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# **The impact of digitalisation on e-service quality: Study of Internet Banking in South Africa**

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**A research report submitted to the Faculty of Commerce, Law and  
Management, University of the Witwatersrand, in partial fulfilment  
of the requirements for the degree of Master of Management in  
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## **ABSTRACT**

This study focuses on examining and analysing the impact of Digitalisation of banking on driving customer satisfaction through e-service quality measurements. Through literature review of existing digital transformation in banking research as well as looking at e-service quality models such as servqual. The study will measure how Digitalisation of traditional banking has shaped customer experiences by focusing on one bank, Standard Bank South Africa.

The focus of this study will be limited to the banking sector. The research paper aims to develop a general understanding of changes in the banking industry by analysing literature on both technology, banking organisations and service delivery in order offer guidance for further research development

For this research paper and adapted version for internet, banking SERVQUAL will be used to deal with customer satisfaction concerning internet banking. The approach will be to use the modified SERVQUAL instrument on the study sample and then validate data using the measurement model and the structural equation model. The relationship between internet banking and, customer satisfaction will be investigated, and the research hypotheses were tested. The sample consisted of 207 participants who were all Standard Bank customers. The survey was targeted and about Standard Bank Internet Banking platform, and therefore the research was ring-fenced to customers who banked with Standard Bank and had used Standard Bank Internet Banking in the last 12 Months.

The study went and tested the theory against several factors, such as the adoption of internet banking and its effect on e-service quality. The study also examined the impact of service quality on customer satisfaction and retention. Lastly, the effect of customer satisfaction on customer retention. Based on the results, we can conclude that Digitalisation of traditional banking, into internet banking, had a positive effect on e-service quality.

Key words: Digitalisation, Omnichannel, Digital Banking, Internet Banking, Customer service, customer satisfaction, e-service quality. Digital transformation.

## DECLARATION

I, Mandisa Charlene Theko, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in Strategic Marketing at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other University.

Mandisa Charlene Theko

Signed at.....

On the.....day of.....20.....

## DEDICATION AND ACKNOWLEDGEMENTS

*“We are our ancestors wildest dreams.”*

*This research report is dedicated to my forefathers who walked this earth before me, laid the groundwork so that I may be free, educated, accomplished and a reality of their vision. I also dedicate this report to my family, who continuously poured love into me when my barrel was empty.*

I want to thank Dr Saini, who, first of all, helped me to put my health first. I am genuinely grateful that you helped me choose me first. Secondly, I would like to thank you for letting me turn my passion for digital into a contributable industry in academia. Thank you for your time, your knowledge and wisdom that pushed me throughout.

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# CHAPTER 1. INTRODUCTION

## 1.1. Purpose of the study

This study focuses on examining and analysing the impact of Digitalisation of banking on driving customer satisfaction through e-service quality measurements. Through literature review of existing digital transformation in banking research as well as looking at e-service quality models such as servqual. The study will measure how Digitalisation of traditional banking has shaped customer experiences by focusing on one bank, Standard Bank South Africa. Digitalisation in traditional banking involves innovations such as internet banking, mobile apps and other technology platforms that allow for transactional banking (Vater et al., 2012). The study aims to address the following research question: *The impact of Digitalisation on e-service quality: Study of Internet Banking in South Africa*. Following other researchers who also embarked on the journey to contribute to the understanding of digital transformation and the relationship with customer satisfaction and service quality (Stiakakis & Georgiadis, 2009).

The focus of this study will be limited to the banking sector. The research paper aims to develop a general understanding of changes in the banking industry by analysing literature on both technology, banking organisations and service delivery in order offer guidance for further research development (Pikkarainen et al., 2004). In the remainder of this paper, it will introduce the concept of digital banking in the four banks to serve as a basis for understanding digital transformation and customer experiences and how that impacts service delivery. After that, we will explain the research process, starting with qualitative analysis on the literature review available, secondly will be expert-based semi-structured interviews to understand the Digitalisation of traditional banking and how that influences customer experiences and its direct and indirect impact on service delivery (Graupner et al., 2015)

## 1.2. Context of the study

Recent advances in digital technology are resulting in changes in various social and economic aspects. According to (Piccinini et al., 2015) Digital technologies are explained as combinations computing, digital communications as well as connectivity technologies such as social media. Social media platforms such as Facebook, Twitter, Snapchat, WhatsApp, Instagram, as well as different types of mobile devices and the analytics give insight into these interactions.

These consumer-focused technologies are immersed in most workplaces, homes and part of our daily routines (Cuesta et al., 2015a). The recent advances in internet banking are resulting in changes in various social and economic aspects regarding consumer behaviour.

According to (Tidd et al., 2005) The drive-in technological changes can also trigger or shape consumer behaviour changes. Other contributors, such as globalisation and the drive to produce higher revenues, are part of what is changing the competitive landscape in the banking sector.

The rise of technology has seen consumers moving away from brick and mortar and instead choosing to bank in more conventional methods such as mobile internet banking. (King, 2012) Argues that the changing consumer behaviours and the new digital environments are forcing banks to address their digitalisation processes quickly if they want to remain in a market, which finds itself in need of transformation, specifically digital transformation. Standard Bank South Africa, which is the bank what this paper will focus on, changed their business models to introduce digital transformation with introductions of internet banking, mobile banking, banking apps, e-wallet facilities as well as other cashless facilities (Aguidissou O. C., Richard, Shambare, Rugimbana, 2017).

Digitalisation is the process of introducing digital technologies into previously traditional business processes, services or platforms. (Kelly, 2014) argues that Digitalisation is not just distribution and retailing phenomenon; she argues that it is the introduction of digital technologies, new digital solutions overall digital thinking that in turn will show impact across various banking services. (Lichtenstein, 2006) states that there has been evidence that has suggested that an 'internet-based' consumer

banking strategy is more likely to be effective, more profitable, show more loyalty from consumers versus consumers who still use traditional banking channels.

It is said that customer's perceptions of the quality of service they receive and their experience of satisfaction are shaped by the experiences they have when they encounter engagements that include service (Jun & Cai, 2001). (Bitner, 1990) argues that this concept includes all aspects of service that a customer may interact with, from staff to facilities. This also extends to other elements, tangible and intangible, and that some of these encounters may be non-human or interpersonal.

According to (Matoti, 2014) she states that South Africa's banking system is well regulated and fares well in comparison to other banking systems in more industrialised countries. She goes on to further state the South African banking system has been ranked third out of one hundred and forty-eight countries in the World Economic Forum Global Competitiveness Survey that was conducted in 2013/4. The banking landscape in South Africa is made up of multiple banks, registered banks, two mutual banks and various local branches of foreign banks. It also includes two cooperative banks as well as forty-three foreign banks with representative offices in South Africa (BASA, 2014).

As traditional banks evolve their business models some of the banks have begun to use Internet platforms, they have used their services on this channel as an opportunity to offer 24hour services to their consumers, internet banking as well as other forms of digital banking. (Rod et al., 2009) Internet banking, in comparison to traditional banking – in-branch, included minimal to no human interaction between consumers due to the nature of internet banking being an online platform.

Therefore, to create a baseline for this research, two areas of literature were selected and reviewed. One was the service quality, and customer satisfaction literature focused on the interpersonal service encounter, with a particular emphasis on Internet banking. (Jun & Cai, 2001) The other was the Digitalisation of traditional banking literature concentrated digital banking Omni-channel, internet banking and digital transformation.

A shift regarding the way consumer's bank is happening currently, with consumers opting for natural forms of banking that fit within their lifestyles and day-to-day

activities. This change is partially due to the increase in digital technologies (Piccinini et al., 2015). According to (Schuchmann & Seufert, 2015), Digital transformation challenges almost every industry; however, banking is the most affected by implications. The "Big Four" banks have had to redesign their business models, in response to the rapid adoption of digital technology that puts the power of banking in the hands of 'digital' consumers. The rise of digital technologies has transcended consumers social experiences into a 'here and now', making time and spaceless relevant; this has inevitably changed the way people live their lives, communicate across various channels and the way they bank. Many scholars have strived to define what digital transformation is.

According to (Schuchmann & Seufert, 2015), Digitalisation has been discussed in the context of digital transformation, where digital transformation was defined as the use of new digital to enable significant business improvements (such as improving digital customer experiences, creating efficiencies in operations and or creating new business models). (Seeger & Bick, 2013) propose that megatrends such as globalisation, digital technologies and consumer trends are essential drivers of digital transformation within the banking sector. In this paper, it will aim to use data from existing literature to explain how digital technologies are changing the banking–consumer relationship to further contribute with essential insights for better understanding the phenomenon of Digitalisation of traditional banking.

With the above background of the study, it can be deduced that the three categories that are integral to the Digitalisation of the transformation of traditional banking and its impact, i.e. Internet Banking (Cziesla, 2014).

1. The quality of online platforms
2. The quality of the banking services and its products.
3. The impact on customer satisfaction that internet banking provides.

According to (Aguidissou & Shambare 2017), the way that retail banking is performing currently is due to progressive deregulation that began in the early 90s, and this has given rise to the evolving format and structures of banking. (Lichtenstein, 2006) argues that banks have moved from the traditional brick and mortar to more virtual channels



such as mobile banking, internet banking, Live Chat and social media banking in response to the rise of technology.

The financial industry has had to respond to the rise in technology by adapting their business model from brick and mortar to online (Dietz et al., 2016). (Brown et al., 2004) argue that the introduction of the Internet in South Africa has led to the establishment of various value-adding products and services such as Internet banking within financial services. Internet banking changed the traditional banking landscape forever. According to (Redlinghuis & Rensleigh, 2010), some may argue that Internet banking has positively affected the lives of many, through providing services in a more convenient, efficient and effective manner, 365 days a year. (Matoti, 2014) states that Absa was the first to respond with the introduction of internet banking in 1996 with essential transactional and businesses services; the other three banks followed soon after.

According (Chavan, 2013), against the population of 54 Million South Africans, 46 per cent of them are active internet users, whether at home, work or school. Twenty-two per cent of South Africans have active social media accounts, and 146 per cent of the population have mobile connections, meaning some people have multiple devices. (Maduku, 2013) argues that the rise in internet adoption is indicative that the digital technologies in South Africa are on the rise and sooner rather than later. Enhanced multichannel experiences that cater for banking on various digital platforms such as desktop and mobile; social media interactions such as social media banking and mobile technology such as cellphone and App banking can enable banks to stay relevant and thriving in the market today as well as in the future (Vater et al., 2012).

The study continues with a review of current literature on Digitalisation, digital transformation and customer satisfaction to determine the research hypothesis. The research methodology is presented in the paper, and various analyses are discussed, and analyses discussed. The study also wraps with limitations and possible future research proposals.

### **1.3. Problem statement**

With the rise of Digitalisation and its direct impact on traditional banking, we have seen some banks attempt to catch up with global developments. They have done these advancements to improve the quality of their service delivery. Thus, we have seen a rise in the use of internet banking. There has been extensive research internationally, and in other regions on internet banking and internet banking adoption (Widya et al., 2014), however, there has been limited research on the impact of internet banking about customer service in South Africa. This highlights the need to understand Digitalisation on traditional banking further and further to that, the impact that has had on customer satisfaction (Gustafsson et al., 2005). This is further brought on by the rise in technological advancements for traditional banking that include mobile banking, app banking and social media banking (King, 2012).

#### **1.3.1. Main Problem**

To investigate the effects of Digitalisation on e-service quality, with a focus on internet banking. The study will investigate the usefulness and applicability of SERVQUAL in measuring internet banking and its relation to customer satisfaction. (Maduku, 2013) argues that very little has been done to identify and to begin to predict the factors that may influence consumer's attitudes towards using internet banking. (Brown et al., 2004) argues that the same can be said for measuring customer satisfaction of consumers who use the internet. Therefore, some gaps exist in measuring consumer's level of satisfaction towards Internet banking in South Africa.

#### **1.3.2. Sub-problems**

- The first sub-problem is to investigate the relationship between adoption of internet banking and service quality.
- The second sub-problem is to investigate the relationship between service quality in internet banking and customer satisfaction.

- The third sub-problem is to investigate the relationship between service quality in internet banking and customer satisfaction and retention.
- The fourth sub-problem is to investigate the relationship between customer satisfaction and customer retention.

**H1a** *The increased adoption of internet banking by consumers is positively related to e-service quality (Yap et al., 2010).*

**H1o**: *The increased adoption of internet banking by consumers is not related to e-service quality ((Yap et al., 2010)*

**H2a**: *Service quality – customer experience of internet banking is positively related to the level of customer retention (Han & Baek, 2004).*

**H2o1**: *Service quality – customer experience of internet banking is not related to the level of customer retention (Han & Baek, 2004)*

**H3a**: *Service quality- customer service of internet banking is positively related to the level of customer retention (Han & Baek, 2004).*

**H3o**: *Service quality- customer service of internet banking is not related to the level of customer retention ((Han & Baek, 2004)).*

**H4a**: *Service quality – customer experience of internet banking is positively related to the level of customer satisfaction (Han & Baek, 2004).*

**H4o**: *Service quality – customer experience of internet banking is not related to the level of customer satisfaction (Han & Baek, 2004)*

**H5a:** *Service quality – customer service of internet banking is positively related to the level of customer satisfaction (Han & Baek, 2004).*

**H50:** *Service quality – customer service of internet banking is not related to the level of customer satisfaction (Han & Baek, 2004)*

**H6a:** *Customer satisfaction is positively related to the level of customer retention (Yang & Fang, 2004).*

**H60:** *Customer satisfaction is not related to the level of customer retention (Yang & Fang, 2004)).*

#### **1.4. Contribution of the study**

With the growing role of digital technologies in both society and organisations, this study has many practical implications for guiding organisations, namely traditional banks in understanding the need for digital transformation to help them to develop strategies better to measure its impact on service delivery for consumers.

Banks are competing to gain a larger share of South Africa's online market. In South Africa, digital technologies are on the rise, with almost half the population with access to the internet. (Ganguly, 2015) Argues that an understanding of how the rise in digital technologies, consumers changing needs and the effect of digital transformation will enable banks to increase their market share and stay relevant in an ever-changing market. There is a need for a study that looks for opportunities and threats within the banking industry. Furthermore, this study will argue that digital capabilities in IT management are essential to design and develop a digital infrastructure that facilitates consumer interactions and enables a differentiated consumer experience to enhance consumer value.

## 1.5. Definition of Terms

Table 1 Definition of Terms

Digitalisation	The process of turning traditional process, services or platforms into digital formats (Vater et al., 2012).
Internet Banking	An electronic banking platform that allows consumers of a bank to perform various services online at their own convenience (Eriksson et al., 2005).
Omni – Channel	A seamless and consistent customer experience across various platforms and touch-points (Parise et al., 2016).
Digital Banking	Online platforms that allow consumers in financial service to perform various services across multiple devices such as desktop, mobile and app (Kelly, 2014).
Digital Transformation	Is the transformation that businesses and organisations embark on to incorporate and leverage various digital technologies into the business practices, processes and services (Cziesla, 2014)

## **1.6. Main Objectives and Aims of Study**

The main objective and sub-objectives of this study are all centered on the factors that influence *the impact of digitalisation on customer satisfaction: Study of Internet Banking in South Africa*

### **Sub-objectives**

The sub-objectives of this study are:

To identify the factors that influence customer satisfaction in digitalisation of banking.

1. To measure the relationship between digitalisation and customer satisfaction.
2. To measure the relationship between customer satisfaction and internet banking.

## **CHAPTER 2. LITERATURE REVIEW**

### **2.1. Introduction**

This chapter reviews the literature about the proposed topic. The review starts by reviewing traditional versus digital in the banking industry, the migration to digital transformation within banking, looking at prior research. The chapter also provides a review of the academic theories used within the research of digital banking usage. Finally, hypotheses, as well as a servqual model, will be derived from the theory and literature review presented.

### **2.2. Traditional Banking versus Digital Banking**

Traditional banking as a business has been summarised to making long term loans and by funding them through issuing 'short-dated' deposits. It is this process that has since been dubbed as borrowing short but lending long (Edwards & Mishkin, 1995). The history of traditional banking dates back to the 16th Century through the act of accepting deposits, lending of money and transferring of funds and banking served as a substitute to silver and gold coins (Widya et al., 2014). The growth of traditional banking gave rise to the financial service industry which facilitated in the growth of economies, businesses and personal wealth across the globe as well as locally in many countries (Klaus & Nguyen, 2009). (Ribbink et al., 2004) state that digital banking offers features for consumers at a lower cost in comparison to traditional banking. (Dapp, 2014) states that advanced technologies have enabled banks opportunities to introduce new banking products. It is allowing customers to utilise new banking products, such as internet banking.

