of bank tellers in the era of ADT services. All "other" businesses' customers feel tellers are still important, while 37% of shop owners are of the notion that tellers are no longer important.

A7= What line of business are you operating in?

C9= Do y

Table 3. 8: Business and regular use of ADT services in the particular areas

Cross tabulation						
a7	1.00	Count	c9			
			1.00	2.00	3.00	4.00
			Total			
		% within a7				
	2.00	Count	0	2	10	23
		% within a7	0.0%	5.7%	28.6%	65.7%
	3.00	Count	0	0	5	7
		% within a7	0.0%	0.0%	41.7%	58.3%
	4.00	Count	0	1	12	5
		% within a7	0.0%	5.6%	66.7%	27.8%
	5.00	Count	0	4	3	7
		% within a7	0.0%	28.6%	21.4%	50.0%
Total		Count	1	8	35	55
		% within a7	1.0%	8.1%	35.4%	55.6%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.486	.025
Nominal Cramer's V	.280	.025
N of valid cases	99	

Result: Cramer's V 0.280 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.025 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between business and regular use of ADT services in the particular areas. Business' customers in the "other" line of businesses are more likely to use ADT services to a very small extent. The rest (taxi owners, shop owners, restaurants and distribution) are frequent users of ADT services.

A7= What line of business are you operating in?

C11= Are you satisfied with current ADT services of your bank?

Table 3. 9: Business and satisfaction with ADT services.

Cross tabulation							
a7	1.00	Count	c11				
			1.00	2.00	3.00	4.00	5.00
		% within a7	4	12	2	2	0
			20.0%	60.0%	10.0%	10.0%	0.0%
	2.00	Count	10	19	2	4	0
		% within a7	28.6%	54.3%	5.7%	11.4%	0.0%
	3.00	Count	8	3	1	0	0
		% within a7	66.7%	25.0%	8.3%	0.0%	0.0%
	4.00	Count	11	7	0	0	0
		% within a7	61.1%	38.9%	0.0%	0.0%	0.0%
	5.00	Count	2	5	1	6	1
		% within a7	13.3%	33.3%	6.7%	40.0%	6.7%
Total		Count	35	46	6	12	1
		% within a7	35.0%	46.0%	6.0%	12.0%	1.0%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.590	.004
Nominal Cramer's V	.295	.004
N of valid cases	100	

Result: Cramer's V 0.295 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.004 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between business and satisfaction with ADT services which the respondents' bank offers. A small per cent (11%) of show owners are not satisfied together with 67% of customers in "other" businesses.

A7= What line of business are you operating in?

C13= I am satisfied with the accessibility (operating hours) of ADT machines.

Table 3. 10: The type of business and ADT service operating hours.

Cross tabulation						
a7	1.00	Count	c13			
			1.00	2.00	3.00	5.00
		% within a7				Total
	1.00	Count	19	0	1	0
		% within a7	95.0%	0.0%	5.0%	0.0%
	2.00	Count	28	7	0	0
		% within a7	80.0%	20.0%	0.0%	0.0%
	3.00	Count	10	2	0	0
		% within a7	83.3%	16.7%	0.0%	0.0%
	4.00	Count	15	3	0	0
		% within a7	83.3%	16.7%	0.0%	0.0%
	5.00	Count	7	5	2	1
		% within a7	46.7%	33.3%	13.3%	6.7%
Total		Count	79	17	3	1
		% within a7	79.0%	17.0%	3.0%	1.0%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.468	.039
Nominal Cramer's V	.270	.039
N of valid cases	100	

Result: Cramer's V 0.270 is less than 0.5, therefore, the effect size is small and Chi-square significance $0.039 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between the type of business and ADT service operating hours. Customers in the "other" line of businesses are dissatisfied with the 24-hour service.

A10= What type of bank account do you operate?

C1= Years of using ADT.

Table 3. 11: The type of bank account and the length of time using ADT services.

Cross tabulation						
a10	1.00	Count	c1			
			1.00	2.00	3.00	4.00
			Total			
		% within a10				
			1	3	0	0
			25.0%	75.0%	0.0%	0.0%
	2.00	Count	6	28	5	2
		% within a10	14.6%	68.3%	12.2%	4.9%
	3.00	Count	2	15	32	6
		% within a10	3.6%	27.3%	58.2%	10.9%
Total		Count	9	46	37	8
		% within a10	9.0%	46.0%	37.0%	8.0%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.548	.000
Nominal Cramer's V	.388	.000
N of valid cases	100	

Result: Cramer's V 0.388 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.000 < 0.05$. This means there is no practical significance meaning that no immediate changes to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is positive association between the type of bank account and the length of time using ADT services. Savings account customers are likely to have adopted ADT usage more recently than current account and business account holders.

A10= What type of bank account do you operate?

C2= How much do you deposit in the ADT?

Table 3. 12: The type of bank account and the amount of money deposited using ADT services.

Cross tabulation

a10	1.00	Count	c2				Total
			1.00	2.00	3.00	4.00	
			4	0	0	0	4
			% within a10	100.0%	0.0%	0.0%	0.0%
	2.00	Count	28	11	2	0	41
		% within a10	68.3%	26.8%	4.9%	0.0%	100.0%
	3.00	Count	13	13	16	13	55
		% within a10	23.6%	23.6%	29.1%	23.6%	100.0%
Total		Count	45	24	18	13	100
		% within a10	45.0%	24.0%	18.0%	13.0%	100.0%

Symmetric measures

	Value	Approximate significance
Nominal by Phi	.577	.000
Nominal Cramer's V	.408	.000
N of valid cases	100	

Result: Cramer's V 0.408 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.000 < 0.05$. This means there is no practical significance meaning that no immediate measures to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between the type of bank account and the amount of money deposited using ADT services. Savings and current account holders are more likely to deposit lower cash amounts than business account holders. It is commendable in this case that business account holders trust and find ADT services safe to make their large cash deposits.

A10 = What type of bank account do you operate?

C5 = Please indicate the most appropriate reason why you feel hesitant.

Table 3. 13: The type of account and the reasons why businesses would be hesitant to use ADT self-service.

Cross tabulation

a10	1.00	Count	c5					Total
			1.00	2.00	3.00	4.00	5.00	
		% within a10	1	1	0	0	2	4
		25.0%	25.0%	0.0%	0.0%	50.0%	100.0%	
2.00	Count	5	2	6	4	24	41	
	% within a10	12.2%	4.9%	14.6%	9.8%	58.5%	100.0%	
3.00	Count	1	17	4	0	32	54	
	% within a10	1.9%	31.5%	7.4%	0.0%	59.3%	100.0%	
Total		Count	7	20	10	4	58	99
		% within a10	7.1%	20.2%	10.1%	4.0%	58.6%	100.0%

Symmetric measures

	Value	Approximate significance
Nominal by Phi	.460	.007
Nominal Cramer's V	.325	.007
N of valid cases	99	

Result: Cramer's V 0.325 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.007 < 0.05$. This means there is no practical significance meaning that no drastic changes to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between the type of account and the reasons why businesses would be hesitant to use ADT self-service. Current and business account

holders prefer face-to-face interactions and require more assistance from bank officials than savings account holders.

A10= What type of bank account do you operate?

C8 = Tellers are still very important.

Table 3. 14: The bank account type and perceptions on the importance of bank tellers.

Cross tabulation

a10	1.00	Count	c8					Total
			1.00	2.00	3.00	4.00	5.00	
			2	0	1	0	0	3
		% within a10	66.7%	0.0%	33.3%	0.0%	0.0%	100.0%
	2.00	Count	9	17	10	3	2	41
		% within a10	22.0%	41.5%	24.4%	7.3%	4.9%	100.0%
	3.00	Count	6	20	5	17	7	55
		% within a10	10.9%	36.4%	9.1%	30.9%	12.7%	100.0%
Total		Count	17	37	16	20	9	99
		% within a10	17.2%	37.4%	16.2%	20.2%	9.1%	100.0%

Symmetric measures

	Value	Approximate significance
Nominal by Phi	.453	.009
Nominal Cramer's V	.320	.009
N of valid cases	99	

Result: Cramer's V 0.320 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.009 < 0.05$. This means there is no practical significance for the current system.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between the bank account type and perceptions on the importance of bank tellers. Savings and current account holders are likely to agree that tellers are still very important in this ADT era.

