

Identifying factors that influence customer retention in a South African retail bank

By

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ABSTRACT

Customer retention plays a pivotal role in contributing to the profitability of retail banks. Within this extremely competitive market it necessitates retail banks to follow a structured, data-driven approach to identify “at risk” customers and to launch proactive retention campaigns based on identified drivers of customer attrition.

The following main drivers of customer attrition were identified in the retail bank:

- ✓ Attrition decrease as Vertical Sales Index increase.
- ✓ Attrition is lower where customers receive their salary in a BANKXX account.
- ✓ Attrition decreases as duration increases.
- ✓ Black and Coloured have a higher attrition rate than White and Asian.

A literature review was conducted to identify the possible independent variables of customer retention and the concept of the profitable customer was addressed throughout proposed conceptual model was developed, signifying the best fit to identify drivers of customer retention in the retail bank.

The analytical tool, SAS was used for data collection and statistical analyses of the data. This high-performance analytics assisted in providing the retail bank with valuable insight into how to successfully manage risk, retain profitable customers, improve operational efficiency and differentiate them in the marketplace for competitive advantage.

Key terms: Retail Banking, Customer Retention, Profitable customer, SAS

DEDICATION

This dissertation is dedicated to my Creator, my son Ruan Gouws, Clinton Haley and family for their understanding, support and encouragement through the three-year journey towards the completion of my MBA.

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LIST OF ABBREVIATIONS

ATM:	Automated Teller Machine
DDA:	Demand Deposit Accounts
GHOS:	Governors and Heads of Supervision
HTML:	Hypertext Markup Language
ILP:	Integrated Loan Processing
NCA:	National Credit Act
NCR:	National Credit Regulator
SAS:	Statistical Analysis System
TDA:	Term Deposit Accounts
VSI:	Vertical Sales Index

CHAPTER ONE

NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

Globally, the retail banking industry is facing extremely high debt levels, political turmoil, regulatory change, and evolving customer habits and as a result creating an environment more difficult than any the industry has experienced in decades.

Retail banks around the world are struggling to maintain their competitiveness in the face of severe external challenges such as massive debt loads threatening the global economy, and stringent regulations put in place as a result of the financial crisis of 2008 which resulted in hindering traditional revenue streams. More than ever, retail banks should strive to create stronger bonds with their customers. Having a long-term strategy and combining it with greater insight into customer behaviours and attitudes offers a compelling argument for greater retail banking success. While banks are making progress in this area, there is an identified gap realisation between customers' wants and needs on the one hand and the value proposition offered by retail banks on the other.

South Africa's financial services sector, backed by a sound regulatory and legal framework, is outstanding, boasting dozens of domestic and foreign institutions providing a full range of services including commercial, retail and merchant banking, mortgage lending, insurance and investment. The South African banking system is well developed and effectively regulated, comprising a central bank, a few large, financially strong banks and investment institutions, and a number of smaller banks. Many foreign banks and investment institutions have set up operations in South Africa over the past decade. The Banks Act (No. 90 of 1990) (SA, 1990) is primarily based on similar legislation in the United Kingdom, Australia and Canada.

South Africa's banking sector compares favourably with those of industrialised countries. Foreign banks are well represented and electronic banking facilities are

extensive, with a nationwide network of automatic teller machines (ATMs) and internet banking facilities available.

The Financial Services Board oversees the regulation of financial markets and institutions, including insurers, fund managers and broking operations but excluding banks, which fall under the South African Reserve Bank.

In a fast growing retail banking market there is pressure to sell, but if net client growth does not exceed that of the market, loss of market share will be the result. Several major groups dominate the South African banking sector, commonly known as the 'Big Four' – ABSA Bank Limited, The Standard Bank of South Africa Limited, FirstRand Bank Limited and Nedbank Limited.

The market share of these banks indicates that these four major banks represent about 84 percent of total banking assets, representing a highly competitive environment. Standard Bank is currently identified as the largest bank in terms of assets, with a market share of 31 percent, followed by ABSA with 25 percent. FirstRand and Nedbank with a market share of about 24 percent and 20 percent respectively. The slogan "Survival of the Fittest" best describe these statistics, which clearly indicates the importance of retail banks to constantly look for ways to distinguish themselves from the competition; to retain customers and at the same time improve the bottom line.

Retail banking is a regional business directly influenced by local cultural drivers, so global trends are few and far between. It is clear that as banks consider ways to rebuild trust, improve service to meet customer expectations, and reduce attrition; their efforts will need to be carefully tailored to the unique requirements of each domestic and regional market in which they operate.

More innovation, more rewards, more value, more savings and more self-service banking alternatives are truly relevant in the lives of all South Africans today, and as a result customer retention becomes the focal point in an ever present competitive retail banking market. This, however, brings in the opportunity of sparking innovation, access to, and the affordability of banking services. The South African public are the reason why these banks exist; and without competitors, banks would easily become

complacent and internally focused. Therefore, innovation, without a doubt, translates into offering to clients the best value proposition, with more product features, lower fees, significant savings, more ways to transact wherever and whenever they wish.

As such, the intention of customer retention strategies is to prompt consumers to evaluate what they're getting from their retail banks, compare this to the value proposition of their current bank and make up their own minds. There is certainly no better proof of a company's success than the following two dynamics:

- ✓ attract and retain new customers; in combination with
- ✓ sustainable new customer account growth.

A retail bank reflecting employee collective energy, passion and commitment supports the achievement of such a goal.

Improving customer retention through value insights gained by combining data analytics and knowledge of retail bank customers was highlighted in research done by Saubert (2009:33). These insights enabled retail banks to offer a value proposition which resulted in a decreased risk of customers defecting. Instead of gathering information from customers to evaluate their perception and trying to understand what makes the customer decide to stay or leave, the researcher has shown the value and opportunity for retail banks to make use of their own data analytics to understand which factors makes the customer more "sticky" to the retail bank.

Many retail banks fail to successfully retain their customers resulting in profit loss and therefore the need arises for retail banks to use customer data to produce actionable insights into reasons for attrition. These valuable internal bank specific data insights could in fact translate into less acquiring and higher customer retention rates, resulting in sustaining profits for the retail bank (Reed, 2006:37). The importance of driving customer value and reducing attrition should be underpinned by the thorough understanding and analysing of customer data. Therefore, valuable insight gained becomes the input of creating tailored offers and service propositions that would be positively received by customers in this competitive market.

The study provides guidance and valuable insights to leadership within retail banking, not only to have a comprehensive understanding as to where the retention problem lies and why customers are defecting, but also to help understand which elements to include in a well-designed customer retention strategy.

1.2 PROBLEM STATEMENT

The highly competitive South African retail banking industry reveals the on-going fight between banks to keep and retain their customers. To ensure sustainable profits pose a problem when acquiring customers due to high cost investment. Therefore, the problem of attrition is three-fold:

- ✓ How can we statistically identify customers at risk of defecting?
- ✓ How can we prevent the identified “at risk” customers from leaving the bank?
- ✓ Is it feasible to spend money to retain the “at risk” customer?

1.3 OBJECTIVES

Based on the various aspects and perceived customer retention problems within South African retail banking, several objectives of this study have been identified and documented. For purposes of this specific study, objectives will be differentiated in terms of primary and secondary objectives.

1.3.1 Primary objective

The primary objective of this study is to investigate and statistically analyse attrition rates of the retail bank customers and determine the impact/influence of selected factors on retail bank customer retention.

1.3.2 Secondary objective

In order to service the primary objective, the following secondary objectives are formulated, namely to:

- ✓ To perform a literature review on customer retention in the retail banking industry.
- ✓ Identification of the important factors of customer retention.
- ✓ Conduct an empirical evaluation of the impact of selected factors that influence customer retention within the selected South African retail bank.
- ✓ Address the research problem through a number of recommendations based on the results of the statistical analysis.

1.4 RESEARCH METHODOLOGY

To address the objective of this study and to test the proposed research questions, the research strategy will be divided into two main components, namely a literature review and empirical study.

1.4.1 Literature review

The literature review provides insights into the discussion and reason behind the selection of important factors influencing customer retention within a South African retail bank. In addition, the literature study serves as potential proof of the anticipated influence of these factors on customer retention.

An initial analysis of relevant secondary sources from the North-West University Library was included as listed below:

- ✓ Academic Journals
- ✓ Accredited Journals (JSTOR, SAGE)
- ✓ Business Source Premier
- ✓ Dissertations and Theses
- ✓ EbscoHost
- ✓ Emerald Insight Journals
- ✓ Google Books
- ✓ Google Scholar

1.4.2 Empirical study

The SAS Software program was used to extract, analyse and summarise data provided by the retail bank. SAS is a modular, integrated, hardware-independent system of software for enterprise-wide information delivery.

For the purpose of this study only the clients identified as profitable enough will be sampled and analysed. Profitable customers are defined and grouped by the chosen retail bank as a customer which earns between than 350k and 1.1 million per annum. This sampling method ensures the focus on factors influencing the retention of profitable customers' and non-profitable customers are to be excluded.

1.5 LIMITATIONS OF THE STUDY

The study is limited to one retail bank within South Africa. Focusing purely on one does not provide a holistic picture regarding factors influencing customer retention in retail banking within South Africa. The selected factors influencing customer retention in the other retail banks might differ vastly from the chosen retail bank. Therefore, the results should not be operationalised to other banks without having this constant in mind.

1.6 DEFINITION OF TERMS

Retail Banking

Banking services offered to individual customers through local branches and channels of the bank.

Basel framework

Essentially the Basel III framework represents the details of global regulatory standards on banking capital adequacy and liquidity as agreed to by the Governors and Heads of Supervision (GHOS), which is the oversight body of the Basel Committee and is endorsed by the G-20.

National Credit Act

The National Credit Act No. 34 of 2005 (NCA) is a recent addition to the protectionist legislation in South Africa. By regulating the credit industry, this Act aims to ensure that consumers do not fall prey to unscrupulous moneylenders.

National Credit Regulator

The National Credit Regulator (NCR) was established in terms of section 12(1) of the National Credit Act No. 34 of 2005 (SA, 2005) and came into being on 1 June 2006.

Customer Retention

The activity a selling organisation undertakes in order to reduce customer defection. Successful customer retention starts with the first contact an organisation has with a customer, and continues throughout the entire lifetime of a relationship.

Profitable customer

As defined by the retail bank, a retail bank customer with an annual income of 350k – R1.1 million deposited into the main bank.

Active Vertical Sales Index

The number of active accounts used as per attrition model, excluding value adds.

1.7 LAYOUT OF THE STUDY

Chapter 1: Introduction

Chapter one provides an introduction and background to the study as well as the detailed description of objectives and research methodology for the research.

Chapter 2: Literature review

Chapter two contains a thorough literature review concerning the topic of customer retention in the context of the retail banking industry. The focus of this chapter is to create a comprehensive understanding as to where the retention problem lies and why

customers are defecting are the focus, and on which type of customer is worth investing in.

Chapter 3: Research methodology and results

In Chapter three the empirical research methodology used in the study and the results are discussed in detail.

Chapter 4: Conclusions and recommendations

In Chapter four the empirical research results are evaluated in detail to establish if objectives were met. Thereafter the study is concluded and recommendations are made to provide guidance and valuable insights to leadership within retail banking. Further research is also proposed in this chapter.

1.8 SUMMARY

This chapter served as the introductory chapter of the study and provides a background in terms of literature, problem statements and research methodology.

The next chapter is a literature review, and examines retail banking globally, as well as in the South African context. In addition, the literature review focuses on defining customer retention and the importance of retaining customers in the retail banking industry. The important factors which influence retail banking customer retention are identified through the literature review.

CHAPTER TWO

CUSTOMER RETENTION WITHIN THE RETAIL BANKING INDUSTRY

2.1 INTRODUCTION

The literature review supports the importance of conducting a thorough research study of the retail banking industry trends globally and in the South African context. This review provides insights into the discussion and reason behind selection of testing variables for the empirical investigation. Furthermore, the literature review provides proof of potential and anticipated influence of testing variables on customer retention, whilst keeping in mind that the goal is to focus on identifying underlying customer retention, and not customer acquisition, factors.

2.2 RETAIL BANKING

2.2.1 Introduction

The traditional role of retail banking was established with the start of commerce, as many as 5000 years ago, as people made first use of currency. As a result, this necessitated customers seeking

- ✓ ways to secure their money; and
- ✓ ways to carry out transactions through a possible intermediary.

Consequently, the retail bank was the only way and means for customers to have access to essential financial services. However, the beginning of the 21st century was signified by the start of a new digital era when a distinct decline in the importance of a physical branch was evident. The physical branch was seen as just another channel to address the financial services need of the customer (SapientNitro, 2010). Entrance to new revolutionary customer banking behaviour was established by this new digital face

of banking, encouraging and potentially enabling customers to no longer visit the branch premises to access and operate accounts but to make use of convenience digital options such as digital applications for advanced mobile devices, Smartphones and tablets.

Research compiled by PwC (12th survey), confirmed the ever-changing characteristics of the new digital retail banking era; however, it also highlights strategic concerns going hand in hand with embryonic customer behaviour trends. The results of the study alluded to the changes and developments within the financial sector, which includes key concepts relating and contributing to the above mentioned changing face of banking. The study highlighted the contributing factors to the changing face of banking. Below a list of the factors:

✓ Regulatory changes:

- The introduction of Basel III is perceived as the power behind banks rethinking their business models.
- Complying with the Companies Act No 71 of 2008 (SA, 2008) enforces implementation of initiative to adapt to e.g. relaxation of audit requirements.
- Forced adjustments / changes to remuneration structures e.g. implement changes in bonus criteria.

✓ Technology:

- Shortcomings such as bandwidth and international connectivity are a growing concern.
- Commitment to increased financial outlay toward improved information technology platforms and processes.

✓ Innovation:

- The importance of innovation to warrant future success of banking electronic channels, with effectiveness and decrease cost driving innovations.

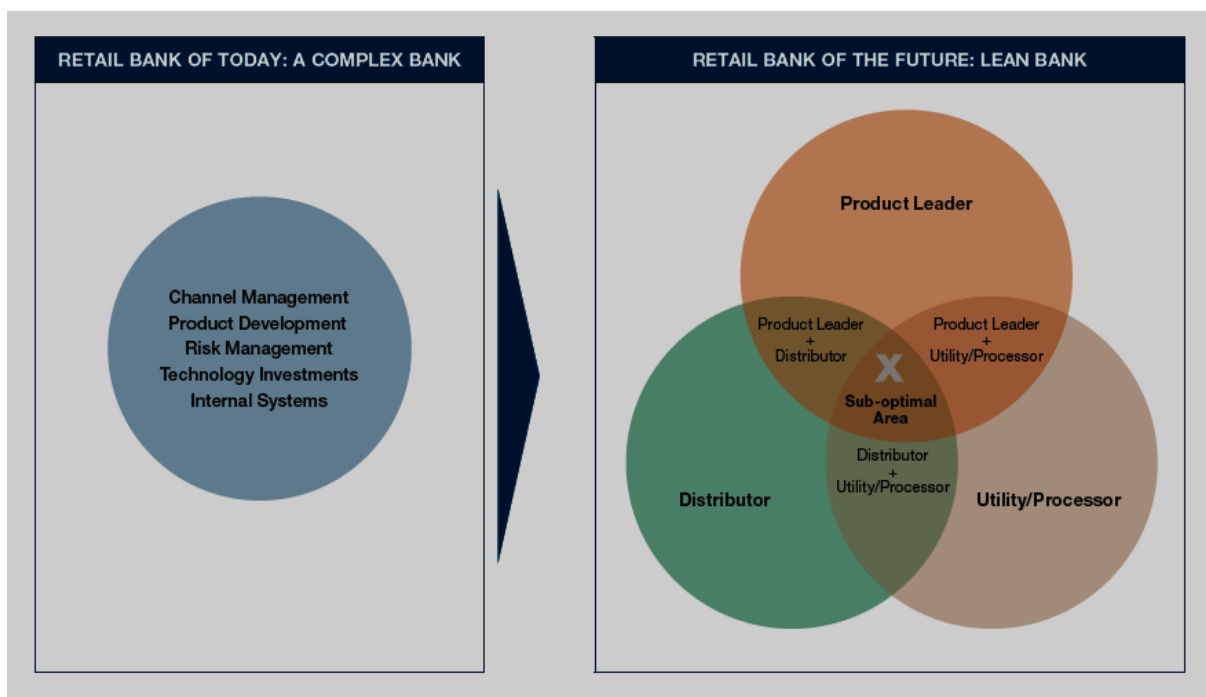
✓ Market dynamics:

- Increased competitive environment within the retail banking industry encourage strategy modification.
- Introduction of the National Credit Act No. 34 of 2005 (SA, 2005) and economic downturn (PricewaterhouseCoopers, 2011:7-9).

These contributing factors form part of an opportunity platform for retail banks to choose how to best serve the customer and satisfy customer demands (Ernst & Young Global Limited, 2011:31). In support to the contributing factors a major bank analysis study done amongst banking customers across nine development and emerging markets, clearly highlighting the current dilemma faced by retail banks in South Africa namely the choice to continue with traditional banking models, or to clinch innovative opportunities to engage and serve the customer in the way they desire (PricewaterhouseCoopers, 2012:38-40).