(Muluka et al., 2015) argues that the introduction of banking technology has been to reduce distribution costs; digital banking has allowed consumers the ability to handle their banking without having to physically step into a bank and have to deal with a bank teller(Bauer et al., 2005a) says that the increase in competition in the banking

sector has led to various banks looking for differentiators, unique selling points to set them apart; innovation has allowed for that platform to exist in the banking industry.

We square measure coming into a replacement era of innovation that may reshape consumers' relationships with their banks. However, banking can evolve within the digital age; it's vital to grasp its basic premise. Whereas cheap folks will disagree concerning nuances, at heart, the art of banking is one amongst skilful record keeping within the double-entry ledger. At a small level, banks are thought of as dividend manufacturing machines seeking deposits and supply loans. At macro level, they're creators of credit cash. The most determinants of their quality and dependability square measure the quantity of capital and therefore, the level of liquidity (necessarily financial institution money) they keep. In general, a bank would love to keep up the correct levels of each – if it's insufficient, it becomes fragile, if it's an excessive amount of, and it becomes unprofitable and therefore unable to meet its purpose of paying dividends.

### **2.3. Digitalisation**

South Africa has seen the penetration of mobile phones and the use of the internet increasing over the years. Figure 1 shows that the penetration of internet in South Africa as of January 2018 was at 51% and figure 2 shows that the mobile connectivity sits at 147%, that means that some consumers have more than one mobile device. This has introduced the transformation of consumer's preferences as well as their habits. Consumers are engaging more on their digital platforms; it's where they are sharing information, engaging with their friends and accessing new services, among other things (Parise et al., 2016). (Meuter et al., 2000) argue that one of the leading contributors of Digitalisation is the development of next-generation mobile phones and the quick adoption in the market. In markets where the economy is developed, Are seeing mobile networks such as 3G and 4G available at competitive rates which means access to the internet is of ease.

Digital developments were historically dedicated to the responsibility of IT Departments. Though the alignment between business and IT goals was a constant discussion of each practitioners and researchers (Dapp, 2014), the leading role of



structure it was not questioned, and outsourcing of IT services typically arose principally in operational issues. By now, the exclusivity of developing new IT services, and delivering digital innovations has disentangled, chiefly as a result of the following reasons: As conversion reached business departments, the need of IT information and IT savvy staff became very important of structure success (Weill & Woerner, 2015). Thus business leaders and staff had to amass digital skills, so IT departments' information monopoly is beneath demystification.

Digital technologies are coming into the banking system for years. Therefore the banking system and banking operations and extremely hooked into the IT services (Fehér & Varga, 2017) originates machine-driven retail banking services into the mid- Sixties, owing to the necessity of process the extensive range of credit-card connected electronic transactions. Since then, digital solutions aren't uncommon within the money sector: ATMs within the late Sixties and Nineteen Seventies, phone banking and POS solutions since Nineteen Eighties, online banking and even mobile banking since late Nineteen Nineties. Motivations of digitisation was quicker and cheaper client service. Despite those efforts and digital achievements, banking services still appear to be lagged behind general digital technology trends, and behind the digitisation of different sectors, particularly commerce (Turber & Smiela, 2014).

The circumstances are more stringent for the banks, as their customers take their money services from completely different service suppliers (e.g. account, mortgage, credit, credit card, etc.). (Bauer et al., 2005a) argue customers demand and appreciate digital services, and these segments area unit able to modification for higher digital client expertise (Lipton et al., 2016). Beside the dynamical client behaviour, banks need to face new challenges (Muluka et al., 2015)

- As new entrants, FinTech corporations provide digital money services in many niches. FinTech corporations act like start-ups, frame a particular client and provide specific solutions (e.g. cash transfer, microloan, crowd funding, payment, etc.) (Fehér & Varga, 2017). One FinTech service in all probability won't endanger banks, or the banking sector, however along they aim tiny yet profitable slices of the banks' worth chains. Astonishingly banks didn't begin to

handle this challenge (Chen et al., 2014). Though this hybrid money model looks to stay within the market and queries the role of banks within the following years.

- Technology corporations additionally enter to the market of financial services, as money services became associate degree integrated section of their worth offerings: Alibaba, Google, Apple, Samsung, etc. give additional and additional money services, that area unit technologically advanced. What is more, they will target their existing user base (Severino et al., 2015).

Since the money crisis started in 2008, government and industrial rules became stricter, and need banks to use and report these necessities (Zysman et al., 2011). These compliance problems need further investments in technological solutions (reporting, knowledge analysis, fraud protection, anti-terrorism analysis), and makes their service offerings less versatile, and generally less user-friendly (Chavan, 2013).

Figure 1 Internet Penetration by Region: Focus on South Africa

<b>Region</b>	<b>Percentage of penetration</b>
North America	89%
Central America	61%
The Caribbean	48%
South America	68%
Northern Europe	94%
Eastern Europe	74%
Western Europe	90%
Southern Europe	77%
Northern Africa	49%
Western Africa	39%
Middle Africa	12%
Eastern Africa	27%
Southern Africa	51%
Central Asia	50%
Western Asia	56%
Southern Asia	36%
Eastern Asia	57%
South East Asia	58%
Oceania	69%

Source: (We Are Social Ltd & Hootsuite Inc, 2018)

Figure 2 Mobile Connectivity by Region: Focus on South Africa

<b>Region</b>	<b>Percentage of penetration</b>
North America	103%
Central America	96%
The Caribbean	74%
South America	115%
Northern Europe	123%
Eastern Europe	157%
Western Europe	119%
Southern Europe	126%
Northern Africa	106%
Western Africa	89%
Middle Africa	58%
Eastern Africa	61%
Southern Africa	147%
Central Asia	98%
Western Asia	108%
Southern Asia	91%
Eastern Asia	103%
South East Asia	141%
Oceania	110%

Source: (We Are Social Ltd & Hootsuite Inc, 2018)

(Kelly, 2014)states the rise of the internet has resulted in a space where you have consumers who do product research online as well give reviews on their experience with various products and or services. This is a phenomenon that exists in the financial sector, insurance as well as telecommunication sectors. (Dapp, 2014)

argues that various transformations have been taking place in the financial industry, and this has been in a bid to transform the bank – digitalisation of the banks digitally.

#### **2.4. Digital Transformation in Traditional Banking**

The banking industry is an information-intensive industry and remains the pioneers of advanced use of information technology. The banks are continually looking for alternative ways of relating to consumers, reduce costs, improve efficiencies, and differentiate products and in the past. The introduction of Automatic Teller Machine (ATMs) allowed access to some banking service on a 24/7 basis ((Katz, 1998). (Aladwani, 2001) States that digital transformation is beyond just moving from traditional banking to digital banking. The author goes on to further state that it is vital for a dramatic change in how banks learn about, interact with and satisfy consumers to stay competitive and relevant.

(Economics, 2015) argue that digital transformation strategies are dependent on the organisation's perspective and its goals. Regarding a business-centric view, they focus on the transformation of products, processes, and organisational aspects in response to new technologies. This depicts a clear difference to process automation & optimisation and digital transformation strategies. (Zysman et al., 2011) state that digital transformation strategies go beyond the automation and optimisation paradigm, and include changes to products, services, and business models as a whole.

(Piccinini et al., 2015) refers to Digitalisation as the integration of digital technologies into everyday life, these include internet, social networks, tablet and mobile devices. He goes on to further state that these are platforms or technologies that are widely used by banking consumers. (Tolo, 2003) introduces the argument that says that not all consumers are attracted to Digitalisation, based on their adoption of digital technologies, or the lack of adoption of such. They go on to that some consumers are resistant to digital technologies; these may help consumers who are in rural areas. Therefore, banks need to provide service capabilities that cater to both the digitally enabled consumer and the traditional consumer.

(Meuter et al., 2000) introduce the concept of understanding evolving customer types. The evolving customers are based on the reality that modernisation or technological advancements change the need of consumers. With the rise of digital technologies, consumers are learning and absorbing information more rapidly; they require products and services that are fast and adapt to their desire for speedy experiences. (Weill & Woerner, 2015) argue that the demand for digital products is what are festering the relationship between banks and consumers. The previous relationship skewed the reliance on the bank's structures and processes. Digital technologies, on the other hand, enabled customers to render services that are natural, comfortable for them and easy to use, whenever they wanted. This means the current customer can decide how they want to bank, where they want to bank and when. They are also able to bank according to their needs and capabilities on platforms such as internet banking, apps, social media or ATMs (Yusuf Dauda & Lee, 2015).

## **2.5. Digital Banking: Omni-Channel**

(Kimotho, 2016) defines digital banking and Omni-channel to have the following elements in it:

- Delivering a customised but consistent brand experience, to consumers across all channels and all touch-points.
- All interactions underpinned by analytics and automation
- Requiring a change in the operating model, products, services, organisation, culture, skills and IT.
- To have all the above in place to deliver demonstrable and sustainable economic value to the business.

(Redlinghuis & Rensleigh, 2010) argue that as consumers change their channel usage patterns, banks need to shift their focus to delivering a seamless customer experience that caters for various touch-points. According to (Aladwani, 2001), Omni-channel banking is a prospect to take insights from consumers various channels, behaviour and preferences. Consumers are becoming more sophisticated and tech-savvy; Banks need to cater to their needs; each consumer needs a unique experience when banking. They want organisations to understand their needs as

well as their preferences. (Parise et al., 2016) state that these consumers are beginning to expect this kind of response and service from banking institutions. (Khalaf Ahmad & Ali Al-Zu'bi, 2011) argue that banks operate in a challenging world in which there is a rise in technology, consumers are becoming more tech-savvy, and expectations are continuously on the rise. Due to that, banking in its current traditional format quickly becomes a thing of the past. To maintain success and gain a competitive advantage, banks must begin moving to Omni-channel banking while customer readiness around the world is gaining momentum (Schuchmann & Seufert, 2015)

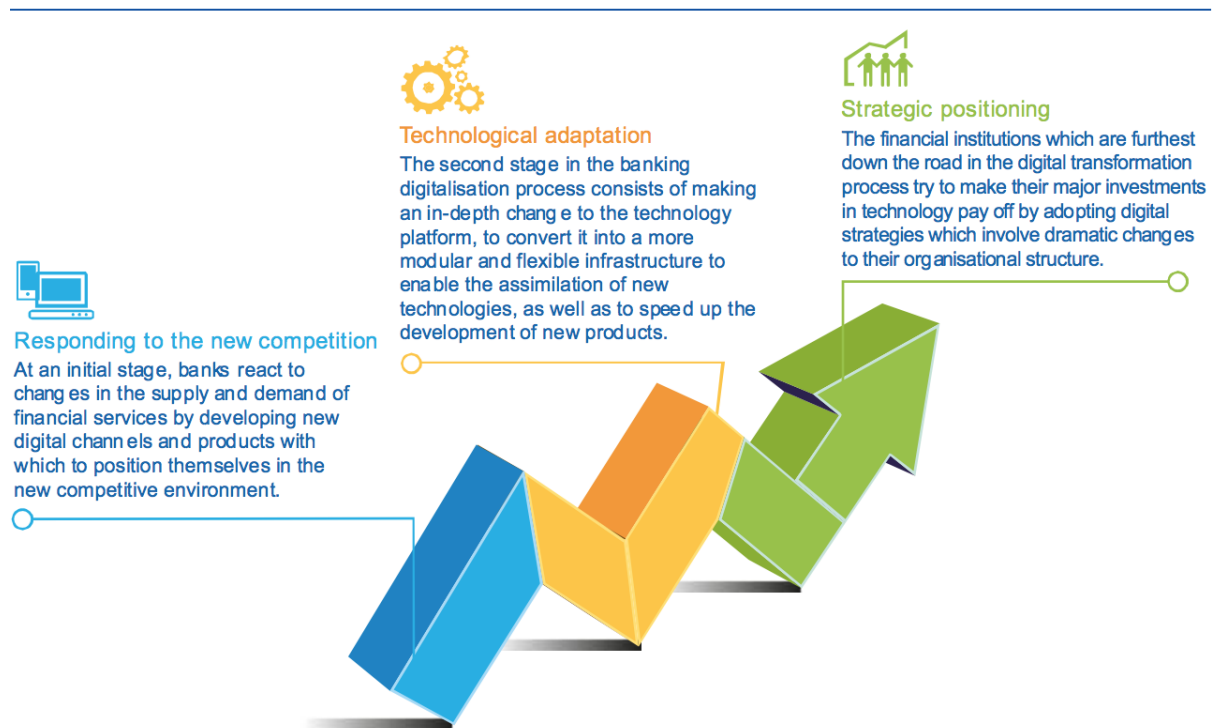
According to (Ericsson et al., 2012), they tell of the case study of the Cisco Internet Business Solutions Group (IBSG). When they embarked on digital transformation with their stakeholders, they called it the "Era of Omni-channel Banking." They go on to state that Omni-channel banking is a different approach to the current one, which is 'multichannel' and it is an approach in which banks offer consumers a platform or channel that is the least expensive. However, there is very little consistency across the channels in regards to services provide or user experience (Parise et al., 2016).

According to (Parise et al., 2016) he states that in the world of Omni-channel banking, consumers choose the platform in which they want to use for banking. An example of this is that a consumer may start an interaction on one channel, i.e. desktop and then they can complete the interaction on their mobile phone on a banking app, in the comfort of their home. (Khalaf Ahmad & Ali Al-Zu'bi, 2011) argue that Omni-channel banking is a transformation within the financial sector that gives life to the possibility of contextual banking; in which various financial services can be seamlessly integrated into the lives of consumers who use their services.

(Cuesta et al., 2015b) argue that the expectation is that digital banking will prioritise customers' needs ahead of business product cycles, seeing that with digital banking, the customer is at heart. It is expected that digital banking will give priority to the needs of end customers ahead of product creation since they are the focal point for which the range of products and services on offer is defined. There is something of a consensus that the concept of digital banking applies to retail banking.

In this regard, the traditional banks which commit to digital banking are undergoing a transformation which allows them to position themselves within the new ecosystem (Dietz et al., 2016). This digital transformation depends on the set of circumstances with which each institution starts, although it is evident that several phases are depending on the level of maturity. In this paper, we have boiled the process down to three main steps.

Figure 3 the Three Phases of Digital Transformation



Source: (Cuesta et al., 2015a)

(Dietz et al., 2016) argue that consumers are adapting to digital interactions in their lives, and thus the call for the financial sector to heed the call has intensified. The need for banks to offer services that are 24/7 is to allow customers to engage with them in a manner that is more preferential to the consumer. Consumers have been asking their banks to communicate with them on the channels that they frequent, such as social media networks or email platforms. (Widya et al., 2014) state that the role of social media networks has vastly played a role in Digitalisation in various sectors.



## **2.6. Trust in Internet Banking**

(Mukherjee & Nath, 2003) state that one of the dimensions of trust is perceived risk. In the case of internet banking, the risks become heightened because the consumer and bank are separated and engage in a virtual world or platform. These heightened risks are due to virtual platform barring the ability to monitor relationships and thus make it difficult for consumers to trust internet banking. (C. Liao et al., 2007) studied the relationship between various innovation attributes and their impact on influencing internet banking adoption.

According to (Ribbink et al., 2004) they argue that trust is an essential element towards building long term relationships. Long term relationships are particularly important in the banking sector as they are integral to their business model as well (Floh & Treiblmaier, 2006). (Ribbink et al., 2004) goes on to state that a widely used definition of trust is that of (Moorman et al., 1992) who had it defined as the willingness to rely on an exchange between two parties in which one has confidence in whom they are exchanging with.

(Ribbink et al., 2004) introduce the concept of 'E-trust', and state that this is what can be used to map out the level of confidence consumers have on online platforms and the online exchanges that occur on those platforms (Floh & Treiblmaier, 2006) argues that the lack of face to face interaction that internet banking allows for is what creates the basis of suggesting that online trust is cognitive. It is reliant on the consumer's judgement, perceptions and perceived reliability on the channel in which they perform these online exchanges.

## **2.7. Adoption of Internet Banking**

### **Accessibility**

According to (C. Liao et al., 2007), the term accessibility refers to the user's ability to access information. They go on to state that a few factors determine the ability to access information; they are listed below

Content format of the information being presented.

The user's hardware, the most updated device renders a better experience.

Software and settings on their devices – some online platforms require specific settings for platform to work desirably (Ameme, 2015).

Internet connects – the quality of interactions is directly dependent on the quality of internet connectivity.

(Jun & Cai, 2001) state that some dimensions have a considerable impact on consumers overall satisfaction and that they attentiveness and ease of use of a platform.

(Joseph et al., 1999) make the argument that when in the context of banking and digital technologies such as internet banking there are five dimensions that consumers compare against to measure their satisfaction form online platforms.