A10= What type of bank account do you operate?

C14= It is cheaper to deposit at an ADT machine than making a deposit at a teller.

Table 3. 15: The type of bank account and knowledge of differences in cost between ADT services and tellers.

Cross tabulation

a10	1.00	Count	c14			Total
			1.00	2.00	3.00	
			1	0	2	3
			33.3%	0.0%	66.7%	100.0%
	2.00	Count	15	1	25	41
		% within a10	36.6%	2.4%	61.0%	100.0%
	3.00	Count	47	0	8	55
		% within a10	85.5%	0.0%	14.5%	100.0%
Total		Count	63	1	35	99
		% within a10	63.6%	1.0%	35.4%	100.0%

Symmetric measures

	Value	Approximate significance
Nominal by Nominal Phi	.511	.000
Cramer's V	.361	.000
N of valid cases	99	

Result: Cramer's V 0.361 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.000 < 0.05$. This means there is no practical significance meaning that no drastic changes to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between the type of bank account and knowledge of differences in cost between ADT services and tellers. Business account holders are more likely to know that ADT services are cheaper than teller deposits, as well as current and savings account holders. A proportion (15%) of business account holders are likely to be unaware that ADT services are cheaper than teller deposits.

A10= What type of bank account do you operate?

C17= How would you rate ADT services?

Table 3. 16: Bank account type and the overall rating for ADT services.

Cross tabulation							
a10	1.00	Count	c17				Total
			1.00	2.00	3.00	4.00	
		% within a10	25.0%	50.0%	25.0%	0.0%	100.0%
	2.00	Count	9	20	12	0	41
		% within a10	22.0%	48.8%	29.3%	0.0%	100.0%
	3.00	Count	35	14	5	1	55
		% within a10	63.6%	25.5%	9.1%	1.8%	100.0%
Total		Count	45	36	18	1	100
		% within a10	45.0%	36.0%	18.0%	1.0%	100.0%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.441	.003
Nominal Cramer's V	.312	.003
N of valid cases	100	

Result: Cramer's V 0.312 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.003 < 0.05$. This means there is no practical significance meaning that no immediate changes to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between bank account type and the overall rating for ADT services. Customers with saving and current accounts are more likely to rate ADT services as just satisfactory or poor. This may be addressed by educating them on the advantage of ADT so that they start using more of ADT services.

A11= Which bank are you banking with?

C1= Years of using ADT.

Table 3. 17: Bank institution and length of time using ADT

Cross tabulation						
a11	1.00	Count % within a11	c1			
			1.00	2.00	3.00	4.00
			Total			
			1	5	6	5
			5.9%	29.4%	35.3%	29.4%
	2.00	Count	3	21	16	2
		% within a11	7.1%	50.0%	38.1%	4.8%
	3.00	Count	1	10	5	0
		% within a11	6.3%	62.5%	31.3%	0.0%
	4.00	Count	0	4	6	1
		% within a11	0.0%	36.4%	54.5%	9.1%
	5.00	Count	4	6	4	0
		% within a11	28.6%	42.9%	28.6%	0.0%
Total		Count	9	46	37	8
		% within a11	9.0%	46.0%	37.0%	8.0%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.488	.021
Nominal Cramer's V	.282	.021
N of valid cases	100	

Result: Cramer's V 0.282 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.021 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between bank institution and length of time using ADT. Absa and Nedbank customers are more likely to have adopted the use of ADT services earlier than customers from other banks.

A11= Which bank are you banking with?

C5= Please indicate the most appropriate reason why you feel hesitant.

Table 3. 18: Bank institution and a feeling of hesitancy when considering using ADT services.

Cross tabulation

a11	1.00	Count	c5					Total
			1.00	2.00	3.00	4.00	5.00	
			% within a11	2	4	0	0	11
		% within a11	11.8%	23.5%	0.0%	0.0%	64.7%	100.0%
	2.00	Count	1	7	3	3	27	41
		% within a11	2.4%	17.1%	7.3%	7.3%	65.9%	100.0%
	3.00	Count	0	5	1	0	10	16
		% within a11	0.0%	31.3%	6.3%	0.0%	62.5%	100.0%
	4.00	Count	0	2	2	0	7	11
		% within a11	0.0%	18.2%	18.2%	0.0%	63.6%	100.0%
	5.00	Count	4	2	4	1	3	14
		% within a11	28.6%	14.3%	28.6%	7.1%	21.4%	100.0%
Total		Count	7	20	10	4	58	99
		% within a11	7.1%	20.2%	10.1%	4.0%	58.6%	100.0%

Symmetric measures

	Value	Approximate significance
Nominal by Phi	.542	.023
Nominal Cramer's V	.271	.023
N of valid cases	99	

Result: Cramer's V 0.271 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.023 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between bank institution and a feeling of hesitancy when considering using ADT services. Capitec Bank customers are more likely to prefer face to face interactions, most likely due to lack of assistance from bank officials and lack of a sense of feeling safe when using ADT services.

A11= Which bank are you banking with?

C14= It is cheaper to deposit at an ADT machine than making a deposit at a teller.

Table 3. 19: Bank institution and knowledge of whether an ADT deposit is cheaper than a deposit made at a teller.

Cross tabulation					
a11			c14		
			1.00	2.00	3.00
	1.00	Count	14	0	3
		% within a11	82.4%	0.0%	17.6%
	2.00	Count	27	0	15
		% within a11	64.3%	0.0%	35.7%
	3.00	Count	9	0	6
		% within a11	60.0%	0.0%	40.0%
	4.00	Count	10	0	1
		% within a11	90.9%	0.0%	9.1%
	5.00	Count	3	1	10
		% within a11	21.4%	7.1%	71.4%
Total		Count	63	1	35
		% within a11	63.6%	1.0%	35.4%
Symmetric measures					
			Value	Approximate significance	
Nominal by Nominal	Phi		.462	.007	
	Cramer's V		.327	.007	
N of valid cases			99		

Result: Cramer's V 0.327 is between 0.3 and 0.5, therefore, the effect size is small and Chi-square significance $0.007 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is positive association between bank institution and knowledge of whether an ADT deposit is cheaper than a deposit made at a teller. While Absa customers are the most knowledgeable that it is cheaper to deposit funds using ADT, Capitec, Nedbank and Standard Bank customers are unsure of the associated costs.

A11= Which bank are you banking with?

C17=How would you rate ADT services?

Table 3. 20: Bank institution and the overall rating for ADT services.

Cross tabulation							
a11	1.00	Count	c17				Total
			1.00	2.00	3.00	4.00	
			7	4	5	1	17
		% within a11	41.2%	23.5%	29.4%	5.9%	100.0%
	2.00	Count	20	18	4	0	42
		% within a11	47.6%	42.9%	9.5%	0.0%	100.0%
	3.00	Count	7	8	1	0	16
		% within a11	43.8%	50.0%	6.3%	0.0%	100.0%
	4.00	Count	9	1	1	0	11
		% within a11	81.8%	9.1%	9.1%	0.0%	100.0%
	5.00	Count	2	5	7	0	14
		% within a11	14.3%	35.7%	50.0%	0.0%	100.0%
Total		Count	45	36	18	1	100
		% within a11	45.0%	36.0%	18.0%	1.0%	100.0%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.531	.005
Nominal Cramer's V	.307	.005
N of valid cases	100	

Result: Cramer's V 0.307 is between 0.3 and 0.5, therefore, the effect size is small and Chi-square significance $0.005 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between bank institution and the overall rating for ADT services. Absa, Standard Bank, Nedbank and FNB customers are more satisfied with ADT services than Capitec Bank customers.

A1= Age.

C10= If to a moderate or to a large extent.

Table 3. 21: The gender of respondents and reasons for the regular use of ADT services

Cross tabulation						
a1	1.00	Count	c10			
			1.00	2.00	3.00	4.00
		% within a1				Total
			3	7	0	0
			30.0%	70.0%	0.0%	0.0%
	2.00	Count	25	30	5	1
		% within a1	41.0%	49.2%	8.2%	1.6%
	3.00	Count	14	9	0	0
		% within a1	60.9%	39.1%	0.0%	0.0%
	4.00	Count	0	1	0	1
		% within a1	0.0%	50.0%	0.0%	50.0%
Total		Count	42	47	5	2
		% within a1	43.8%	49.0%	5.2%	2.1%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.559	.000
Nominal Cramer's V	.323	.000
N of valid cases	96	

Result: Cramer's V 0.323 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.000 < 0.05$. This means there is no practical significance for the current system.