The choice of superior customer engagement and service was also evident in a study conducted by Campangeni and Efma (2012:32). The important differences seen between banking models of the future and the current complex model were investigated and emphasis was placed on the importance of retail banks to focus on their core strengths, in response to the evolving retail bank industry. Below is an illustration summarising the capabilities of a complex bank today and lean retail bank of the future.

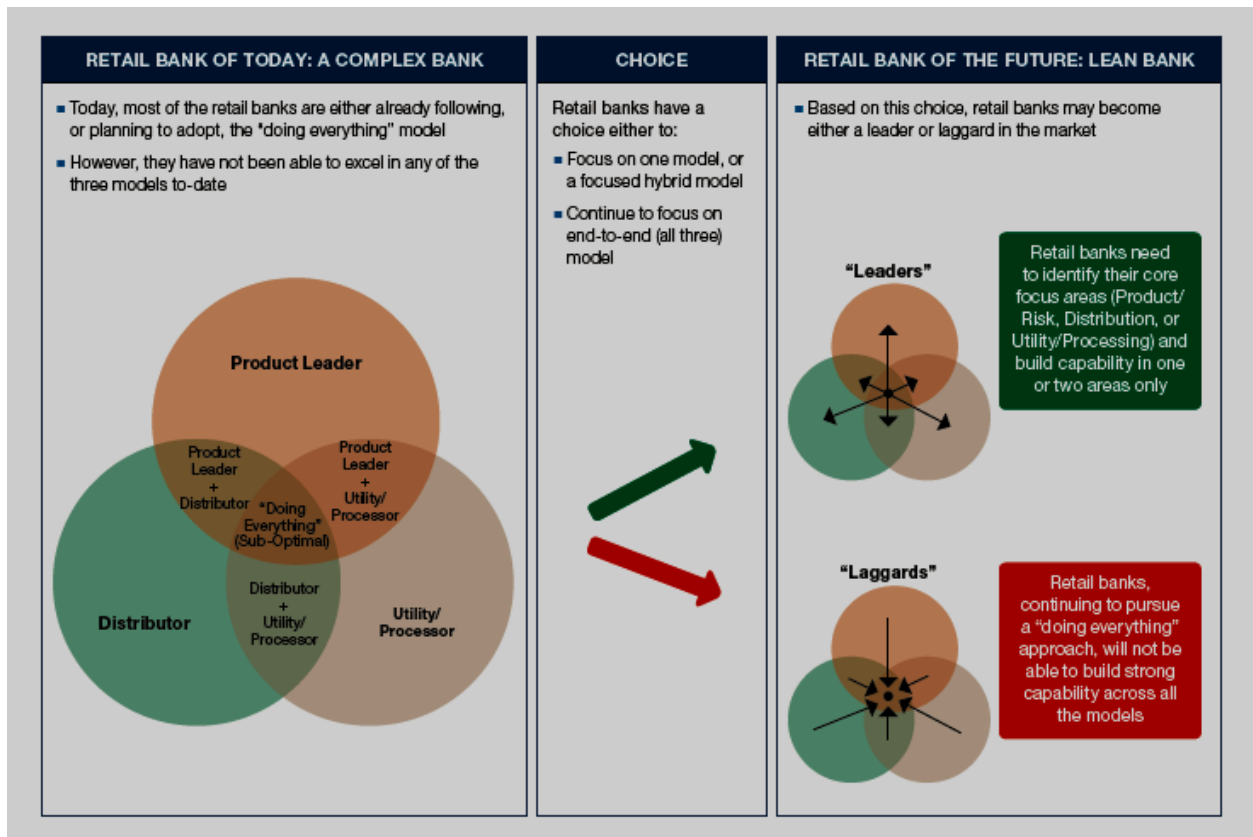
Figure 2.1: Learner Business Models



Source: Capgemini and Efma (2012:32)

The results of the study clearly indicated that retail banks that continue to follow an unfocused and undifferentiated approach may find themselves as laggards. Therefore, the choice retail banks are faced with either lead to leaders or laggards in the retail banking industry.

Figure 2.2: Path forward for retail banks



Source: Capgemini and Efma (2012:38)

2.2.2 Retail banking in South Africa

2.2.2.1 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, also converts deposits (a liability for the bank) into assets (loans). The bank earns interest income by paying less interest on the deposits received than the interest they charge on loans made.

Within the banking sector deposits from the public, mainly individuals and companies, remain the main source of funding for the banking sector. 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. Money could be borrowed from other banks or from the South African Reserve Bank.

Three sectors take part in the financial sector:

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

These sectors do not operate in isolation; as a result banks are involved in both the security (investment) and insurance business. 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. Banks know how much they owe to lenders, but they cannot be certain that all their assets will be repaid by borrowers.

- **Insurers:**

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

- **Investment and retirement organisations:**

These organisations 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 (Retail Bank, 2010).

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

- ✓ 17 registered banks;
- ✓ 2 mutual banks;
- ✓ 12 local branches of foreign banks; and
- ✓ 41 foreign banks with approved local representative offices.

These banks are listed below:

Table 2.1: List of banks in South Africa

Category	Banks
Registered banks – locally controlled	ABSA Bank Limited; African Bank Limited; Bidvest Bank Limited; Capitec Bank Limited; FirstRand Bank Limited; Grindrod Bank Limited; Investec Bank Limited; Nedbank Limited; Regal Treasury Private Bank Limited (In liquidation); Sasfin Bank Limited; Ubank Limited; The Standard Bank of South Africa Limited.
Registered banks – foreign controlled	Albaraka Bank Limited; Habib Overseas Bank Limited; HBZ Bank Limited; Islamic Bank Limited (In Final Liquidation); Mercantile Bank Limited;

	The South African Bank of Athens Limited.
Mutual banks	GBS Mutual Bank; VBS Mutual Bank
Foreign banks with approved local representative offices	AfrAsia Bank Limited; Banco BPI, SA; BancoEspirito Santo e Comercial de Lisboa; Banco PrivadoPortuguês, S.A.; Banco Santander Totta S.A.; Bank Leumi Le-Israel BM; Bank of Cyprus Group; Bank of India; Barclays Bank Plc; Barclays Private Clients International Limited; BNP Paribas Johannesburg; Commerzbank AG Johannesburg; Credit Suisse AG; Credit Suisse Securities (Europe) Limited; Ecobank; Export-Import Bank of India; Fairbairn Private Bank (Isle of Man) Limited; Fairbairn Private Bank (Jersey) Limited; First Bank of Nigeria; Fortis Bank (Nederland) N.V.; Hellenic Bank Public Company Limited; HSBC Bank International Limited; Icici Bank Limited; KfWIpex-Bank GmbH; Lloyds TSB Offshore Limited; Millenium BCP; National Bank of Egypt; NATIXIS Southern Africa Representative Office; Royal Bank of Scotland International Limited; SociétéGénérale Representative Office for Southern Africa; Sumitomo Mitsui Banking Corporation; 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

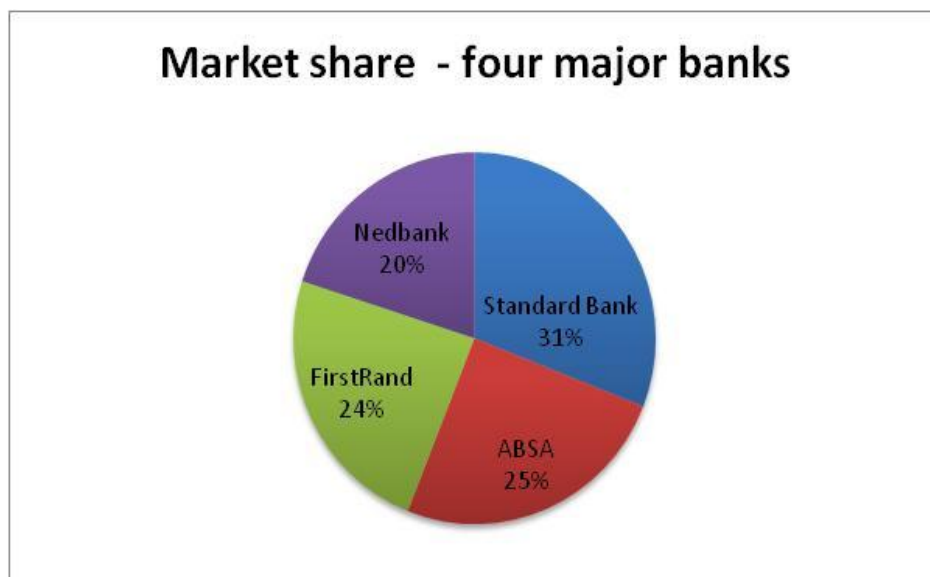
Source: The Banking Association South Africa (2011)

2.2.2.2 Major retail banks market share

Literature studies completed over the years have reported the link between market share and profitability, especially in the service industry (Abir & Chokri, 2010:17). The outcome of these studies associated higher return of investment with higher market share. Moreover, a retail bank with “deep pockets” have the ability to build large branch networks with the aim to drive out smaller banks, only if it would be profitable to do so compared to attracting customers of other retail banks. The above mentioned research done by Berger and Dick (2007:803-804) shows that there is a fraction of consumers that will stay with their present bank regardless, even if the bank have access to large amounts of capital and accumulated customer knowledge, it was evident that larger, multi-market entrants grow faster than smaller, single-market entrants.

The figure below indicates the current market share of the major banks in South, which gives a good indication of intensity of competition within the retail banking industry.

Figure 2.3: Market share of the four major banks



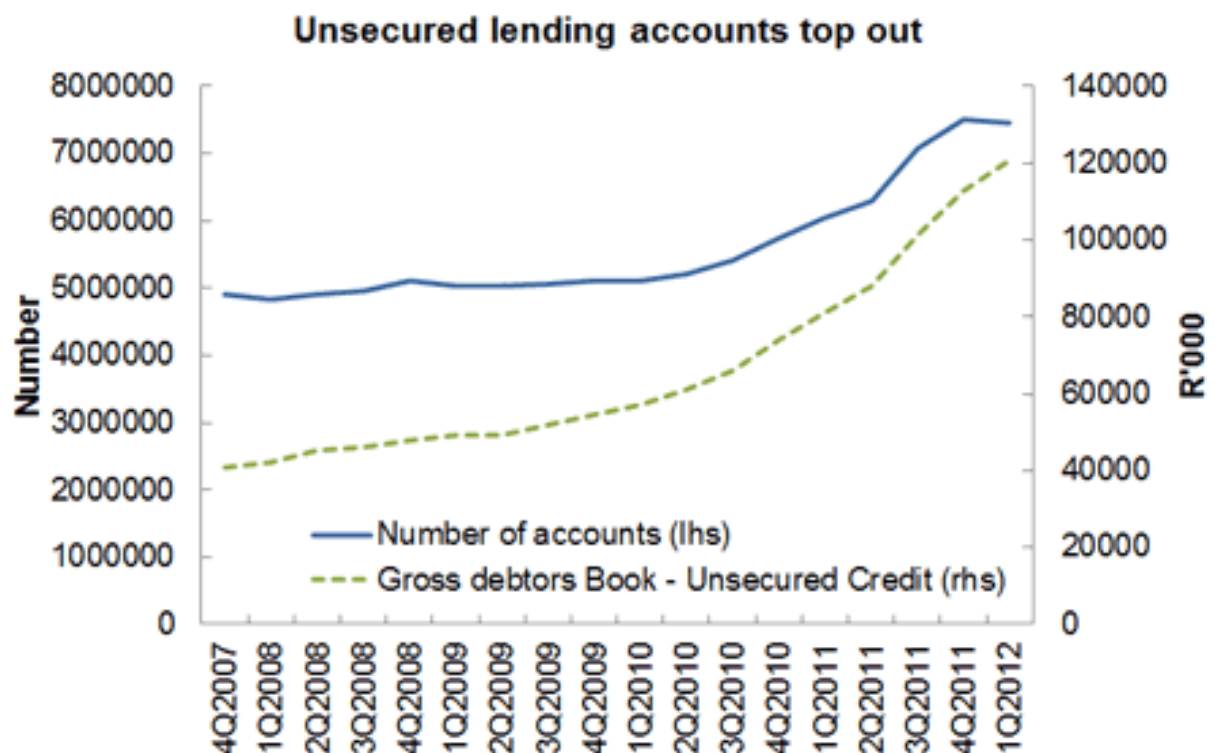
Source: South African Reserve Bank (2011)

It is evident that the retail banking industry in South Africa is experienced by all competitors as a cut throat industry, where only the most innovative bank can survive.

2.2.3 Impact of the global financial crisis

The global financial crisis deeply impacted South Africa in 2008, affecting customers' affordability and spending patterns, which resulted in an increased reluctance to take on debt (The Banking Association South Africa, 2011). The banking industry experienced varied results in the post-crisis phase from 2008 of which the aftermath of this crisis mirrored a sharp increase within the unsecured lending space, as indicated in Figure 4. This increase has been accompanied by a striking increase in lending by credit providers other than banks. Although commercial banks continue to supply in excess of 80% of total new consumer credit, credit extended by credit providers other than banks, non-bank vehicle financiers and retailers has grown fastest over the past two years. As seen below, the rush by other credit providers appears to have topped out in mid-2011 (National Credit Regulator, 2012).

Figure 2.4: Unsecured lending accounts



Source : I Net, National Credit Regulator

Source: National Credit Regulator (2012)

Furthermore, the growth rate of assets of the top 1000 banks globally in the post-crisis period remained 2.7%, compared to the double digit growth rates witnessed during the pre-crisis years of 2006 to 2007. On the flip side, significant recovery of risk management and profitability was witnessed. Profits returned to pre-crisis levels and the solvency of the industry illustrated significant improvement with growth of 3.8% registered in capital adequacy ratio during 2007 to 2010 (The Banking Association South Africa, 2011).

The credit crisis necessitated the application of stricter lending measures, such as the introduction of the National Credit Act No. 34 of 2005 and Basel framework. This resulted into heavy losses suffered due to increased administrative burden placed on banks to collect overdue accounts following. In addition, customers also deemed the crises to be the result of banks' under-capitalised and over-leveraged practices. This negative perception increased lack of trust for the industry as a whole, combined with the belief that banks are responsible for disrupting the wider economy (Ernst & Young, 2012:5).

A study done by Ernst and Young (2012:6-14) indicated the impact of this negative global customer perception on banking today, referring to the new customer era as an era where customers have a strong feeling of failure to trust their bank. Consequently, the importance of retail banks to constantly look for ways to distinguish themselves from the competition; to retain profitable customers and restore customer trust is clear.

With the global financial crisis, the banking industry as a whole was thrown into a deep end where banks globally were forced to either sink or swim.

2.12.3 CUSTOMER RETENTION

2.3.1 Introduction

Many definitions of customer retention have been identified by previous research, such as the study done by Liu and Wu (2007:132-133), where a definitive distinction was identified between customer retention and cross-buying. Customer retention was viewed as a measure of relationship continuation and cross-buying considered as

customer relationship development. This study will therefore view customer retention as a measure of relationship continuation.

Understanding the process and the relationship cycle of each customer is critical to increasing the retention rate and maximising lifetime value to the bank. This value translates into the revenue potential customers represent if banks are able to maintain their relationship through the customer lifetime (Clapp, 2007:40).

Relationship continuations shape the dividing of customer retention into three stages (Retail bank, 2012). The figure below illustrates the three stages:

- **Stage one: Early stage retention**

This stage is signified when the relationship between the bank and customer is between 0 and 12 months long. Low products' uptake and non-activation of accounts are evident and the focus of this stage is on activation and prevention of customer attrition through on boarding interventions. On boarding is the process of integrating customers into the organisation by ensuring they understand the value proposition purchased and the possible time value the bank offers beyond their initial purchase.