They are:

- Convenience as well as accuracy
- Feedback from their bank as well as efficiency in problem management
- Managing to service-related queries when there is a high volume
- Accessibility to the internet banking platform as well as call centres
- Customisation and personalisation of their internet banking platform
- The above are dimensions that will be measured to see how digitalisation of traditional banking – internet banking and what the impact of those have on customer satisfaction.

*The first hypothesis that:*

**H1a** *The increased adoption of internet banking by consumers is positively related to e-service quality.*

**H10:** *The increased adoption of internet banking by consumers is not related to e-service quality.*

Several converging reference domains and theories suggest numerous potential influences on consumer adoption of internet banking, including theories of consumer

behaviour in mass media choice and use. (Cheung et al., 2005) further argues that gratification theories, innovation diffusion, technology acceptance, online consumer behaviour, online service adoption, service switching costs and the adoption of internet banking. First, the initial personal choice of the internet as a medium for information consumption underpins consumer adoption of internet banking (Rod et al., 2009).

The internet marketing will add price to banking franchises in many ways that, looking on whether or not it's wont to augment physical branches (click-and-mortar banks) or in situ of physical offices (internet-only banks) (Yang & Fang, 2004). (Dapp, 2014) states that the strategic core of the click-and-mortar banking model is to route standardised, low added transactions (e.g., bill payment, balance inquiries, account transfers, MasterCard lending) through the cheap web channel, whereas routing specialised, high-value-added transactions (e.g., little business disposition, personal trust services, investment banking) through the costlier branch channel. By providing associate possibility for purchasers World Health Organization wish to try to some, however not all, of their banking over the web, a click-and-mortar bank could also be higher able to retain its most profitable customers (Lee et al., 2003).

In distinction, the strategic core of the internet-only business model is to cut back overhead expenses by eliminating the physical branch channel. Most internet-only banking franchises within us have struggled for profit. Some have exited the market via acquisition, voluntary liquidation, or regulative closure. Others have remained within the market, however, modified methods, augmenting their transactional websites with physical branches. Similarly, a variety of the large banking corporations that launched "trade name" internet-only ventures, like Washington-Mutual, have integrated these business units back to the financial institution. However, a tiny low variety of internet-only banking franchises have achieved some life of profit and stay committed to the present business model within the long-term.

## **2.8. Service Quality into E-Service Quality**

(Joseph et al., 1999) argue that when consumers rate the quality of service they are receiving from their banks, they use a different criterion. This criterion is relative to

what they have determined as important to them, and therefore it may differ from consumer to consumer. (Siddiqi, 2011) states that are many authors have previously focused their research on established models of service quality to focus on expectations and not enough has been done to explore the issue of importance. Let us take into consideration the most widely used model, in academia, to measure perceived service quality; this model was developed by (Ostrom et al., 2015; Parasuraman et al., 1985).

(Joseph et al., 1999) argue that this focuses and shows indicators for consumer's perception of service quality. He goes on to further state that those indicators are influenced by gaps that consumers feel are blockers for companies to deliver high level of service.

The definition of service quality that was conceptually developed by (Ostrom et al., 2015) has been used as a tool to compare service excellence experiences that various consumers have encountered. Authors such as (Bitner, 1990) and (Al-Hawari & Ward, 2006) have defined service quality as a consumers impression whether good or bad of the service provider, this is in some instances directly correlated to the consumers' attitude towards the brand as the consumers' overall perceptions and impression regarding how good or bad a service provider is, it is also in most cases similar to the consumer's attitude towards the company or brand.

(Parasuraman et al., 1985) indicate that in his definition of service quality, several points encompass the definition. One of the points covered in the definition is that of attitude; this is about attitude towards a brand gets developed over several previous encounters with the brand. (Bitner et al., 1997) argues that the word "attitude" includes outcome quality and process quality.

(Kadir et al., 2011) among other researchers have deduced outcome quality as the experience the customer received and concluded process quality as the way the service is delivered.

The above definitions from various authors' definition describe the quality of service as the outcome, and process quality of the service from the previous service

encounters a consumer has with a brand or service provider. (Parasuraman et al., 1985) indicate how consumers rate a product or service depends on the extent of tangibles and intangibles. (Liao & Wong, 2008) argue that in digitally transformed businesses, perceived service quality is mapped out against the consumers' overall judgment of the service excellence of the quality of the service, even in a virtual setting.

(Yusuf Dauda & Lee, 2015) state the e-service quality is not a new dynamic; it just operates in a different environment and that there have been multiple systems that deal with the evaluation of e-service quality. (Parasuraman et al., 1985) they developed the e-servqual method, which allows the measurement of service of electronic services. They specifically focused on seven dimensions which are namely efficiency, reliability, fulfilment, privacy, responsiveness, contact to customer and recovery and these apply specifically to the online world.

We therefore hypothesise that:

***H2a:*** Service quality – customer experience of internet banking is positively related to the level of customer retention.

***H2o1:*** Service quality – customer experience of internet banking is not related to the level of customer retention.

***H3a:*** Service quality- customer service of internet banking is positively related to the level of customer retention.

***H3o:*** Service quality- customer service of internet banking is not related to the level of customer retention.

***H4a:*** Service quality – customer experience of internet banking is positively related to the level of customer satisfaction.

***H4o:*** Service quality – customer experience of internet banking is not related to the

*level of customer satisfaction.*

**H5a:** *Service quality – customer service of internet banking is positively related to the level of customer satisfaction.*

**H5o:** *Service quality – customer service of internet banking is not related to the level of customer satisfaction.*

## **2.9. Customer Satisfaction in Internet Banking**

According to (Joseph et al., 1999) the concept of customer satisfaction incorporates a central position in promoting because it could be a significant outcome of selling activity and it links the processes of purchase and consumption or use of the merchandise or service to angle amendment, repeat purchase and ultimately complete loyalty. Origin of the thought is expounded to the marketing (Stiakakis & Georgiadis, 2009). The concept is that profit is generated through the satisfaction of client wants and desires. (Wong, 2011) defines customer satisfaction as the degree of comfort provided by the products or services of an organisation as measured by the amount of repeat customers. The concept of customer satisfaction is new several corporations, who are centered on value and availableness of product. So, it's necessary to be clear the precise which means of on precisely the term (Hennig-Thurau, 2004). According to (Chavan, 2013) customer satisfaction could be a state of mind that clients have a couple of product or services when mistreatment that product and repair offered by an organisation reciprocally of customer expectations concerning the product. Customer satisfaction results in product repurchase that ultimately results in complete loyalty. In the early 1970s, client satisfaction emerged as a legitimate field of study. U .S department of agriculture's Index of shopper satisfaction was the first study to report direct data on shopper satisfaction (Parise et al., 2016). Customer Satisfaction whole Loyalty and gain square measure connected to 1 another (Hallowell, 1996).

(Yang & Fang, 2004) state that the definition of customer satisfaction is involved in that it is not limited to just 'happy customer'. They go on to state the term is widely used in business and in industries such as that of commerce. (Yang et al., 2004) argue that most businesses use it as a measure, a standard in which the company's products and or services need to meet a consumer's expectation. In some businesses it is introduced as a critical performance measure, in a highly competitive market where companies are competing for customers, customer satisfaction is and can be used as a vital differentiator and becomes integral to the business strategy (Hennig-Thurau, 2004).

(Lin & Luarn, 2003) argue that customers operate with a set of expectations on the service they want to receive from a service provider, based on their interactions, they then make conclusions on the service they received. Customer satisfaction can be summarised as being a direct result of a customer's expectations, having been met by the service provided by the organisation (Gustafsson et al., 2005). Customer satisfaction is argued to be even more important online, as it may be harder to keep online customers loyal (Khalaf Ahmad & Ali Al-Zu'bi, 2011). (Chavan, 2013) States that in the banking sector, which has traditionally been known to be a high contact service, therefore the lack of direct human interaction in internet banking forces the need to look at the role of technology in closing that gap. We, therefore, hypothesise that:

***H6a:*** *Customer satisfaction is positively related to the level of customer retention.*

***H6o:*** *Customer satisfaction is not related to the level of customer retention.*

## **2.10. The SERVQUAL scale**

There is a vast analysis of the market on the activity of service quality. Parasuraman, Zeithaml and Berry developed the SERVQUAL model within the early Nineteen Eighties (Bitner, 1990). The model is predicated on shoppers assessing service

quality by scrutiny their expectations versus their perceptions of the service they get from a service supplier that is predicated on the read that buyers assess service quality by scrutiny expectations of services supplied with impressions of the particular service received from a selected service supplier.

The servqual model consists of 5 service quality dimensions that square measure (Parasuraman et al., 1985):

- Tangibles: these square measure associated with physical facilities, equipment, personnel and communication materials.
- Reliability: this can be associated with the service supplier having the ability to perform the services accurately and, during a dependable manner.
- Responsiveness: this can be associated with the service provider's temperament to assist shoppers with prompt and correct service.
- Assurance: this can be associated with the data and courtesy that the workers of the service supplier to show confidence and insert trust in them for the shoppers.
- Empathy: this can be associated with the number of care, and individual attention service suppliers offer to shoppers.

There is vast analysis literature that there's marginal accord on service quality. The SERVQUAL model has been wide used and accepted as a method for service quality activity (Kadir et al., 2011). (Kassim & Asiah Abdullah, 2010) & (Yang & Fang, 2004) offer Associate in nursing example, of however analysis has been turned to the size of service quality in e-commerce settings or digitised settings; specifically, they're simple use, web site style, responsiveness, personalisation or customisation, and assurance. They're going on to argue that these dimensions have a right away on client satisfaction.

(Han & Baek, 2004) state that in the previous couple of years, abstract and empirical studies have tried to speak to the key attributes, directly or indirectly once activity online service delivery. They're going on to argue that the SERVQUAL methodology has been utilised inactivity the service quality of online systems, platforms and data



technology innovations. (Bauer et al., 2005b) specialise in the medical aid of ancient quality dimensions within the context of digital banking and online services as an entire,

According to (Jun & Cai, 2001), SERVQUAL might not perpetually be applicable for activity service quality across all industries. For instance, (Cronin & Taylor, 1992) targeted on numerous industries in their study; industries like tormenter management, banking, fast foods and cleaning and in their study they weren't able to ensure the SERVQUAL scale and its five dimensions for any of the five dimensions. (Johnston, 1997) in his study analysed customers satisfaction or discontent in banking regarding the standard of service they receive. He went on to argue that the causes of dissatisfaction weren't perpetually the direct opposite of causes of satisfaction.

### **2.11. Technology Acceptance Model**

(Legris et al., 2003) argue that organisations invest in info systems reasons that embrace cutting prices for a business, the power to form additional whereas still keeping costs down yet on improving the standard of the service or merchandise they deliver or manufacture. (Z. Liao & Wong, 2008)state that the acceptance of recent technology could be a field that has been extensive analysis explored over the last decades. The technology acceptance model (TAM) prompt by Davis (Venkatesh & Davis, 2000) has been accustomed try to justify user behaviour across numerous computer-based info systems and knowledge technologies that get introduced in multiple industries and fields.

According to (Brown & Alemayehu, 2005), the expansion of digital banking depends totally on shoppers adopting and mistreatment them. (Pikkarainen et al., 2004) argue that despite the net platform is excellent or unhealthy, the adoption of usage depends on the acceptance of the buyer to mistreatment that platform. If shoppers have any negative perceptions or don't suppose the platform, then their behaviour toward digital banking can be harmful.

(Ganguly, 2015) discusses the infrastructure that exists at intervals banking. He argues that it's usually concerned centralised platforms that run large systems. They need been supported by high-security infrastructure during a bid to secure the data of shoppers. This has continued to be an attentiveness because the revolution of the web has worked its manner into the banking sector. During a bid to do to stay up with the advancements of the trade, the banking sector has found itself with complicated systems that either overlap, don't communicate with one another or presently become obsolete (Ganguly, 2015).

(Dapp, 2014) introduces the necessity for digital comes that need the power to method giant volumes of information on multiple channels on a 24/7 and 365-day policy that's the rise of digital shoppers, to be wherever they're. The dependency for the banking sector to supply that's the rationale of digital banking as an idea is required, and it's the solution to it shopper would like. So banks got to introduce speedy integration to their processes and new technologies to be able to sustain with changing wants of the shoppers yet because the advancements at intervals the trade (Ayo et al., 2016).

The theory can also be relevant to client decisions in internet banking adoption. During this model, 'perceived usefulness' and 'perceived simple use' area unit the two main influences in user adoption of technologies. Newer studies using a TAM-base theoretical lens have identified further constructs which will be prestigious in web service adoption. For instance, a holistic framework incorporating complicated social, psychological and economic components was recently planned (Rishi & Saxena, 2004).

## **2.12. Diffusion Innovation Theory**

The theory of diffusion of innovation (IDT) (Wani & Ali, 2015) can be thought-about mutually of the earliest theories that have tried to explore factors which will influence a private to adopt innovation or a replacement technology. The central thesis of this theory is that innovation adoption could be a method of uncertainty reduction. To scale back uncertainty regarding the new technology, people can gather and synthesise data regarding technology. The results of this method are beliefs

regarding mistreatment the technology. These beliefs then cause people to accept or reject the technology simply. (Rogers, 2010) Advised five elementary opinions moving the adoption of any innovation. Initial is relative advantage that he defines as "the degree to that Associate in nursing innovation is perceived as being higher than the concept it supersedes.

(Rambocas, 2012) recommended that the various dimensions of attitudinal belief towards an innovation can be measured victimisation the five perceived attributes (relative advantage, compatibility, complexity, trialability and observability) of the change. (Agarwal et al., 1998) found that compatibility, comparative advantage, and quality had the foremost meaningful relationships with adoption across a broad vary of innovation varieties. (Takieddine & Sun, 2015) considered performance as being alive of relative advantage, whereas (Awamleh & Fernandes, 2006) determine the elimination of the necessity to accept others. The relative advantage is a critical issue to assess adoption of latest innovations (Daniel, 1999). (Combs, 2009) showed that the relative advantage of a change is positively associated with its rate of adoption. (Jaehrling et al., 2018) outlined quality because the degree of a move that's thought-about comparatively troublesome to understand and use. (Corrocher et al., 2004) implied that knowing individuals, who are familiar with the net and email, shouldn't notice Internet banking to be complicated. (Corrocher et al., 2004) Discovered that e-banking needs a certain minimum level of technical expertise and competence, regardless of whether or not this relates to the use of a pc or the net.

As digital banking may be a comparatively new conception in banking service delivery, another theory which will justify influential forces in client web banking adoption is Rogers' theory of innovation diffusion (Rogers, 2010). He further (Rogers, 2010) describes five innovation attributes that facilitate justify innovation adoption rates: relative advantage; compatibility (degree to that the service is per the consumer's values, experiences and needs), complexity, trialability (degree to that the service is experimented with before creating the choice whether or not to adopt) and observability (degree to that the service is ascertained being with success used).

### **2.13. Conclusion of Literature Review**

In the discussion of the literature, it reviews points around Digitalisation, the trust that is required for internet banking. Trust in internet banking also talks to the adoption of internet banking and also discusses the service quality in which internet banking is intended to deliver on. The literature review also discusses the servqual model and its seven dimensions of measurement and how they directly relate to internet banking and their impact on service quality. The seven dimensions listed above are by no means a limitation regarding the factors that inform and impact service quality. The ones used above have been used as they are relevant and are integral elements of internet banking.

This study will test the problem statements stated above and are aligned to the hypothesis which has been explored in the literature review in evaluating the impact of internet banking on e-service quality, focusing on Standard Bank.

## **CHAPTER 3. RESEARCH CONTEXT**

### **3.1. Research methodology**

In this chapter, the method of the current study is identified and described. The methodology is defined as the procedure of conducting research and scientific investigation (Lin & Luarn, 2003)) and gives attention to the epistemological considerations, ontological considerations and the theoretical paradigm of the researcher (Agarwal et al., 1998)

Eight specific objectives of the methodology were examined in this chapter – to identify and describe the research paradigm (Section 3.1); the research design (Section 3.2); the population and sample (Section 3.3); the research instrument (Section 3.4); the procedure for data collection (Section 3.5); data analysis and interpretation (Section 3.6); the potential limitations of the research procedure and methods (Section 3.7) and the reliability and validity measures applied to assess and establish the quality of the research (Section 3.8).

#### **3.1.1. Research type**

Previous studies conducted by (Kettinger & Lee, 1997) and they set out to test empirically whether SERVQUAL was the appropriate model for them to test service quality of information systems. For this research paper and adapted version for internet, banking SERVQUAL will be used to deal with customer satisfaction concerning internet banking. The approach will be to use the modified SERVQUAL instrument on the study sample and then validate data using the measurement model and the structural equation model. The relationship between internet banking and, customer satisfaction will be investigated, and the research hypotheses were tested.