Decision: Reject the null hypothesis.

Conclusion: There is positive association between the gender of respondents and reasons for the regular use of ADT services. While all customers are using ADT services because of closeness to work or home, customers in the 16-29 age group and 50-69 age group also want safety and have other reasons for using ADT services.

A5= Highest level of education.

C14= It is cheaper to deposit at an ADT machine than making a deposit at a teller.

Table 3. 22: The level of education and views on whether it is cheaper to make an ADT deposit rather than using the teller.

Cross tabulation					
a5	1.00	Count	c14		
			1.00	2.00	3.00
		% within a5	0	0	1
			0.0%	0.0%	100.0%
	2.00	Count	2	0	2
		% within a5	50.0%	0.0%	50.0%
	3.00	Count	14	0	18
		% within a5	43.8%	0.0%	56.3%
	4.00	Count	17	1	12
		% within a5	56.7%	3.3%	40.0%
	5.00	Count	27	0	2
		% within a5	93.1%	0.0%	6.9%
Total		Count	60	1	35
		% within a5	62.5%	1.0%	36.5%

Symmetric measures			
		Value	Approximate significance
Nominal by Nominal	Phi	.468	.007
	Cramer's V	.331	.007
N of valid cases		96	

Result: Cramer's V 0.331 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.007 < 0.05$. This means there is no practical significance meaning that no drastic changes to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between the level of education of respondents and views on whether it is cheaper to make an ADT deposit rather than using the teller. Customers who hold a degree are the most likely to know that ADT services are cheaper than the service of a teller.

A12=How long have you been banking with them?

C5= Please indicate the most appropriate reason why you feel hesitant.

Table 3. 23: The length time with the banking institution and reasons for feeling hesitant

Cross tabulation							
a12	1.00	Count	c5				
			1.00	2.00	3.00	4.00	5.00
			2	2	2	3	9
		% within a12	11.1%	11.1%	11.1%	16.7%	50.0%
	2.00	Count	2	9	7	1	35
		% within a12	3.7%	16.7%	13.0%	1.9%	64.8%
	3.00	Count	1	9	0	0	12
		% within a12	4.5%	40.9%	0.0%	0.0%	54.5%
	4.00	Count	2	0	1	0	2
		% within a12	40.0%	0.0%	20.0%	0.0%	40.0%
Total		Count	7	20	10	4	58
		% within a12	7.1%	20.2%	10.1%	4.0%	58.6%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.540	.004
Nominal Cramer's V	.312	.004
N of valid cases	99	

Result: Cramer's V 0.312 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.004 < 0.05$. This means there is no practical significance meaning that no immediate changes to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between the length of time with banking institutions and reasons for feeling hesitant. The longer clients stay with their banking institutions, the more they feel hesitant of ADT services and prefer face-to-face interactions because the older customers have less trust in the security of ADTs and still prefers the human interaction as they have a relationship with the tellers.

A12= How long have you been banking with them?

C10= If to a moderate or to a large extent.

Table 3. 24: The length time with banking institution and reasons for the regular use of a particular ADT

Cross tabulation						
a12			c10			
			1.00	2.00	3.00	4.00
	1.00	Count	5	12	0	0
		% within a12	29.4%	70.6%	0.0%	0.0%
	2.00	Count	21	28	5	0
		% within a12	38.9%	51.9%	9.3%	0.0%
	3.00	Count	14	6	0	1
		% within a12	66.7%	28.6%	0.0%	4.8%
	4.00	Count	2	1	0	1
		% within a12	50.0%	25.0%	0.0%	25.0%
Total		Count	42	47	5	2
		% within a12	43.8%	49.0%	5.2%	2.1%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.498	.005
Nominal Cramer's V	.287	.005
N of valid cases	96	

Result: Cramer's V 0.287 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.005 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between the length time with banking institutions and reasons for the regular use of a particular ADT. The longer customers stay with their banking institutions, the more they regularly use ADT services for safety and other reasons besides just closeness to home/place of work.

A7= What line of business are you operating in?

C14= It is cheaper to deposit at an ADT machine than making a deposit at a teller.

Table 3. 25: Business and perception on the cost of ADT service as opposed to the bank teller.

Cross tabulation						
a7	1.00	Count	c14			Total
			1.00	2.00	3.00	
		% within a7	6	0	14	20
			30.0%	0.0%	70.0%	100.0%
	2.00	Count	20	1	14	35
		% within a7	57.1%	2.9%	40.0%	100.0%
	3.00	Count	11	0	1	12
		% within a7	91.7%	0.0%	8.3%	100.0%
	4.00	Count	18	0	0	18
		% within a7	100.0%	0.0%	0.0%	100.0%
	5.00	Count	8	0	6	14
		% within a7	57.1%	0.0%	42.9%	100.0%
Total		Count	63	1	35	99
		% within a7	63.6%	1.0%	35.4%	100.0%

Symmetric measures			
		Value	Approximate significance
Nominal by Nominal	Phi	.522	.001
	Cramer's V	.369	.001
N of valid cases		99	

Result: Cramer's V 0.369 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.001 < 0.05$. This means there is no practical significance meaning that no immediate changes to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is positive association between business and perception on the cost of ADT service as opposed to walking into the bank and using a Teller. Taxi customers, shop owners and 'other' business owners will most likely be unaware of the differences in cost between ADT services and the bank teller.

A7= What line of business are you operating in?

C17=How would you rate ADT services?

Table 3. 26: Business and the overall rating score for ADT self-service.

Cross tabulation							
a7			c17				Total
			1.00	2.00	3.00	4.00	
	1.00	Count	6	10	4	0	20
		% within a7	30.0%	50.0%	20.0%	0.0%	100.0%
	2.00	Count	16	11	8	0	35
		% within a7	45.7%	31.4%	22.9%	0.0%	100.0%
	3.00	Count	10	2	0	0	12
		% within a7	83.3%	16.7%	0.0%	0.0%	100.0%
	4.00	Count	11	5	2	0	18
		% within a7	61.1%	27.8%	11.1%	0.0%	100.0%
	5.00	Count	2	8	4	1	15
		% within a7	13.3%	53.3%	26.7%	6.7%	100.0%
Total		Count	45	36	18	1	100
		% within a7	45.0%	36.0%	18.0%	1.0%	100.0%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.478	.029
Nominal Cramer's V	.276	.029
N of valid cases	100	

Result: Cramer's V 0.276 is less than 0.3 therefore the effect size is small and Chi-square significance $0.029 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between business and the overall rating score for ADT self-service. "Other" businesses' customers are more likely to be unsatisfied with ADT services.

3.18 General self-service channels

This section continues with significant findings from the study pertaining to the use of self-service channels in general. These will be findings on the other service platforms namely ATMs, cell phone, online and telephone banking as well as cash send/e-wallet. It is important to discuss the behaviours and perception on the other self-service platforms in order to know what more is of importance to banking clients and to incorporate those items when designing banking services and packages for business. In fact, the evolution of the Internet has forced banks to improve on the services that are being offered to their customers by using various technologies (Simuchimba, 2011:9). These are also crucial to investigate the utilisation of services and also designing of alternatives if ADT services are down or not available in an area.

A2= Gender.

B1n4 = Online banking.

Table 3. 27: Gender and frequency of use of online banking.

Cross tabulation								
a2	1.00	Count	b1n4					
			1.00	2.00	3.00	4.00	5.00	6.00
			23	14	0	3	3	5
a2	1.00	% within a2	47.9%	29.2%	0.0%	6.3%	6.3%	10.4%
		Total	48					
a2	2.00	Count	5	21	6	4	5	11
		% within a2	9.6%	40.4%	11.5%	7.7%	9.6%	21.2%
Total		Count	28	35	6	7	8	16
		% within a2	28.0%	35.0%	6.0%	7.0%	8.0%	16.0%

Symmetric measures			
		Value	Approximate significance
Nominal by Nominal	Phi	.466	.001
	Cramer's V	.466	.001
N of valid cases		100	

Result: Cramer's V 0.466 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.001 < 0.05$. This means there is no practical significance meaning that no immediate changes to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is an association between gender and frequency of use of online banking and the practical significance is moderate. Female customers are more likely to use online banking services daily or once a week than male customers. Male business customers are, therefore, more likely to never use online banking or use it once a month.