- **Stage two: Proactive prevention**

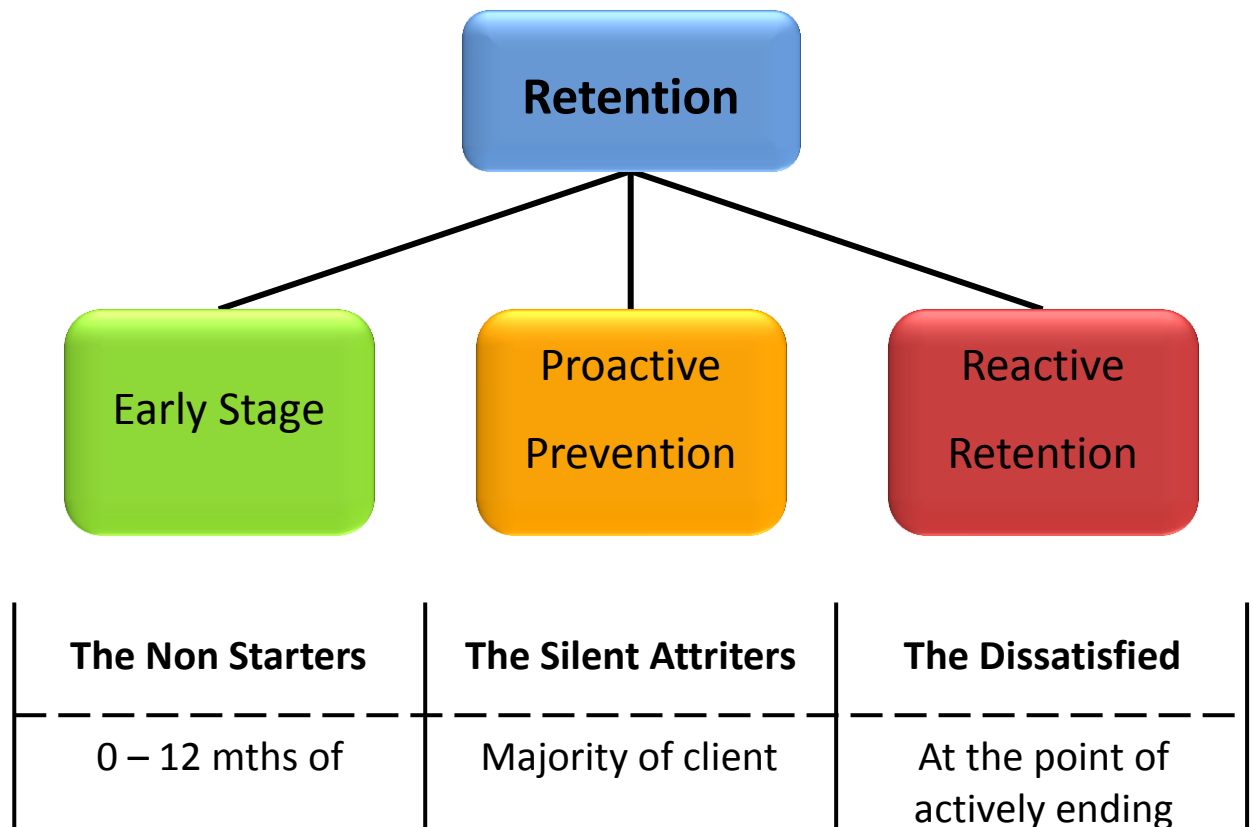
For the majority of the customer lifecycle the focal point of retention is proactive. The potential method of identification is trigger based, such as a decrease in account balance and switching of products. In response to the triggers, the retention tactics' focus is on recommending tailor-made product options and relationship calls.

- **Stage three: Reactive retention**

Reactive retention focus becomes relevant when customers are at the point of actively ending the relationship with the bank, mainly due to dissatisfaction. The customers to target are characterised as the most profitable. Potential retention tactics include offering of incentives. Reactive retention potentially are too late and too expensive, therefore focusing on the first two stages are vital.

Figure 2.5: Three stages of retention

There are 3 stages of retention



Source: Retail Bank (2012)

2.3.2 Importance of customer retention in retail banking

- **Cost versus benefit**

Rootman et al. (2008), found in the execution of retail banking services, the building of a long-term customer or client relationship is seen as central to improve business performance. Specific to service industries, such as banking, the relationship with the customer influences satisfaction, support and retention of the customer relationships.

Remembering that good customer service is only one of the many factors that should be taken in consideration by leadership and management to form part of their customer retention strategies.

Furthermore, many literature studies such as Symonds et al. (2007:4) have alluded to the fact that customer retention is an important factor and role-player in the profitability of an organisation; therefore, a thorough analysis, investigation and understanding of customer retention factors can close the gap between customer retention and customer attrition.

Research as mentioned below has strongly suggested that there is a high correlation between customer retention and company profitability and therefore places emphasis on the value of the customer to the retail bank. A small increase in customer retention rate can translate into much higher increases in profits (Anvari, 2010:17-18). Also, emphasised by Moller (2007:1-2) and Drotskie (2008:22), retail banks should proactively understand and address the changing needs of customers. The ability of a retail bank to address and improve the overall customer experience (service quality, satisfaction) will not only result in higher profitability, but will strategically differentiate it from the competitors.

Although there is a strong correlation between customer retention and profitability the value of the customer needs to be identified to ensure focused customer retention strategy formulation. Research done by Panda (2006), Reed (2006:37), Haenlein et al. (2007:221-222), and Symonds et al. (2007) highlighted the importance of Customer Life-Time Value (CLTV) calculations in service organisations to identify the most valued customers on the basis of their net-worth to the company. The studies found that the CLTV concept allows a service organisation to decide how much it's worth spending on each customer and therefore forms part of the customer retention strategy formulation.

The influx of consumers switching banks reflects the superior value proposition, unique and distinctive products and services. The view from the competing retail banks would be that of concern, even discomfort. However, by welcoming a competitive and customer focused banking environment it creates a platform to continue to be recognised as a banking brand driven by the desire to aggressively compete to directly

benefit customers. As a result, customers experience a wide variety of choices linked to traditional or modern retail bank offerings.

It is evident in the aforementioned studies that sustainable profits are a reflection of a retail bank's ability to retain customers, therefore it makes sense for retail banks to identify customers that are more likely to be at risk of attrition.

- **Customer experience**

The retail banking industry of today are signified by new competitors, new channels and new business models emerging swiftly, as a result placing an immense focus on the importance of building and sustaining enduring, rewarding relationships with the customer.

The economic crisis rattled the trust and confidence related to banking and these two factors are now perceived as being at an all-time low, due to the popular belief that profit obtains preference in comparison to customer service.

Research done by Peppers and Rogers Group (2011:12) confirmed that traditional retail banks across the globe show slow progress in the effective management of customer expectations and perceptions due to the existence of low trust and confidence levels.

The results of the study confirmed the following reasons for slow progress:

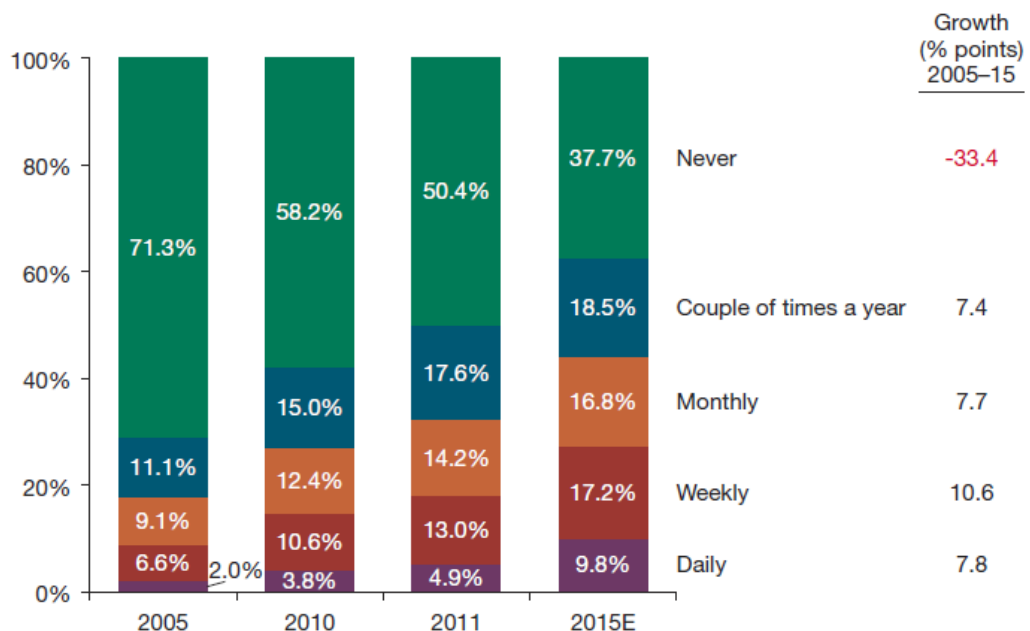
- ✓ Cost cutting which restricts the resources that can be dedicated to improvement of customer service.
- ✓ Lack of clear focus and measurement.
- ✓ Product centric mindset.

Peppers and Rogers Group (2011:10) defines trust as “a company's ability to do things right (competency) and do the right things (goodwill)”. The link between trust and customer experience excellence, as illustrated by Peppers and Rogers Group Customer Experience framework (2011:20), reveals that trust is one of the key contributors to moving from a good to excellent customer experience.

- **Technology**

The link between technology and customer retention can be related to the report published by Capgemini and Efma (2012), which highlights the role of mobile banking in improving the overall customer experience, as seen in Figure 6. While mobile banking adoption is still low, it could become an extremely compelling channel for large numbers of customers. Therefore, gaining a better understanding now of how to shape positive experiences through mobile technology can position banks for the future with favourable market share relating to improved profits.

Figure 2.6: Mobile banking usage statistics



Source: Capgemini and Efma (2012)

Furthermore, literature studies over the years have taken into account models and theories which contribute to identifying determinants of technical advancement and innovation adoption, including the usage of new technology. One of these studies was done by Yousafzai et al. (2006:3-7).

Theories such as the theory of reasoned action, theory of planned behaviour and technology acceptance models (TAM) were used in the literature review to help identify factors that influence banks customers' internet usage custom of performing banking activities while forsaking visits to the retail bank branches, as a result predicting the adoption of Internet in banking services. The TAM has been tested in many research studies (Mangin et al., 2011:366; Adamson & Shine, 2003;Gapar et al., 2011; Jaradat & Twaissi, 2010; Wang et al., 2003) and the common findings strongly support the appropriateness of using TAM as a platform to understand the intention of people to adopt electronic banking services, such as Internet Banking.

The technology acceptance by customers of retail banking is especially relevant due to the modification of banking channels from traditional to electronic models. In addition, the understanding of different technology acceptance model approaches assists with customer behaviour understanding, signified by the shift toward electronic banking models.

Literature has questioned the degree to which customer interaction with the bank has been replaced with electronic banking (e-banking) channels. However, the above research focuses on technology acceptance by customers which highlights the importance of retail bank customer retention strategies alignment with the global, revolutionary development of e-banking.

Furthermore, within the White Paper on Financial Services (US, 2011:10), extensive insight was gained into the technology acceptance potential of the youth market. This research as compiled by Peppers and Roger Group (2011:10) gave extensive insight regarding technology acceptance of the youth market. The results of the study revealed the importance of the bank growth along with the customer life cycle growth and well-designed retention strategies supporting long-term relationships building within the youth market. Retention strategies such as understanding the customer, tailor-made value propositions, customised marketing, product and pricing were identified:

- ✓ understanding key characteristics of the customer
- ✓ tailor-made value propositions
- ✓ customised marketing campaigns
- ✓ customised product and pricing packages

- ✓ service levels based on potential for relationship to grow

The new technology era of banking is seen to be not only relevant to the youth market but to all customer groups. Valuable insight gained from customers such as demographics, common banking needs and interests, as well as what customers are looking for in a relationship with a bank enrich the value propositions that cultivate trust and lifetime value across multiple customer groups.

The competitive retail banking environment as witnessed in the above, mirrors the fierce competition experienced, in addition stressing the importance of banks to concentrate on retaining their profitable customer base.

2.3.3 Important factors influencing customer retention

A clear view is created throughout the literature relating to the changing face of retail banking, in addition, it highlights the importance of customer retention to ensure sustainable profitability and competitive advantage. However, customers are really a company's scarcest resource, not capital nor products (Peppers & Rogers, 2011). In addition the question of how much investment for how "nice" a relationship also pertains to customer retention.

Therefore, the below identified factors are viewed as important factors when considering successful retention of retail bank customers.

2.3.3.1 Description of customer retention factors

- **Income**

The justification is that customer income profiles differ and will influence their buying behaviour. For instance, the value proposition offer to an affluent customer (e.g. electronic banking) will differ to a customer with an annual income of < 100k (e.g. simplistic transaction procedures). For the purpose of the study categories by income is defined as mentioned in the proposed conceptual model (Global Trade Media, 2011).

- **Length of relationship (Duration)**

The longer a customer is at a retail bank the less likely the customer will be to move, therefore time period is defined as the time that the customer has been with the retail bank until time of measurement.

Berndt *et al.* (2005:81) researched the steps of customer relationship management, well-known as the development and preservation of equally beneficial long-term relationships with strategically significant customers. Certain conditions or circumstances could lead to termination of this relationship, hence the significance of determining the customer value to the financial institutions.

- **Vertical Sales Index**

Given the broad and multifaceted range of banking products available to customers, the fit between the various product offerings and customers' needs enhances customer retention. For a well-equipped bank with customer-specific information, it is easier to direct and modify their communications and optimise product mix offerings (Maharaj, 2008:29). The more deep-rooted the customers, the less likely they are to leave, therefore the complexity of products can be simplified through grouping of products as a vertical sales index measure. This grouped product mix relates to the number of active accounts used. Each type of product is only counted once, including value adds.

- **Age:**

Tesfom and Birch (2010:372) argue that the influence of switching barriers on bank customers is not the same across different age groups. For instance, since more mature (older) customers are more established than younger customers, switching barriers can have a higher impact on them. They also highlighted the importance of retail banks to obtain a comprehensive understanding of how switching barriers affect each customer group, assisting banks to design a relationship marketing strategy. Therefore, it enables retail banks to attract new young and older customers who are ready to switch from other banks. With regard to this research study there is a critical need for retail banks to understand how age affect the retention of customers.

- **Race:**

Research done by Lopez *et al.* (2007:261-262) indicates that ethnic diversity is a growing occurrence in cut-throat industries such as banking. It affects how these organisations attract and retain their customers. This phenomenon is particularly significant in the service industry, where product offerings are perceived by customers to be homogeneous. Hence, it makes sense to provide products that differentiate itself from the next. The South African retail banks operate in ethnically diverse markets, which is evident in the South African racial make-up. Therefore, banks face a multifaceted challenge of understanding different ethnic customer perceptions.

- **Main bank:**

Research compiled by Roy and Shekhar (2010) highlighted the importance of establishing trust as an element of corporate image, relating to competitive advantage for service organisations and improved financial performance. For the purpose of the study the main bank is established through identifying whether a customer receives its salary in their cheque account.

- **Service channels**

Competitive environment and complexity depicts the South African retail banking industry. It is essential for banks to offer different service channels to establish, develop and improve customer relationships as defined in research done by Van Ravesteyn (2005). This study investigated the effect of the relationship banking offering on customer loyalty, and its use in realising customer loyalty and long-term value from relationship. Relationships with the most important asset, the customer can be fulfilled through either a dedicated banker, general banker (call centre) or a physical branch.

2.3.3.2 Summary of customer retention factors

The table below summarises the important customer retention factors identified in the comprehensive literature study. The following factors have been identified as possible drivers of customer attrition:

Table 2.2: Possible customer retention factors

Year	Author/s	Customer retention factor
2008	Nayak and Beckett	Income
2008	Teller Vision	Income
2009	Yunus	Income
2011	Global Trade Media	Income
2006	Panda	Relationship length (Duration)
2006	Reed	Relationship length (Duration)
2007	Hainlein	Relationship length (Duration)
2007	Liu and Wu	Relationship length (Duration)
2007	Symonds	Relationship length (Duration)
2008	Rootman et al.	Relationship length (Duration)
2007	Moller	Vertical Sales Index
2007	Liu and Wu	Vertical Sales Index
2008	Drotskie	Vertical Sales Index
2011	Pepper and Roger Group	Vertical Sales Index
2003	Adamson and Shine	Age
2006	Yousafzai	Age
2010	Jaradat and Twaissi	Age
2010	SapientNitro	Age
2011	Mangin et al.	Age
2011	Gapar et al.	Age
2011	Pepper and Roger Group	Age
2012	Capgemini	Age
2007	Lopez et al.	Race
2007	Armstrong and Haiss	Race
2008	Kozloski Hart et al.	Race
2009	Yunus	Race
2010	Mokhlis	Race
2012	Pepper and Roger Group	Race
2012	Capgemini and Efma	Race

2005	Van Ravesteyn	Service Model/Channel
2006	Van Ravesteyn and Ackermann	Service Model/Channel
2008	Moller	Service Model/Channel
2009	Drotskie	Service Model/Channel
2010	Bick et al. (record 2)	Service Model/Channel
2011	Rootman et al.	Service Model/Channel
2006	Beaujean and Davidson	Main Bank
2007	Baumann et al.	Main Bank
2007	Liu and Wu	Main Bank
2008	Lymperopoulos	Main Bank
2010	Roy and Shekhar	Main Bank
2011	Rootman et al.	Main Bank
2006	Yousafzai et al	Technology
2011	Peppers and Roger Group	Technology
2012	Capgemini	Technology