### **3.2. Research approach / paradigm**

According to (Kiani, Reza, 1998), internet banking in the financial sector shows a potential and appetite for building relationships online. For this study, we selected

customers who use internet banking as their channel of banking. Data for model testing will be obtained via an online survey. Standard Bank South Africa will avail access to be able to send a questionnaire to their internet banking consumers. Using the seven dimensions of SERVQUAL for online platforms, the survey will measure user expectation and service quality of Standard Bank's internet banking in general and perceived performance of the internet banking platform. The appendix shows the questionnaire items that will be used for the online survey.

### **3.3. Population and sample**

#### **3.3.1. Population**

Regarding banking, this study focused on Standard Bank and its internet banking consumers and therefore representation and consumers from the bank were necessary in order make general comparisons to understand the impact of digitalisation, internet banking, and its impact on customer satisfaction. It was necessary to get respondents to respond to the survey. The number of respondents would be directly linked to the number of internet banking consumers Standard Bank had, to get a sample number that is representative of the total number of consumers who had used Standard Bank internet banking. Respondents on the bank were found using social media platforms who had a relationship with the bank through:

1. Customers of Standard Bank.
2. Liked and or followed the Standard Bank Facebook page.
3. Liked and or followed the Standard Bank LinkedIn page.
4. Engaged and or interacted with Standard Bank on social media via sending a query to the social media platforms of the bank.

#### **3.3.2. Sample**

The sample consisted of 207 participants who were all Standard Bank customers. The survey was targeted and about Standard Bank Internet Banking platform, and therefore the research was ring-fenced to customers who:

- Bank with Standard Bank
- Had used Standard Bank Internet Banking in the last 12 Months.

- Had seen or were targeted to participate in the research report questionnaire via Facebook ad ( Targeting metrics used were 'customers of Standard Bank' or 'Liked Standard Bank Facebook Page', 'engaged or interacted with Standard Bank via Facebook in last 12 Months').
- Had seen or were targeted to participate in the research report questionnaire via LinkedIn post ( Targeting metrics used were 'Liked, engaged or interacted with Standard Bank LinkedIn Page').

### **3.3.3. Measures of customer satisfaction**

According to (Zavareh et al., 2012), they state that customer satisfaction can be measured in various ways. One of the ways to measure it consists of responses to single questions in the form of a questionnaire. One of the roles that customers play in service delivery is in the contribution to their own satisfaction about the quality of service they receive. (Zavareh et al., 2012) goes on to state that consumers put a great deal of importance on whether their needs are fulfilled versus the improvement of productivity of organisations. Previous researchers (Cronin & Taylor, 1992) have argued and commented about the merit of perception-only measures. In light of these discussions, only perceptions about the service quality of Internet banking were examined.

The questions explored positive and negative Internet banking experiences, criteria used in evaluating Internet banking service quality, and the characteristics of good or bad electronic service quality. Results indicated that the items from the dimensions of fulfilment and compensation had little local bearings on the automated service quality perceptions. Therefore, tangibles, reliability, responsiveness, assurance and empathy were the dimensions adopted for the present study measuring service quality in Internet banking. Findings from these qualitative studies also helped to modify items in the questionnaire used in subsequent work.

The questionnaire is in 7 parts. A five-point Likert scale with “1” for strongly disagree and “5” for strongly agree was used to show perceptions of service quality, customer satisfaction and future consumption behaviour in Internet banking. Target respondents were customers who had current experience in using Internet banking for transactions and had operated at least one Internet banking account during the previous 12 months. Respondents would be found on online platforms, such as LinkedIn, Facebook and Twitter. The targeting demographics would-be customers of Standard Bank, 18-35, live around South Africa and have liked the Standard Bank social media pages.

According to (Meyer & Schwager, 2007) some consumers enjoy the use of the internet or computers to make purchases and to bank online, they prefer these as a medium to interact with service providers. In some instances, they can directly influence improvements of service that directly increase the convenience in engagement. But also, (Gustafsson et al., 2005) states that these consumers are quite integral to the participation or chain of service delivery, they are likely to blaming themselves when things go wrong. If some consumers take the blame for any part of the service delivery value chain, then they are likely to be less dissatisfied with the service provider.

### **3.4. Data collection**

Data collection involves first, distributing surveys via online means via various online platform options, to the sample population of Standard Bank internet banking customers. The online platforms included the possibility of targeting only customers of Standard Bank; this was available within the online platforms such as Facebook which allows you to add targeting parameters. This included targeting customers who have used internet banking for 12 months. Section one of the survey will deal with socio-demographic questions related to the respondent. The second part of the questionnaire will be connected to E-service quality questions. The next section will deal with the adoption of internet banking efficiently. Section four focuses on the service quality with a specific focus on the customer experience. Part five will also be



related to service quality but with a focus on customer service within internet banking. Part six will deal with customer retention efforts related to internet banking. The last section will deal with customer satisfaction concerning the internet banking platform. The questionnaire duration was approximately 15 minutes.

### **Section 1: Screening and socio demographic questions**

In the questionnaire, there were three questions (Q1 –Q4) that were designed to ensure that the respondents were qualified to participate in the research:

- Consent: The first question for respondents was whether they consented to participate in the study, two options were presented to respondents.
- Age: Respondents needed to be adults; there were various age brackets offered as options for respondents – adults were classified as above 18 years old.
- Income: Respondents required to indicate the income bracket they currently fall under, various income brackets were offered as options for respondents.
- Gender: Respondents needed to show gender; they now fall under; two gender options were provided for respondents.

### **Section 2: E-service Quality**

Once it was established that the respondent consented to participate in the research as well as shared their socio-demographic information, four questions (Q5 – Q8) were asked to provide context on the respondent's perception of the platform of Standard Banks internet banking. Whether they thought that Standard Bank had the latest equipment and digital technologies (Q5). Ascertaining whether Standard Bank internet banking provides them as customers with valuable information (Q6). The visual appeal of the Standard Bank internet banking platform (Q7). Whether the platform catered to respondents specific needs (Q8).

### **Section 3: Adoption of Internet Banking**

The adoption of internet banking was framed around elements that would appeal to the respondent in influencing their uptake of internet banking. (Q9) focused on the

features and functionality of the Standard Bank Internet banking platform. Respondents were asked if they perceived the platform to be responsive, laid well and intrinsic to the needs of the respondent (Q10). The questionnaire also focused on the Standard Bank platform being efficient or not (Q11). (S. Ananda, 2020) argued that consumers who perceived the internet banking to be easy to use and efficient had a direct and positive influence on the adoption of internet banking. Therefore testing the consumers response on the ease of the standard bank internet banking platform would underly their probability to adopt internet banking, as ease of use and efficiency are key drivers for adoption.

#### **Section 4: Service Quality – Customer Experience**

To understand the service quality, we had to measure its impact on customer experience and customer satisfaction. Section 4 of the questionnaire focused on service quality concerning customer experience. Respondents were asked if they perceived Standard Bank to be eager to help (Q14). Understanding whether the Standard Bank Internet Banking department is helpful is a question posed to the respondents (Q15). Respondents were also asked question of the service and efficiency they received from Standard Bank internet Banking (Q18).

#### **Section 5: Service Quality – Customer Satisfaction**

To understand the service quality, we had to measure its impact on customer experience and customer satisfaction. Section 5 of the questionnaire focused on service quality concerning customer satisfaction. Respondents were asked whether their interactions with the Standard Bank internet banking was a platform they felt was safe (Q19). They were also asked questions concerning the department at Standard Bank in dealing with their queries and are knowledgeable in regards to the internet banking platform (Q20).

#### **Section 6: Customer Retention**

Section 6 of the questionnaire was framed around understanding how and whether Standard Bank internet banking platform drives customer retention. Respondents were asked whether they saw the platform as being personalized as well as giving individual attention (Q23). Respondents were further asked whether the call centres

or help desks that Standard Bank offers are convenient and providing speedy and resolution driven interactions (Q24).

### **Section 7: Customer Satisfaction**

The last section of the questionnaire was framed around customer satisfaction concerning Standard internet banking. Respondents were asked whether they felt Standard Bank understood its customers' specific needs (Q25). Respondents were further asked if their experiences with the Standard Bank help desks offer their customers individual and personal attention (Q27).

### **3.5. Ethical considerations**

Ethical issues must be taken into account at each step of the design and implementation of research (Wagner & Sanders, 2001) and often require the researcher to balance the quest for scientific knowledge with the rights of the subjects being studied (Marshall & Rossman, 1999). (Corrocher et al., 2004) discussed four main ethical principles that recur in social research, namely "whether there is harm to the participants; whether there is a lack of informed consent; whether there is an invasion of privacy; and whether deception is involved." Below is a description of how the ethical considerations were adhered to in this study, in terms of the ethical issues described by (Bryman, n.d.).

#### **Ethical issue: Harm**

- Ethical committee clearance – Before this questionnaire was distributed for participation the Wits Business School Faculty, Academic Ethics Committee reviewed the research proposal and survey and granted ethical consent to ensure that no harm would fall upon the respondents.

#### **Ethical issue: Informed consent**

- Voluntary participation – Q1 in the questionnaire explicitly asks the respondents for their consent in the research. Further to that, a cover letter

was included at the introduction of the questionnaire explaining this was added at the beginning of the survey (please refer to Appendix B and C).

### **Ethical issue: Invasion of privacy**

- Anonymity and confidentiality – Respondents were not asked not to share personally identifiable information. The socio-demographic questions were limited to Age, Gender and Income. Further to that, the online survey was anonymous and did not capture any personal information. Respondents were not asked to reveal their names or information that could make them easily identifiable (such as their ID number or student number), as specified in the cover letter that is supported by the questionnaire (Appendix B and C for reference).
- Data security – securing the data was done through a managed platform that housed the questionnaire as well as the responses. This platform stored all the information electronically and could only be accessed with a password.

### **3.6. Limitations of the study**

- A sample of the population will be studied; consequently, there is the possibility of sampling error occurring.
- The research will focus on Standard Bank in South Africa. Therefore, it may not be possible to generalize the results of this study to all banks in South Africa.
- The study specifically focused only on financial institutions. This in turn, a limitation in generalisation the findings in other industries

## **CHAPTER 4. PRESENTATION OF THE RESULTS**

### **4.1. Introduction**

This chapter will present the overall results for the research that was conducted. First, the profile of the respondents is described in terms of the socio-demographic questions contained in the first section of the questionnaire (gender, age and income). Then, the respondent's perceptions on Standard Bank internet banking concerning e-service quality, adoption, service quality, customer retention and customer satisfaction. Lastly, this chapter will present the results relating to each hypothesis, with a conclusion stating whether the hypothesis has been supported or not supported by the research findings.

### **4.2. Sample Statistics**

#### **Gender**

The results of the respondents in regards to gender indicated that there was a skew towards females (54%) with males consisting of 46%. This split does not correspond directly with the gender split against the total population in South Africa, as presented in Figure 5. However, the gender split correlates with the results as the population split indicates that there are more women in South Africa; this correlates with the results. The results show that more women responded to the survey than men.

Figure 4 Respondent gender

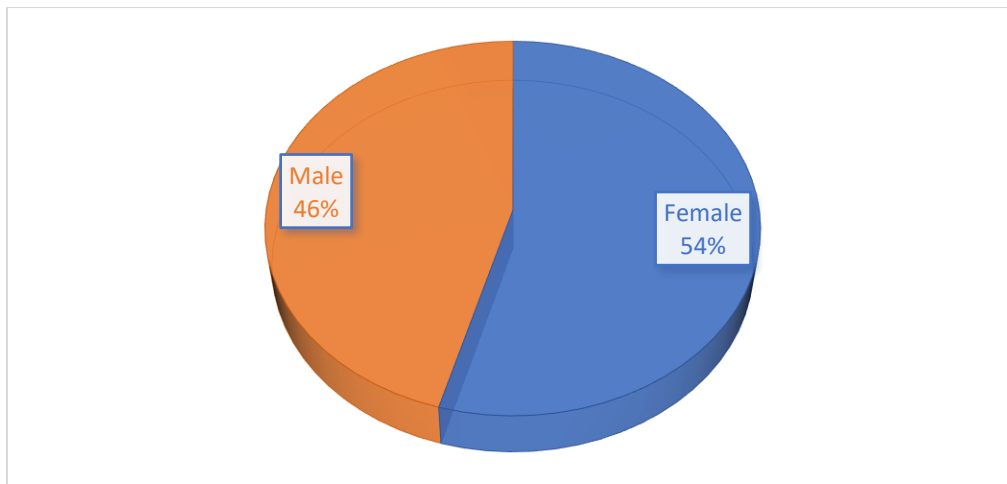
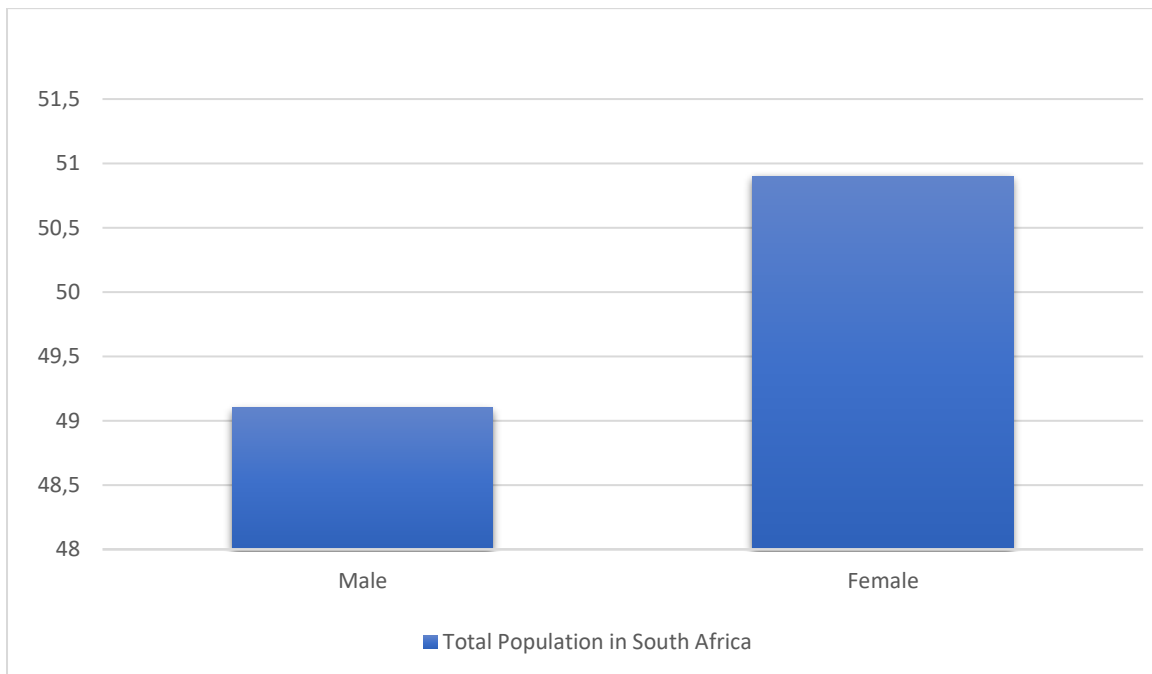


Figure 5 Gender Split against Total Population in South Africa



Source: (Hootsuite, 2019)

## Age

The ages of the respondent ranged from 18 to 64 years old, with an average age of 29 years (SD = 7.05). As depicted in Figure 6 below, almost half (48%) of respondents fell into the 25 to 34 year age group. Furthermore, 63% of respondents were teenagers and young adults (i.e. aged 18-34 years), which correlates with a study conducted by Effective Measure (2018) on the age range of internet users in South Africa.