A6= Where do you reside?

B1n4= Online banking.

Table 3. 28: Place of residence and frequency of use of online banking.

Cross tabulation								
a6			b1n4					
			1.00	2.00	3.00	4.00	5.00	Total
	1.00	Count	3	0	0	2	0	5
		% within a6	60.0%	0.0%	0.0%	40.0%	0.0%	100.0%
	2.00	Count	5	7	1	2	2	21
		% within a6	23.8%	33.3%	4.8%	9.5%	9.5%	100.0%
	3.00	Count	11	8	1	0	0	20
		% within a6	55.0%	40.0%	5.0%	0.0%	0.0%	100.0%
	4.00	Count	1	7	2	1	0	16
		% within a6	6.3%	43.8%	12.5%	6.3%	0.0%	100.0%
	5.00	Count	8	13	1	2	6	37
		% within a6	21.6%	35.1%	2.7%	5.4%	16.2%	100.0%
Total		Count	28	35	5	7	8	99
		% within a6	28.3%	35.4%	5.1%	7.1%	8.1%	100.0%
Symmetric measures								
			Value	Approximate significance				
Nominal by Nominal	Phi		.614	.011				
	Cramer's V		.307					
	N of valid cases		99					

Result: Cramer's V 0.307 is between 0.3 and 0.5 therefore the effect size is moderate and Chi-square significance $0.011 < 0.05$. This means there is no practical significance meaning that no drastic changes to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between place of residence and frequency of use of online banking. Soweto business customers never use online banking; if they did use online banking, it would be once a month or once in three weeks. Fourways and customers from other areas use online banking daily or once a week more than Soweto, Kempton Park or Bruma customers.

A6= Where do you reside?

B2= Do you feel hesitant to use self-service channels in any way?

Table 3. 29: Place of residence and a feeling of hesitancy when using self-service channels.

Cross tabulation						
a6	1.00	Count	b2			
			1.00	2.00	3.00	4.00
		% within a6	2	1	2	0
			40.0%	20.0%	40.0%	0.0%
	2.00	Count	14	7	0	0
		% within a6	66.7%	33.3%	0.0%	0.0%
	3.00	Count	7	4	6	3
		% within a6	35.0%	20.0%	30.0%	15.0%
	4.00	Count	11	3	0	2
		% within a6	68.8%	18.8%	0.0%	12.5%
	5.00	Count	23	10	3	1
		% within a6	62.2%	27.0%	8.1%	2.7%
Total		Count	57	25	11	6
		% within a6	57.6%	25.3%	11.1%	6.1%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.498	.017
Nominal Cramer's V	.287	.017
N of valid cases	99	

Result: Cramer's V 0.287 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.017 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between place of residence and a feeling of hesitancy when considering using self-service channels in general. While customers in

other areas and Soweto are more likely to be hesitant, Bruma, Kempton Park and Fourways customers are less likely to be hesitant.

A7= What line of business are you operating in?

B1n3= Cell phone banking.

Table 3. 30: Business type and frequency of use of cell phone banking.

Cross tabulation									
a7	1.00	Count	b1n3						Total
			1.00	2.00	3.00	4.00	5.00	6.00	
			6	2	6	4	0	2	20
		% within a7	30.0%	10.0%	30.0%	20.0%	0.0%	10.0%	100.0%
	2.00	Count	4	5	10	4	4	8	35
		% within a7	11.4%	14.3%	28.6%	11.4%	11.4%	22.9%	100.0%
	3.00	Count	0	1	2	2	3	4	12
		% within a7	0.0%	8.3%	16.7%	16.7%	25.0%	33.3%	100.0%
	4.00	Count	2	0	3	3	1	9	18
		% within a7	11.1%	0.0%	16.7%	16.7%	5.6%	50.0%	100.0%
	5.00	Count	6	1	6	0	1	1	15
		% within a7	40.0%	6.7%	40.0%	0.0%	6.7%	6.7%	100.0%
Total		Count	18	9	27	13	9	24	100
		% within a7	18.0%	9.0%	27.0%	13.0%	9.0%	24.0%	100.0%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.566	.043
Nominal Cramer's V	.283	.043
N of valid cases	100	

Result: Cramer's V 0.283 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.043 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between business type and frequency of the use of cell phone banking. Shop owners and those in restaurants or distribution are more likely to use cell phone banking daily or once in two weeks. Business customers in the taxi industry never use cell phone banking, or at most, use it once in two weeks.

A7= What line of business are you operating in?

B1n4= Online banking.

Table 3. 31: Business type and frequency of use of online banking.

Cross tabulation								
a7	1.00	Count % within a7	b1n4					
			1.00	2.00	3.00	4.00	5.00	6.00
			Total					
			14	6	0	0	0	0
			70.0%	30.0%	0.0%	0.0%	0.0%	0.0%
	2.00	Count	8	18	2	4	1	2
		% within a7	22.9%	51.4%	5.7%	11.4%	2.9%	5.7%
	3.00	Count	4	1	0	3	2	2
		% within a7	33.3%	8.3%	0.0%	25.0%	16.7%	16.7%
	4.00	Count	1	5	2	0	3	7
		% within a7	5.6%	27.8%	11.1%	0.0%	16.7%	38.9%
	5.00	Count	1	5	2	0	2	5
		% within a7	6.7%	33.3%	13.3%	0.0%	13.3%	33.3%
Total		Count	28	35	6	7	8	16
		% within a7	28.0%	35.0%	6.0%	7.0%	8.0%	16.0%

Symmetric measures			
		Value	Approximate significance
Nominal	Phi	.768	.000
by	Cramer's	.384	.000
Nominal	v		
N of valid cases		100	

Result: Cramer's V 0.384 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.000 < 0.05$. This means there is no practical significance for the current system.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between business type and frequency of use of online banking. Taxi customers have the least probability of ever using online banking services.

A7= What line of business are you operating in?

B4= Would you use self-service channels in the future with more assistance or information?

Table 3. 32: Business type and whether businesses would opt for self-services with more assistance

Cross tabulation						
a7	1.00	Count % within a7	b4			
			1.00	2.00	3.00	5.00
			4	7	9	0
			20.0%	35.0%	45.0%	0.0%
	2.00	Count	15	14	6	0
		% within a7	42.9%	40.0%	17.1%	0.0%
	3.00	Count	9	2	0	1
		% within a7	75.0%	16.7%	0.0%	8.3%
	4.00	Count	8	6	2	1
		% within a7	47.1%	35.3%	11.8%	5.9%
	5.00	Count	3	9	3	0
		% within a7	20.0%	60.0%	20.0%	0.0%
Total		Count	39	38	20	2
		% within a7	39.4%	38.4%	20.2%	2.0%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.506	.013
Nominal Cramer's V	.292	.013
N of valid cases	99	

Result: Cramer's V 0.292 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.013 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between business type and whether businesses would opt for self-services with more help/assistance. Taxi customers and

"other" business customers would not be easily convinced to use general self-service channels even with more assistance or information.

A10= What type of bank account do you operate?

B1n1= ATM.

Table 3. 33: Type of bank account and the frequency of use of ATM services

Cross tabulation								
a10			b1n1					
			1.00	2.00	3.00	4.00	5.00	6.00
1.00	Count		0	1	0	2	1	0
	% within a10		0.0%	25.0%	0.0%	50.0%	25.0%	0.0%
2.00	Count		0	1	6	12	21	1
	% within a10		0.0%	2.4%	14.6%	29.3%	51.2%	2.4%
3.00	Count		2	1	7	5	28	12
	% within a10		3.6%	1.8%	12.7%	9.1%	50.9%	21.8%
Total		Count	2	3	13	19	50	13
		% within a10	2.0%	3.0%	13.0%	19.0%	50.0%	13.0%

Symmetric measures			
		Value	Approximate significance
Nominal	Phi	.490	.008
by	Cramer's V	.346	.008
Nominal			
N of valid cases		100	

Result: Cramer's V 0.346 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.008 < 0.05$. This means there is no practical significance meaning that no immediate or drastic changes to the current system are necessary.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between type of bank account and the frequency of use of ATM services. Business and current accounts customers were likely to use ATMs frequently.