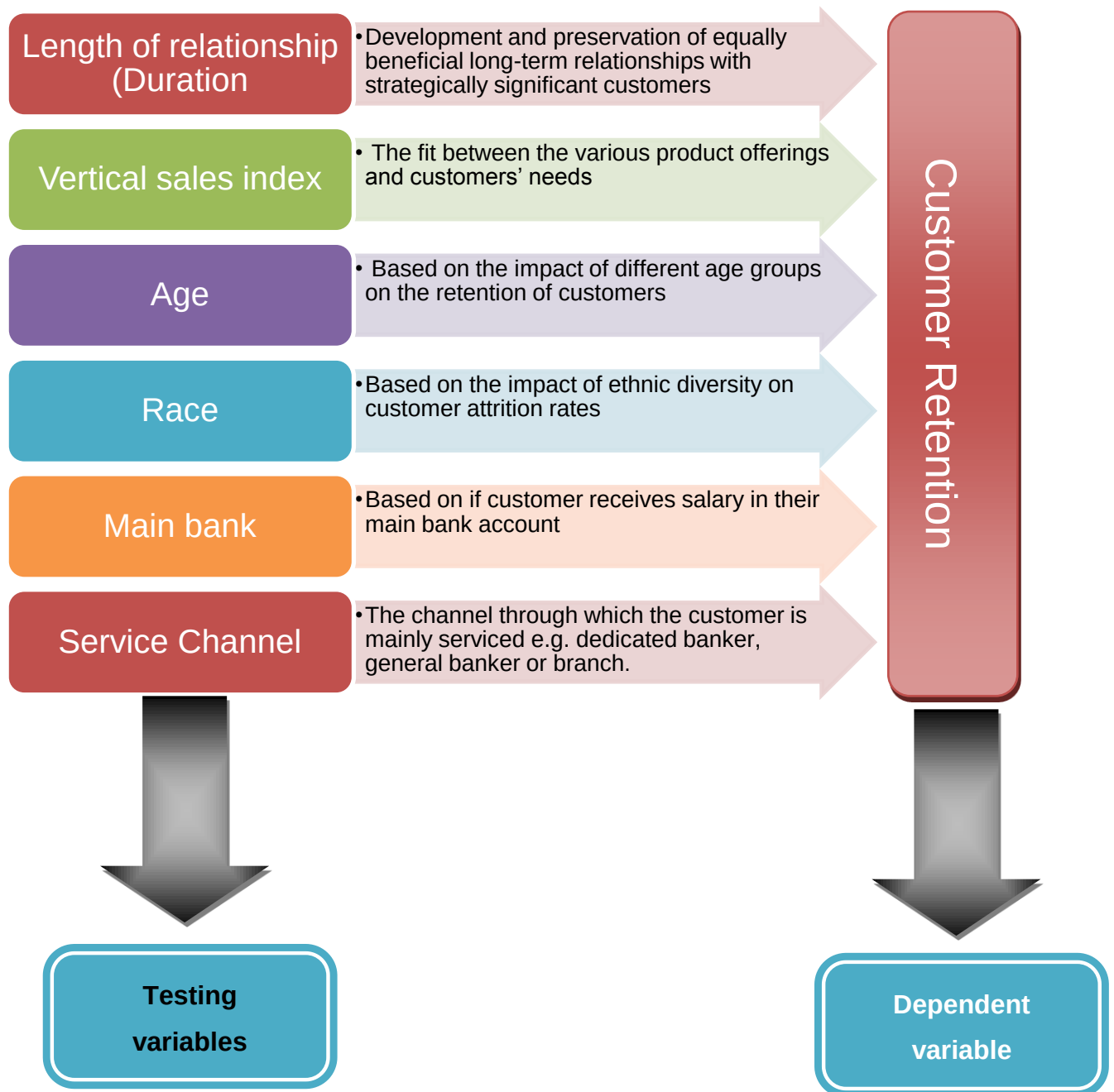
The above summary of possible factors influencing customer retention emphasises the importance for retail banks to investigate factors which can influence customer attrition, which in turn forms the basis for developing successful customer retention strategies.

2.3.3.3 Theoretical conceptual model

A theoretical conceptual model was designed by taking into consideration the important customer retention factors identified.

The model will measure attrition on each factor independently. The dependence between each variable will then be tested through a consistency test.

Figure 2.7: Proposed conceptual model: Drivers of customer retention in retail bank



2.22.4 SUMMARY

Chapter 2 provided the literature research as foundation to the empirical study. The chapter deals with two major components, namely the concept of retail banking globally and specific to South Africa, and the significance of customer retention to the organisation. The concept of profitable customers is addressed throughout the discussions. The proposed conceptual model was regarded as the best fit to identify drivers of customer retention in the retail bank.

The research methodology and the results of the empirical study are discussed in the following chapter.

CHAPTER 3

RESEARCH METHODOLOGY AND RESULTS

3.1 INTRODUCTION

This chapter presents the research methodology and includes the data collection, the Statistical Analysis System (SAS), the statistical analysis and the results of the study. Tables and figures are utilised to represent the data and the results of the empirical study.

3.2 RESEARCH METHODOLOGY

3.2.1 Research paradigm

The positivistic research paradigm is proposed for the research and is alternatively known as quantitative approach. The positivist approach holds that research must be limited to what can be observed and measured objectively, which exists independently of the feelings and opinions of individuals. This natural-scientific approach strives to formulate laws that apply to populations and explain the causes of objectively observable and measurable behaviour.

Quantitative research, which is based on positivistic methodologies, is undertaken by means of controlling the situation and using remote, empirical inferential methods. A quantitative approach therefore involves collecting and analysing data that can be mathematical and/or statistically interpreted and analysed (Collingridge & Gantt, 2008:389-390).

Given the nature of the problem statement and research objectives the positivistic approach seems to be the most appropriate to gauge the influence of the selected factors on customer retention within the retail bank.

3.2.2 Statistical method

3.2.2.1 SAS System

The literature review revealed that the SAS Software system can be used to extract, analyse and summarise data provided by the retail bank. SAS is a modular, integrated, hardware-independent system of software for enterprise-wide information delivery. This software has the ability to:

- ✓ Make enterprise data a generalized resource available to any user or application that requires it, regardless of the source of the data.
- ✓ Transform enterprise data into meaningful information for a broad range of applications.
- ✓ Deliver critical information through a variety of interfaces that are tailored to the needs and experience of the individual user.
- ✓ Perform consistently across a broad range of hardware environments while exploiting the particular advantages of each environment (SAS Institute Inc., 2008:262).

SAS integrates all of the above mentioned elements into a powerful software system, in addition views virtually any application as a collection of data-driven tasks or processes. This software system is a set of solutions for enterprise-wide business users and provides a powerful fourth-generation programming language for performing tasks such as the following:

- ✓ data entry, retrieval, and management
- ✓ report writing and graphics
- ✓ statistical and mathematical analysis
- ✓ business planning, forecasting, and decision support
- ✓ operations research and project management
- ✓ quality improvement

- ✓ applications development

With SAS software as the foundation, it is possible to integrate with SAS many SAS business solutions which enable large scale business functions. Examples include data warehousing and data mining, human resources management and decision support, and financial management and decision support (SAS Institute Inc., 2011:4).

3.2.2.2 SAS Language Elements

SAS language elements were used to perform specific tasks. This language consists of statements, expressions, options, formats, and functions similar to those of many other programming languages. In SAS, these elements were used within one of two groups of SAS statements:

- ✓ DATA steps
- ✓ PROC steps

A DATA step consists of a group of statements in the SAS language that can perform the following tasks:

- ✓ read data from external files
- ✓ write data to external files
- ✓ read SAS data sets and SAS views
- ✓ create SAS data sets and SAS views

Once the data provided was accessible as a SAS data set, analysis of the data and writing of reports followed by making use of a set of tools known as SAS procedures.

A group of procedure statements is called a PROC step. The SAS procedures was used to analyse data in SAS data sets to produce statistics, tables, reports, charts, and plots, to create SQL queries, and to perform other analyses and operations on the data supplied by the retail bank(SAS Institute Inc. 2011:6).

3.2.2.3 SAS Software

The core of the SAS System is Base SAS software, which consists of the following:

- ✓ **DATA step**
Programming language that is used to manipulate and manage data.
- ✓ **SAS procedures**
Software tools for data analysis and reporting.
- ✓ **Macro facility**
A tool for extending and customising SAS software programs as well as reducing text in programs.
- ✓ **DATA step debugger**
Programming tool that helps to find logic problems in DATA step programs.
- ✓ **Output Delivery System (ODS)**
This system delivers output in a variety of easy-to-access formats, such as SAS data sets, procedure output files, or Hypertext Markup Language (HTML).
- ✓ **SAS windowing environment:**
An interactive, graphical user interface that enables easily run and test of SAS programs (SAS Institute Inc. 2011:3-4).

For the purpose of the study the aim was to make use of a statistical measuring instrument which can determine the impact of selected factors on customer retention, therefore the SAS software program was chosen as the measuring instrument of choice. DATA step and SAS procedures were used to manipulate and analyse data, as well as report on the data.

3.2.3 Sample

For the purpose of this study predetermined criteria by the retail bank was used to identify profitable customers as the sample group. Profitable customers are defined and grouped by the chosen retail bank as a customer which earns between 350k and R1.1 million per annum. The sample size equates to 600 000 customers, in addition this

sampling method ensures the focus on factors influencing the retention of profitable customers' and non-profitable customers are to be excluded.

3.2.4 Data collection

SAS Software system was used to extract, analyse and summarise data provided by the retail bank by means of SAS Data Steps and Proc SQ Steps.

3.2.4.1 SAS Data Steps and ProcSQSteps

SAS programs are made up of distinct steps, and each one is completed before it moves on to the next one. Data steps are written by the person who extracts the data e.g. actuary and primarily used for data manipulation (hence the name) though in theory supports analysis.

Proc steps are pre-written programs made available as part of SAS. The code may look similar to a data step in some ways, but the code in a proc step is not giving SAS step-by-step instructions to execute. This enables the user to control how the proc step runs. A few simple procedures (Proc) during the course of this study will be used; more details are available on the SAS support website (SAS Institute Inc., 2012).

3.2.4.2 Technical detail of Data steps and ProcSQSteps

A step starts with either the word data or the word proc, and ends with the word run. The run; is often not strictly required, as SAS will assume the start of a new step when it recognises data or proc.

- Proc SQ steps:
 - ✓ **PROC SQL** options:
 - ✓ **SELECT** column(s)
 - ✓ **FROM** table-name | view-name
 - ✓ **WHERE** expression
 - ✓ **GROUP BY** column(s)
 - ✓ **HAVING** expression
 - ✓ **ORDER BY** column(s);

➤ **QUIT;**

- Options to use in proc SQL:

- ✓ The INOBS=, OUTOBS=, and LOOPS= options reduce query execution time by limiting the number of rows and the number of iterations that PROC SQL processes.
- ✓ The EXEC and VALIDATE statements enable you to quickly check the syntax of a query.
- ✓ The FEEDBACK option displays the columns that are represented by a SELECT * statement.
- ✓ The PROC SQL STIMER option records and displays query execution time.

- Proc FREQ steps

- ✓ **PROC FREQ**<options>;
- ✓ **BY**variables;
- ✓ **EXACT** statistic-options < / computation-options>;
- ✓ **OUTPUT**<OUT= dataset>options;
- ✓ **TABLES** requests < /options>;
- ✓ **TEST**options;
- ✓ **WEIGHT**variable;
- ✓ **RUN**;

These options are described as follows:

- ✓ **BY** calculates separate frequency or cross tabulation tables for each BY group.
- ✓ **EXACT** requests exact tests for specified statistics.
- ✓ **OUTPUT** creates an output dataset that contains specified statistics.
- ✓ **TABLES** specify frequency or cross tabulation tables and requests tests and measures of association.
- ✓ **TEST** requests asymptotic tests for measures of association and agreement.

- ✓ **WEIGHT** identifies a variable with values that weigh each observation.

All of the above are data manipulation tools and no statistical confidence is needed.

2.33.3 STATISTICAL ANALYSIS

The data selected for the study was analysed by making use of the SAS System, which provides extensive statistical capabilities. The SAS software was used for the statistical analyses of the following:

3.3.1 Calculating Attrition

The calculation of attrition rate for identified customer retention factors included the gathering of data sources to determine account and customer statuses. Thereafter the status flow was measured in different intervals, in addition for each measure period the process was repeated 12 times to get more stable results. Lastly, a definition which was used to determine customer attrition rates and customer inactivation rates was established.

Below a breakdown of the details covered in the calculation of customer attrition rates:

3.3.1.1 Account and Customer Status

All of the account statuses from the following data sources were gathered:

- ✓ Demand Deposit Accounts (DDA):
DDA relates to Cheque, Savings and Transmission accounts
- ✓ Term Deposit Accounts (TDA)
TDA relates to Investment accounts
- ✓ Integrated Loan Processing (ILP)
ILP relates to Mortgage Loans and Personal Loans
- ✓ Vehicle finance
- ✓ Credit Card

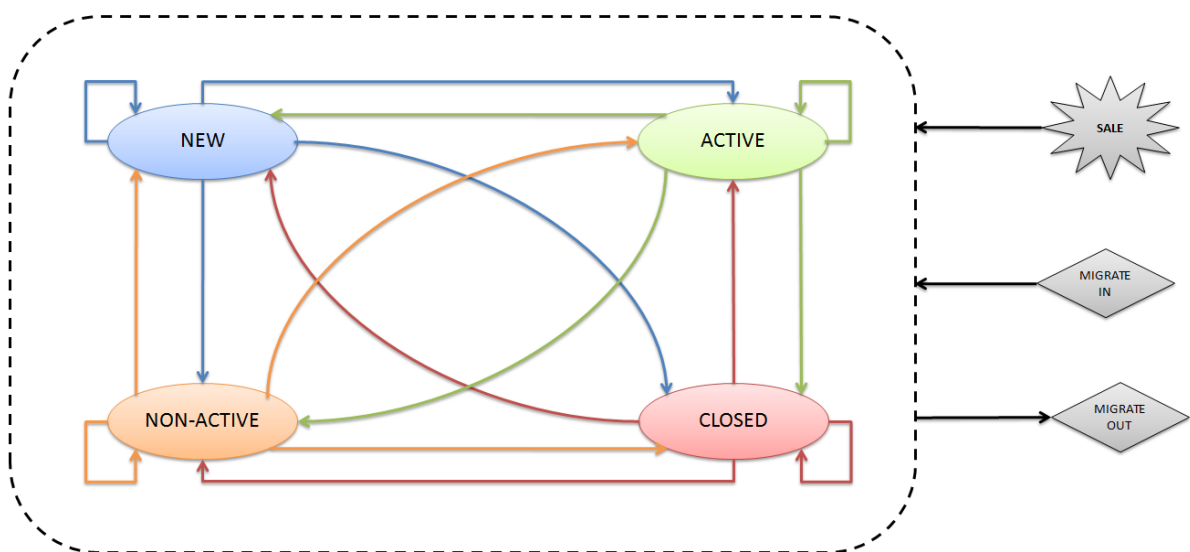
The customer status can be classified as stated below:

- ✓ Active: If any one account is active, the customer will be deemed as “Active”.
- ✓ New: If no accounts are active but at least one account is new, the customer will be deemed as “New”.
- ✓ Closed: If all accounts are closed, the customer will be deemed as “Closed”.
- ✓ Non-Active: Otherwise the customer is deemed as “Non-Active”.

3.3.1.2 Status Flow

The following status flow was measured:

Figure 3.1: Measured Status Flow



Source: Retail bank (2012)

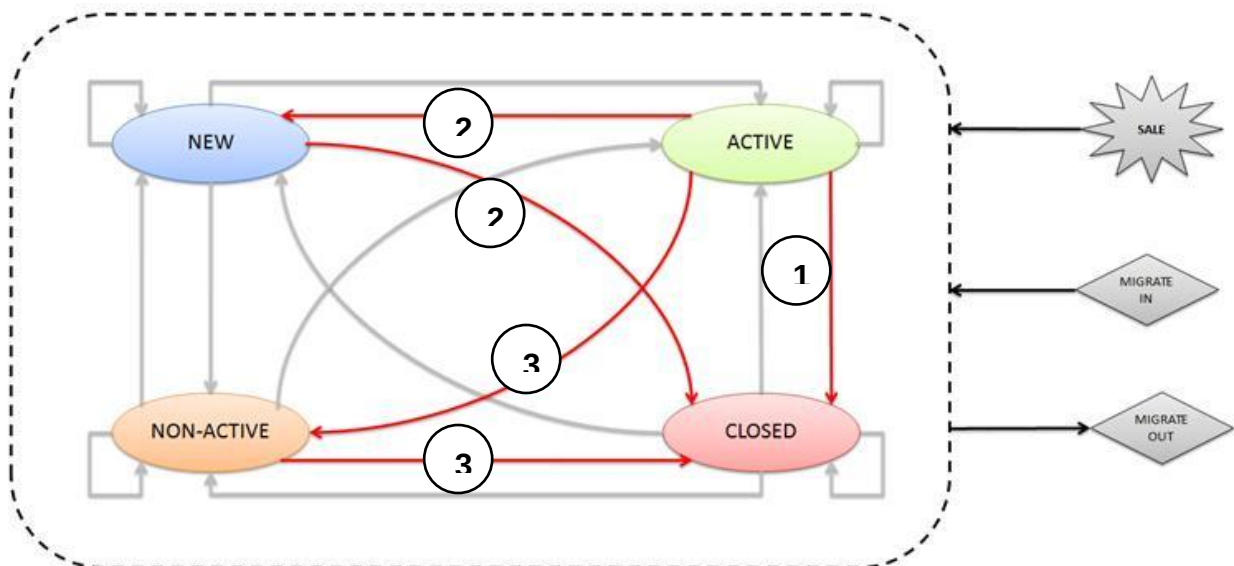
The above mentioned status was measured with the following intervals: annually, bi-annually, quarterly and monthly.