Figure 6 Respondent age

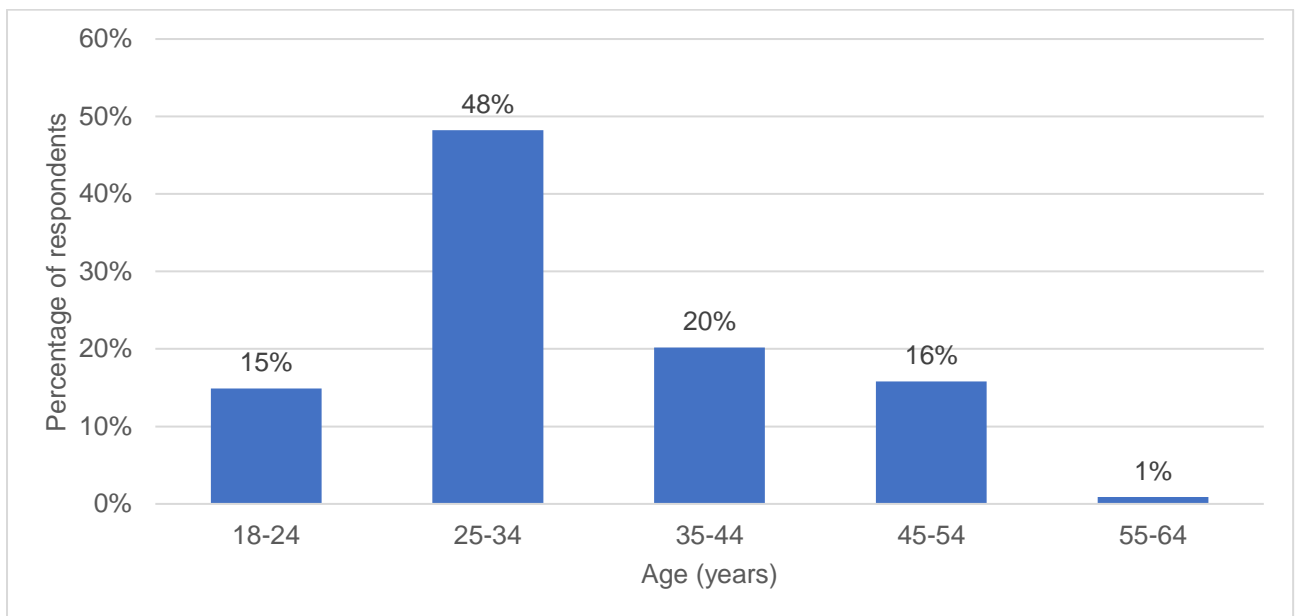
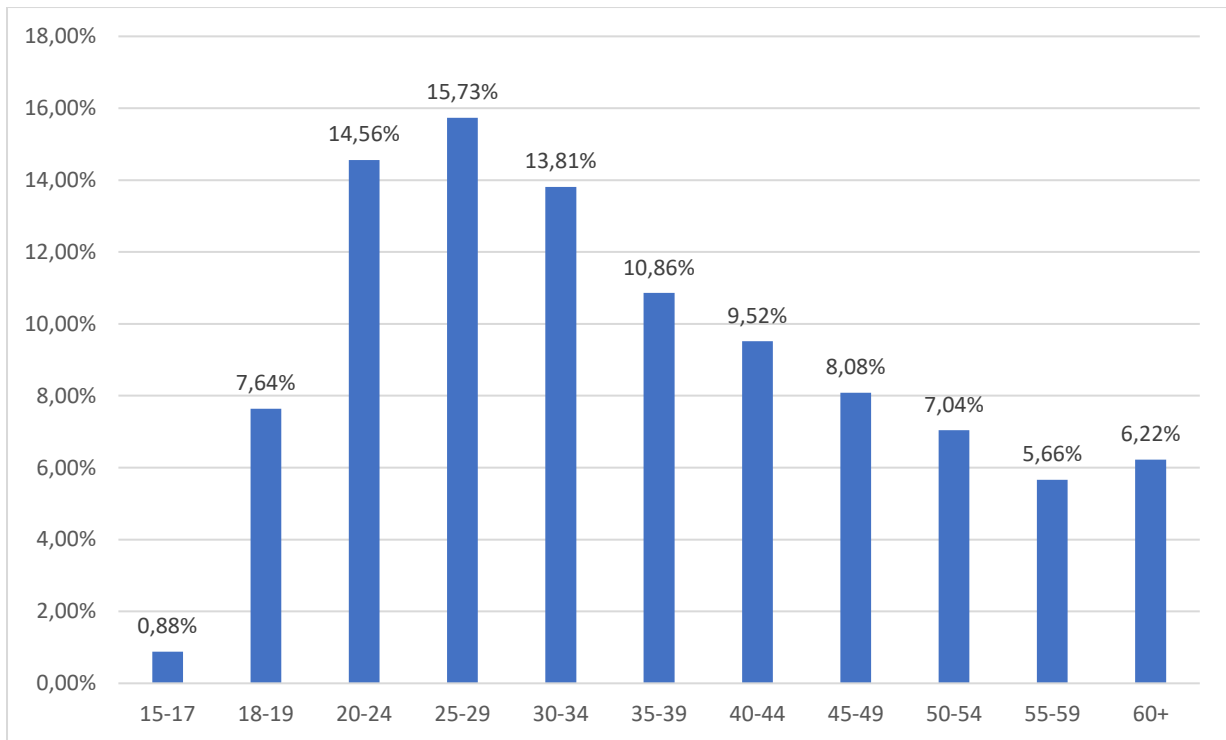


Figure 7 Age Split against Total Population in South Africa



Source: (Statistics, 2018)

## **Income**

The income of the respondents indicated that 33% earn between R5 000 – R29 000 per month. This is followed by more than half of the respondents who made R30 000 – R49 000 (53%), 14% of the respondents earned above R50 000 per month. The monthly income groups are presented in figure 8 as per below. The results below correlate with a study conducted by Effective Measure (2018) on the monthly income brackets of internet users in South Africa in figure 9. The study shows that above 30% of South Africans earn between R5 000 – R29 000, which correlates with the results from the respondents.



Figure 8 Respondent Income

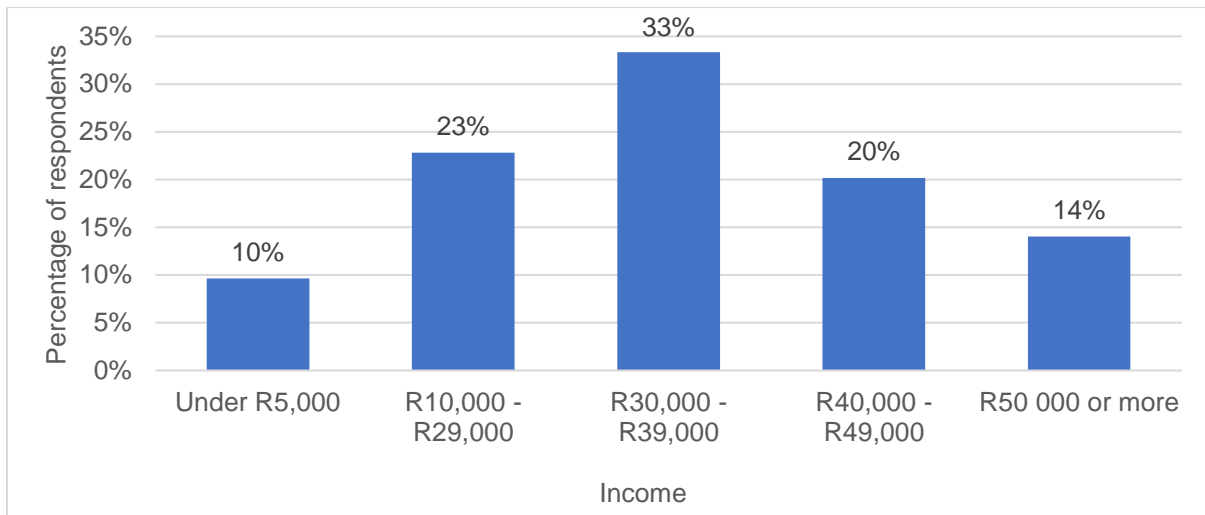
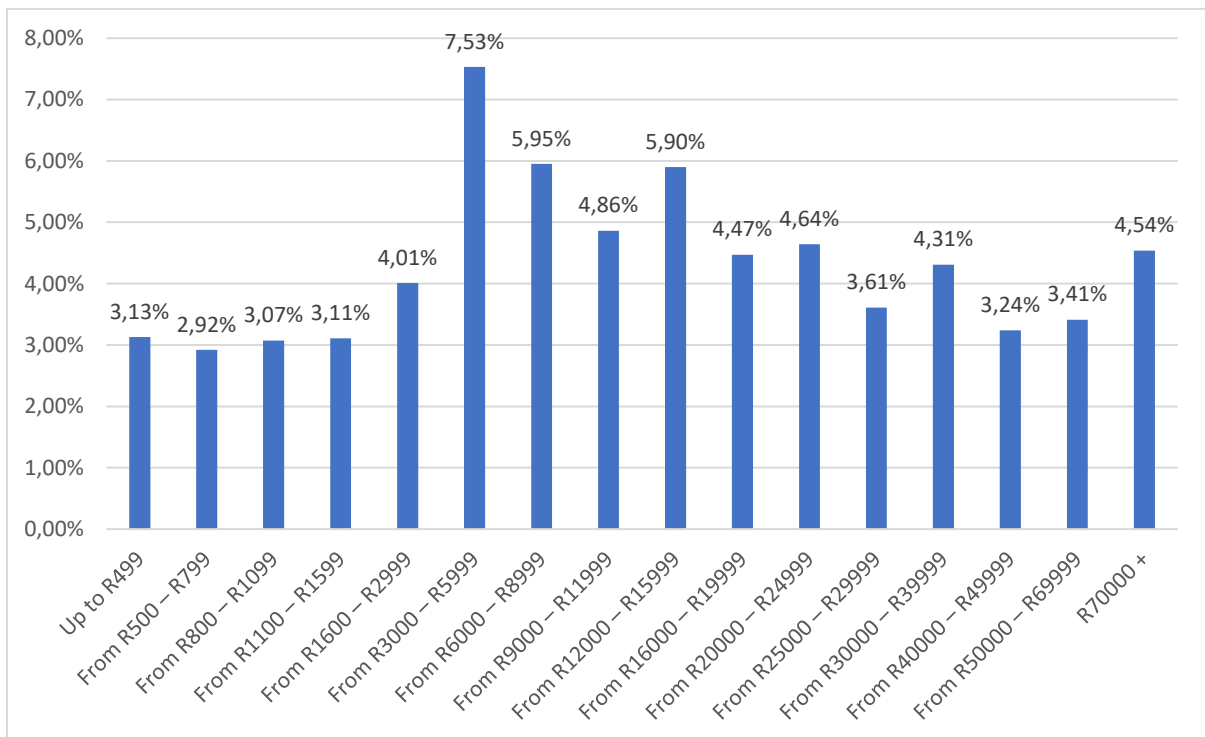


Figure 9 Income Split against Total Population in South Africa



Source: (Statistics, 2018)

**4.3. The first sub-problem results: To investigate the relationship between adoption of internet banking and service quality.**

The first sub-problem of this study was to investigate the relationship between the adoption of internet banking and service quality. The exploratory factor analysis (EFA) was conducted to assess whether the constructs were valid. The results are presented in Table 2. Cronbach's Alpha values were computed per each construct retained after EFA to evaluate the validity of the scale; the results are presented in Table 3. Correlation analysis was conducted to assess the relationships among the variables; the results are shown in Table 4. Path analysis was conducted to evaluate the hypotheses. The results are presented in Figure 10, Table 4 and Table 5.

*Table 2: Exploratory Factor Analysis - Adoption of internet banking and service quality*

Construct	Items	Factor 1	Factor 2	Total Variance Explained
Adoption of Internet Banking	Q9 Standard Bank internet banking offers features and functionality efficiently and accurately	.725		49%
	Q10 The Standard Bank internet banking website is responsive, intrinsic and well-laid out	.662		
	Q11 Standard Bank internet banking works efficiently on your first attempt	.655		
	Q12 When internet banking is a problem, Standard Bank do what they can quickly and efficiently to attend to the problem	.464		
	Q13 When Standard Bank internet banking promises a service at certain time, they adhere to that	.417		

*Table 3: Cronbach's Alpha - Adoption of internet banking and service quality*

Construct	Number of Items	Cronbach's Alpha	Reliability Level
Adoption of Internet Banking	5	.712	Acceptable

Table 4 Descriptive Statistics and Pearson's Correlation - Adoption of internet banking and service quality

	Mean	Std. Deviation	1.	2.	3.	4.	5.	6.
2. Adoption of Internet Banking	2.96	0.87	.663**	1				

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Figure 10 Income Split against Total Population in South Africa

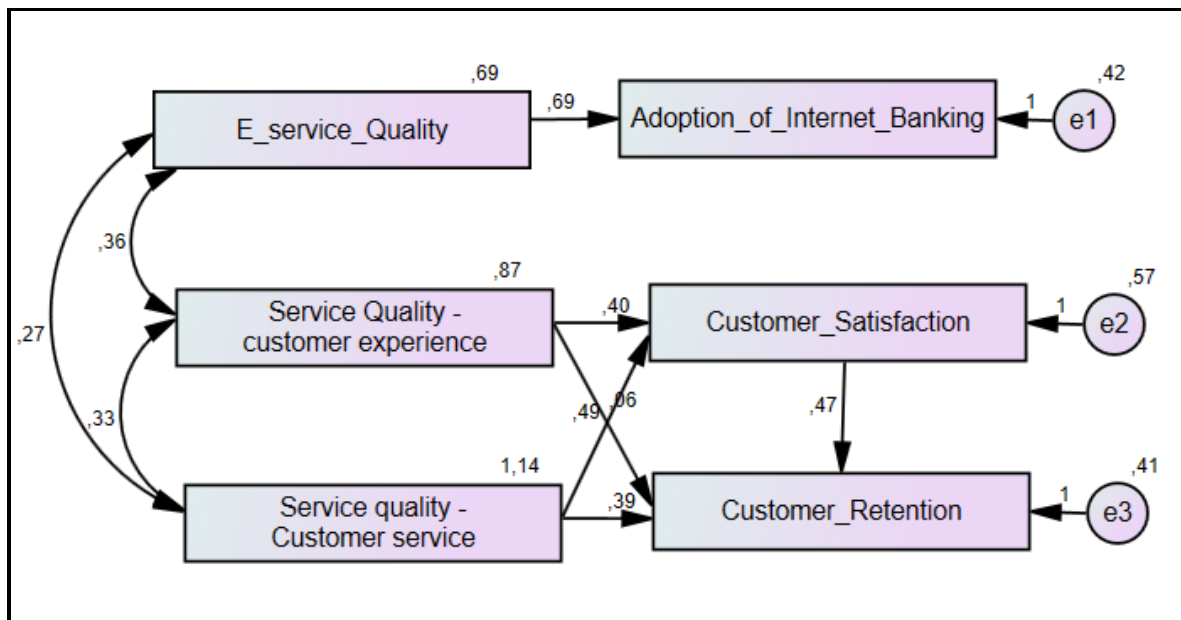


Table 5 Regression Weights - Adoption of internet banking and service quality

			Estimate	Standardised Estimate	S.E.	C.R.	P
Adoption of Internet Banking	<--	E service Quality	,689	,663	,073	9,425	***

Notes: \*\*\*, p-value < 0.001

#### 4.3.1. Hypothesis 1 results: The relationship between adoption of internet banking and service quality.

**H1a** The increased adoption of internet banking by consumers is positively related to e-service quality.

**H10:** The increased adoption of internet banking by consumers is not related to e-service quality.

The results of the exploratory factor analysis that was loaded onto their respective constructs hence confirming that there was convergence validity. The total variance explained shows the amount of variation in the original items that are defined by the retained constructs; the variation for the adoption of internet banking is 49%.

For Cronbach's alpha analysis, the adoption of Internet Banking ( $\alpha = 0.712$ ) had an acceptable reliability level. Since the Cronbach's Alpha values were all greater than 0.7, the items within each construct were grouped to form a composite score. Hypothesis testing was conducted with the created composites scores.

Correlation analysis was conducted to assess the relationships among the variables; the results are shown in Table 4. It can be noted that the Adoption of internet banking was positive and significantly correlated to e-service quality ( $r = 0.505$ ,  $p$ -value  $< 0.01$ ). The path analysis model and regression weights presented. The results showed that E-service Quality was significant in predicting the Adoption of Internet Banking.

The results presented in Table 5 showed that E-service Quality ( $B = 0.689$ ,  $\beta = 0.663$ ,  $t$ -value = 9.425,  $p$ -value  $< 0.001$ ) had a positive and significant impact on customer adoption. The impact is positive because the coefficient for E-service Quality was greater than zero and was significant because the  $p$ -value was less than 0.05. This implies that hypotheses one is supported. It is concluded that the increased adoption of internet banking by consumers is positively related to e-service quality.

#### **4.4. The second sub-problem results: To investigate the relationship between service quality in internet banking and customer retention.**

The second sub-problem of this study was to investigate the relationship between service quality and customer retention. The exploratory factor analysis (EFA) was conducted to assess whether the constructs were valid. The results are presented in Table 6. Cronbach's Alpha values were computed per each construct retained after

EFA to evaluate the validity of the scale; the results are presented in Table 7. Correlation analysis was conducted to assess the relationships among the variables; the results are shown in Table 8. Path analysis was conducted to evaluate the hypotheses. The results are presented in Figure 11, Table 8 and Table 9.