A10= What type of bank account do you operate?

B1n3= Cell phone Banking.

Table 3. 34: Bank account type and the frequency of use of cell phone banking

Cross tabulation								
a10			b1n3					
			1.00	2.00	3.00	4.00	5.00	6.00
1.00	Count		1	1	1	1	0	0
	% within a10		25.0%	25.0%	25.0%	25.0%	0.0%	0.0%
	Total		4					
2.00	Count		9	4	16	6	4	2
	% within a10		22.0%	9.8%	39.0%	14.6%	9.8%	4.9%
	Total		41					
3.00	Count		8	4	10	6	5	22
	% within a10		14.5%	7.3%	18.2%	10.9%	9.1%	40.0%
	Total		55					
Total		Count	18	9	27	13	9	24
		% within a10	18.0%	9.0%	27.0%	13.0%	9.0%	24.0%

Symmetric measures			
		Value	Approximate significance
Nominal by Nominal	Phi	.449	.028
	Cramer's V	.317	.028
N of valid cases		100	

Result: Cramer's V 0.317 is less than 0.3 therefore the effect size is small and Chi-square significance $0.028 < 0.05$

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between bank account type and the frequency of use of cell phone banking and business account holders were the most likely to make use of cell phone banking.

A10= What type of bank account do you operate?

B1n6= E-wallet/cash send

Table 3. 35: Banking institution and the frequency of use of cash send/ewallet

Cross tabulation								
a10	1.00	Count	b1n6					
			1.00	2.00	3.00	4.00	5.00	6.00
		% within a10						
	1.00	Count	0	0	2	1	1	0
		% within a10	0.0%	0.0%	50.0%	25.0%	25.0%	0.0%
	2.00	Count	2	6	27	4	2	0
		% within a10	4.9%	14.6%	65.9%	9.8%	4.9%	0.0%
	3.00	Count	7	8	13	5	7	15
		% within a10	12.7%	14.5%	23.6%	9.1%	12.7%	27.3%
Total		Count	9	14	42	10	10	15
		% within a10	9.0%	14.0%	42.0%	10.0%	10.0%	15.0%

Symmetric measures			
		Value	Approximate significance
Nominal by Nominal	Phi	.531	.002
	Cramer's V	.376	.002
N of valid cases		100	

Result: Cramer's V 0.376 is between 0.3 and 0.5, therefore, the effect size is moderate and Chi-square significance $0.002 < 0.05$. This means there is no practical significance meaning that no immediate or drastic changes to the current system necessary.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between banking institutions and the frequency of use of cash send/ewallet. Savings and current account holders are more likely to use e-Wallet/ cash send facilities than customers with business accounts.

A11= Which bank are you banking with?

B1n4= Online banking.

Table 3. 36: Bank institution and frequency of use of online banking services

Cross tabulation								
a11			b1n4					
			1.00	2.00	3.00	4.00	5.00	6.00
	1.00	Count	1	4	1	1	5	5
		% within a11	5.9%	23.5%	5.9%	5.9%	29.4%	29.4%
	2.00	Count	14	14	2	3	3	6
		% within a11	33.3%	33.3%	4.8%	7.1%	7.1%	14.3%
	3.00	Count	4	7	2	2	0	1
		% within a11	25.0%	43.8%	12.5%	12.5%	0.0%	6.3%
	4.00	Count	1	5	1	0	0	4
		% within a11	9.1%	45.5%	9.1%	0.0%	0.0%	36.4%
	5.00	Count	8	5	0	1	0	0
		% within a11	57.1%	35.7%	0.0%	7.1%	0.0%	0.0%
Total		Count	28	35	6	7	8	16
		% within a11	28.0%	35.0%	6.0%	7.0%	8.0%	16.0%

Symmetric measures			
		Value	Approximate significance
Nominal by Nominal	Phi	.594	.019
Nominal by Nominal	Cramer's V	.297	.019
N of valid cases		100	

Result: Cramer's V 0.297 is less than 0.3, therefore, the effect size is small and Chi-square significance $0.019 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association between bank institution and frequency of use of online banking services. Absa and Nedbank customers are the most frequent users of online banking services compared to Standard Bank, FNB and Capitec Bank.

A1= Age.

B3= Please choose the most appropriate reason why you are hesitant.

Table 3. 37: The age group and reasons for feeling hesitant about using self-service channels.

Cross tabulation								
a1	1.00	Count	b3					Total
			1.00	2.00	3.00	4.00	5.00	
		% within a1		0				
			1	1	2	0	7	11
			9.1%	9.1%	18.2%	0.0%	63.6%	100.0%
	2.00	Count	0	21	1	3	37	62
		% within a1	0.0%	33.9%	1.6%	4.8%	59.7%	100.0%
	3.00	Count	1	7	0	0	15	23
		% within a1	4.3%	30.4%	0.0%	0.0%	65.2%	100.0%
	4.00	Count	1	1	0	0	0	2
		% within a1	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%
Total		Count	3	30	3	3	59	98
		% within a1	3.1%	30.6%	3.1%	3.1%	60.2%	100.0%

Symmetric measures		
	Value	Approximate significance
Nominal by Phi	.574	.001
Nominal Cramer's V	.332	.001
N of valid cases	98	

Result: Cramer's V 0.332 is between 0.3 and 0.5, therefore, the effect size is small and Chi-square significance $0.001 < 0.05$.

Decision: Reject the null hypothesis.

Conclusion: There is a positive association of the age group of respondents and reasons for feeling hesitant about using self-service channels. The language barrier is a worry to all customers less than 70 years and the older customers prefer face-to-face interactions and security violation in self-services channels.

3.19 CORRELATIONAL ANALYSIS

Hypothesis

H₀₃: there is no correlation between a1 a5 a8 a9 a12 and b1n1 b1n2 b1n3 b1n4 b1n5 b1n6;

H₁₃: at least one pair is related.

Table 3. 38: Correlation coefficient table

B1n1= ATM

B1n2= ADT

B1n3= Cell phone banking

B1n4= Online banking

B1n5= Telephone banking

B1n6= E-wallet/cash send

A1= Age

A5= Highest level of education

A8= How long have you been operating in this line of business?

A9= Monthly turnover

A12=How long have you been banking with them?

		a1	a5	a8	a9	a12
b1n1	Correlation coefficient	.058	-.202*	.285**	.142	.200*
	Sig. (2-tailed)	.566	.047	.004	.161	.046
	N	100	97	99	99	100
b1n2	Correlation coefficient	.214*	-.424**	.231*	.188	.168
	Sig. (2-tailed)	.033	.000	.022	.063	.094
	N	100	97	99	99	100
b1n3	Correlation coefficient	-.214*	.008	.032	.255*	.101
	Sig. (2-tailed)	.033	.942	.755	.011	.316
	N	100	97	99	99	100
b1n4	Correlation coefficient	-.204*	.615**	.022	.084	.220*
	Sig. (2-tailed)	.042	.000	.832	.411	.028
	N	100	97	99	99	100
b1n5	Correlation coefficient	-.065	.185	.126	.052	.223*
	Sig. (2-tailed)	.520	.069	.214	.608	.026
	N	100	97	99	99	100
b1n6	Correlation coefficient	-.180	-.248*	.041	.097	-.046
	Sig. (2-tailed)	.074	.014	.688	.341	.653
	N	100	97	99	99	100

Result: Respondents' age is positively related to frequency of use of ADT services, but negatively related to frequency of use of cell phone banking and online banking.

Level of education is positively related to frequency of use of online banking, but negatively related to frequency of use of ATMs, ADT and cash send facilities.

Length of business operation is positively related to ATM and ADT services' frequency of use.

Monthly turnover is positively related to frequency of use of cell phone banking.

Length of banking with institution is positively related with frequency of use of ATMs and online banking.