3.3.1.3 Definition: Customer attrition and inactivation rates

The following definition was used to determine *customer attrition rates*: A customer has to be alive and active at the start of the period and closed at the end of the period.

The three movements are shown below in Figure 9.

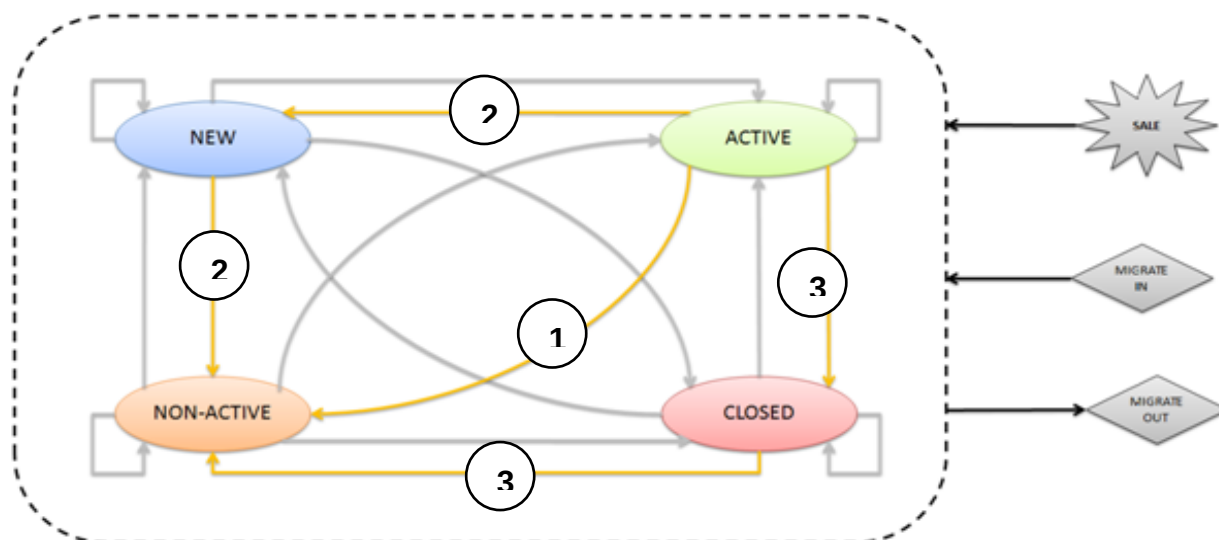
Figure 3.2: Customer attrition rates



Source: Retail bank, 2012

The following definition was used to determine *customer inactivation rates*: A customer has to be alive and active at the start of the period and inactive at the end of the period. The three movements are shown below in Figure 10.

Figure 3.3: Customer inactivation rates



Source: Retail bank, 2012

3.3.2 Drivers of Customer Attrition

3.3.2.1 Possible Drivers

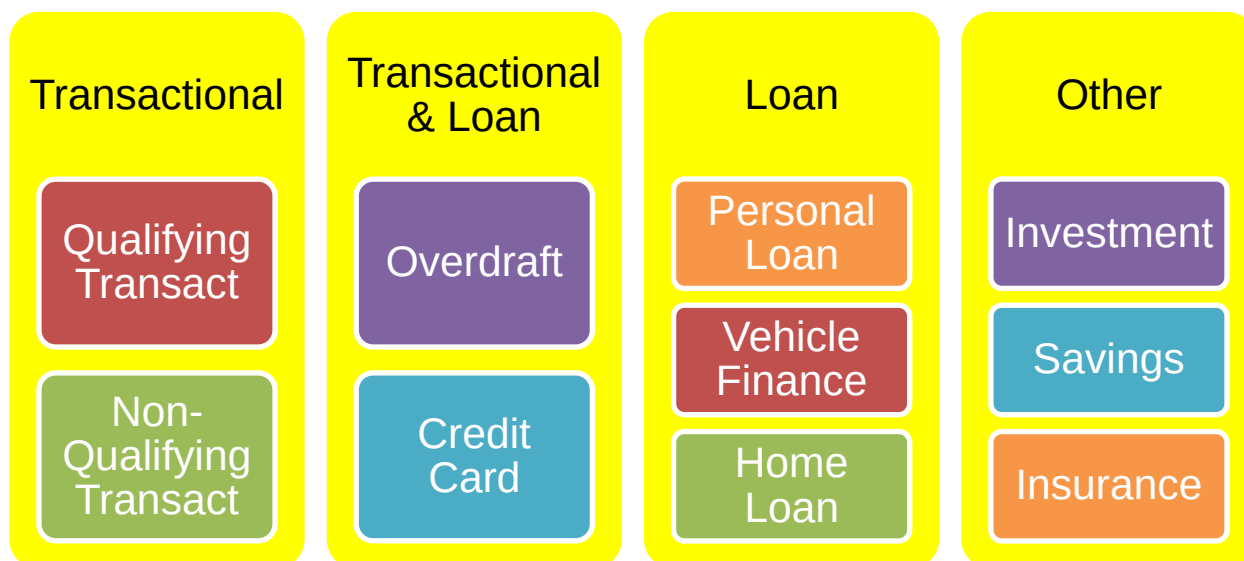
The factors identified as possible drivers of customer attrition are illustrated in Table 3.

Table 3.1: Possible drivers of customer attrition

Demographics	Product Holding	Type of Relationship
Age	Active Vertical Sales Index	Duration (Length of Relationship)
Race		Main Bank
Income Estimate		Service Channel

The number of active accounts used in the statistical analysis, can be viewed in detail in Table 4.

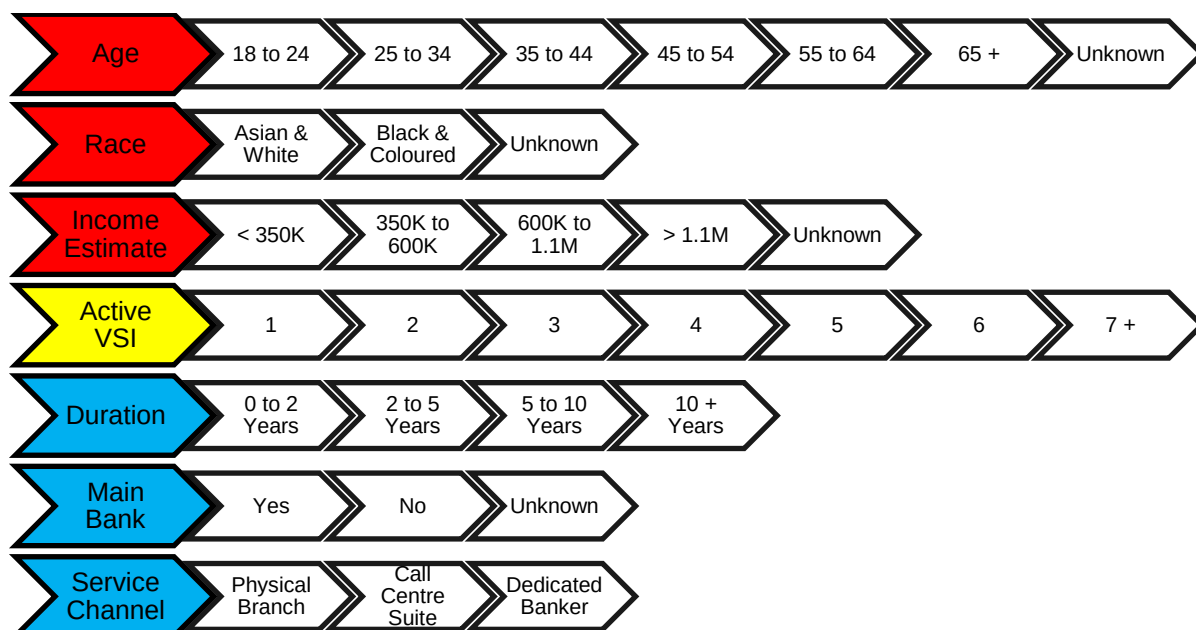
Table 3.2: Product holding breakdown



3.3.2.2 The Testing variables

The table illustrates and summarises the detailed description of all the testing variables used for this study.

Table 3.3: Variables



3.3.2.3 The Test

All variables were run against each other to determine the real drivers. If it had the same effect in each subgroup of the variable tested against, it was identified as a stronger driver. For interpretation of test results, Table 3.4 was used.

Table 3.4: Interpretation tool

✓	•The variable tested was consistent.
✗	•The variable tested was not consistent.
?	•The variable tested was not 100% consistent, but close.

As seen below, Table 4.5 summarises the test outcomes reflecting the main drivers of customer attrition as determined through the statistical analysis.

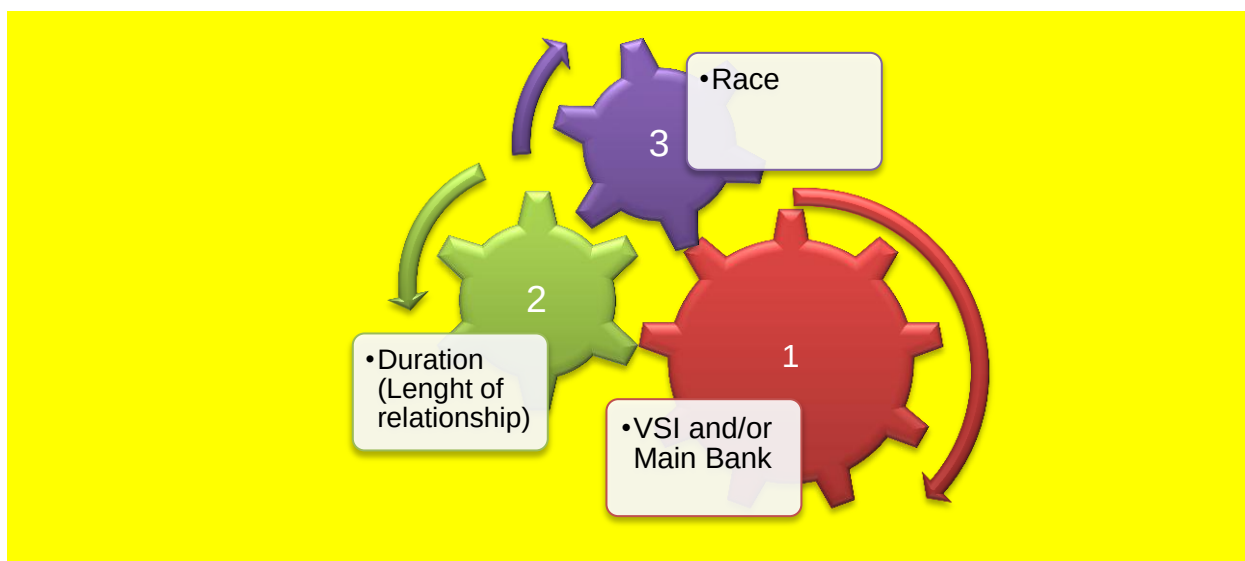
Table 3.5: Test Summary

	Age	Race	Income	VSI 1	Duration	Main Bank	Service Channel
Age		✗	✓	✓	✗	✓	✓
Race	✓		✓	✓	✓	✓	✓
Income	✗	✓		✗	✗	✓	✓
VSI 1	✓	✓	✓		✓	✓	✓
Duration	✓	✓	✓	✓		✓	✓
Main Bank	✓	✓	✓	✓	✓		✓
Service Channel	✓	✓	✓	✗	✗	✓	

3.3.2.4 Identified Key drivers of attrition

Through statistical analysis the main drivers identified were consistent over all other testing variables, highlighted in the test summary table above. The key drivers of attrition are VSI and/or Main Bank, Duration (Length of relationship) and Race. Figure 3.4 below illustrates these key drivers.

Figure 3.4: Key drivers of attrition



3.3.2.3 Highlights of results

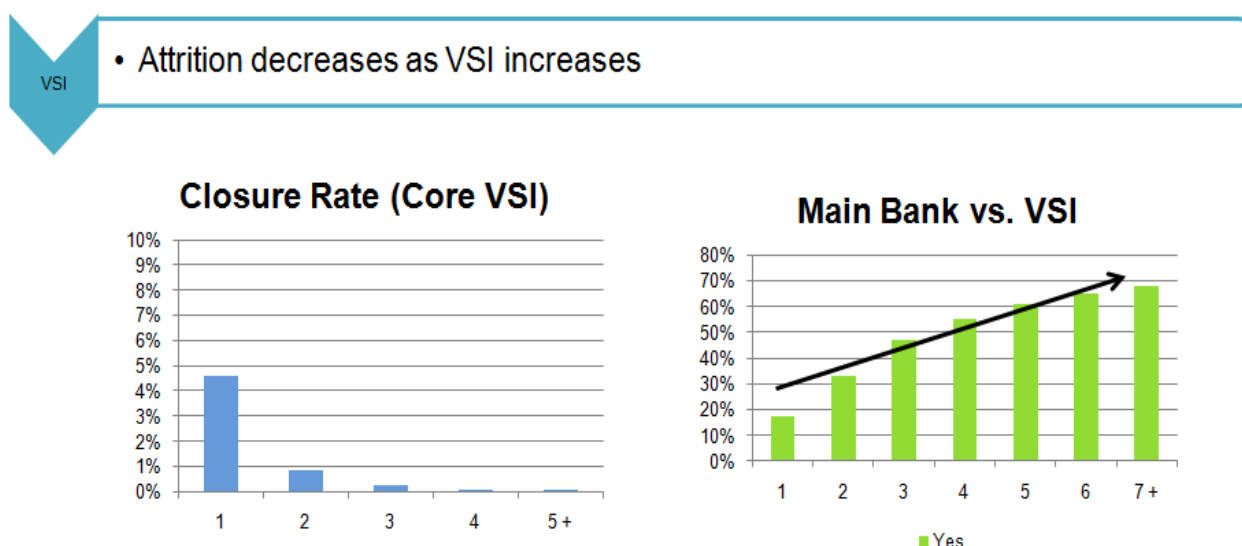
Table 4.6 illustrates the summary highlights of the results for each variable tested, namely VSI, Main Bank, Duration, Race, Age, Income and Service Channel. Furthermore, highlights of each variable are also discussed in detail.

Table 3.6: Highlights of results

VSI	Attrition decreases as VSI increases
Main	Attrition is lower where customers receive their salary in an BankXXaccount
Dura	Attrition decreases as length of relationship increases
Rac	Black & Coloured have a higher attrition than White & Asian
Age	Attrition decreases as age increases
Inco	Attrition decreases as income increases
Serv	Attrition is the lowest for Dedicated Bankers, the Call Centre suite has a lower attrition than the Physical

✓ **VSI vs. main bank**

Figure 3.5: Closure rate and Main Bank vs. VSI

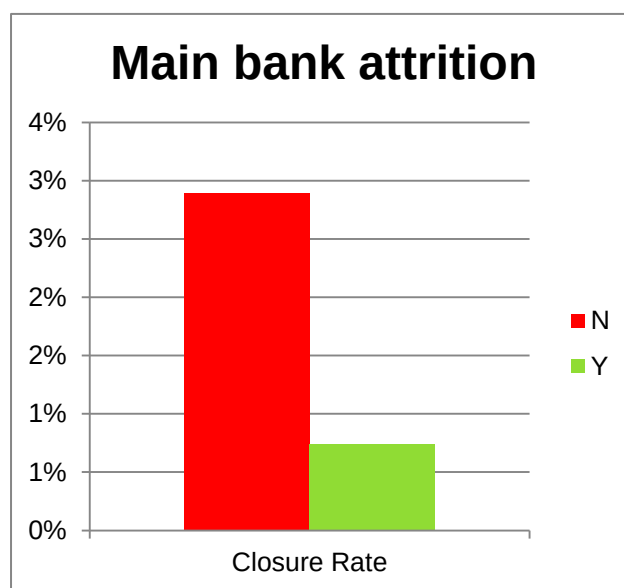
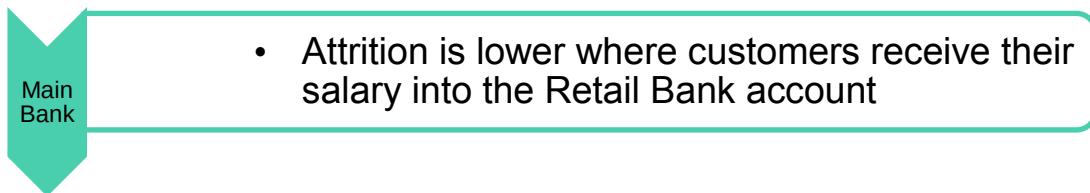


Core product VSI seems to be the biggest initial indicator of attrition risk, since the biggest plunge in attrition is seen from a VSI of 1 to a VSI of 2 (core products).

The Main Bank vs. VSI figure illustrates a direct correlation between the VSI and Main Bank relationship (i.e. the higher the VSI the more likely the Main Bank probability is.)

✓ **Main bank**

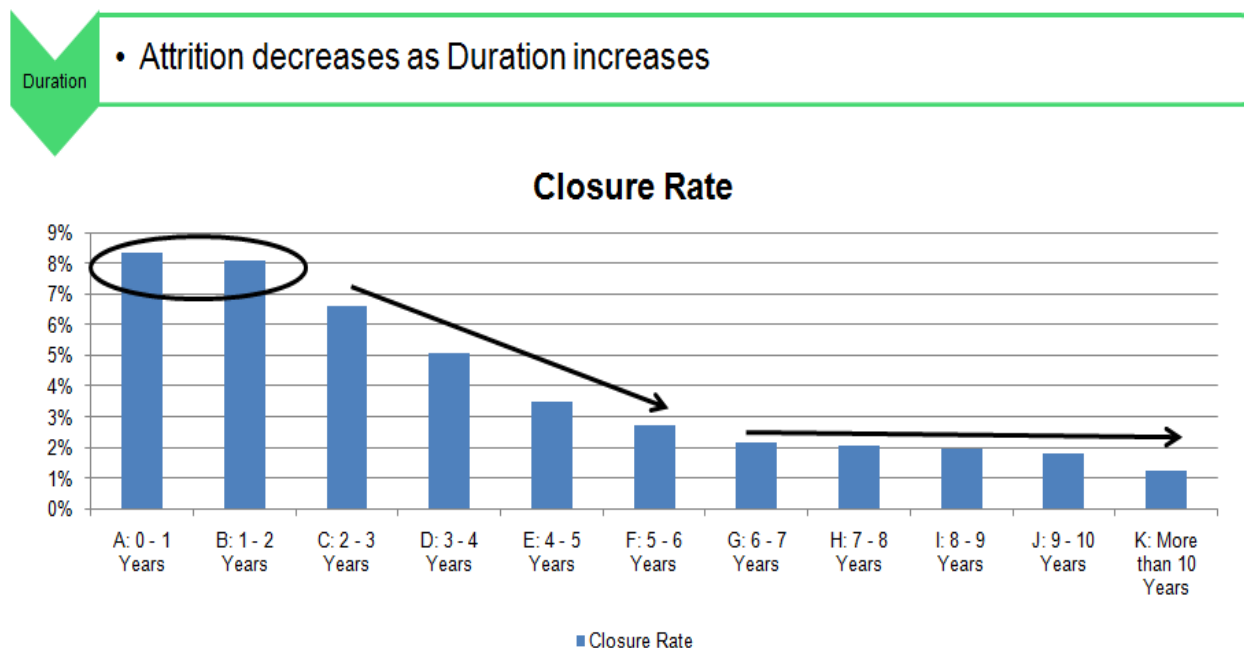
Figure 3.6: Main bank attrition



Overall, the attrition risk of a main bank client is four times smaller than that of a non-main bank customer.

✓ **Duration (Length of relationship)**

Figure 3.7: Closure Rate



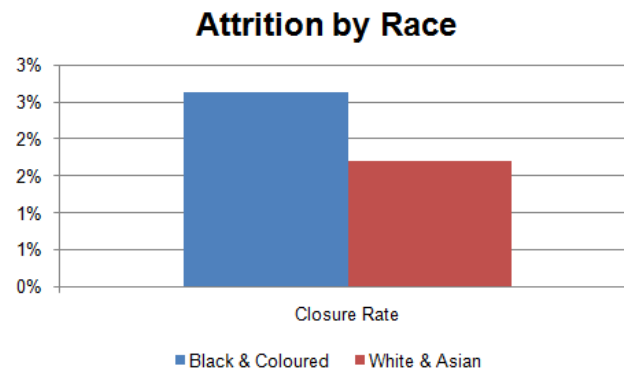
Attrition stabilises after a client has been with the retail bank for five years, and is especially high in the first two years. Therefore, the summarised groupings of duration periods were used in this study rather than using the detailed groupings.

✓ Race

Figure 3.8: Attrition by Race

Race

- Black & Coloured have a higher attrition than White & Asian



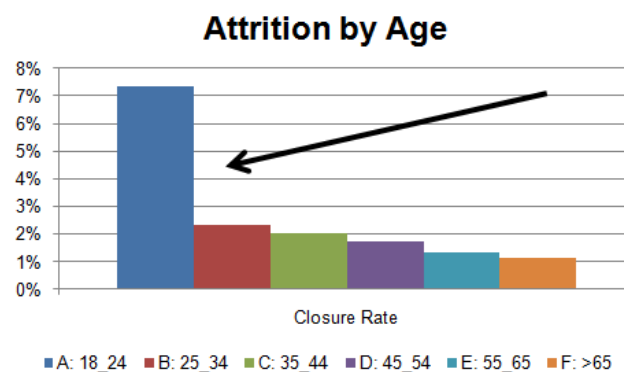
Black and Coloured clients have a higher risk of attrition. This is consistent across all other variables and overall their risk of attrition is 1.5 times higher than White and Asian.

✓ Age

Figure 3.9: Attrition by Age

Age

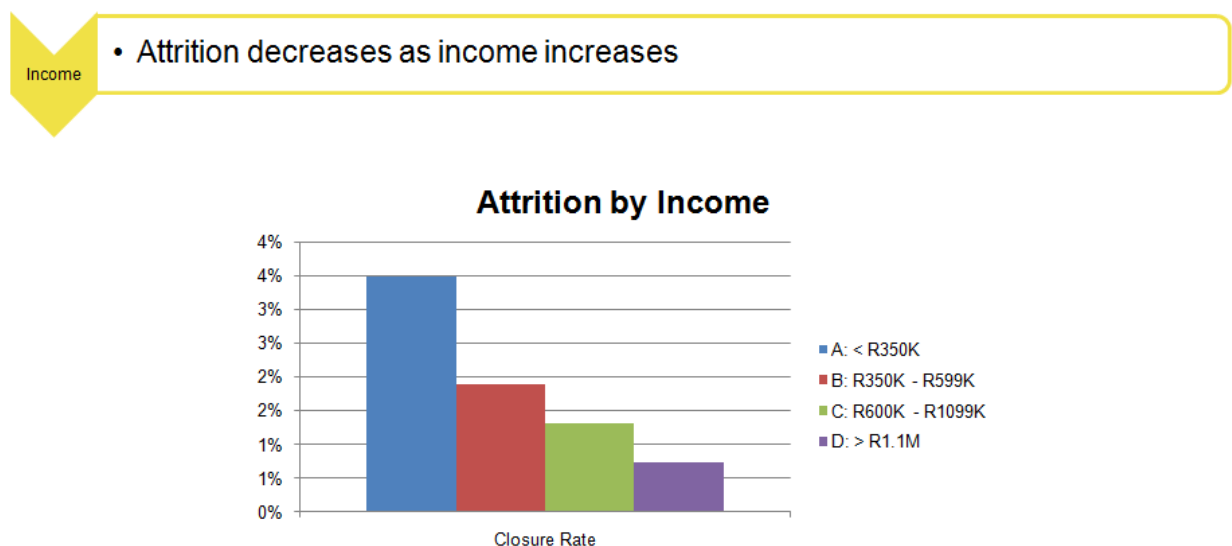
- Attrition decreases as age increases



The 18-24 age group consistently has a higher risk of attrition across all variables, except for clients with a duration of 0-2 years (where duration/length of relationship is a bigger driver).

✓ Income

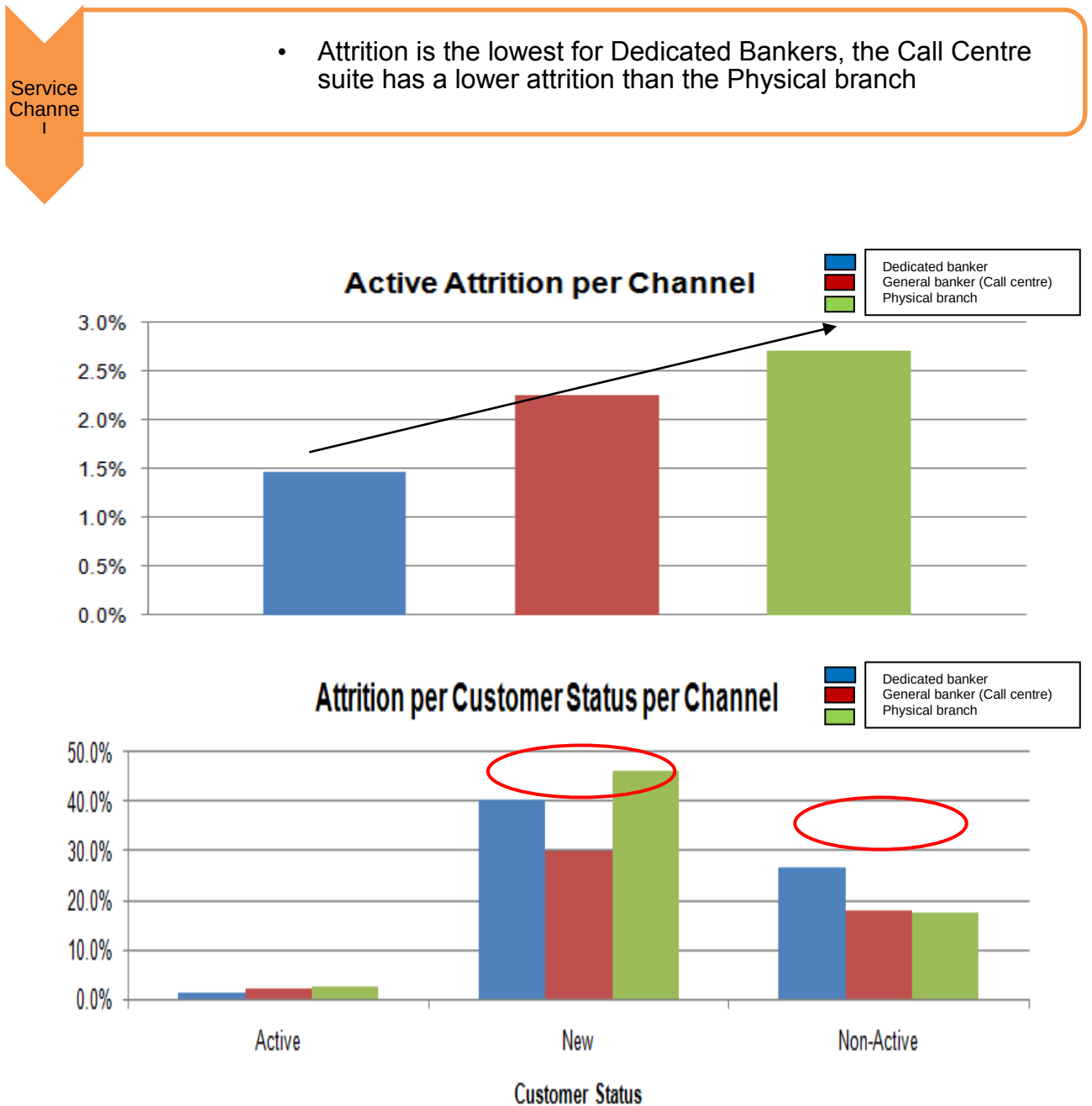
Figure 3.10: Attrition by Income



Overall, clients with an income estimate of less than R350k have a higher risk of attrition. Further investigation to understand what is causing this effect is necessary i.e. self-employed, related parties, and more.

✓ Service channel

Figure 3.11: Active attrition & Attrition per Customer status per channel

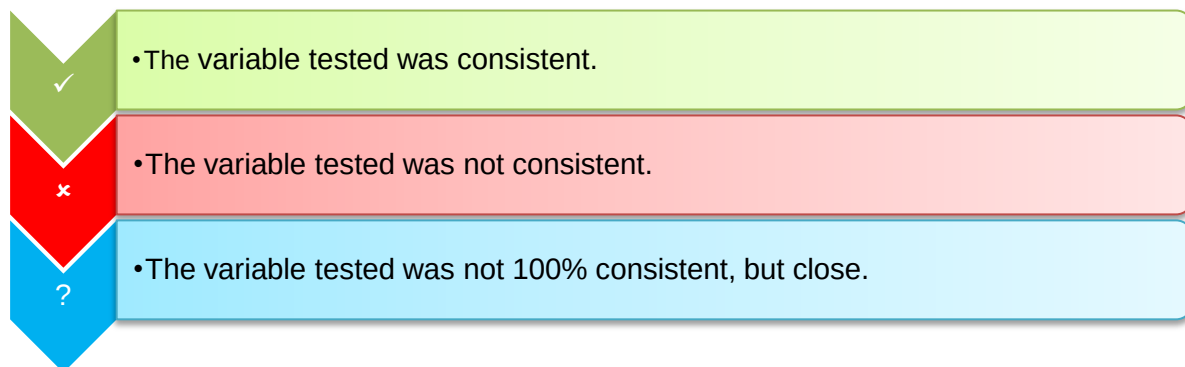


The above figures highlight that the more personalised the service channel the lower the customer attrition rates.

3.3.2.4 Detailed results

The SAS statistical method was used to statistically analyse the data, in addition Summary Tables, Tables and Figures are utilised to represent the data and the results of the empirical study. For ease of interpretation of individual results, the legend below will be used:

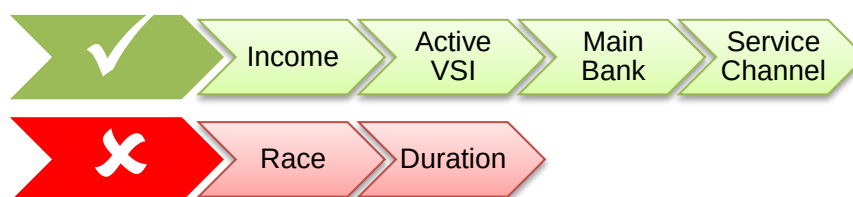
Table 3.7: Legend used to interpret results



The discussion of the results of Customer Age, Race, Income estimate, Active VSI, Duration, Main Bank and Service Channel will follows below

i. Customer Age

Table 3.8: Individual results - Customer Age



The attrition rate decrease as age increase, therefore if age is truly a driver of attrition, then this statement will be consistent throughout all the subsets of all the other variables.

The *racial* distribution per age group *could* be the reason why we see that attrition decreases as age increases as well as the *duration* distribution per age group *could* be

the reason why we see that attrition decreases as age increases, as the distribution of the more than 10 years group increases per age group.

The *income* distribution per age group *will not* be the reason why we see that attrition decreases as age increases. The higher age groups would have had a higher distribution of the higher income, which is not the case. Similar, the *VSI* distribution per age group *will not* be the reason why we see that attrition decreases as age increases, as the distribution is very similar in the middle groups.

The *service channel* distribution per age group *will not* be the reason why we see that attrition decreases as age increases, as the distribution is very even across all age groups, except for the first age group. It *could* explain the bump in the first age group.

The *Main bank* distribution per age group *will not* be the reason why we see that attrition decreases as age increases.

ii. Race

Table 3.9: Individual results - Race



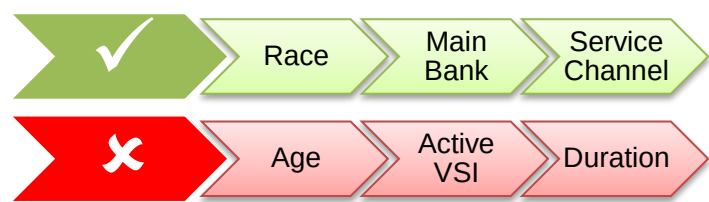
Black and Coloured racial groups have a higher attrition rate than White and Asian groups; therefore, if race is truly a driver of attrition, then this statement will be consistent throughout all the subsets of all the other variables.

The *age* distribution per racial group *will not* be the reason why we see the specific results, as well as the *income* distribution per age group *will not* be the reason why we see the specific results. The White and Asian groups would have had a higher distribution of the higher income, which is not the case. The *VSI* distribution per race group *will not* be the reason why we see the specific results, as the distribution is very similar.

The *duration* distribution per race group *will not* be the reason why we see the specific results, as the distribution of duration is very similar per race group. The *main bank* distribution per age group *will not* be the reason why we see that attrition decreases as age increases, as there is no real trend in either the “Yes” or “No” distribution. The *service channel* distribution per race group *will not* be the reason why we see the specific results.

iii. Income Estimate

Table 3.10: Individual results - Income



Attrition decreases as income increases; therefore, if income is truly a driver of attrition, then this statement will be consistent throughout all the subsets of all the other variables.

The *service channel* distribution per income group *will not* be the reason why we see that attrition decrease as income increase, as the distribution is very random over the different income groups. The individual results also reflect that the income distribution per *racial* group *could be* the reason why we see that attrition decreases as income increases, as the White and Asian percentage is more in the higher income groups and we know that White and Asian groups have a lower attrition rate.

In addition, the statement in question is true for both the “Yes” and “No” group. The *main bank* distribution per income group *could be* the reason why we see that attrition decreases as income increases, as there is a higher % “Yes” as income increases.

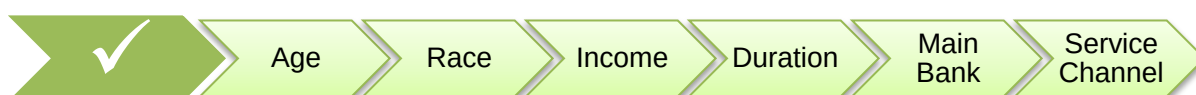
The above statement mentioned in question is not true for the *very young and very old groups*, as the racial distribution per income group *will be* the reason why we see that attrition decreases as income increases. As well, the *VSI* distribution per age group

could be the reason why we see that attrition decreases as income increases, as the VSI is lower in lower income groups.

The individual results also confirm the statement in question is only true for the 5 to 10 years and the more than 10 years groups. The *duration* distribution per income group *will not* be the reason why we see that attrition decreases as income increases, as the distribution is very similar per income group.

iv. Active VSI

Table 3.11: Individual results – Active VSI



Attrition decreases as VSI increases; consequently if Active VSI is truly a driver of attrition. Subsequently, this statement will be consistent throughout all the subsets of all the other variables.

The statement in question is true for the *all age groups*; therefore the age distribution per VSI group *will not* be the reason why we see that attrition decreases as VSI increases.

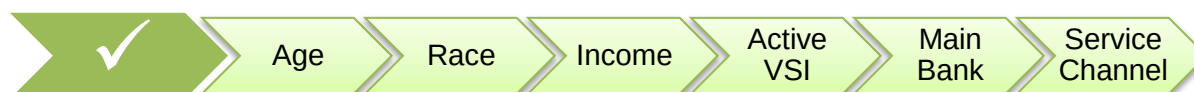
Results confirm that the statement in question is true for all the racial and income groups. The *racial* distribution per VSI group *will not* be the reason why we see that attrition decreases as VSI increases. Similar, the *income* distribution per VSI group *will not* be the reason why we see that attrition decreases as VSI increases.

Furthermore, the *duration* distribution per VSI group *could be* the reason why we see that attrition decreases as VSI increases and main bank results confirm the statement in question is true for both the “Yes” and “No” group. The *main bank* distribution per income group *could be* the reason why we see that attrition decreases as income increases, as there is a higher % “Yes” as income increases.

Furthermore, the statement in question is true for all the service channel groups. The *service channel* distribution per VSI group *could be* the reason why we see that attrition decreases as VSI increases.

v. Duration

Table 3.12: Individual results - Duration



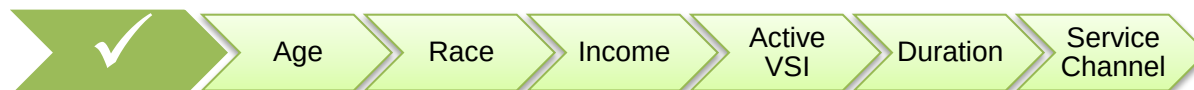
Attrition decreases as length of relationship increases, for that reason if the length of relationship is truly a driver of attrition, then this statement will be consistent throughout all the subsets of all the other variables.

The above statement is true for all the age, racial, income, VSI, main bank and service channel groups. The individual results indicate that *age, race, income, main bank and service channel* distribution per duration group *will not* be the reason why we see that attrition decrease as duration increase.

Furthermore, the statement in question is true for all the VSI groups. The *VSI* distribution per duration group *could be* the reason why we see that attrition decrease as duration increase.

vi. Main Bank

Table 3.134: Individual results – Main Bank

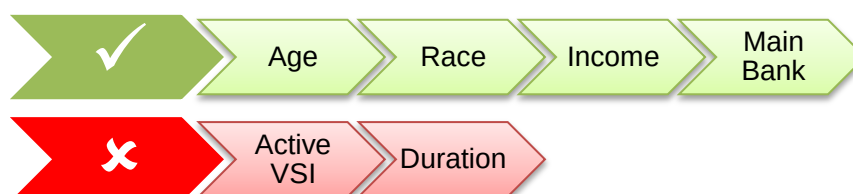


Attrition is lower when a customer receives their salary in a BANK XX account; therefore, once a customer receives their salary in the retail bank account is truly a driver of attrition, subsequently this statement will be consistent throughout all the subsets of all the other variables.

The statement in question is true for all the *age, racial, income, VSI, duration and service channel* groups. The *age, racial, income, duration and service channel* distribution per main bank group *will not* be the reason why we see the specific attrition results. The *VSI* distribution per main bank group *could be* the reason why we see the specific attrition results, as the average VSI is a lot higher for Main Banked customers.

vii. Service Channel

Table514: Individual results – Service Channel



Attrition is the lowest for dedicated bankers, whereas the call centre suite has a lower attrition than the physical branch. Consequently, if the Service Channel (dedicated banker, call centre suite, physical branch) is truly a driver of attrition, then this statement will be consistent throughout all the subsets of all the other variables.

The statement in question is true for all *age, race, income* and *main bank* groups. The *age, racial, income* and *main bank* distribution per service channel group *will not* be the reason why we see the specific attrition results.

In addition, the statement in question is not true for all the *VSI and Duration* groups. The *VSI* distribution per service channel group *will be* the reason why we see the specific attrition results. The statement in question is not true for customers with *duration* of 5 years and more. The *duration* distribution per service channel group *will not* be the reason why we see the specific attrition results.

3.3 DISCUSSION OF RESULTS

The study revealed the main drivers of attrition as the following:

- ✓ Attrition decreases as *VSI* increases.
- ✓ Attrition is lower where customers receive their *Salary* in a *BANKXX* account.
- ✓ Attrition decreases as *Duration* increases.
- ✓ *Black and Coloured* have a higher attrition rate than *White and Asian*.

3.3.1 Key insights of main drivers of attrition

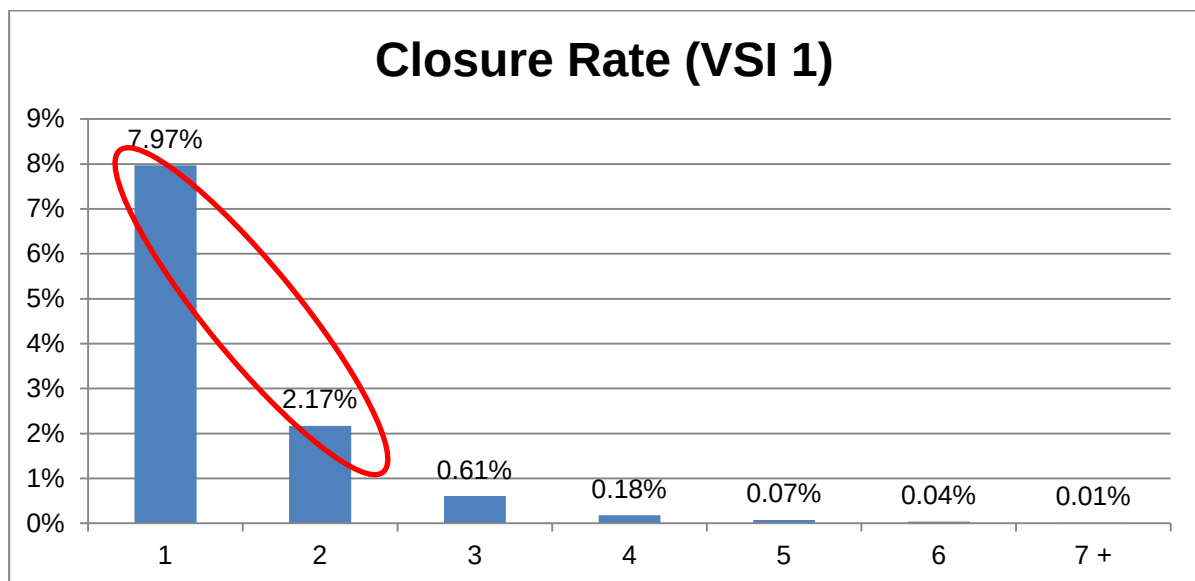
3.3.1.1 Main Driver 1: Active VSI

The key insights derived from the individual results indicated that attrition decreases as VSI increases, therefore the core product VSI seems to be the biggest initial indicator of attrition risk, since

- The largest plunge in attrition is seen from a VSI of 1 to a VSI of 2 (core products). This can be seen in Figure 3.12below, where a significant decrease in closure rate from 7.97% - 2.17% was evident.
- When adding Value Adds, the drop is not as significant (Note: The Value adds included are online banking, mobile banking, rewards program and linked Petro.

These results are displayed in Figure 3.12below:

Figure 3.12: Key insights: closure rate of the VSI



Moller (2007:1) researched the importance of both product and service delivery to be aligned with customer expectations in order for retail banks to thrive. Furthermore, the study highlighted that a good value proposition contributes to decreased customer attrition rate which correlate with the above insights. In addition, relating to the above key insights, research conducted by Drotskie (2009) focused on the total customer experience as competitive advantage for retail banks. This study included differentiators in the banking industry such as product, price and service.

3.3.1.1 Main Driver 2: Main Bank

As seen in the below figure, where customers receive their salary in a BANKXX account the attrition rate is significant lower at 0.74% compared to a 2.89% attrition rate when customers do not receive their salary in a BANKXX.

Figure 3.13: Key insights: closure rate of Main Bank customers



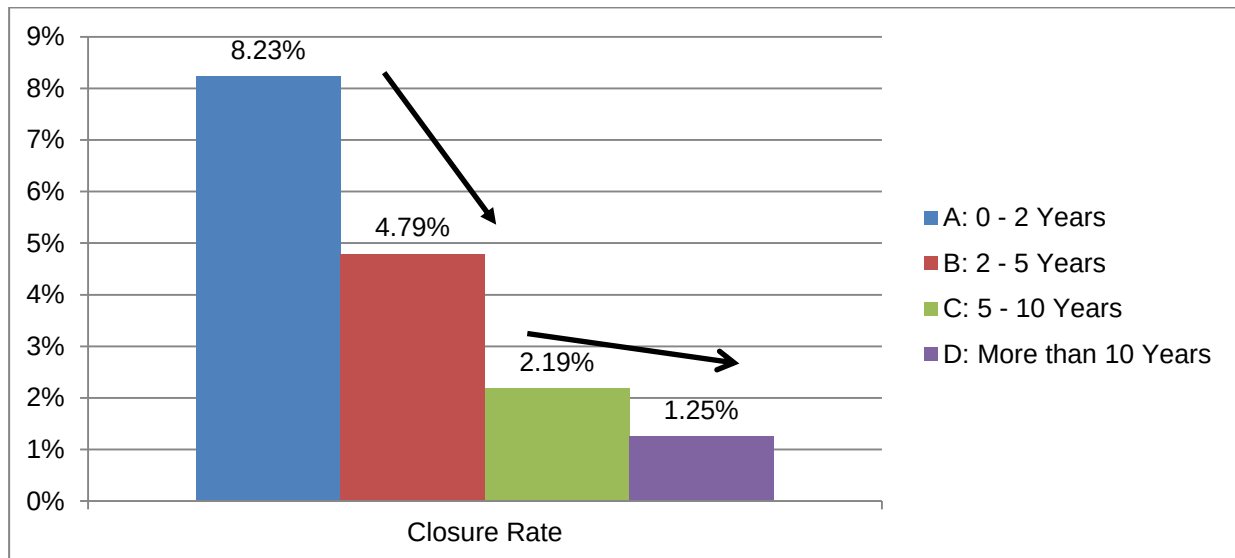
Research done by Roy and Shekhar (2010:48) highlighted the importance of banks to gain and sustain the trust of their (main bank) customers, as well as focusing on making trustworthiness a strategic focal point in the on-going fight to retain customers. This relates to the above findings depicted in figure 3.5 where main bank customers' closure rate is much lower. Similar correlations were found in a study done by Baumann et al. (2007:102- 116) where customers' intention to remain with their main bank short-term (in the next six months) and long-term (from six months to five years) was established by means of exploring the factors predicting customer loyalty in retail banking.

Due to the high correlation between the VSI and Main Bank relationship either one can be used for the attrition model.

3.3.1.2 Main driver 3: Duration (length of relationship)

Figure 21 reflects a closure rate of 8.23% for 0 -2 year period which is significantly higher in comparison with the rest of the duration periods. From 2 – 5years' period a significant decrease in the closure rate is evident where after attrition evens out after a client has been with the retail bank for 5 years. The table below indicates the different closure rates for the different duration periods the clients are with the retail bank:

Figure 3.14: Key insights: closure rate of length of relationship

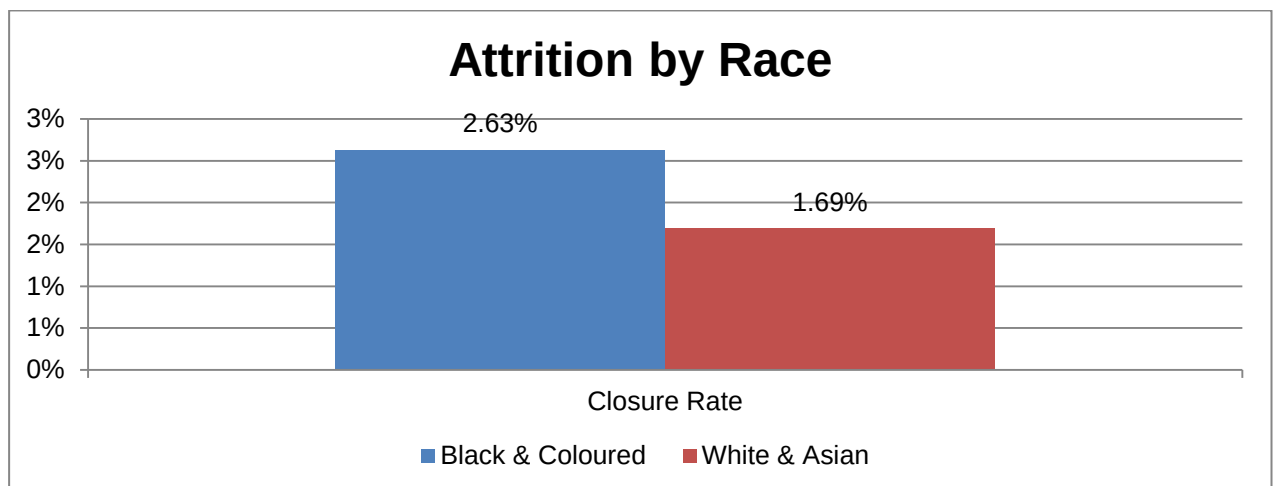


Studies conducted by Rootman et al. (2011:184-185), and Symonds et al. (2007:4) correspond closely to the above results which reflects the importance of building of a long-term customer or client relationship to improve retention of the customer relationships. Similar correlations were found in a study done by Ackermann and Van Ravensteyn (2007:156) confirming that one of the main objectives of the relationship-banking offering is to create a higher level of customer loyalty and develop this loyalty over time. The benefits include retention of customers and staff, customer satisfaction, trust, word of mouth referrals and growth, cost reduction, cross-sales, profitability (relationship lifetime value (RLV)) and enhanced competitive advantage for the bank.

3.3.1.2 Main driver 4: Race

As derived from the individual results, Black and Coloured clients have a higher risk of attrition, which was visible as consistent across all the other tested variables. Black and Coloured clients reflect a closure rate of 2.63% compared to the White and Asian clients showing 1.69% closure rate. In addition; overall the Black and Coloured risk of attrition is 1.5 times higher than the White and Asian client group.

Figure 3.15: Key insights: Attrition by Race



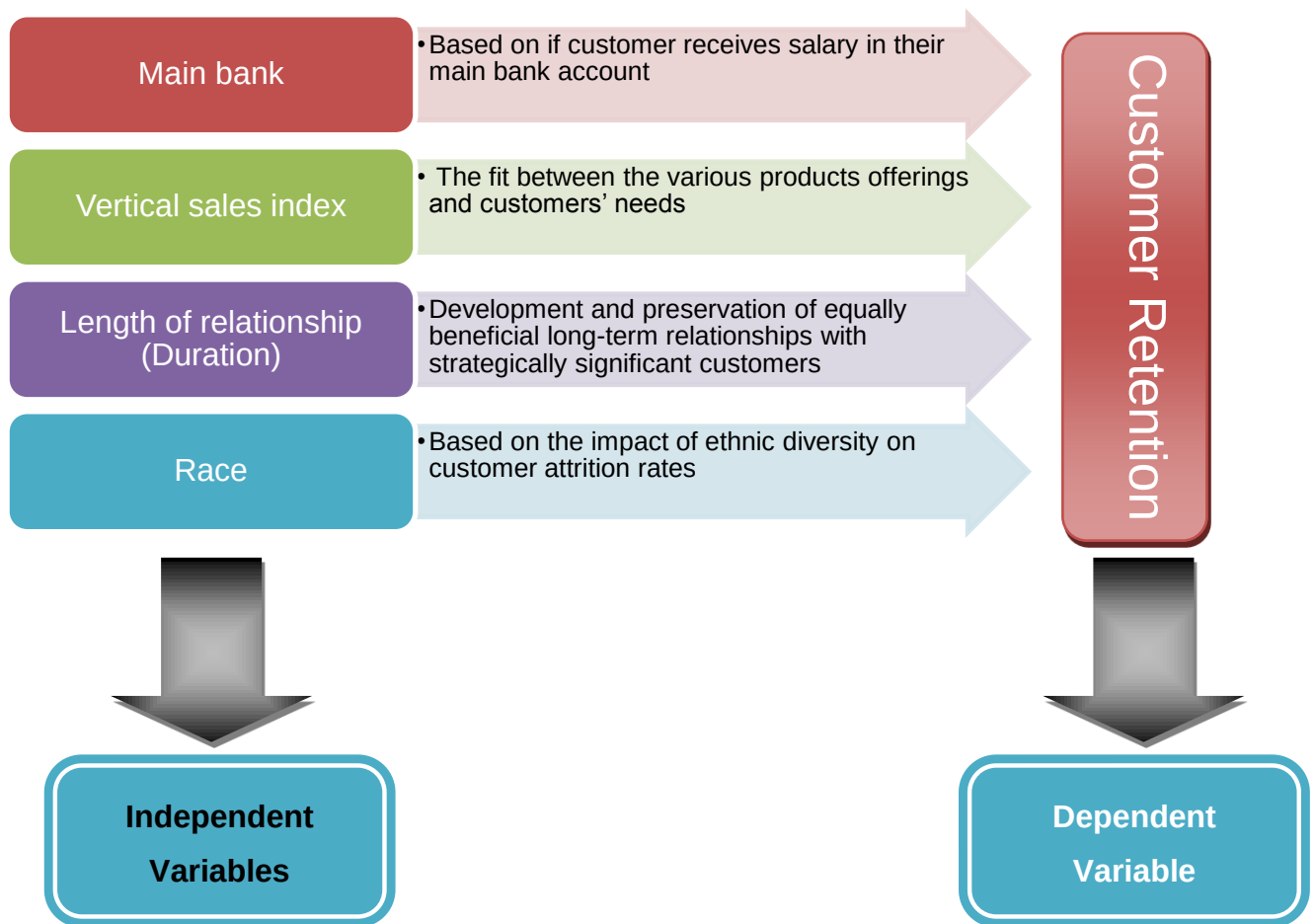
A study conducted by Lopez et al. (2007:259) highlighted the fact that heterogeneous retail banking customers have differing perceptions of the importance of service quality dimensions; and therefore various ethnic groups report different levels of customer satisfaction with their retail banks. This study therefore corresponds closely to the above results illustrated. A similar correlation was found in a study done by Yunus (2009), where the pressure on service organisations' managers to prevent customers from defecting was highlighted and recommended retention of multi-cultural customers in order to be competitive and stay in business.

In addition, the results of a comparative analysis done by Hart-Kozloski et al. (2008:98) indicated that there is a difference in bank choice criteria based on ethnic backgrounds, and bank marketers can capitalise on these differences, by identifying them and designing appropriate operations and marketing strategies, leading to increased customer satisfaction and competitive advantage.

3.3.2 New Conceptual Model

The above mentioned key insights regarding the three main drivers of attrition necessitated the development of a new conceptual model, as derived from the detailed results presented earlier in this Chapter. Below, Figure 3.16 illustrates the new conceptual model for customer attrition.

Figure 3.16: New conceptual model: Drivers of customer retention in retail bank



3.4 SUMMARY

This chapter presented the research methodology and the results of the empirical analysis. The next chapter is the fourth and final chapter of the research study presenting all conclusions (inferred from the empirical results) and recommendations made based on the empirical study as well as the literature review.

CHAPTER FOUR

CONCLUSIONS 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 literature and the conclusions of the empirical research. The chapter finally highlights some limitations and areas for further research.

4.2 CONCLUSIONS

The following conclusions were drawn from the study:

Conclusion 1:

The research study displays the use of SAS, a set of solutions for enterprise-wide business users which provides a powerful fourth-generation programming language for performing tasks such as data entry, retrieval, and management; report writing and graphics; statistical and mathematical analysis. This method proves to be successful in delivering quality data in addition, providing the following added benefits:

- ✓ **Increased productivity:** Due to capabilities and enhancements of SAS, streamline integration, activity and responsiveness result in increased productivity of user.
- ✓ **Broader enablement:** Added features and functionality give the user the ability to resolve bigger and more complex issues.
- ✓ **Improved scalability.** Unparalleled ability to handle vast amounts of data, with the capabilities to continue to scale with voluminous growth in the future.
- ✓ **Higher performance:** Reducing the time to results and therefore allowing for faster decision-making.

Conclusion 2:

The study demonstrated the use of a qualitative methodological approach regarding customer attrition. It can be concluded that all the possible drivers of customer attrition as indicated in the literature – Age, Race, Income, Active VSI, Duration, Main Bank and Service Channel are important to measure, the most important being Active VSI and/or Main Bank, Duration and Race.

Conclusion 3:

SAS ensures data quality including profiling, cleansing, augmenting and integrating data to create consistent, reliable information.

Conclusion 4:

The banking sector routinely manages massive amounts of data, ranging from financial transactions to customer, operational and regulatory data. All this data means big challenges, but also big opportunities for the industry. As seen in this study, by analysing the immense data volume, it provides a sound base for gaining valuable insight into the business problem. In addition it provides guidance into developing strategies based on quality data results.

4.3 RECOMMENDATIONS**4.3.1 Recommendations based on the empirical study**

The following recommendations are made, based on the conclusions from the empirical study in Section 4.2. The recommendation number is directly related to the conclusion number, e.g. Recommendation 1 is related to Conclusion 1 and Recommendation 2 is related to Conclusion 2.

Recommendation 1:

The research should be repeated to compare the results from this study to similar studies in the future. The same measuring instrument can be used while the successful method of data collection can be used as well.

Recommendation 2:

It is recommended that all the possible drivers for customer attrition as identified in the literature review are included in future studies of customer retention. However, the main drivers such as Active VSI and/or Main Bank, Duration and Race should not be excluded, as these are the most important drivers of customer attrition, as concluded in the empirical study.

Recommendation 3:

The tried and tested, tailor-made SAS Software system can be used in any research pertaining to the drivers of customer attrition in the retail banking environment.

Recommendation 4:

It is recommended that banks make use of high-performance analytics which can spin their big data into pertinent new business insights that guide faster, better decisions. As a result, banks can successfully manage risk, retain profitable customers, improve operational efficiency and differentiate themselves in the marketplace for competitive advantage.

4.3.2 Recommendations based on the literature review

The following business solutions and strategies are recommended to combat customer attrition, specifically addressing VSI, Duration and Race elements.

Recommendation 5: Increase cross-selling

Retail banks need to understand that customers with multiple product lines are not only valuable in the short term, but in the long term as well, as customers with more than one bank product tend to be more loyal. Therefore, to encourage activation and lock in customer loyalty, the bank should strive to encourage customers to activate inactive

accounts, as well as make sure new customers can fully utilize their new accounts, particularly in the first two weeks. It is important for banks to focus on cross selling to clients with a product with a set expiration, therefore reacting within a week of a client opening an account to cross sell another product.

Recommendation 6: Onboarding Communication

A good relationship provides value from the start for both customers and the bank. Industry studies indicate that if customer intimacy, a key component of trust, is well established during the first 180 days, cross selling is more likely. According to US Banker, 60% of customers who open at least one additional account in the first three months do so in response to information provided by their banks, yet 34% of customer do not receive follow-up from their bank within the first 180 days of opening an account (Peppers & Rogers Group, 2011).

Therefore, banks should take action to engage customers within the first few months or stand the risk of losing profitable customers. Banks should consider a comprehensive, cross functional on boarding strategy and if implemented correctly could reduce new customer attrition by as much as 50%. By focusing on improved new-customer experience helps to establish long-term customer loyalty and trust.

The following onboarding initiatives aim to locking loyalty of the customer in the early days, increase customer delight and drive adoption of desired behaviours:

- ✓ Map out a comprehensive onboarding strategy: including onboarding objectives, assessment of current state, design the conceptual onboarding model, plan the proof of concept and prepare for a bank-wide implementation.
- ✓ Ongoing communication to the customers: 4-6 communications in the first year with the bulk of communication to focus on cross-sell vs. of a loyalty nature.
- ✓ Base proactive retention calls on transaction triggers, balance trends and statistical filtering.
- ✓ Outbound calling units and direct marketing campaigns are used effectively to limit attrition.

- ✓ Welcome and retention calls allow banks to effectively approach new clients, asking clients if they are satisfied with their new product – such needs based discussions often lead to sales opportunities.

A well implemented onboarding strategy will ensure that new customer vulnerability and uncertainty can be replaced by a strong connection to the brand that will evolve over time to become one of trust, loyalty, advocacy and profitability.

Recommendation 7: Market Segmentation

Retail banks serving ethnically diverse customer bases are continuously challenged to deal with differing perceptions of service quality and satisfaction. As a result, banks need to firstly identify these customers and their rapidly changing needs and wants and secondly strategically focus on providing services targeted at all ethnic customer groups.

For banks to survive in this competitive market, they need to determine what the satisfaction levels of specific groups of the ethnically diverse customer population resemble, as well as which service areas customers of different ethnicities perceive as important. Using the above mentioned information effectively, may help banks achieve higher levels of customer satisfaction, retention, and profitability.

However, due to the difficulty of racial sensitivity this driver might not be feasible.

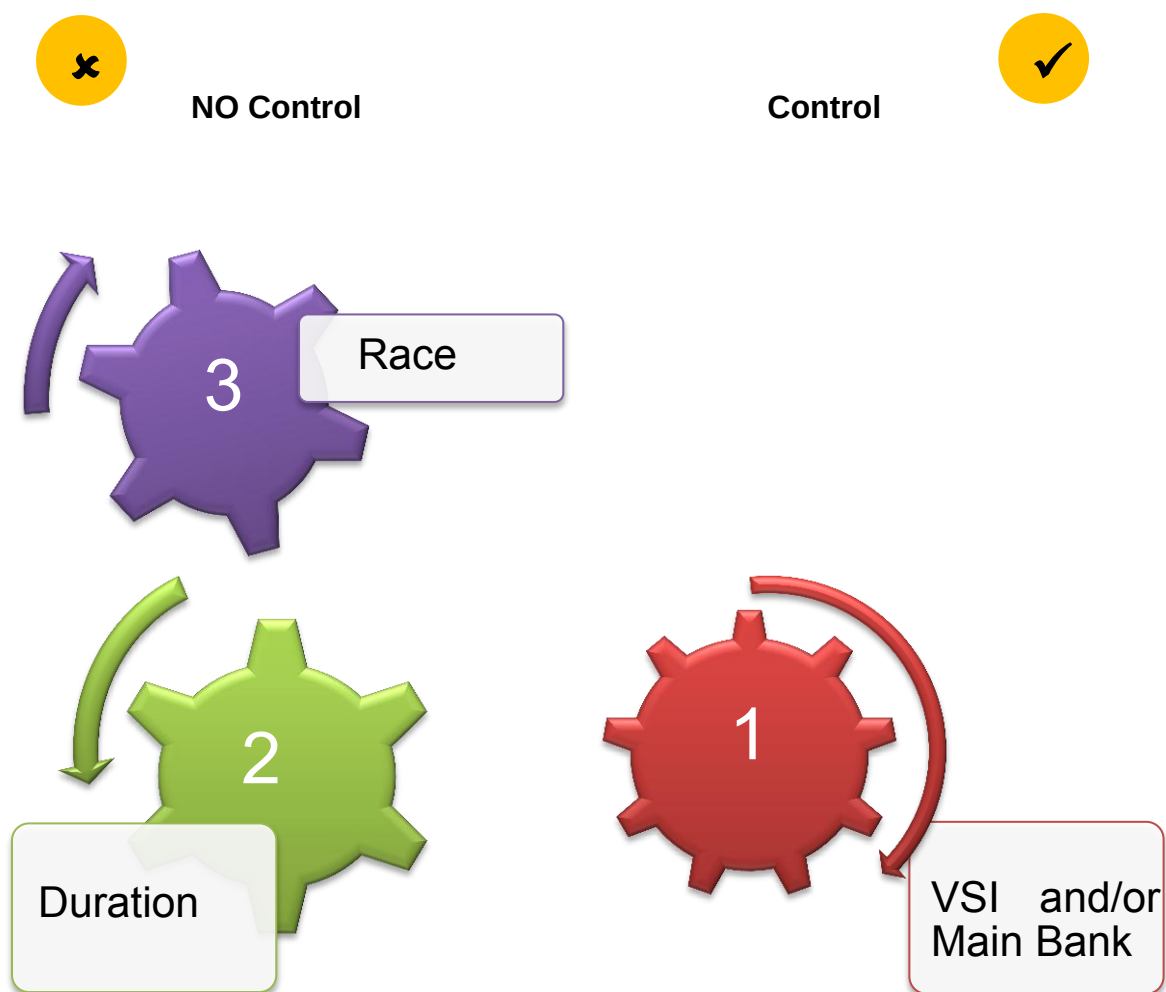
4.4 AREAS OF FUTURE RESEARCH

4.4.1 Product mix analysis within the main drivers of attrition

Suggested areas for future research include the investigation of the products that will have the largest impact (on average) on attrition.

Product mix has an influence on VSI, which BANKXX have control over. Therefore when analysing product mix within the key drivers we only analyse the product mix within the two key drivers, Race and Duration. The figure below illustrates the driver/s of attrition which BANKXX have/do not have control over.

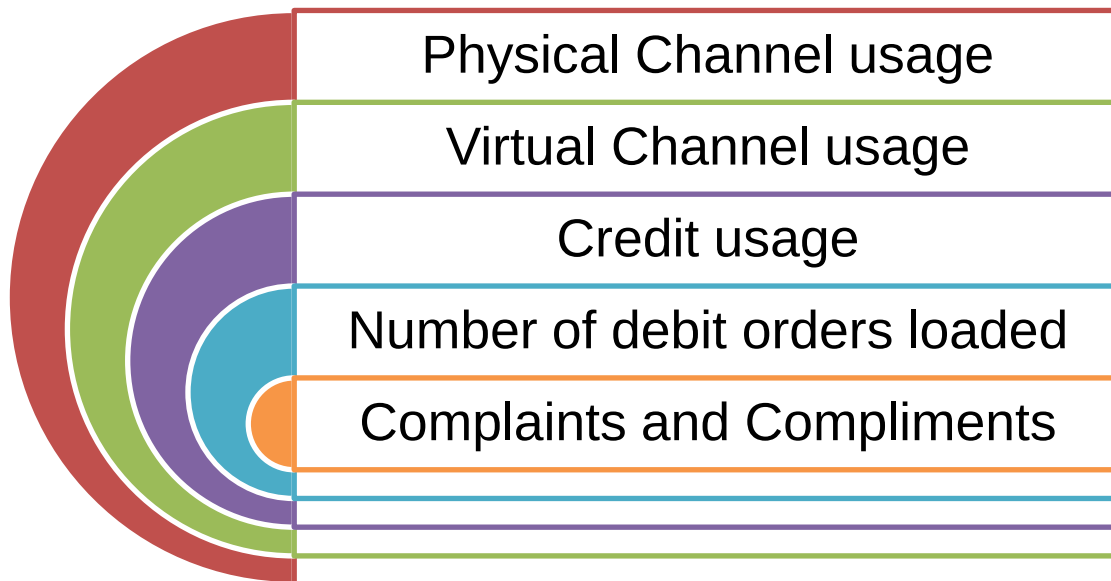
Figure 4.1: Main drivers BANKXX have and do not have control over



4.4.2 Transactional behaviour

Transactional behaviour has not been included in the initial study due to the complexity of the raw data. Although this might be a big driver it needs to be investigated further. Examples of what can be included are illustrated in Figure 4.2 below:

Figure 4.2: Transactional behaviour examples



4.5 SUMMARY

This study consists of four chapters. **Chapter 1** mainly focused on the nature and scope of the study, with an introduction to the study as well as the problem statement. The objectives of the study were set in this chapter and the research methodology discussed.

Chapter 2 presented an in-depth literature review regarding customer retention within the retail banking industry, which provided proof and reason behind the selection of testing variables for the empirical investigation and anticipated influence of testing variables on the customer.

In **Chapter 3**, the research methodology was discussed in detail as well as the statistical methods employed to analyse the data and the results of the statistical analysis. SAS statistical methods used for data collection and the SAS Software system used to extract, analyse and summarise data were discussed in this chapter.

The final **Chapter 4** entails conclusions, recommendations and areas of future research. It was concluded that VSI / Main Bank, Duration and Race were identified as

the main drivers for attrition. This chapter also identified some areas where the research could be extended to in the future, which is necessary to improve customer retention within the retail bank.

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APPENDIX A: DECLARATION BY LANGUAGE EDITOR

October 10, 2012



To whom it may concern

Re: Letter of confirmation of language editing

The MBA mini-dissertation "*Identifying factors that influence customer retention in a South African retail bank*" by N. Gouws was language, technically and typographically edited. The sources and referencing technique applied was checked to comply with the specific Harvard technique as per North-West University prescriptions. Final editing and printing remains the responsibility of the student.

A handwritten signature in black ink, appearing to read 'Antoinette Bisschoff'.

Antoinette Bisschoff

BA (Languages); MBA

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Officially approved language editor of the NWU