Table 6 Exploratory Factor Analysis - E-service Quality

Construct	Items	Factor 1	Factor 2	Total Variance Explained
E-service Quality	Q5 Standard Banks internet banking has the latest equipment and digital technologies	.693		53%
	Q6 The Standard Bank internet banking provides with valuable information	.675		
	Q7 The Standard Banking internet banking website is visually appealing	.639		
	Q7 The Standard Bank internet banking makes you find information easily	.605		
	Q27 Standard Bank internet banking understands your specific needs	.552		

Table 7 Cronbach's Alpha - E-service Quality

Construct	Number of Items	Cronbach's Alpha	Reliability Level
E-service Quality	4	.743	Acceptable

Table 8 Descriptive Statistics and Pearson's Correlation - e-service quality

	Mean	Std. Deviation	1.	2.	3.	4.	5.	6.
1. E-service Quality	3.32	0.83	1					

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Figure 11 Path analysis model – E-service Quality

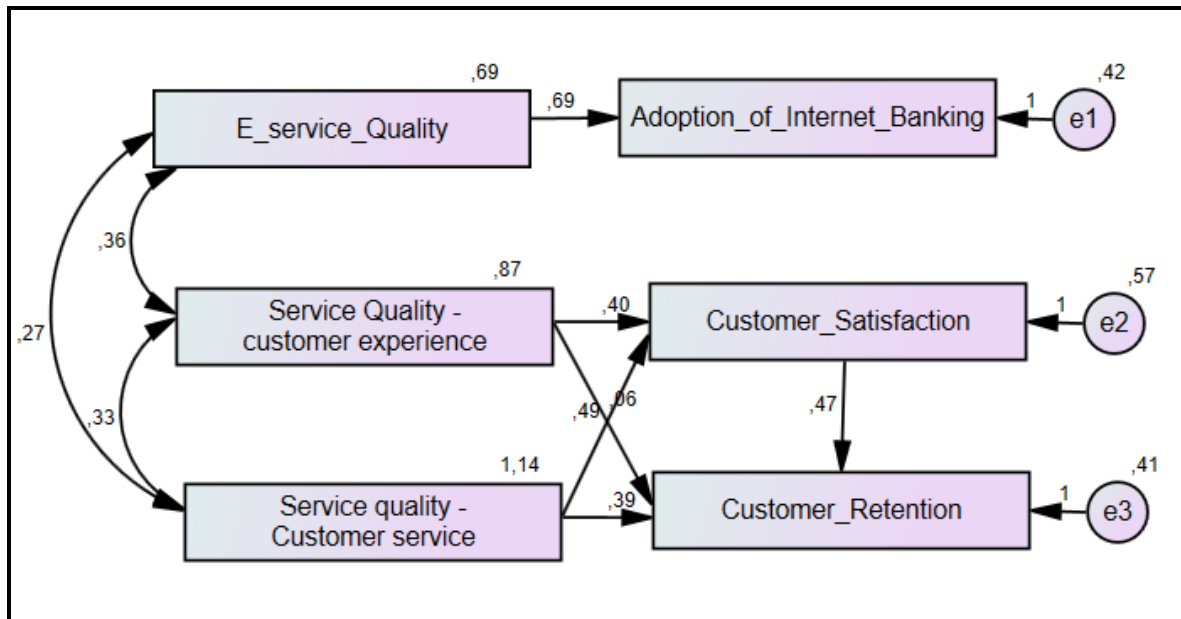


Table 9 Regression Weights – E-service Quality

			Estimate	Standardise d Estimate	S.E.	C.R.	P
E-service Quality	<-- -	Service Quality - Customer Experience	,401	,355	,081	4,97 4	***

Notes: \*\*\*, p-value < 0.001

**4.4.1. Hypothesis 2 results: The relationship between service quality in internet banking and customer retention.**

**H2a:** Service quality – customer experience of internet banking is positively related to the level of customer retention.

**H2o:** Service quality – customer experience of internet banking is not related to the level of customer retention.

The results of the exploratory factor analysis that was loaded onto their respective constructs hence confirming that there was convergence validity. The total variance

explained shows the amount of variance in the original items that are defined by the retained constructs; the variance for e-service quality is 53%.

For Cronbach's alpha analysis, the service quality – customer experience ( $\alpha = 0.724$ ) had an acceptable reliability level. Since the Cronbach's Alpha values were all greater than 0.7, the items within each construct were grouped to form a composite score. Hypothesis testing was conducted with the created composites scores.

Correlation analysis was conducted to assess the relationships among the variables; the results are shown in Table 8. It can be noted that service quality – customer experience was not positively related to customer retention ( $r = 0.473$ ,  $p\text{-value} < 0.01$ ). The path analysis model and regression weights presented the results showed that service quality - Customer experience was not significant in predicting customer retention.

The results revealed that Service Quality - Customer Experience ( $B = 0.063$ ,  $\beta = 0.055$ ,  $t\text{-value} = 0.831$ ,  $p\text{-value} = 0.406$ ) had a positive but insignificant impact on retention. Although the impact is positive because the coefficient for Service Quality - Customer Experience (0.063) was greater than zero, it was not significant because the  $p\text{-value}$  was greater than 0.05. This implies that hypotheses two is not supported. It is concluded that Service Quality - Customer Experience of internet banking does not have an impact on customer retention.

#### **4.5. The third sub-problem results: To investigate the relationship between service quality in internet banking and customer satisfaction and retention.**

The third sub-problem of this study was to investigate the relationship between the adoption of internet banking and service quality. The exploratory factor analysis (EFA) was conducted to assess whether the constructs were valid. The results are presented in Table 10. Cronbach's Alpha values were computed per each construct retained after EFA to evaluate the validity of the scale; the results are presented in Table 11. Correlation analysis was conducted to assess the relationships among the variables;

the results are shown in Table 12. Path analysis was conducted to evaluate the hypotheses. The results are presented in Figure 12, Table 12 and Table 13.

Table 10 Exploratory factor analysis – Service Quality (Customer Experience and Customer Service)

Construct	Items	Factor 1	Factor 2	Total Variance Explained
Service Quality-customer experience	Q17 The department at Standard Bank internet banking are eager to help you always	.865		42%
	Q15 The department at Standard Bank internet banking are very communicative in terms of what service will be done and when	.808		
	Q16 The department at Standard Bank internet banking provide quick and efficient service	.681		
	Q18 The department at Standard Bank internet banking are never too busy to respond to your questions	.435		
Service Quality - Customer Service	Q20 You trust that your interactions and exchanges are safe with Standard Bank internet banking		.742	22%
	Q22 The department at Standard Bank internet banking are knowledgeable and well equipped to answer your questions		.698	
	Q19 Standard Bank internet banking platform displays the trust and confidence consumers need in their platform		.660	
	Q21 The department at Standard Bank internet banking are consistently respectful and polite with their consumers		.637	

Table 11 Cronbach's Alpha – Service Quality (Customer Experience & Customer Service)

Construct	Number of Items	Cronbach's Alpha	Reliability Level
Service Quality- Customer Experience	4	.793	Acceptable
Service Quality - Customer Service	3	.704	Acceptable



Table 12 Descriptive Statistics and Pearson's Correlation – Service Quality (Customer Experience & Customer Service)

	Mean	Std. Deviation	1.	2.	3.	4.	5.	6.
3. Service Quality-Customer Experience	3.18	0.94	.472**	.567**	1			
4. Service Quality - Customer Service	3.01	1.07	.308**	.426**	.335**	1		

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Figure 12 Path analysis model – Service Quality (Customer Experience & Customer Service)

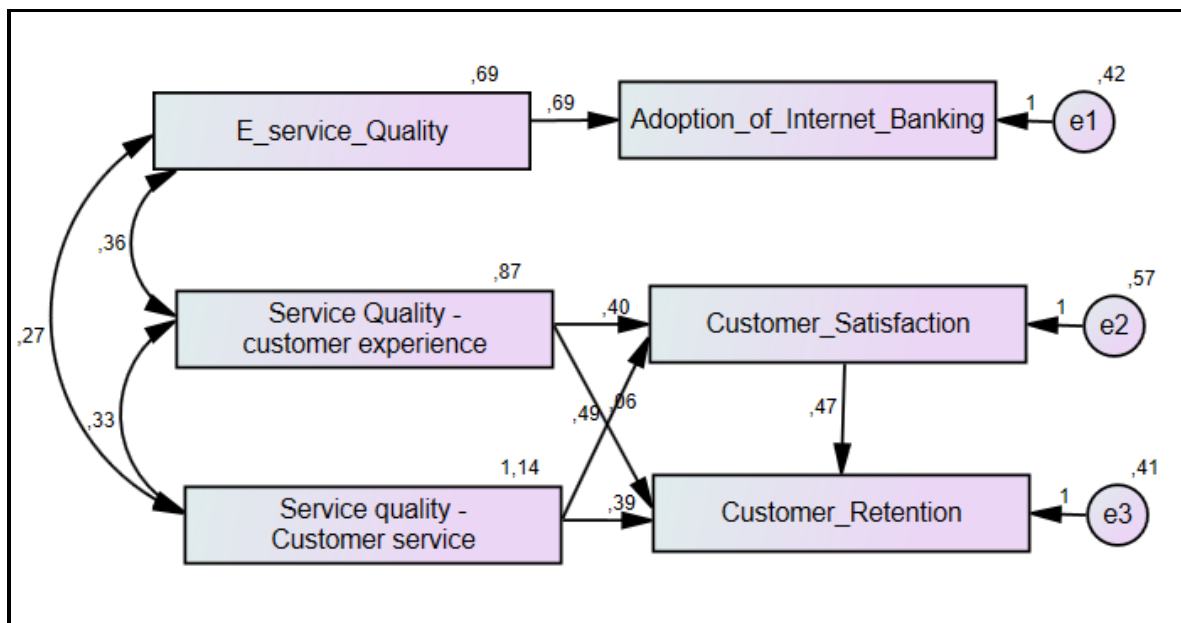


Table 13 Regression Weights – Service Quality (Customer Experience & Customer Service)

			Estimate	Standardised Estimate	S.E.	C.R.	P
Customer Retention	<--	Service Quality - Customer Service	,392	,394	,071	5,495	***
Customer Retention	<--	Service Quality - Customer Experience	,063	,055	,075	,831	,406

Notes: \*\*\*, p-value < 0.001

#### **4.5.1. Hypothesis 3 results: The relationship between service quality in internet banking and customer retention.**

*H3a: Service quality- customer service of internet banking is positively related to the level of customer retention.*

*H3b: Service quality- customer service of internet banking is not related to the level of customer retention.*

The results of the exploratory factor analysis that was loaded onto their respective constructs hence confirming that there was convergence validity. The total variance explained shows the amount of variance in the original items that are defined by the retained constructs, the variance for service quality – customer service is 42%.

For Cronbach's alpha analysis, the service quality – customer service ( $\alpha = 0.704$ ) had an acceptable reliability level. Since the Cronbach's Alpha values were all greater than 0.7, the items within each construct were grouped to form a composite score. Hypothesis testing was conducted with the created composites scores.

Correlation analysis was conducted to assess the relationships among the variables; the results are shown in Table 12. It can be noted that service quality – customer service was positive and significantly correlated to customer retention ( $r = 0.521$ ,  $p$ -value  $< 0.01$ ). The path analysis model and regression weights presented. The results showed that service quality – customer service was significant in predicting customer retention.

The results presented in Table 13 showed that Service Quality - Customer Service ( $B = 0.392$ ,  $\beta = 0.394$ ,  $t$ -value = 5.495,  $p$ -value  $< 0.001$ ) had a positive and significant impact on customer retention. The impact was positive because the coefficient for Service Quality - Customer Service (0.392) was greater than zero and was significant because the  $p$ -value was less than 0.05. This implies that hypotheses

three is supported. It is concluded that Service Quality - Customer Service of internet banking is positively related to the level of customer retention.

#### **4.5.2. Hypothesis 4 results: The relationship between service quality in internet banking and customer satisfaction.**

*H4a: Service quality – customer experience of internet banking is positively related to the level of customer satisfaction.*

*H4o: Service quality – customer experience of internet banking is not related to the level of customer satisfaction.*

The results of the exploratory factor analysis that was loaded onto their respective constructs hence confirming that there was convergence validity. The total variance explained shows the amount of variance in the original items that are defined by the retained constructs, the variance for service quality – customer experience is 49%.

For Cronbach's alpha analysis, the adoption of Internet Banking ( $\alpha = 0.712$ ) had an acceptable reliability level. Since the Cronbach's Alpha values were all greater than 0.7, the items within each construct were grouped to form a composite score.

Hypothesis testing was conducted with the created composites scores.

Correlation analysis was conducted to assess the relationships among the variables; the results are shown in Table 12. It can be noted that the Adoption of internet banking was positive and significantly correlated to e-service quality ( $r = 0.505$ ,  $p$ -value  $< 0.01$ ). The path analysis model and regression weights presented. The results showed that E-service Quality was significant in predicting the Adoption of Internet Banking.

The results presented in Table 13 showed that Service Quality - Customer Experience ( $B = 0.401$ ,  $\beta = 0.355$ ,  $t$ -value = 4.974,  $p$ -value  $< 0.001$ ) had a positive and significant impact on Customer Satisfaction. The impact is positive because the coefficient for Service Quality - Customer Experience (0.401) was greater than zero and was significant because the  $p$ -value was less than 0.05. This implies that

hypotheses 4a is supported. It is concluded that the Service Quality - Customer Experience of internet banking is positively related to the level of customer satisfaction.

#### **4.5.3. Hypothesis 5 results: The relationship between service quality in internet banking and customer satisfaction.**

*H5a: Service quality – customer service of internet banking is positively related to the level of customer satisfaction.*

*H5b: Service quality – customer service of internet banking is not related to the level of customer satisfaction.*

The results presented in Table 13 showed that Service Quality - Customer Service ( $B = 0.489$ ,  $\beta = 0.496$ ,  $t\text{-value} = 6.948$ ,  $p\text{-value} < 0.001$ ) had a positive and significant impact on Customer Satisfaction. The impact is positive because the coefficient for Service Quality - Customer Service (0.489) was greater than zero and was significant because the p-value was less than 0.05. This implies that hypotheses 5a is supported. It is concluded that the Service Quality - Customer Service of internet banking is positively related to the level of customer satisfaction.

#### **4.6. The fourth sub-problem results: To investigate the relationship between customer satisfaction and customer retention.**

The fourth sub-problem of this study was to investigate the relationship between the adoption of internet banking and service quality. The exploratory factor analysis (EFA) was conducted to assess whether the constructs were valid. The results are presented in Table 14. Cronbach's Alpha values were computed per each construct retained after EFA to evaluate the validity of the scale; the results are presented in Table 15. Correlation analysis was conducted to assess the relationships among the variables; the results are shown in Table 16. Path analysis was conducted to evaluate the hypotheses. The results are presented in Figure 13, Table 16 and Table 17.