3.20 SUMMARY OF FINDINGS

The sample consists of 20% respondents being taxi operators, 35% respondents being retail shop owners, 12% respondents being in distribution, 18% catering in restaurants and 15% of respondents are practicing other businesses. The majority of respondents (71%) have been in business for at least 5 years. The most respondents (55%) designated their business activities as business accounts.

Research findings show that business customers have a great appetite for self-service channels in general, with the exception for telephone banking. It is evident from the results that self-service channels make respondents' lives easier as it creates more time for business and banking can be done any time of day, even after work. Soweto business customers never use online banking; if they did, it would be once a month or once in three weeks. Female customers are more likely than male customers to use online banking services daily or once a week. Male business customers (opposed to female business customers) never use online banking or they just use it once a month. Shop owners and those in restaurants or distribution use cell phone banking daily or once in two weeks. Taxi business customers never or at most once in two weeks use cell phone banking. They also have the least probability of ever using online banking services or general self-service channels, even with more assistance or information. Business and current accounts customers use ATMs frequently. Savings and current account holders use e-wallet/ cash send facilities more than customers with business accounts. Absa and Nedbank customers are the most frequent users of online banking services compared to Standard Bank, FNB and Capitec Bank.

On the usage of self service functions in general, the majority are confident of using self-service channels; 25% seldom doubt the services, 12% often feel very uncomfortable and 6% are always sceptical of the banking self-service channels in general. Scepticism come mainly from the safety and security features of self-service channels pushing 3% to the old fashioned face-to-face interactions.

The main objective of this study was to evaluate the implementation of client satisfaction management for automated deposit terminal services. There is a relationship between business type and frequency of use of ADT services. Shop owners and restaurants use ADT services once every two weeks or once a week.

- **To determine the customer's perceptions on the convenience of ADT services**

While most customers use ADT machines close to their place of work or residence, the most popular reason for businesses to use ADT services is mainly its 24-hour availability every day. This makes it convenient and many businesses experienced a reduction in face-to-face teller visits as ADT self-service machines are utilised. Nonetheless, many businesses attest that ADT machines do not substitute or threaten the role of bank tellers.

Savings and current account holders are more likely to agree than business account holders that tellers are still very important in this ADT era.

On the cost side, it is interesting to note that females are more alert about the cost of ADT services than male customers. Taxi customers and shop owners prove to be unaware of the differences in cost between ADT services and the bank teller costs. Customers who hold a degree know that ADT services are cheaper than the teller services, while those with lower qualifications than a degree are not sure of the cost differences.

- **To investigate the levels of trust that customers associated with the use of ADT services**

Zooming in on ADT services, 50% of respondents are making use of ADT machines on a daily basis and users are confident of the service, but some are sceptical about the safety of ADT machines to such a degree that they prefer assistance or face-to-face service. Distribution customers never hesitate in using ADT machines. Current and business account holders prefer face-to face-interactions and require more assistance from bank officials than savings account holders.

- **To determine and evaluate the relationship between customer's demographics and attitude towards ADT services**

The study proves that respondents' age is positively related to frequency of use of ADT services, but negatively related to frequency of use of cell phone banking and online banking. The level of education is also positively related to frequency of use of online banking, but negatively related to frequency of use of ATMs, ADT and cash send facilities. Length of business operation is positively related to ATM and ADT services' frequency of use.

On the other hand, there is not a significant relationship between frequency of use of ADT services with the respondents' gender, race, marital status, and level of education, place of residence, length of business operation, monthly turnover and type of bank account used or the bank that a client uses. This implies that update of ADT services is not limited by the above factors. Once an ADT service product is designed attractively and marketed appropriately, any client who deals with cash on a daily basis is likely to adopt it. It also means that banking industry players have not outdone each other in developing innovative ways of improving ADT services.

- **Measuring customer satisfaction towards ADT services**

The majority of businesses are satisfied with their current service provider and the accessibility of ADT machine points. The majority of respondents (60%) show that ADT machines are in good working order all the time with only occasional power failures. Only a few respondents (5%) indicate that the ADT machines are underserved and/or no ADT machines are in certain places where they would want or need it to be established. Some customers are not happy with the number of notes that can be deposited in a bunch in the ADT machines. Results show that the longer a business stays with a bank the more they feel that their language is not incorporated and that there is a lack of assistance from bank officials, so they start opting for and prefer face-to-face interactions.

- **To offer suggestions on how banks can improve customers' satisfaction**

The majority of business clients (81%) are satisfied with ADTs, however, some of them have request that ADT machines should provide change, take coins (as some of them are in the business of taking coins) and take in more notes at a time and they request assistance when they do not understand how to use the machines.

Chapter 4 will present the conclusion and recommendations which is an approach to manage client satisfaction for and the use of the ADTs. It also offers suggestions to improve service conditions of ADTs.

3.21 CHAPTER SUMMARY

This chapter described the research design and methodology that were applied. A broad outline was given of the research process that was followed throughout the study as well as the research design. The chapter provided insight into the sampling method that was applied. The selected methodology, as outlined in this chapter, was preferred because of its simplicity of presenting results; it is also less complex, as it uses the simplest approached to data capturing, analyses and interpretation and yet remains effective in proving the reader with conclusive findings of the matters under investigation. Data analysis and research findings were discussed based on the background of the literature review already given.

CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

4.1 INTRODUCTION

This is the final chapter of the study encompassing the conclusions and recommendations. Conclusions are made based on the findings of the statistical analysis and recommendations are formulated based on the literature and the conclusions of the empirical research. The chapter finally highlights some areas for further research.

4.2 PRIMARY OBJECTIVE

The main objective of this study was to evaluate the implementation of customer satisfaction management for automated deposit terminal services.

4.2.1 Literature

According to Kapare *et al.*, ADTs offer important benefits to both banks and their customers. These terminals allow the customer to deposit cash at more suitable times and places than during banking hours. ADT reduces the cost of serving some depositor demands. The potential benefits are multiplied when banks share their ADTs, allowing depositors of other banks to access their accounts through a bank's ADT.

4.2.2 Conclusion

The implementation of ADTs has been a success across all banking service institutions and all of its business customers have experienced convenience in banking and a cheaper option to deposit their cash. More business clients have finally come to realise that there is a better way to do banking even more frequently, daily, any time without walking into the bank. It is such features of the ADT services that have enabled banking institutions to grab the attention of the intended target market, namely the business customer, but even the low turnover of business tier like taxi drivers and small shop owners. However, the majority of the ADT users are customers who make small cash deposits on a daily basis, given the limitation of the number of notes that can be deposited on the terminal. This means customers who make bulk deposits would still require to go inside the branch to make their deposits.

4.2.3 Recommendation

The establishment of ADTs in South Africa had an impact on how banking is done. As much as there is a success on the implementation of ADT, banking institutions can still invest on other services that ADTs can do, like the machine must be able to take coins, give change and increase the number of notes that can be deposited in the machine.

4.3 SECONDARY OBJECTIVE

The first secondary objective of this study was to manage and improve customer satisfaction for and in the use of the ADTs and offer suggestions to improve service conditions of ADT's.

4.3.1 Literature

The current ADTs have been designed to accept only 38 notes at a time and a maximum of R8000. Furthermore, these terminals are not designed to accept coins. Banks should consider upgrading the ADT machines. Possible differentiators that could be considered to offer are different languages, an increase in the number of notes that can be deposited into the machine, a more innovative way of allowing the business customers to be able to give change and also deposit coins into the machine (specifically aimed at business customers like taxi owners).

4.3.2 Conclusion

Most customers are satisfied with ADT services which their banking institutions offer. It has emerged that the frequency of use of ADT services is related to the kind of business operations one is engaged in and that a service, like telephone banking, has not been adopted on a large scale nor is it a priority for respondents in this study so they would still visit the bank for other banking needs. The implementation of ADTs has also successfully served as an option without substituting the role of bank tellers which could have led to increased unemployment levels in the country.

4.3.3 Recommendations

Banking institutions should work on increasing the ADT footprint in those areas where there are no services and improve network connection facilities to ensure seamless service. Banking institutions can increase campaigns to educate business clients on using

telephone banking for other banking services like general enquiries, change of details and applications for small loans. By so doing, customers would fully enjoy the benefit of avoiding physical queues and rushing for closing times inside the banking hall.

4.4 SECONDARY OBJECTIVE

The second secondary objective of this study was to determine the customers' perceptions on the convenience of ADT services.

4.4.1 Literature

ADTs are like tellers that never go off duty, enabling one to deposit cash and have it cleared immediately at a time that suits the client best. These deposits are available 24/7. The terminals allow the customer to deposit cash at a more suitable time and place than during banking hours.

ADTs are specifically targeted by business customers as they need to deposit large amounts of cash daily. Using ADTs will extend their business day as they could schedule their own banking hours. Literature further state that there will always be customers that adapt slower than others with the introduction of new technology and services. Although ADTs is a good technology, one should still know that change is a process. People take time to adapt and there are also business clients who are not comfortable to use new technology. Thus, some business customers will be reluctant to use ADTs and still prefer interaction with the tellers inside the branch as they can be assisted at once regardless of the number of notes they have to deposit. Some customers will feel inconvenienced with ADTs because large amounts cannot be deposited into the machine. Nonetheless, the general population in this study's perception on ADTs is positive. Most respondents mention the limitation in the number of notes that can be deposited and they feel that if this can be improved, more customers can adapt to using the ADT machines. ADTs should be implemented and further developed as they introduce many avenues for the business client.

4.4.2 Conclusion

ADT services have also been hailed for their 24-hour accessibility and availability, carrying out deposits in real time and providing the convenience of banking closer to place of work or residence. A feeling of safety is also important when business customers make their

cash deposits. ADTs offer safety and security which respondents confirm. In fact, taxi customers, shop owners, distribution and restaurant business customers use ADT services daily because there is a high risk of theft associated with business customers who collect cash every day from their business. However, some still feel that there is not 100% safety in ADT services.

4.4.3 Recommendations

It is recommended that banks should frequently inspect their ADTs to avoid the breakdown of ADTs and also increase safety features to ensure that criminals do not temper with machine service functions making customers vulnerable to robberies and cyber theft or cloning of their private information.

4.5 SECONDARY OBJECTIVE

The third secondary objective of this study was to investigate the levels of trust that customers associated with the use of ADT services.

4.5.1 Literature

Some business customers fear the unknown as in what would happen if their money just disappears. In some instances, safety also plays a major role because customers may be followed and robbed while they deposit notes into the machine.

4.5.2 Conclusion

The majority of customers confirm that ADT services are not complicated. Therefore, ADT services are easy to use and customers do not hesitate to use ADT functions in most cases. There are low levels of concern on the language used on ADT machines. Although the majority of customers across all places of residence do not feel hesitant about using an ADT service, for customers from Soweto, the visibility of the tellers is important and they indicated to not feel very safe. In conclusion, customers state issues of language and safety as their main concerns; otherwise they are quite satisfied with the efficiency of the ADT machines.

4.5.3 Recommendation

Banking institutions may have to increase the ADT language of interaction to make them more user-friendly. Security features may also have to be upgraded frequently to ensure banking institutions always have the competitive edge in protecting customers before criminals learn to manipulate the ADT systems at any point in time. Customer complaints on safety and security should be addressed diligently to maintain customer confidence and avoid brand damage.

4.6 SECONDARY OBJECTIVE

Fourthly, the secondary objective of this study was to determine customer's demographics and evaluate their attitude towards ADT services.

4.6.1 Literature

Literature do not mention much about demographics and the attitude towards ADTs services, however, this study shows that there is a relation between the two. Given that the ADT machine is a new form of self-service channel, available literature does not cover this aspect as yet.

4.6.2 Conclusion

The more businesses stay in operation, they tend to adopt ADT services and the type of business also influences ADT usage as some businesses do not deal with cash daily so their banking behaviour is different. Personal demographics like gender, race, marital status level of education and place of residence have no bearing on the frequency of use of ADT services. There is a positive association between place of residence and reasons for the general feeling of hesitancy when considering using self-service channels.

4.6.3 Recommendation

If banking institutions can focus on ADT service products designed attractively and marketed appropriately, any client who deals with cash daily is likely to adopt it. If banks consider building a competitive edge, they have to do something differently from the rest of the ADT service players. It is also recommended that banks establish ADTs in different locations in order to meet customer needs and they must be conscious of where they put the machines to guard against any bombings.

4.7 SECONDARY OBJECTIVE

Finally, the fifth secondary objective of this study was to measure customer satisfaction towards ADT services.

4.7.1 Literature

According to Saarnio (2011) clients become loyal when they are satisfied, and satisfied customers return to buy more from a certain shop. Therefore, if the banks can ensure that the functions that the ADT perform will make customers' lives more convenient and save them time, the satisfied customers will return to make use of the ADT and also tell other customers to also make use of the ADTs.

4.7.2 Conclusion

Banking institutions have done well to keep ADT customers satisfied but some customers request that ADT machines should provide change and take in more notes at a time and assistance when they do not understand. Some customers are not aware of the lower cost of ADT deposits. This is a factor with the potential to increase ADT uptake if awareness programmes are launched.

4.7.3 Recommendation

It is recommended that the banks increase the number of notes in a bunch to be deposited in the ADT machine and the machine have a function to give customers change. Machines should be customized to be able to take and give coins. Banks must provide a step by step guide on how to use the ADT machine and also have different language options to choose from. Banks should also provide awareness about various facilities which the ADT offers and then only can customers know different features of ADTs, like the cost of using ADT versus teller.

4.8 OVERALL RECOMMENDATIONS

Every business customer has a channel (or channels) they favour in his/her interaction with the bank. Some prefer a face-to-face interaction experience in the branch, while others prefer an ADT service. In getting the business customers to consider using ADTs instead of a teller in the branch, banks should highlight the importance of the ADT service for the customer's own business. The identified benefits for the customer need to be

communicated in a simple and understandable language. The message should be structured in such a way that all customers can relate to the benefits of the ADT services and understand how it will fulfil their business needs.

It will be beneficial to conduct an awareness programme amongst business customers to demonstrate not only the functioning of the ADTs, but also the following:

- its usefulness in providing customers more banking convenience;
- smoother day-to-day operational functioning of their own business;
- less time will be spent in banking halls, completing deposit slips and possible long queuing;
- allay all customer fears related to issues of safety and possible miscalculation of their deposits.

In addition, new customers should be informed on the benefits of ADT services through a welcome and on-board pack and/or session as an informed customer will be able to rather make use of the convenient ADT service than the in-branch teller-service.

4.9 AREAS OF FUTURE RESEARCH

5.2.1 Which line of business is suitable for the use of ADT services?

5.2.2 The level of adoption of self-service channels by business customers from urban areas opposed to business customers in rural areas

4.10 CONCLUSION

More business clients have finally come to realise that there is a better way to do banking even more frequently, daily, any time without walking into the bank. The implementation of ADTs has also successfully served as an option to Business Customers without substituting the role of bank tellers which could have led to increased unemployment levels in the country. A feeling of safety is also important when business customers make their cash deposits. ADTs offer safety and security which respondents confirm. Business clients state issues of language and safety as their main concerns; otherwise they are quite satisfied with the efficiency of the ADT machines.

4.11 SUMMARY

This study consists of five chapters. **Chapter 1** mainly focused on the nature and scope of the study, with an introduction to the study, motivation of topic's actuality as well as the problem statement. The objectives of the study were set in this chapter, limitations of the study were described, the research methodology was discussed and the layout of the further chapters was given.

Chapter 2 presented an in-depth literature review regarding the five most commonly used self-services that are already applied in retail banking in South Africa, the overview of the banking sector and trends and its origins in South Africa. Two models have been identified as the theoretical base for this study, namely the Technology Readiness Model (TRM) and Technology Acceptance Model (TAM). Customer satisfaction is explained in detail and the reasons why it is important to measure customer satisfaction.

Chapter 3 presented the research methodology that was followed to reach the research objectives. Furthermore, in this chapter the data collection methods and the procedures that were applied to obtain the needed information were explained.

This chapter also discussed the research findings starting with descriptive statistics followed by inferential statistics to prove the given hypothesis. SPSS statistical software was used to analyse the data.

Chapter 4 is the final, concluding chapter and set out the conclusions, recommendations and areas for future research.