Table 14 Exploratory factor analysis – Customer Satisfaction & Customer Retention

Construct	Items	Factor 1	Factor 2	Total Variance Explained
Customer Retention	Q22 The department at Standard Bank internet banking are knowledgeable and well equipped to answer your questions	.768		63%
	Q23 Standard Bank internet banking give personalized and individual attention	.691		
	Q24 Standard Bank internet banking has operating Help desks or call centres that are convenient for all consumers	.593		
Customer Satisfaction	Q27 Standard Bank internet banking understands your specific needs	.730		62%
	Q26 Standard Bank internet banking call centres have you best interests at heart	.695		
	Q25 Standard Bank internet banking call centres give your personal attention	.626		

Table 15 Cronbach's Alpha – Customer Retention & Customer Satisfaction

Construct	Number of Items	Cronbach's Alpha	Reliability Level
Customer Retention	3	.724	Acceptable
Customer Satisfaction	3	.723	Acceptable

Table 16 Descriptive Statistics and Pearson's Correlation – Customer Retention & Customer Satisfaction

	Mean	Std. Deviation	1.	2.	3.	4.	5.	6.
5. Customer Retention	2.90	1.07	.485**	.530**	.428**	.697**	1	
6. Customer Satisfaction	2.95	1.06	.473**	.505**	.521**	.614**	.735**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Figure 13 Path analysis model – Customer Retention & Customer Satisfaction

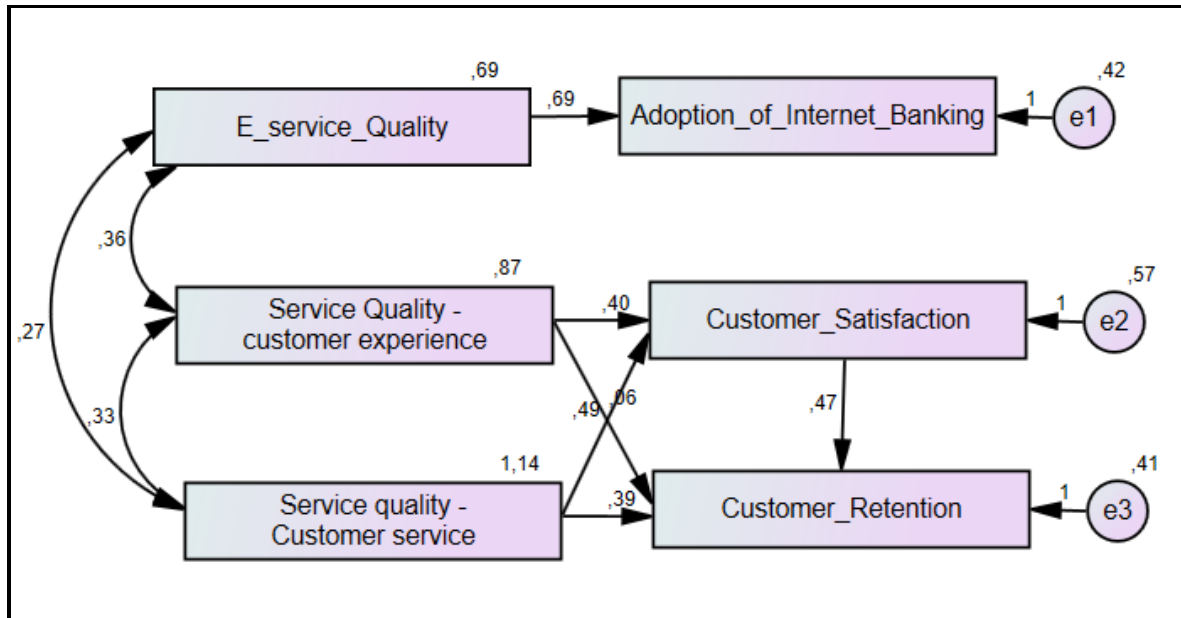


Table 17 Regression Weights – Customer Retention & Customer Satisfaction

			Estimate	Standardise d Estimate	S.E.	C.R.	P
Customer Retention	<--	Customer Satisfaction	,469	,464	,080	5,871	***

Notes: \*\*\*, p-value < 0.001

**4.6.1. Hypothesis 6 results: The relationship between service quality in internet banking and customer satisfaction.**

*H6a: Customer satisfaction is positively related to the level of customer retention.*

*H60: Customer satisfaction is not related to the level of customer retention.*

The results of the exploratory factor analysis that was loaded onto their respective constructs hence confirming that there was convergence validity. The total variance explained shows the amount of variance in the original items that are defined by the retained constructs; the variance for customer satisfaction is 62%. For customer retention, it is 63%.

For Cronbach's alpha analysis, customer satisfaction ( $\alpha = 0.723$ ) had an acceptable reliability level. Since the Cronbach's Alpha values were all greater than 0.7, the items within each construct were grouped to form a composite score. Hypothesis testing was conducted with the created composite scores.

Correlation analysis was conducted to assess the relationships among the variables; the results are shown in Table 15. It can be noted that customer satisfaction was positive and significantly correlated to customer retention ( $r = 0.505$ ,  $p\text{-value} < 0.01$ ). The path analysis model and regression weights presented. The results showed that customer satisfaction was significant in predicting customer retention.

The results presented in Table 17 showed that Customer Satisfaction ( $B = 0.469$ ,  $\beta = 0.464$ ,  $t\text{-value} = 5.871$ ,  $p\text{-value} < 0.001$ ) had a positive and significant impact on customer retention. The impact was positive because the coefficient for Customer Satisfaction (0.469) was greater than zero and was significant because the  $p\text{-value}$  was less than 0.05. This implies that hypotheses two are supported. It is concluded that customer satisfaction is positively related to the level of customer retention.

#### **4.7. Summary of the results**

The main research problem of this study is to investigate the effects of digitalisation on e-service quality, with a focus on internet banking. The study then went to test various subproblems further to measure the impact of internet banking on customer satisfaction. This was measured against the adoption of internet banking on e-service quality, service quality – customer experience and customer service on customer satisfaction and customer retention. Lastly, the study measured customer satisfaction on customer retention, ultimately.

In regards to exploratory factor analysis, all the constructs retained the items that were in the hypothesised constructs except for Service quality, where one item (Q14. Standard Bank internet banking has no errors on their system or on their database) was excluded from the construct because it had a very low communality. The Service Quality construct was further split into two sub-constructs, namely; Service Quality-

customer experience and Service Quality - Customer Service. All items loaded highly onto their respective constructs hence confirming that there was convergence validity. The total variance explained shows the amount of variance in the original items that are defined by the retained constructs. The total variance explained ranged from 23% to 64%.

In regards to Cronbach's Alpha, values were computed per each construct retained after EFA to assess the validity of the scale. The results are presented in Table 2.

All the constructs E-service Quality ( $\alpha = 0.743$ ), Adoption of Internet Banking ( $\alpha = 0.712$ ), Service Quality- Customer Experience ( $\alpha = 0.793$ ), Service Quality - Customer Service ( $\alpha = 0.704$ ), Customer Retention ( $\alpha = 0.724$ ), and Customer Satisfaction ( $\alpha = 0.723$ ) had an acceptable reliability level. Since the Cronbach's Alpha values were all greater than 0.7, the items within each construct were grouped to form a composite score. The composite scores were calculated by computing the average of all items within a scale.

In regards to correlation analysis, It can be noted that Customer Satisfaction was positive and significantly correlated to each of E-service Quality ( $r = 0.473$ ,  $p\text{-value} < 0.01$ ), Adoption of Internet Banking ( $r = 0.505$ ,  $p\text{-value} < 0.01$ ), Service Quality- Customer Experience ( $r = 0.521$ ,  $p\text{-value} < 0.01$ ), Service Quality - Customer Service ( $r = 0.614$ ,  $p\text{-value} < 0.01$ ), and Customer Retention ( $r = 0.735$ ,  $p\text{-value} < 0.01$ ). E-service Quality (mean = 3.32) was the highest rated construct while Customer Retention (mean = 2.90) was the lowest rated construct.

Hypothesis 1 predicted a positive relationship between the adoption of internet banking and e-service quality. The construct validity results indicated that there were two components of service quality, namely; service quality - customer experience and service quality - customer service. Hypothesis 2 did not predict a positive relationship between service qualities – customer experience of internet banking. Thus, it concluded that Service Quality - Customer Experience of internet banking does not have an impact on customer retention.

Hypothesis 3 predicted a positive relationship between service quality - Customer Service of internet banking and customer retention. Hypothesis 4 also predicted a



positive relation between service quality - customer experience of internet banking is and the level of customer satisfaction. Hypothesis 5 predicted a positive relationship between service quality - customer service of internet banking and the level of customer satisfaction. Hypothesis 6 predicted a positive correlation between customer satisfaction and the level of customer retention. The following chapter of the report will discuss and explain the research findings.

## **CHAPTER 5. DISCUSSION OF THE RESULTS**

### **5.1. Introduction**

This chapter discusses and interprets the results. First, we discuss the possible impact that the socio-demographic profiles of the respondent had on the variables that were hypothesized in the study. The chapter will go on to discuss the results relating to sub-problem one and the hypothesis that were laid out to test each sub-problem. Then, the chapter will discuss the results concerning subproblem 1, 2, 3 and 4 in conjunction with the literature. In the latter part of the chapter, it will discuss possible explanations in regards to the similarities or differences of the results in relation to past academic studies. Lastly, a summary of the discussion is presented in section 5.6.

### **5.2. Demographic profile of respondents**

Recent research has presented support for two socio-demographic variables, which are namely age and gender, as affecting the adoption of internet banking. (Mutengezanwa & Ngoma, 2013) discuss the socio-demographic variables and how they affect the uptake of internet banking. Studies have been conducted to determine the factors that influence the adoption of internet banking, but the role of socio-demographic variables has been understudied. Previous research has found out that demographic characteristics such as education, age, and income are significantly associated with the usage rates of technological innovations (Rishi & Saxena, 2004) Therefore, although not hypothesized in the research model, the prevalence of these differences in prior research suggests that it is essential to understand the research results of this study in the context of the demographic profile of the sample, and particularly the potential impact that age and gender had on the findings.

#### **5.2.1. Age**

Literature suggests that there is a strong relationship between age and the acceptance of new technologies (Khalaf Ahmad & Ali Al-Zu'bi, 2011). Older customers are found to have negative attitudes towards technology, whilst younger adults are seen to be

more interested in using technology and innovation (Lee et al., 2003). The ages of the respondent ranged from 18 to 64 years old, with an average age of 29 years (SD = 7.05). Almost half (48%) of respondents fell into the 25 to 34 year age group. Furthermore, 63% of respondents were teenagers and young adults (i.e. aged 18-34 years), this further supports the literature that the younger generation is first to adopt new technologies such as internet banking.

### **5.2.2. Gender**

In extensions of Technology Acceptance Model (TAM), demographic factors such as gender and age have also provided significant effects on technology use (Pearson & Altaf, 2010). Gender is a significant moderator of the relationship between TAM's constructs (perceived usefulness, perceived ease of use, and subjective norm) and the intention to use a technological innovation (Venkatesh & Davis, 2000). The decisions to adopt the technology by men are mainly determined by the perceived usefulness of technology use. In contrast, women are more influenced by their perceptions about a system's ease of use and social influences (Venkatesh & Davis, 2000). The results from the study indicated that there was a skew towards females (54%) with males consisting of 46%. The results show that more women responded to the survey than men. The study did test features and ease of use of internet banking, which are factors that lean more towards the preferences of women. This, therefore, is in support of the literature.

### **5.3. The first sub-problem discussion: To investigate the relationship between adoption of internet banking and service quality.**

#### ***5.3.1. Hypothesis 1 discussion: The relationship between adoption of internet banking and service quality.***

***H1a*** *The increased adoption of internet banking by consumers is positively related to e-service quality.*

**H10:** *The increased adoption of internet banking by consumers is not related to e-service quality.*

The results presented in Table 5 showed that E-service Quality ( $B = 0.689$ ,  $\beta = 0.663$ ,  $t\text{-value} = 9.425$ ,  $p\text{-value} < 0.001$ ) had a positive and significant impact on customer adoption. The impact is positive because the coefficient for E-service Quality was greater than zero and was significant because the p-value was less than 0.05. This implies that hypotheses one is supported. It is concluded that the increased adoption of internet banking by consumers is positively related to e-service quality.

The results supported and confirmed the first hypothesis in the study through multiple regression analysis provides evidence that the quality of Standard Bank's latest equipment and digital technologies. This was also explored through Standard Bank internet banking, providing customers with valuable information, the visual appeal of the Standard Bank internet banking platform and lastly, whether the platform catered to respondents specific needs. The hypothesis was further tested through investigating whether respondents found the platform to be responsive, laid out well and intrinsic to the needs of the respondent.

The results support the TAM theory. According to (Brown & Alemayehu, 2005), the growth of digital banking depends mostly on consumers adopting and using them. (Pikkarainen et al., 2004) argue that regardless of the online platform is good or bad, the adoption of usage is dependent on the acceptance of the consumer to using that platform. If consumers have any negative perceptions or do not rely on the platform, then their behaviour toward digital banking could be negative.

Based on the results, E-service quality had a positive and significant impact on customer adoption. The effect is positive because the coefficient for E-service Quality was greater than zero and was significant because the p-value was less than 0.05 adoption of internet banking is positively related to e-service quality. This is further supported by the literature.

**5.4. The second sub-problem discussion: To investigate the relationship between service quality in internet banking and customer retention.**

**5.4.1. Hypothesis 2 discussion: The relationship between service quality in internet banking and customer retention.**

*H2a: Service quality – customer experience of internet banking is positively related to the level of customer retention.*

*H2o: Service quality – customer experience of internet banking is not related to the level of customer retention.*

Correlation analysis was conducted to assess the relationships among the variables; the results are shown in Table 7. It can be noted that service quality – customer experience was not positively related to customer retention ( $r = 0.473$ ,  $p\text{-value} < 0.01$ ). The path analysis model and regression weights presented the results showed that service quality - Customer experience was not significant in predicting customer retention.

The results revealed that Service Quality - Customer Experience ( $B = 0.063$ ,  $\beta = 0.055$ ,  $t\text{-value} = 0.831$ ,  $p\text{-value} = 0.406$ ) had a positive but insignificant impact on retention. Although the impact is positive because the coefficient for Service Quality - Customer Experience (0.063) was greater than zero, it was not significant because the  $p\text{-value}$  was greater than 0.05. This implies that hypotheses two is not supported. It is concluded that Service Quality - Customer Experience of internet banking does not have an impact on customer retention.

Respondents were asked whether they saw the Standard Bank internet banking platform as being personalized as well giving individual attention or help desks that Standard Bank offers are convenient and providing speedy and resolution driven interactions (Q24).

The results of hypothesis 2 are not support supported by TAM, however IDT theories present a reason as to why a consumer can either accept or reject new technologies. (Takieddine & Sun, 2015) people can gather and synthesise data regarding technology. The results of this method are beliefs regarding mistreatment the technology. These beliefs then cause people to accept or reject the technology simply. According to (Suk & Eppie, 2007), the factors affecting customer retention are diverse. Of the numerous factors, customer satisfaction has been empirically validated to have a relationship with customer retention in the service sector (Gustafsson et al., 2005). The importance of satisfaction on customer retention is so well recognised that some retention and future financial performance (Hennig-Thurau, 2004).

Based on the results, service quality – customer experience had a positive but insignificant impact on retention. Although the effect is positive because the coefficient for Service Quality - Customer Experience (0.063) was greater than zero, it was not significant because the p-value was greater than 0.05. This states that hypotheses two is not supported.

**5.5. The third sub-problem discussion: To investigate the relationship between service quality in internet banking and customer satisfaction and retention.**

***5.5.1. Hypothesis 3 discussion: The relationship between service quality in internet banking and customer satisfaction.***

***H3a:*** Service quality- customer service of internet banking is positively related to the level of customer retention.

***H3b:*** Service quality- customer service of internet banking is not related to the level of customer retention.

The results supported and confirmed the third hypothesis in the study through multiple regression analysis provides evidence that service quality – customer

service had a positive relation to customer retention. Respondents were asked questions speed of service from Standard Bank. Whether Standard Bank help desks offered a personalised experience and whether they understood the respondent specific needs.

The results of hypothesis 3 support the TAM theory, (Legris et al., 2003) argue that organisations invest in information systems reasons that include cutting costs for a business, the ability to create more while still keeping costs down as well as to improve the quality of the service or products they deliver or produce.

Based on the results, service quality - customer service impact on customer retention. The effect was positive because the coefficient for Service Quality - Customer Service (0.392) was greater than zero and was significant because the p-value was less than 0.05. This implies that hypotheses three is supported. It is concluded that Service Quality - Customer Service of internet banking is positively related to the level of customer retention.

#### ***5.5.2. Hypothesis 4 discussion: The relationship between service quality in internet banking and customer satisfaction.***

*H4a: Service quality – customer experience of internet banking is positively related to the level of customer satisfaction.*

*H4o: Service quality – customer experience of internet banking is not related to the level of customer satisfaction.*

The results supported and confirmed the fourth hypothesis in the study through multiple regression analysis provides evidence that service quality – customer experience had a positive relation to customer satisfaction. Respondents were asked about their experience with the Standard Bank internet banking platform, the platform being safe, innovative, confidence in the platform and well equipped.

The results of hypothesis 4 support the IDT theory (Ayo et al., 2016). In terms of the theories of change, Innovation Diffusion theory takes a contrary approach to study changes. Instead of focusing on persuading individuals to change, it sees change as being primarily about the evolution or “reinvention” of products and behaviours, so they become better fits for the needs of individuals and groups. In diffusion of innovations, it is not people who change, but the innovations themselves (Pearson & Altaf, 2010)

Based on the results, service quality - customer service impact on customer retention. The effect is positive because the coefficient for Service Quality - Customer Experience (0.401) was greater than zero and was significant because the p-value was less than 0.05. This implies that hypotheses 4a is supported. It is concluded that the Service Quality - Customer Experience of internet banking is positively related to the level of customer satisfaction.

### ***5.5.3. Hypothesis 5 discussion: The relationship between service quality in internet banking and customer satisfaction.***

***H5a:*** Service quality – customer service of internet banking is positively related to the level of customer satisfaction.

***H50:*** Service quality – customer service of internet banking is not related to the level of customer satisfaction.

The results supported and confirmed the fifth hypothesis in the study through multiple regression analysis provides evidence that service quality – customer service had a positive relation to customer satisfaction. Respondents were asked about their experience with the Standard Bank internet banking platform, if they felt the platform was safe and or innovative.