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ANNEXURE A

List of registered banks in South Africa

Category	Banks
Banks in liquidation	Islamic Bank Limited (In final liquidation) Regal Treasury Private Bank Limited (In liquidation)
Branches of Foreign Banks	Bank of Baroda Bank Of China Limited Johannesburg Branch (trading as Bank Of China Johannesburg Branch) Bank of India Bank of Taiwan South Africa Branch BNP Paribas SA Canara Bank China Construction Bank Corporation - Johannesburg Branch Citibank N.A. Deutsche Bank AG HSBC Bank plc - Johannesburg Branch Icici Bank Limited JPMorgan Chase Bank, N.A. (Johannesburg Branch) Société Générale Standard Chartered Bank - Johannesburg Branch State Bank of India
Foreign bank representatives	AfrAsia Bank Limited African Banking Corporation of Botswana Limited (trading as BancABC Botswana) Banco BIC Banco BPI, SA

	Banco Nacional De Desenvolvimento Econômico E Social
	Banco Santander Totta S.A.
	Banif - Banco Internacional do Funchal, S.A.
	Bank Leumi Le-Israel BM
	Bank of America, National Association
	Bank One Limited
	Banque SYZ Suisse SA
	Commerzbank AG Johannesburg
	Credit Suisse AG
	Doha Bank
	Ecobank
	Export-Import Bank of India
	First Bank of Nigeria
	Hellenic Bank Public Company Limited
	Icici Bank Limited
	Industrial and Commercial Bank of China African Representative Office
	KfW Ipex-Bank GmbH
	Millenium BCP
	Mizuho Bank Limited
	National Bank of Egypt
	Notenstein Private Bank Limited
	Novo Banco
	Société Générale Representative Office for Southern Africa
	Sumitomo Mitsui Banking Corporation

	Swedbank AB (Publ) The Bank of New York Mellon The Bank of Tokyo-Mitsubishi UFJ, Ltd The Mauritius Commercial Bank Limited The Rep. Off. for Southern and Eastern Africa of The Export-Import Bank of China UBS AG Unicredit Bank AG Union Bank of Nigeria Plc Vnesheconombank Wells Fargo Bank, National Association Zenith Bank Plc
Foreign controlled banks	ABSA Bank Limited Albaraka Bank Limited Habib Overseas Bank Limited HBZ Bank Limited Mercantile Bank Limited The South African Bank of Athens Limited
Locally controlled banks	African Bank Limited Bidvest Bank Limited Capitec Bank Limited FirstRand Bank Limited Grindrod Bank Limited Investec Bank Limited Nedbank Limited Sasfin Bank Limited The Standard Bank of South Africa Limited UBANK Limited

Mutual banks	Finbond Mutual Bank GBS Mutual Bank VBS Mutual Bank
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Source: Reserve Bank (2016)

ANNEXURE B

CUSTOMER SATISFACTION QUESTIONNAIRE

I am an MBA student of the North-West University's Potchefstroom Business School. As part of my studies I am carrying out research where I am evaluating the effectiveness of customer satisfaction management on automated deposit terminal services in Gauteng province. I will really appreciate it if you could kindly answer the following questions as honestly as you can. Your feedback will be treated as confidential as possible. It takes only 10 - 15 minutes. Please be assured that the responses you give are for academic purposes only.

You may contact Wilma Pretorius at 018 299 1419 to verify the validity of this research.

Section A: Biographical information

Please tick the appropriate box with an X

1. Age :

16 - 29	30 - 49	50 - 69	70+
1	2	3	4

2. Gender :

Male	Female
1	2

3. Race :

African	Coloured	Indian	White	Other: please specify
1	2	3	4	5

4. Marital status:

Single	Married	Separated	Widow (er)
1	2	3	4

5. Highest level of education:

No formal education	Basic education	Secondary	Diploma	Degree	Other: please specify
1	2	3	4	5	6

6. Where do you reside?

Bruma	Kempton Park	Soweto	Fourways	Other: please specify
1	2	3	4	5

7. What line of business are you operating in?

Taxi	Shop owner	Distribution	Restaurants	Other: please specify
1	2	3	4	5

8. How long have you been operating in this line of business?

0 - 5	5 - 10	10 - 15	15+
1	2	3	4

9. Monthly turnover:

0 - 5000	5000 - 50000	50000 - 100000	100,000 – 150,000	150,000 – 200,000	Other: please specify
1	2	3	4	5	6

10. What type of bank account do you operate?

Savings Account	Current Account	Business Account	Other: please specify
1	2	3	4

11. Which bank are you banking with?

ABSA	FNB	STD Bank	Nedbank	Capitec	Other: please specify
1	2	3	4	5	6

12. How long have you been banking with them?

0 -5	5 - 10	10 - 15	15+
1	2	3	4

Section B: Self – Service channels

1. How frequently do you use the following Self – Service channels?

Self-service channel	Never	Once a month	Once in 3 weeks	Once in 2 weeks	Once a week	Daily
1. ATM	1	2	3	4	5	6
2. ADT	1	2	3	4	5	6
3. Cell phone banking	1	2	3	4	5	6
4. Online banking	1	2	3	4	5	6
5. Telephone banking	1	2	3	4	5	6
6. E-wallet/cash send	1	2	3	4	5	6

2. Do you feel hesitant to use self-service channels in any way?

Never	Seldom	Often	Almost Always
1	2	3	4

3. Please choose the most appropriate reason why you are hesitant:

Prefer face to face interaction	Security violation for self-service channels	Lack of assistance by bank officials	Language or cultural barriers	N/A
1	2	3	4	5

4. Would you use self-service channels in the future with more assistance or information?

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

Section C: Customer satisfaction on ADT

1. Years of using ADT

A year or less	2 – 3 years	4-5 years	6 years and above
1	2	3	4

2. How much do you deposit in the ADT?

5000 -10,000	10,000 – 15,000	15,000 – 20,000	20,000 +
1	2	3	4

3. ADT are easy to use:

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

4. Do you feel hesitant to use ADT in any way?

Never	Seldom	Often	Almost always
1	2	3	4

5. Please indicate the most appropriate reason why you feel hesitant:

Prefer face to face interaction with a teller	Don't feel safe when utilising ADT	Lack of assistance by bank officials	Language of cultural barriers	N/A
1	2	3	4	5

6. ADT has reduced the frequency of my visit to the tellers

Not at all	To a small extent	To a moderate extent	To a large extent
1	2	3	4

7. If to a moderate or large extent, choose the most appropriate reason:

Easy to use	Convenient for my business	Cheaper	Real time deposit	Available 24/7	Safe
1	2	3	4	5	6

8. Tellers are still very important:

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

9. Do you regularly use ADTs at this branch?

Not at all	To a small extent	To a moderate extent	To a large extent
1	2	3	4

10. If to a moderate or to a large extent:

Closer to my business	Closer to my home	Safe	Other: please specify
1	2	3	4

11. Are you satisfied with the current ADT services of your bank?

Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
1	2	3	4	5

12. If dissatisfied or highly dissatisfied, what can the bank improve on in order for you to feel completely satisfied in using ADT?

1.Branch officials' visibility at the ADT	2.Step by step guide next to the ADT	3.Training on how to use the ADT	4.Increase number of notes that can be deposited in the ADT	5.Language preference	6. Other Please specify
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13. I am satisfied with the accessibility (operating hours) of ADT machines:

Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
1	2	3	4	5

14. It is cheaper to deposit at an ADT machine than making a deposit at a teller:

Yes	No	I don't know
1	2	3

15. Do you find ADT working:

All the time	Sometimes	Always not working
1	2	3

16. Choose the commonest problem of ADT transaction:

Power failure	Inadequacy of ADTs	Restriction to number of notes to deposit	Poor connection of ADT network	Other
1	2	3	4	5

17. How would you rate ADT services?

Excellent	Good	Satisfactory	Poor
1	2	3	4

18. Why (choose the most applicable answer)?

Easy to use	Convenient for my business	Cheaper	Human interaction	Real time deposit	Available 24/7	Safe	Don't trust the ADT
1	2	3	4	5	6	7	8

19. What features would you like to be introduced on the ADT machines or suggestions to improve ADT services?

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THANK YOU FOR YOUR TIME ☺