The results of hypothesis 5 support the TAM theory, (Legris et al., 2003) argue that organisations invest in information systems reasons that include cutting costs for a business, the ability to create more while still keeping costs down as well as to improve the quality of the service or products they deliver or produce

Based on the results, service quality - customer service impact on customer satisfaction. The effect is positive because the coefficient for Service Quality - Customer Service (0.489) was greater than zero and was significant because the p-value was less than 0.05. This implies that hypotheses 5a is supported. It is concluded that the Service Quality - Customer Service of internet banking is positively related to the level of customer satisfaction.

## **5.6. The fourth sub-problem results: To investigate the relationship between customer satisfaction and customer retention.**

### ***5.6.1. Hypothesis 6 results: The relationship between service quality in internet banking and customer satisfaction.***

*H6a: Customer satisfaction is positively related to the level of customer retention.*

*H60: Customer satisfaction is not related to the level of customer retention.*

The results presented in Table 16 showed that Customer Satisfaction ( $B = 0.469$ ,  $\beta = 0.464$ ,  $t\text{-value} = 5.871$ ,  $p\text{-value} < 0.001$ ) had a positive and significant impact on customer retention. The impact was positive because the coefficient for Customer Satisfaction (0.469) was greater than zero and was significant because the p-value was less than 0.05. This implies that hypothesis 2 is supported. It is concluded that customer satisfaction is positively related to the level of customer retention.

The results supported and confirmed the second hypothesis in the study through multiple regression analysis provides evidence that customer satisfaction had a

positive impact on retention. This was explored by measuring whether the Standard Banking internet banking platform is personalized as well giving individual attention. Respondents were further asked whether the call centres or help desks that Standard Bank offers are convenient and providing speedy and resolution driven interactions. Respondents were asked whether they felt Standard Bank understood its customers' specific needs. Respondents were further asked if their experiences with the Standard Bank help desks offer their customers individual and personal attention.

The results of hypothesis 6 support the TAM theory (Ganguly, 2015) discusses the infrastructure that exists within banking. He argues that it has typically involved centralised platforms that run large systems. They have been supported by high-security infrastructure in a bid to secure the information of customers. This has continued to be a focal point as the revolution of the internet has worked its way into the banking sector. In a bid to try to keep up with the advancements of the industry, the banking sector has found itself with complex systems that either overlap, don't communicate with each other or soon become outdated (Wani & Ali, 2015)

Based on the results, Customer Satisfaction had a positive and significant impact on customer retention. The effect was positive because the coefficient for Customer Satisfaction (0.469) was greater than zero and was significant because the p-value was less than 0.05. It is concluded that customer satisfaction is positively related to the level of customer retention.

## **5.7. Summary of results**

The results of the study were presented and discussed in the chapter. The main research problem of this study is to investigate the effects of digitalisation on e-service quality, with a focus on internet banking. Various factors ultimately would or could contribute to service quality in regards to internet banking.

Recent research has presented support for two socio-demographic variables, which are namely age and gender, as affecting the adoption of internet banking.

(Mutengezanwa & Ngoma, 2013) discuss the socio-demographic variables and how they affect the uptake of internet banking. Literature suggests that there is a strong

relationship between age and the acceptance of new technologies (Khalaf Ahmad & Ali Al-Zu'bi, 2011). Older customers are found to have negative attitudes towards technology, while younger adults are seen to be more interested in using technology and innovation (Lee et al., 2003). The perceived usefulness of technology use mainly determines the decisions to adopt the technology by men. In contrast, women are more influenced by their perceptions about a system's ease of use and social influences.

Based on the results, E-service quality had a positive and significant impact on customer adoption. The effect is positive because the coefficient for E-service Quality was greater than zero and was significant because the p-value was less than 0.05 adoption of internet banking is positively related to e-service quality. The literature further supports this.

Based on the results, service quality – customer experience had a positive but insignificant impact on retention. Although the effect is positive because the coefficient for Service Quality - Customer Experience (0.063) was higher than zero, it was not significant because the p-value was greater than 0.05. This states that hypotheses two is not supported.

Based on the results, service quality - customer service impact on customer retention. The effect was positive because the coefficient for Service Quality - Customer Service (0.392) was greater than zero and was significant because the p-value was less than 0.05. This implies that hypotheses three is supported. It is concluded that Service Quality - Customer Service of internet banking is positively related to the level of customer retention.

Based on the results, service quality - customer service impact on customer retention. The effect is positive because the coefficient for Service Quality - Customer Experience (0.401) was greater than zero and was significant because the p-value was less than 0.05. This implies that hypotheses 4a is supported. It is concluded that the Service Quality - Customer Experience of internet banking is positively related to the level of customer satisfaction.

Based on the results, service quality - customer service impact on customer satisfaction. The effect is positive because the coefficient for Service Quality - Customer Service (0.489) was greater than zero and was significant because the p-value was less than 0.05. This implies that hypotheses 5a is supported. It is concluded that the Service Quality - Customer Service of internet banking is positively related to the level of customer satisfaction.

Based on the results, Customer Satisfaction had a positive and significant impact on customer retention. The effect was positive because the coefficient for Customer Satisfaction (0.469) was greater than zero and was significant because the p-value was less than 0.05. It is concluded that customer satisfaction is positively related to the level of customer retention.

## **CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS**

### **6.1. Introduction**

This chapter presents the conclusions of the study. First, the findings of the research are summarised, and the outcomes are drawn (Section 6.2). Next, the theoretical implications are outlined as well as the recommendations (Section 6.3). Last, the chapter discusses the limitations of the study.

### **6.2. Conclusions of the study**

This study aimed to investigate the effects of Digitalisation on e-service quality, with a focus on internet banking. The study went and tested the theory against several factors, such as the adoption of internet banking and its effect on e-service quality. The study also examined the impact of service quality on customer satisfaction and retention. Lastly, the effect of customer satisfaction on customer retention. Based on the results, we can conclude that Digitalisation of traditional banking, into internet banking, had a positive effect on e-service quality.

However, it is essential to note that on the regression analysis, the results revealed that Service Quality - Customer Experience had a positive but insignificant impact on retention. Although the effect is positive because of the coefficient for Service Quality - Customer Experience, it was not significant. Thus, hypotheses two was not supported. It is concluded that Service Quality - Customer Experience of internet banking does not have an impact on customer retention.

According to (Suk & Eppie, 2007), the factors affecting customer retention are diverse. Of the numerous factors, customer satisfaction has been empirically validated to have a relationship with customer retention in the service sector (Gustafsson et al., 2005). The importance of satisfaction on customer retention is so well recognised that some significant economies measure satisfaction at the industry level to predict customer retention and future financial performance (Hennig-Thurau, 2004).

(Liao & Wong, 2008) argues that while the role customer satisfaction plays in retaining customers is now perceived as more complex than initially thought (Joseph et al., 1999; Yap et al., 2015) the literature review discovered that customer satisfaction has traditionally been regarded as a fundamental determinant of long-term customer behaviour.

### **6.3. Theoretical Implications**

This study focused on Standard Bank customers, and this limits its generalisability to other banks in South Africa, as well as globally. It can be noted that the banking industry does adopt similar approaches and standards in regards to financial management across the globe, one could, therefore, imply that replication of this study in South Africa for the 'Big Four' banks would further enhance the results.

### **6.4. Recommendations**

The area of digital transformation and Digitalisation is under-researched. This study, therefore, contributes to the literature of digital transformation, digital banking, internet banking and the perceived impact that it has on service quality, customer satisfaction and customer retention.

Other suggestions for future research are as follows:

- Conduct the research of Digitalisation of traditional banking against the 'Big Four' banks in South Africa. To assess whether the results in this study apply to the banking sector or whether they are limited to Standard Bank.
- Conduct research on the Digitalisation of content in regards to the rise of second and third screen viewing in regards to the surge of Showmax and Netflix. To assess the impact of small-screen viewing on SABC or DSTV as constituents of content

## **6.5. Limitations.**

This study was not without limitation. The first limitation is that while this study was focused on the impact of digitalisation and e-service quality, it was limited to the banking industry. The second limitation of this study was that the respondents were only customers of Standard Bank, South Africa has several banks, and so the results are not a reflection of the banking industry in the country. The third limitation is that the respondents of the survey are respondents from Facebook or LinkedIn. The fourth limitation is that this study did not consider demographical circumstances and the varying impacts this may have on adoption of internet banking. This is, therefore, not a reflection of the Standard Bank customer demographic as many may not be on those two channels that were used for data collection. Thus, questions do remain regarding the generalisation of the results applying to a larger population of Standard Bank customers, or the Digitalisation across other industries. Future study may consider surveying a broader demographic of the Standard Bank customer for a more reflective impact of Digitalisation. There is also opportunity to research other industries that have digitalised their business.

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## APPENDIX A



Dimension	Item
Demographic Questions	<ol style="list-style-type: none"> <li>1. Do you consent to participating in this survey?</li> <li>2. Are you Male or Female?</li> <li>3. What is your age?</li> <li>4. Please indicate your income monthly?</li> </ol>
E-service Quality	<ol style="list-style-type: none"> <li>5. When Standard Bank internet banking promises a service at certain time, they adhere to that?</li> <li>6. Does the Standard Bank internet banking makes you find information easily?</li> <li>7. When internet banking is a problem, Standard Bank do what they can quickly and efficiently attend to the problem?</li> <li>8. Does Standard Bank internet banking works efficiently on your first attempt?</li> </ol>
Adoption of Internet Banking	<ol style="list-style-type: none"> <li>9. Is the Standard Bank internet banking website is responsive, intrinsic and well-laid out?</li> <li>10. Does Standard Bank internet banking offers features and functionality efficiently and accurately?</li> <li>11. Does Standard Bank internet banking has no errors on their system or on their database?</li> <li>12. Does Standard Banks internet banking has the latest equipment and digital technologies?</li> <li>13. Is the Standard Banking internet banking website is visually appealing?</li> </ol>
Service Quality – Customer Experience	<ol style="list-style-type: none"> <li>14. Does the department at Standard Bank internet banking provide quick and efficient service?</li> <li>15. Is the department at Standard Bank internet banking are eager to help you always?</li> <li>16. Is the department at Standard Bank internet banking are never too busy to respond to your questions?</li> <li>17. Does Standard Bank internet banking give personalized and individual attention?</li> </ol>
Service Quality – Customer Service	<ol style="list-style-type: none"> <li>18. Does Standard Bank internet banking has operating Help desks or call centres that are convenient for all consumers?</li> <li>19. Do Standard Bank internet banking call centres give your personal attention?</li> <li>20. Do Standard Bank internet banking call centres have you best interests at heart?</li> <li>21. Does Standard Bank internet banking understands your specific needs?</li> </ol>
Customer Retention	<ol style="list-style-type: none"> <li>22. Does Standard Bank internet banking platform displays the trust and confidence consumers need in their platform?</li> <li>23. Do you trust that your interactions and exchanges are safe with Standard Bank internet banking?</li> <li>24. Is the department at Standard Bank internet banking are knowledgeable and well equipped to answer your questions?</li> </ol>

Customer Satisfaction	<p>25. Is the department at Standard Bank internet banking are consistently respectful and polite with their consumers?</p> <p>26. Does the Standard Bank internet banking provides with valuable information?</p> <p>27. Is the department at Standard Bank internet banking are very communicative in terms of what service will be done and when?</p>

**APPENDIX B**

## Sample Participation Letter (SPL)



Date: 15 August 2019

Good Day

My name is Mandisa Theko and I am a Masters student in the Masters of Management – Strategic Marketing division at the University of the Witwatersrand, Johannesburg. I am conducting research the impact of digitalisation on customer satisfaction: Study of Internet Banking in South Africa

As customers of Standard Bank you are **invited** to take part in this survey. The purpose of this survey is to find out the impact that the internet banking services Standard Bank offers have had on their service delivery in the eyes of their customers

Your response is important and there are no right or wrong answers. This survey is both confidential and anonymous. Anonymity and confidentiality are guaranteed by not needing to enter your name on the questionnaire. Your participation is completely voluntary and involves no risk, penalty, or loss of benefits whether or not you participate. You may withdraw from the survey at any stage.

The first part of the survey comprises 26 statements. Please indicate the extent to which you agree with each statement, by ticking in the appropriate box. Please tick whichever boxes are applicable. The entire survey should take between 10 to 15 minutes to complete. Please note that completing the survey and pressing SUBMIT can be taken to mean consent to the survey.

Thank you for considering participating. If you have any concerns or complaints regarding the ethical procedures of this study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email [Shaun.Schoeman@wits.ac.za](mailto:Shaun.Schoeman@wits.ac.za)

Kind regards

Mandisa Theko

Masters Student: Division of Strategic Marketing

School of Commerce, Law and Management

Wits Business School, Johannesburg

## Appendix C

Mandisa Theko 364488 – MMSM – Questionnaire

<https://dstvdigital.wufoo.com/forms/the-impact-of-digitalisation-on-customers/>

The impact of digitalisation on customers

Part 1

Good Day

My name is Mandisa Theko and I am a Masters student in the Masters of Management – Strategic Marketing division at the University of the Witwatersrand, Johannesburg. I am conducting research the impact of digitalisation on customer satisfaction: Study of Internet Banking in South Africa

As customers of Standard Bank you are invited to take part in this survey. The purpose of this survey is to find out the impact that the internet banking services Standard Bank offers have had on their service delivery in the eyes of their customers

Your response is important and there are no right or wrong answers. This survey is both confidential and anonymous. Anonymity and confidentiality are guaranteed by not needing to enter your name on the questionnaire. Your participation is completely voluntary and involves no risk, penalty, or loss of benefits whether or not you participate. You may withdraw from the survey at any stage.

The first part of the survey comprises 26 statements. Please indicate the extent to which you agree with each statement, by ticking in the appropriate box. Please tick whichever boxes are applicable. The entire survey should take between 10 to 15 minutes to complete. The survey was approved by the SEBS Ethics Committee (Non-Medical).

Thank you for considering participating. Should you have any questions, or should you wish to obtain a copy of the results of the survey, please contact me at 364488@wits.ac.za.

My contact details: 364488@wits.ac.za – Cell number: 060 474 6756

My supervisor's name and email are: Dr Yvonne Saini yvonne.saini@wits.ac.za

Kind regards

Mandisa Theko

Masters Student: Division of Strategic Marketing

School of Commerce, Law and Management

Wits Business School, Johannesburg

Part 2

Do you consent to participating in this survey?

Yes

No

0%

Part 3

1. Please indicate your Gender

Male

Female

Prefer Not to Answer

2. Please indicate your Age

18-24

25-34

35-44

45-54

55-64

65 or Above

Prefer Not to Answer

3. Please indicate your income monthly

Under R5, 000

R10, 000 - R29, 000

R30, 000 - R39, 000

R40, 000 - R49, 000

R50 000 or more

Prefer Not to Answer

4. Does Standard Banks internet banking have the latest equipment and digital technologies?

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

5. Is the Standard Banking internet banking website visually appealing.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

6. Is the Standard Bank internet banking designed to make you find information easily?

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

7. Does the Standard Bank internet banking provide you with valuable information?

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

8. Is the Standard Bank internet banking website responsive, intrinsic and well-laid out.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

9. When Standard Bank internet banking promises a service at certain time, they adhere to that.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

10. When internet banking is a problem, does Standard Bank do what they can quickly and efficiently to attend to the problem.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

11. Does Standard Banks internet banking work efficiently on your first attempt?

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

12. Does Standard Bank internet banking offer you features and functionality efficiently and accurately.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

13. Does Standard Bank internet banking have no errors on their system or on their database.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

14. Is the department at Standard Bank internet banking very communicative in terms of what service will be done and when.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

15. Does the department at Standard Bank internet banking provides quick and efficient service?

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree



16. Is the department at Standard Bank internet banking eager to help you always?

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

17. The department at Standard Bank internet banking are never too busy to respond to your questions.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

18. Does the Standard Bank internet banking platform display the trust and confidence consumers need in their platform.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

19. Do you trust that your interactions and exchanges are safe with Standard Bank internet banking?

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

20. Is the department at Standard Bank internet banking consistently respectful and polite with their consumers?

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

21. Is the department at Standard Bank internet banking are knowledgeable and well equipped to answer your questions.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

22. Does Standard Bank internet banking give personalized and individual attention.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

23. Does Standard Bank internet banking have operating Help desks or call centres that are convenient for all consumers.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

24. Do Standard Bank internet banking call centres gives your personal attention.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

25. Do Standard Bank internet banking call centres have your best interests at heart.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

26. Does Standard Bank internet banking understands your specific needs.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree