

**FACTORS INFLUENCING CUSTOMER PERCEPTIONS ON ADOPTION OF
INTERNET BANKING IN NAMIBIA**

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DECLARATION

“This thesis is my own original work and has not been submitted elsewhere in fulfilment of the requirements of this or any other award”

Signature:.....

Date:.....

DEDICATION

I dedicate this research work to my supervisor who did all he could to guide me throughout the entire research, to my husband and family for the continuous love and support in everything, my friends for encouragements and most of all to the Almighty God who gives power, strength and health while doing the research.

Table of Contents

CHAPTER 1	1
INTRODUCTION	1
1.1 Background	1
1.2 Statement of the problem	4
1.3 Research objectives	6
1.4 Significance of the study	7
1.5 Limitations of the study	7
1.6 Outline of the paper	8
1.7 Conclusion	8
CHAPTER 2	10
LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Evolution of conventional banking services	10
2.3 Internet banking	13
2.3.1 Concept and types of Internet banking	13
2.3.2 Advantages of Internet banking	17
2.3.3 Challenges of Internet banking	20
2.4 Adoption of Internet banking services	22
2.5 Analytical framework and research model for the study	28
2.6 Demographic attributes	33
2.7 Conclusion	34
CHAPTER 3	35
METHODOLOGY	35
3.1 Introduction	35
3.2 Nature of the study	35
3.3 Population	37
3.4 Sampling	38

3.5	Data collection techniques	40
3.6	Data analysis	42
3.7	Ethical consideration	43
CHAPTER 4		44
RESULTS AND DISCUSSION		44
4.1	Introduction	44
4.2	Demographic and descriptive statistics	44
4.2.1	Gender	44
4.2.2	Age	45
4.2.3	Qualification	46
4.2.4	Employment status	48
4.3	Perceptions on adoption of Internet banking	49
4.3.1	Perceived usefulness (PU)	49
4.3.2	Perceived ease of use (PEU)	53
4.3.3	Trust (T)	57
4.3.4	Attitude (ATT)	61
4.3.5	Perceived behavioural control (PBC)	65
4.3.6	Subjective norms (SN)	68
4.3.7	Intention (INT)	71
4.4	Discussion	74
4.5	Conclusion	78
CHAPTER 5		79
CONCLUSIONS AND RECOMMENDATIONS		79
5.1	Introduction	79
5.2	Conclusions	79
5.3	Recommendations	81
REFERENCES		83
APPENDICES		95
APPENDIX I		96

LIST OF TABLES

Table 2.1 - Advantages of online banking over traditional banking practices	12
Table 2.2 - Internet banking categories and comparative features	16
Table 2.3 - Variations in the dimensions of business model	19
Table 2.4 - Summary of previous research on Internet banking adoption.....	27
Table 2.5 - Definition of model constructs	32
Table 4.1 - Distribution by Gender	45
Table 4.2 - Distribution by Age	46
Table 4.3 - Distribution by Qualification.....	47
Table 4.4 - Distribution by Employment Status	48
Table 4.5 - Perceived Usefulness (PU) Results	52
Table 4.6 - Perceived Ease Use (PEU) Results.....	56
Table 4.7 - Trust (T) Results.....	60
Table 4.8 - Attitude (ATT) Results.....	65
Table 4.9 - Perceived Behaviour (PBC) Results.....	67
Table 4.10 - Subjective Norms (SN) Results.....	70
Table 4.11 - Intention (INT) Results.....	73

LIST OF FIGURES

Figure 2.1 - Research Model.....	29
Figure 4.1 - Distribution by Gender.....	45
Figure 4.2 - Distribution by Age.....	46
Figure 4.3 - Distribution by Qualification	47
Figure 4.4 - Distribution by Employment Status	48
Figure 4.5 - Perceived Usefulness (PU) Results.....	52
Figure 4.6 - Perceived Ease Use (PEU) Results	57
Figure 4.7 - Trust (T) Results	61
Figure 4.8 - Attitude (ATT) Results	65
Figure 4.9 - Perceived Behaviour (PBC) Results	68
Figure 4.10 - Subjective Norms (SN) Results	70
Figure 4.11 - Intention (INT) Results	73
Figure 4.12 – Average Construct Percentages.....	75

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ABSTRACT

Internet banking is receiving greater attention as one of the most important and popular delivery channel for banking services in the cyber age, and it has remarkably developed in the light of the advances made in the information and communication technologies over the last three decades. This study analyses the factors influencing customer perceptions on adoption of Internet banking in Namibia by focusing on the selected demographic attributes such as gender, age, qualification and employment status, and the constructs of perceived usefulness, perceived ease of use, trust, attitude, subjective norms, perceived behavioural control and intention.

As part of this empirical study using a quantitative approach and informed by a hybrid construct of an extended trust and technology acceptance model (TAM) with the decomposed theory of planned behaviour (DTPB), data was collected through a survey questionnaire on factors influencing customer perceptions on adoption of Internet banking and analysed using Statistical Package for Social Science (SPSS) software. The study found that each of the constructs surveyed have varying degrees of perceptions and influences on customer adoption of Internet banking in Namibia ranging from as high as 78.75% to as low as 55.59%. Furthermore, the study highlights the importance of considering the demographic and contextual attributes in analysing and understanding factors influencing customer perceptions on adoption of Internet banking.

The results should assist banks in achieving higher penetration rates of Internet banking services that would not only benefit from much lower operating costs and improved profitability but also ensure that customers benefit from the convenience, speed and round-the-clock availability of such services. Namibia, as a country, also stands to benefit from increased Internet banking usage by virtue of the improved financial inclusion in the economy as regards ease of access, availability and usage of the formal financial system.

The banks should, however, consider Internet banking as a strategic business necessity and develop aggressive marketing and outreach strategies to ensure that customers are motivated to adopt cost effective and convenient Internet banking services. The absolute need for the banks to take into consideration the findings of this study cannot be overemphasised.

CHAPTER 1

INTRODUCTION

1.1 Background

The banks, as part of the overall financial sector or intermediary systems of countries, are critically important in supporting the socio-economic development endeavours through the provision of efficient and cost effective financial services (Lamoreaux, 1986; Al-Smadi, 2012). According to Al-Smadi (2012), advances in technology and competition, both in the market and for the market, have profoundly affected the operations of the banks, particularly the reliance on technology in the provision of expanded and cost competitive banking services and product ranges. In the quest to remain differentiated, satisfy and retain demanding customers and increase market shares, the banks have continuously pursued innovations that have been largely driven by competition and information and communication technology (ICT) imperatives (Uchupalanan, 2000; Baraghani, 2007; Goyal, Chawla & Bhatia, 2016).

Globally, online banking services are receiving greater attention and have evolved and developed significantly during the 1980s taking advantages of the advances in information technology (Karen, William & Daniel, 2002; Kenova & Jonasson, 2006). Karen *et al.* (2002) argue that the increasing attention to Internet banking is not only from banks but also from a variety of other stakeholders including other sectors of the financial services industry, the business press, regulators and lawmakers. Chou and Chou (2000) reckon that four media can be used as a means to provide online banking service, namely, online banking using the bank's propriety software, online banking via the PC using dial-up software, online banking via online services and Internet banking via the web.

Online banking started in earnest in the 1980s in the United States of America and this term became popularised in the late 1980s. In the United States of America and other countries, there is increasing attention being paid to Internet banking because of its perceived benefits (Karen *et al.*, 2002). Jarrett (2016) acknowledges significant growth trend of the Internet banking portion given the general change observed in the activities of Internet bankers and services provided by conventional bankers on the Internet. Bankrate.com (2011) reckons that online banking is not necessarily about changing people's money habits but rather utilise the information and communication technologies to cut on banking services time and cost associated with paperwork as well as manage financial transactions much more efficiently.

As technology advances, the banking industry is also embracing and increasingly using it. Moving from electronic banking services of automated teller machine (ATM) to new technologies such as mobile and internet banking that is widely popular among the young and middle-class customers who would like to take control and manage their finances anytime they want from any place of their choice. Historically, the first success stories and experiences in pioneering the implementation of Internet banking were Security First National Bank (SFNB), Liberty Financial Cos., and Charles Schwab & Co. of the United States of America (USA) in the 1990s (Chou & Chou, 2000). SFNB launched the first full-service Internet bank in the world on the 18th of October 1995. A year later, 28 financial institutions, mostly in the USA (about 23 of them) offered their customers varied forms of banking services on the Internet. By 1997, thousands of banks globally started offering a variety of Internet banking and other online services via their websites.

The emerging Internet banking phenomenon has not spared Africa and it is also sweeping through African countries with most banks adopting electronic systems such as ATMs, telephone banking and online banking as part of their business strategies. As James Addison

(2011) puts it, the African banking industry is also seeing electronic banking as the way forward in its operations. The banking industry in Namibia has not been left out in the current global trends of information and communication technology (ICT) innovations in the provisions of banking services and harnessing technology to improve their products, services and efficiency (Bank of Namibia, 2016).

Currently, Namibia has ten (10) licensed commercial banks: Bank Windhoek Limited; E-Bank Limited; First National Bank Namibia Limited; Nedbank Namibia Limited; Standard Bank Namibia Limited; SME Bank Limited; Trustco Bank Namibia Limited; Banco Atlantico (branch of a foreign banking institution); Bank BIC Namibia Limited; and Letshego Bank Namibia Limited. The First National Bank Namibia Limited, Standard Bank Namibia Limited, Ned Bank Namibia Limited, Bank Windhoek Namibia Limited constitute more than 65% of the market share in Namibia (Okeahalam, 2008). These banks are the primary mobiliser of funds from the public and the main sources of financing, which support business operations and economic activities in Namibia. The others are either micro-finance banks or smaller entities whose operations remained relatively small in comparison to that of the other four commercial banks. With regard to the total number of bank employees, it was estimated at 3,000 in 2000 (Ipangelwa, 2001).

Of the four (4) major banks in Namibia, Bank Windhoek Namibia Limited wholly locally while the other three commercial banks have their holding banking companies in South Africa. Thus, the developments in the banking industry in South Africa always impact on the three subsidiary commercial banks owned and operated in Namibia. According to Singh (2004), Internet banking in South Africa (and Namibia by extension) started in 1996 with ABSA Bank Limited being the first to offer online services, followed by Ned Bank, Standard Bank, First National Bank and Mercantile Bank in that order. The implementation and the

functioning of these digital systems seem to be relatively smooth in the advanced economies but the situation may be entirely different for developing economies.

Undoubtedly, the electronic evolution is spreading through all sectors with the banking industry going through swift technological changes and the electronic banking has remarkably grown over the years (Addison, 2011). Electronic banking services offer banks prospects for convenient service delivery channels, lower transaction costs that potentially result in higher profitability and increases in the rates of service provisions (Frame & White, 2014; Goyal *et al.*, 2016). From the customer perspective, Internet banking services are beneficial because of the convenience to transact anywhere and anytime at relatively lower costs or fees (Shanmugam *et al.*, 2015). Notwithstanding the opportunities presented by Internet banking, it also has its own challenges. Some customers are risk adverse and afraid of losing money through Internet scams and fraud (Debashree, 2015; Agwu, 2017).

Unless the factors influencing customer perceptions on adoption of Internet banking services in Namibia are properly understood and contextualised, it would be highly unlikely that banks and other key stakeholders could put in place appropriate and responsive measures to increase the adoption of online banking services. The orientation of this research study was to help in understanding the pertinent factors that influence bank customers to embrace Internet banking in Namibia.

1.2 Statement of the problem

Internet banking has been receiving greater attention and remarkably developed in the light of the advances made in the information and communication technologies over the last three decades (Karen, William & Daniel, 2002; Kenova & Jonasson, 2006). Internet banking is also widely perceived as the most important and most popular delivery channel for banking services in the cyber age (Cheng, Lam & Yeung, 2006). With the excitable interest in Internet

banking, it may seem like it would spectacularly take off in terms of its adoption given the potential benefits to both the banks and the customers. However, Internet banking has not taken off in many countries as anticipated. According to Cheng, Lam and Yeung (2006), about 522,700 people in Hong Kong visited an Internet banking site from their home personal computer in January 2003 (out of 2,194,600 active Internet users), representing a penetration rate of 23.8%.

Unless the factors influencing customer perceptions on adoption of Internet banking services in Namibia are studied, challenges pertaining to the low penetration rate of Internet banking would continue to be prevalent. Once the factors that influence customers' intention to adopt Internet banking are properly understood, banks could better formulate their marketing strategies to increase Internet banking usage in the future. With higher penetration rates of Internet banking, banks could benefit from much lower operating costs by offering Internet banking services, which require less staff and fewer physical branches. Customers could also benefit from the convenience, speed and round-the-clock availability of Internet banking services. Namibia, as a country, could also stand to benefit from increased Internet banking usage by virtue of the improved financial inclusion in the economy as regards ease of access, availability and usage of the formal financial system (Ikhide, 2008; Okeahalam, 2008; Sarma & Pais, 2011).

Whereas some African countries have had several studies related to the adoption of Internet banking, literature in general and the peer-reviewed material in particular on the banking industry in Namibia remains very limited (Singh, 2004; Thulani, Tofara & Langton, 2008; Ozuru, Chikwe & Uduma, 2010; Aderonke, 2010; Tarhini, Mgbemena, Trab & Masa'deh, 2015; Agwu, 2017). Furthermore, the United States of America Central Intelligence Agency (2017) estimated that 22.5% of the total population in Namibia (about 439,000 people) used

Internet. However, the penetration rate of Internet banking was not known. With little or virtually lack of empirical investigations and evidence on Internet banking in Namibia, questions exist regarding the features, capabilities and adoption of the related products and services, and the extent to which they have been developed, popularised, utilised and localised in the country.

This empirical study examines the factors influencing customer perceptions on adoption of Internet banking services in Namibia as a cost effective and convenient means of accessing banking services. In particular, the study focused on the:

- demographic variables such as gender, age, qualification and employment status;
- perceptions about Internet banking through constructs such as perceived usefulness, perceived ease of use, trust, attitude, subjective norms, perceived behavioural control and intention; and
- influence on the decision to adopt Internet banking from the perceptions of friends, media and family.

Applied in this study was a quantitative approach that entails primarily surveying the customers of the ten (10) commercial banks of which four of them have a combined market share of more than 65% have a well-established banking network in Windhoek, the Capital City of Namibia (Okeahalam, 2008).

1.3 Research objectives

The main objective of the proposed study is to analyse factors that influence customers to adopt Internet banking in Namibia.

More specifically, the study aimed to achieve the following specific research objectives:

- i) To analyse the influence of customers' perceptions on the Internet banking constructs, namely perceived usefulness, perceived ease of use, trust, attitude, subjective norms, perceived behavioural control and intention; and
- ii) To analyse whether the customers' demographic attributes, namely gender, age, qualification and employment status, that have influence on the Internet banking constructs including the perceptions.

1.4 Significance of the study

Although the banking industry in Namibia is relatively young and to a large extent dependent on the support from the South African banking industry, it has not been left out of the current global trends of ICT innovations in the provisions of Internet banking products and services. Namibia is also known to have a large unbanked population and getting them banked as well as enticing them to embrace technological innovations such as IB remains a challenge. The significance of the proposed research study will be its contribution to the knowledge in understanding factors that influence the acceptance of IB in Namibia and the country's financial inclusion in the economy as regards ease of access, availability and usage of the formal financial system (Okeahalam, 2008; Ikhide, 2008; Sarma & Pais, 2011).

1.5 Limitations of the study

Literature in general and the peer reviewed material in particular on the banking industry in Namibia remains very limited. The confidential nature of the banking operations coupled with the desire by the banks to safeguard their competitive advantages placed some limitations on the information that could be accessed, especially customer related. Therefore, determining the population for this research study and a representative sample size in order to have findings that would be very generalisable was a big challenge. Aside from a relatively

small size of the sample limiting the generalisation of the outcome of the study, its concentration on a particular location could not be representative of the whole Namibia since results may vary with location and the demography of the people. Furthermore, the research study was more of a descriptive type and did not seek to elaborately explain or theorise about the relationships among the various factors influencing customer perceptions on adoption of Internet bank in Namibia. The data challenges also made it difficult to do statistical tests such as the chi-square test, which has applied for many years in testing the association between two categorical responses (Sharpe, 2015; Shih & Fay, 2017).

1.6 Outline of the paper

The dissertation has main five parts. First, it provides a glimpse of the theme of the research study, the context and manner in which it was conducted, and its academic and practical importance. Chapter two presents the literature applicable to the research study and in particular, a conceptual background and framework, while the third Chapter is on the research methodology detailing the research method, the population, sampling technique, and the data collection, analysis tools and techniques. The fourth Chapter is the general synthesis of the overall findings and discussion of the same and final Chapter provides the conclusions, summary of the findings, implications of the study and recommendations.

1.7 Conclusion

The banking industry has evolved over time from the traditional manner in which it used to operate and the influence of the technology, particularly the information and communication technology (ICT), has been profound in that regard since the 1980s. Innovative ICT platforms such as Internet banking have been developed for the benefit of both the banks, as service providers and the customer, as the recipient of those banking services. Potential benefits to banks include lowering the service costs and improving profitability and customers would

have the convenience of doing banking services anywhere and anytime at lower costs. Notwithstanding the potential benefits of Internet banking, its adoption by customers is not without challenges from the perspective of risks (perceived or real). Thus, understanding the factors that influence the customers to adopt Internet bank is important and this study focusing on Namibia was undertaken in that context.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this Chapter, an overview of the literature applicable to the research study is provided that traces the evolution of banking, helps to understand the basics, benefits, challenges and factors influencing customer perceptions on adoption of Internet banking. A variety of sources were used during the literature review including peer reviewed journal articles and the Internet. The literature review informed the development of the conceptual framework and research model used in this study for the analysis of the factors influencing customer perceptions on adoption of Internet banking in Namibia.

2.2 Evolution of conventional banking services

The roots of the early conventional or traditional banking can be traced to Italy during the period 1000-1350 and by the late thirteenth and fourteenth centuries, the following categories of bank were operational (Awan, 2009):

- i) International merchant banks;
- ii) Local deposit banks, and
- iii) Pawn broking establishments.

Conventional banking services entail, among other things, the practice of physically going to bank branches to withdraw and/or deposit stacks of cash and cheques during the conventional business hours (Islam, 2005). The settlement of bills and negotiation of banking services such as home loans and overdrafts in some instances entail spending a considerable amount of time in queues and discussing details with banking consultants or tellers in person (Bihari,

2011). The cornerstone of traditional banking services remains that of establishing mutual trust and doing business with bank tellers or officials (who may be personal bankers) you become familiar with or used to over some considerable period of time (Austrin, 2016).

The rapid expansion of information and communication technologies has had a tremendous impact on all areas of human life (Schneider, 2006). Consumer behaviour is changing partly because of more spare time. The way of use of financial services is characterized by individuality, mobility, independence of place and time, and flexibility. Financial transactions caused by purchases will more and more be carried out by non- and near-banks. These facts represent big challenges for providers of financial services.

With the advent of information communication technologies (ICTs), especially the computers and Internet, profound changes have taken place in the banking industry insofar as the provision of banking services are concerned. According to the Bankrate.com (2011), the popularity of ICTs in the banking industry present both a myriad of opportunities and challenges, and that online banking is a powerful “value added” tool to attract and retain new customers while helping to eliminate costly paper handling and teller interactions in an increasingly competitive banking environment. Online banking started in earnest in the 1980s in the United States of America and this term became popularised in the late 1980s. Bankrate.com (2011) reckons that online banking is not necessarily about changing people’s money habits but rather utilise the ICTs to cut on banking services time and cost associated with paperwork as well as manage financial transactions much more efficiently.

Since the early 1980s, most of the large bank offer online banking known by many names such as personal computer (PC) banking, home banking, electronic banking or internet banking (Bankrate.com, 2011). According to Bankrate.com (2011), those banks embracing online banking are referred to as “brick-to-click” banks while those still in a seemingly

paradigm paralysis are known as the “brick-and-mortar” banks. For those banks offering online banking services, the challenge is to ensure that the services are designed in such a manner that makes them easier to learn and utilise, secure and inspire a good sense of faith or trust in them. Some of the factors outlined by Bankrate.com (2011) that make online banking services more advantageous than the traditional banking practices as highlighted in Table 2.1.

Table 2.1 Advantages of online banking over traditional banking practices

Advantage	Description
<i>Convenience</i>	Online banking sites never close; available 24 hours a day, seven days a week, and are only a mouse click away
<i>Ubiquity</i>	Wherever one maybe, you can log on instantly to your online bank and take care of business, 24/7
<i>Transaction speed</i>	Online bank sites generally execute and confirm transactions at or quicker than ATM processing speeds
<i>Efficiency</i>	You can access and manage all of your bank accounts from one secure site
<i>Effectiveness</i>	Many online banking sites offer sophisticated tools, including account aggregation, stock quotes, rate alerts and portfolio managing programs to help you manage all of your assets more effectively.

2.3 Internet banking

2.3.1 Concept and types of Internet banking

The advent and rapid growth of the Internet presents organisations in retail financial services with a new technological paradigm and opportunity to provide Web-based and profitable e-commerce applications to reach-out, retain, offer expanded range services to the customers (Martinsa, Oliveira & Popovic, 2014). Consequently, there is an emerging trend to use innovative ICT platforms to operate internal business systems, improve profitability, promote products, satisfy customers with value added services and dematerialise customer relationships (Martins, *et al.*, 2014). Hanafizadeh, Keating and Khedmatgozar (2014) argue that the Internet has not only technologically transformed the retail financial services but also revolutionised the manner in which banking services are delivered using the ICT platforms commonly referred to as Internet banking. Unavoidably, customer banking service delivery has, over the years, been migrating from using physical structures of the branches to online self-services using the Internet platform (Simpson, 2002).

According to Martins, *et al.* (2014), the understanding of the concept of Internet banking in literature is varied and associated with electronic banking, online banking and e-banking, and can be defined as the use of banking services through the computer network (the Internet), offering a wider range of potential benefits to financial institutions due to more accessibility and user friendly use of the technology. Internet banking also refers to the use of the Internet as a remote delivery channel for banking services and such services include traditional ones, such as opening a deposit account or transferring funds among different accounts, and new banking services, such as electronic bill presentment and payment (allowing customers to receive and pay bills on a bank's Web site) (Karen *et al.*, 2002).

Internet banking also defined as a system that enables bank customers to get access to their accounts and general information on bank products and services through the use of bank's website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmations (Thulani, Tofara & Langton, 2008). Yibin (2003) defines Internet banking as the provision of retail and small value banking products and services through electronic channels as well as large value electronic payments and other wholesale banking services delivered electronically. This definition is shared by Chang (2003), Sullivan and Wang (2005) by virtue of referring Internet banking as a process innovation whereby customers handle their own banking transactions without visiting bank tellers. The banking transactions are elaborated in Chavan's definition of Internet banking as the use of the Internet to deliver banking activities such as funds transfer, paying bills, viewing current and savings account balance, paying mortgages and purchasing financial instruments and certificates of deposits.

Often found in literature are the different terms and definitions, some of which are used interchangeably or taken to mean one and the same thing (Chavan, 2013). For instance, 'online banking', which is defined as a "*facility provided by banks and other financial institutions to their customers and clients for business transactions through Internet*" (Sharma & Abrol, 2011). The Indiana Department of Financial Institutions also alludes to electronic banking that is also referred to as Electronic Funds Transfer (EFT), implying the use of electronic means to transfer funds from one account to another rather than by check or cash. Put it differently, it is the use of computer and electronic technology as a substitute for checks and other paper transactions.

Worthy pointing out are the different views on Internet banking and online banking. On one hand, Nasri and Charfeddine (2012) contend that Internet banking is another term used for

online banking and both share a similar meaning as the use of Internet as a remote delivery channel of banking system services via the World Wide Web. This argument is also supported by other researchers who even go a step further to state that Internet banking is also called online banking, e-payment and e-banking (Ozuru, Chikwe & Uduma, 2010; Singhal & Padhmanbhan, 2008; Beer, 2006; Jun & Cai, 2001). On the other hand, some researchers are of the view that Internet banking differs from online banking since provides universal connection from any location and Internet linked computer or device (Bradley & Stewart, 2003; Rotchanakitumnuai & Speece, 2003; Wu, Hsia & Heng, 2006).

Despite the different views on Internet and online banking, Internet banking allows customer to have direct access to their financial information and undertake financial transactions without the hassle of going to the bank (Hamid, *et al.*, 2007). It is also a system that enables customers 24 hour 7-day access to their account, and allows customers to conduct more complicated transactions, such as pay bills, applying for housing loan applications, online shopping, account consultation, and stock portfolio management. In the emerging banking era, the Internet is being used as the platform to deliver services through automated processes and electronic devices (Singhal & Padhmanbhan, 2008; Ozuru *et al.*, 2010; Chaffey *et al.*, 2009). In this research study, a view was taken to use these terms interchangeably and collectively as Internet banking.

For comparability purposes, Diniz (1998) devised a classification tool that differentiates or categorises the levels of use of websites as part of Internet banking as informational, transactional and relational. The informational level is about using the Web to provide a bank's promotional information such as brochures and advertisements. At transactional level, it entails using the Web as a delivery platform for transactions such as applications for accounts and cards, account inquiries including statements and balances, payment of bills,

transfers of funds and e-cash. Typical at relational level, the banks utilise the Web to strengthen the relationships with the customers and could take the form of e-mails, complaint handling, financial tools and decision aids such as calculators and video-conferencing. Within each of the three categories, the sub-levels of sophistication could be varied from basic (incremental), intermediate (improvement) and advanced (transformation). Furthermore, the size of a bank could also influence the level of development and use of the Web for Internet banking purposes.

The Internet banking categories and comparative features, as suggested by Southard & Siau (2004), are similar to the classification by Diniz (1998) as outlined in Table 2.2.

Table 2.2 - Internet banking categories and comparative features

Category	Feature
<i>Informational</i>	General Bank Information and History
	Financial Education Information
	Employment Information
	Interest Rate Quotes
	Financial Calculators
	Current Bank and Local News
<i>Administrative</i>	Account Information Access
	Applications for Services
	Personal Finance Software Applications
<i>Transactional</i>	Account Transfer Capabilities
	Bill-pay Services

	Corporate Services (Cash Management, Treasury)
	Online Insurance Services
	Online Brokerage Services
	Online Trust Services
<i>Portal</i>	Links to Financial Information
	Links to Community Information
	Links to Local Businesses
	Links to Non-local Businesses (and/or Advertisers)
<i>Other</i>	Wireless Capabilities
	Search Function

Source: Diniz (1998)

2.3.2 Advantages of Internet banking

Internet banking is increasingly becoming part of the business model in the banking business because its advantages, benefits and positive impacts on both the banks and the customers (Wu *et al.*, 2006; Al-Smadi, 2012). Vyas (2012) asserts the advantages of Internet banking to include real time availability of accounts information and transfer of funds across bank locations, and ease of online banking requests/inquires, downloading of accounts statements, opening new accounts and letters of credit, making and stopping payments. Thus, from the perspective transactional, informational and relational mechanisms and service deliveries, Internet banking overcomes geographical or time limitations and can be done anywhere-anytime using virtual facilities, processes and payments over the Internet channel (Wu *et al.*, 2006).

Specific to the banks, Bihari (2011) emphasises on the three (3) main benefits of Internet bank. Firstly, automated Internet banking services reduce costs drastically as the volumes being handled by a bank is huge. Secondly, time and cost of processing a request is reduced hence resulting in more processing in lesser time and hence reduced costs and increased profitability. Thirdly, the first benefit for the banks offering Internet banking services is better branding and better responsiveness to the market. Those banks that would offer such services would be perceived as leaders in technology implementation and hence they would enjoy a better brand image.

From the perspective of customers, Chavan (2013) and Bihari (2011) report the following advantages and benefits of e-banking:

- Reduced costs in accessing and using the banking services;
- Increased comfort and timesaving - transactions can be made 24 hours a day, without requiring the physical interaction with the bank;
- Quick and continuous access to information - corporations will have easier access to information as, they can check on multiple accounts at the click of a button;
- Better cash management - e-banking facilities speed up cash cycle and increases efficiency of business processes as large variety of cash management instruments are available on Internet sites of banks;
- Reduced costs - this is in terms of the cost of availing and using the various banking products and services;
- Convenience - all the banking transactions can be performed from the comfort of the home or office or from the place a customer wants to;

- Speed - the response of the medium is very fast; therefore, customers can actually wait till the last minute before concluding a fund transfer; and
- Funds management - customers can download their history of different accounts and do a “what-if” analysis on their own PC before affecting any transaction on the web. This will lead to better funds management.

With Internet banking, customer service choices are more and the transactional costs are much cheaper than those done at the ‘bricks-and-mortar’ bank branches or over the telephones. Wu *et al.* (2006) observes variations in the dimensions of business model between the ‘bricks-and-mortar banking’ and ‘e-banking’ as outlined in Table 2.3.

Table 2.3 - Variations in the dimensions of business model

Factors	Bricks-and-mortar banking	E-banking
<i>Value proposition</i>	<ul style="list-style-type: none"> • Localization • Risk reduction • Comfortable services • Enhanced trust 	<ul style="list-style-type: none"> • Efficiency • Convenience • Customized services • Market extension
<i>Market scope</i>	<ul style="list-style-type: none"> • Physical market-place • General users • Geographic customer base • Customers are passive participants 	<ul style="list-style-type: none"> • Virtual market-space • Users with Internet connection • Wide customer base • Customers are active participants
<i>Cost structure</i>	<ul style="list-style-type: none"> • High entry and start-up costs • High operating costs 	<ul style="list-style-type: none"> • High technology investments • High contents creation and

	<ul style="list-style-type: none"> • High networking, transaction, production costs 	<ul style="list-style-type: none"> • Low entry, operating, networking, application development costs
<i>Profit potential</i>	<ul style="list-style-type: none"> • Over-the-counter serving revenues • Lower risks 	<ul style="list-style-type: none"> • Transactional commissions, servicing charge, advertising revenue, and financial information subscriptions • Lower transaction, labor, premises, and service costs
<i>Value network</i>	<ul style="list-style-type: none"> • Intermediation model • Key stakeholders: mainly for consumers and financial institutions 	<ul style="list-style-type: none"> • Re-intermediation model • Key stakeholders: Internet service providers, content providers, financial portal, online stores, retail outlets, etc.

Source: Wu *et al.* (2006)

Online banking is a powerful “value added” tool to attract and retain new customers while helping to eliminate costly paper handling and teller interactions in an increasingly competitive banking environment (Adel, 2001; Gerrard & Cunningham, 2003; Bankrate.com, 2011). Chavan (2013) also acknowledges that online banking has a lot of benefits which add value to customers’ satisfaction in terms of better quality of service offerings and at the same time enable the banks gain more competitive advantage over other competitors.

2.3.3 Challenges of Internet banking

On the flipside, the popularity of ICTs in the banking industry presents a myriad of challenges to the banks and customers alike. Some customers have shown reluctance to use

online banking services due to challenges pertaining to availability of internet infrastructures, ease of use, required skills, uncertainty and security are some concerns keeping the customers away from adopting online banking services (Lassar, Manolis & Lassar, 2005; Tarhini *et al.*, 2015). This is despite the several new security technologies and procedures aimed at providing authenticated secure communication against the number of malware that exploit online banking system vulnerabilities. One of the challenges to “the trust thing” of Internet banking is the absolute need for efficient security procedures by banks that offer online access to their systems (Yousafzai, 2005; Khrais, 2015). Khrais (2015) outlines the three attack methods against and vulnerabilities of Internet banking systems as credential stealing attack (CSA), channel breaking attack (CBA) and content manipulation also called man-in-the browser (MiTB) attack.

Rotchanakitumnuai and Speece (2003) categorises three (3) barriers to Internet banking in Thailand, namely, trust of the system, legal support and organisational barriers. The trust of system concerns are with regard to security, reliability of transaction and trust of the bank. With regard to the legal support concerns, they relate to fair liability, court capability to solve online cases efficiently and privacy protection. Organisational barriers are concerned with management attitude, and lack of resource and knowledge. This Thailand research study found that the level of concern or negativity to Internet banking barriers was lower among Internet banking users and higher among the non-Internet banking users. The fear from the risk of using Internet banking in general and losing money in particular is prevalent among customers but more significantly among the non-Internet banking customers (Al-Smadi, 2012).

Additional Internet banking challenges observed by Chavan (2013) include:

- i) infrastructure and human capital constraints, particularly in developing countries, to utilise the technology on localised and contextual basis, lack of public support for and firm commitment to e-finance related initiatives;
- ii) eroding trust, confidentiality, integrity and authentication using open and perceived insecure communication over the Internet platform in the bank-customer relations;
- iii) tailoring, extending and adapting the existing risk management frameworks to Internet banking systems from the perspectives of bank managements, regulatory and supervisory authorities insofar as domestic and cross border transactions are concerned; and
- iv) redefining methods and instruments for carrying out transactions and the associated legal standings, definitions, recognitions and permissions of banks, boundaries/borders, and electronic signatures instead of handwritten ones.

Chavan (2013) also argues that bank managements, and regulatory and supervisory authorities need to rise to the new challenges and institute the necessary measures including laws and regulations to safeguard and maintain the integrity of financial sector to ensure the safety and soundness of the domestic banking system, promote market discipline and protect customer rights and the public trust in the banking system.

2.4 Adoption of Internet banking services

Undoubtedly, the adoption of Internet banking by the bank's customers is important since the costs per transaction are even lower than those of an automated teller machine (Mukherjee & Nath, 2003). It opens up new horizons for them and moves them from local to global frontiers. Colgate *et al.* (1996) states that customer friendly technology such as ATMs, telephone and internet banking as a means to deliver traditional banking services have been

an important way to increase retention of customers and market share in recent years. Furthermore, this shift of service delivery method has been shown as an inexpensive means to retain bank customers according to Schlesinger and Heskett (1991).

If business enterprises fail to provide channels, which their customers seek and value, they will find it more difficult to develop strong relationships with their customers (Zineldin, 2000). Athanassopoulos (2000) argues that the economic value of customer retention is widely recognized since successful customer retention lowers the need for seeking new and potentially risky customers and allows organizations to focus more accurately on the needs of their existing customers by building relationships. In the words of Joseph and Stone (2003), losing customers not only leads to opportunity costs because of the reduced sales, but also to an increased need for attracting new customers which is five to six times more expensive than customer retention. Zineldin (2000) reckons that long-term customers buy more and, if satisfied may provide new referrals through positive word-of-mouth for the company.

Colgate *et al.* (1996) argue that long term customers tend to be satisfied with their relationship with the company and are less likely to switch to competitors, making market entry or competitors' market share gains difficult. Regular customers tend to be less expensive to service because they are familiar with the processes involved, require less "education," and are consistent in their order placement (Schlesinger & Heskett, 1991). According to Zineldin (2001), it is essential for bank managers to focus on automated service quality in order to increase retention rates and these delivery methods require banks to continue to encourage customers to use bank automated delivery services.

Mol (2000) says acceptance of new automated channels of service delivery in banks has brought a dramatic change in the way retail banks build and maintain close relationships with their customers. The introduction of new automated channels of service delivery has made

customer participation more widely possible and therefore there is need to adopt new ways to conceptualize automated service quality, taking into consideration the attributes of all electronic delivery channels. Competition among bank in the industry has also contributed to a rise in electronic banking (Dabholkar, 1994).

As technology reshapes the banking services industry, new products and services are offered through the Internet. The banking sector has little choice but to implement some form of Internet technology in order to remain both innovative and on the cutting edge of competitive advantage. According to Winter (2001) the increasing competition among banks has forced them to develop new technology and tools to stay competitive. Among the tools winter is referring to include Internet and mobile banking services that have been established by banks to remain competitive. Besides being used as a competitive tool by banks in the industry, Internet and mobile banking is proving to be reducing costs for banks in terms of personnel, branches and bank office operations considerably. Addison (2009) says Internet banking as reduced keeps overhead costs down and therefore enables the bank to offer better interest rates to savers and borrowers. The cost of transferring costs is minuscule compared to those involved in completing a written cheque payment. The counter staff and high street premises are less needed. Furthermore, although there are some risks connected with Internet banking overall, it is proving to be a safe, efficient and convenient method of banking that is satisfying customers all over the world.

Hanafizadeh, Keating and Khedmatgozar (2014) systematic review of a total of 165 research articles published on the adoption of Internet banking (IB) between 1999 and 2012 concludes that its adoption is likely to continue into the future. Karen *et al.* (2002) reckons that the growth of Internet banking mirrors the growth in electronic and the heightened interest in such banking services is in anticipation of attendant benefits of minimising banks' costs,

increasing banks' revenues and added convenience to customers. At the core of the convenience of online banking to customers are benefits of accessing accounts and information on banking products and services via a computer at any time without necessarily having to spend time and incur costs associated with physical travel to banking halls.

Applying a statistical model to explain why banks choose to adopt Internet banking and investigate the effects of online banking on profitability developed by Furst *et al.* (2002), it was concluded that profitability correlated with Internet banking. Additionally, the banks use Internet banking services as an aggressive business strategy to gain market share rather than for making profits. According to Kaptan, S. (2003) *“one of the main reasons electronic banking services were introduced was that banks were losing their market share. Electronic banking has assisted the banks in retaining their customers and their market share by reducing costs in many areas, especially those associated with providing service to the customer and also to enhance their image”*. Furthermore, the ability to obtain accurate information accurately and quickly has been increased drastically. On the part of the customer, Internet banking provides the customer with 24 hours of service and offers a platforms support account aggregation as well as monitoring all of their accounts in one place whether they are with their main Bank or with other institutions.

Notwithstanding the benefits of popular self-service technology (SST) such as Internet banking, it is important to understand why some customers avoid using it and still practice the traditional way of doing transactions at the bank branches (Yousafzai & Yani-de-Soriano, 2012). Baraghani (2008) and Rogers and Shoemaker (1971) agree that adoption is acceptance and continued use of a product, service or idea and customers have to go through a process of knowledge, persuasion, decision and confirmation before they are ready to adopt a product, service or idea. According to Im, Hong and Kang (2011), much research has been done on

the acceptance and use of ICT systems using different theories and models to shed some useful insights and perspectives at individual, organisational, national (country) and international levels. Some of the well-known models and variants developed to explain the relationship between user beliefs, attitudes, and intentions or a combination of them include the following:

- i) Technology Acceptance Model (TAM);
- ii) Theory of Reasoned Action (TRA);
- iii) Theory of Planned Behaviour (TPB); and
- iv) Unified Theory of Acceptance and Use of Technology (UTAUT).

The Technology Acceptance Model (TAM), as the name implies, seeks to predict information technology acceptance with the main determinants of attitude to do so being perceived usefulness and perceived ease of use (Davis, 1989). In the case of the Theory of Planned Behaviour (TPB), the inclination is towards the perceived behavioural control insofar as the perceived ease or difficulty of performing the behaviour are concerned (Ajzen, 1991). Fishbein and Ajzen (1977) postulate that different types of behaviours in the two models are consequences of beliefs influencing attitudes that in turn lead to intentions, which ultimately generate patterns of behaviours. The Unified Theory of Acceptance and Use of Technology (UTAUT) models was derived by Venkatesh, Davis, Davis and Morris (2003) from the following eight (8) models explaining in the order of 70% of the variance in intention:

- i) Technology Acceptance Model (TAM);
- ii) Theory of Reasoned Action (TRA);
- iii) Motivational Model (MM);
- iv) Theory of Planned Behaviour (TPB);

- v) TAM and TPB hybrid construct model (C-TAM-TPB);
- vi) Model of PC Utilization (MPCU);
- vii) Innovation Diffusion Theory (IDT); and
- viii) Social Cognitive Theory (SCT).

Table 2.4 highlights some of the theories used in the previous studies from literature since 2000 on adoption of Internet banking focusing on customer specific factors and technology related views.

Table 2.4 - Summary of previous research on Internet banking adoption

Theory	References
Unified theory of acceptance and use of technology (UTAUT), trust, awareness of service, output quality, perceived playfulness, and web-design	Riffai <i>et al.</i> , 2012
Technology acceptance model (TAM) and self-efficacy as one of the antecedent variables such as risk, Internet experience, facilitating conditions	Lee & Chung, 2011
Technology acceptance model (TAM) and some additional important control variables	Al-Somali <i>et al.</i> , 2009
Perceived risk, perceived benefit, technology acceptance model (TAM), theory of planned behaviour (TPB)	Lee, 2009
Technology acceptance model (TAM), personal innovativeness in information technology (PIIT) and perceived risk	Yiu <i>et al.</i> , 2007
Decomposed theory of planned behaviour (TPB)	Sinti, 2006

Decomposed theory of planned behaviour (TPB)	Bussakorn & Dieter, 2005
Decomposed theory of planned behaviour (TPB)	Fink, 2005
Technology acceptance model (TAM)	Pikkarainen <i>et al.</i> , 2004
Technology acceptance model (TAM)	Eriksson Kerem Nilsson, 2004
Technology acceptance model (TAM) and focus group	Pikkarainen Karjaluoto Pahlila, 2004
Extended technology acceptance model (TAM2) and social cognitive theory (SCT)	Chan & Lu, 2004
Technology acceptance model (TAM)	Wang Lin Tang, 2003
Trust and technology acceptance model (TAM)	Gefen, Karahanna and Straub, 2003
Technology acceptance model (TAM)	Suh Han, 2002
Decomposed theory of planned behaviour (TPB)	Black Lockett Winklohofer Ennew, 2001
Theory of planned behaviour (TPB) and diffusion of innovations theory (DIT)	Tan & Teo, 2000

2.5 Analytical framework and research model for the study

Informed by the extant literature reviewed on adoption of Internet banking across the globe, at the core of this research study was the need to develop an analytical framework and research model to examine the factors influencing customer perceptions on adoption of Internet banking in Namibia. In that regard, the research study chose developed a framework

and model focusing on seven (7) customer factors or determinants: attitude; intention; perceived behavioural control, perceived ease of use, perceived usefulness, subjective norms and trust. Shown in Figure 2.1 is the research model for the study adapted from Davis *et al.* (1989) and Baraghani (2007) that seeks to illustratively depict the integration of the seven (7) customer factors or constructs. The model is essentially a hybrid construct of an extended trust and technology acceptance model with the decomposed theory of planned behaviour.

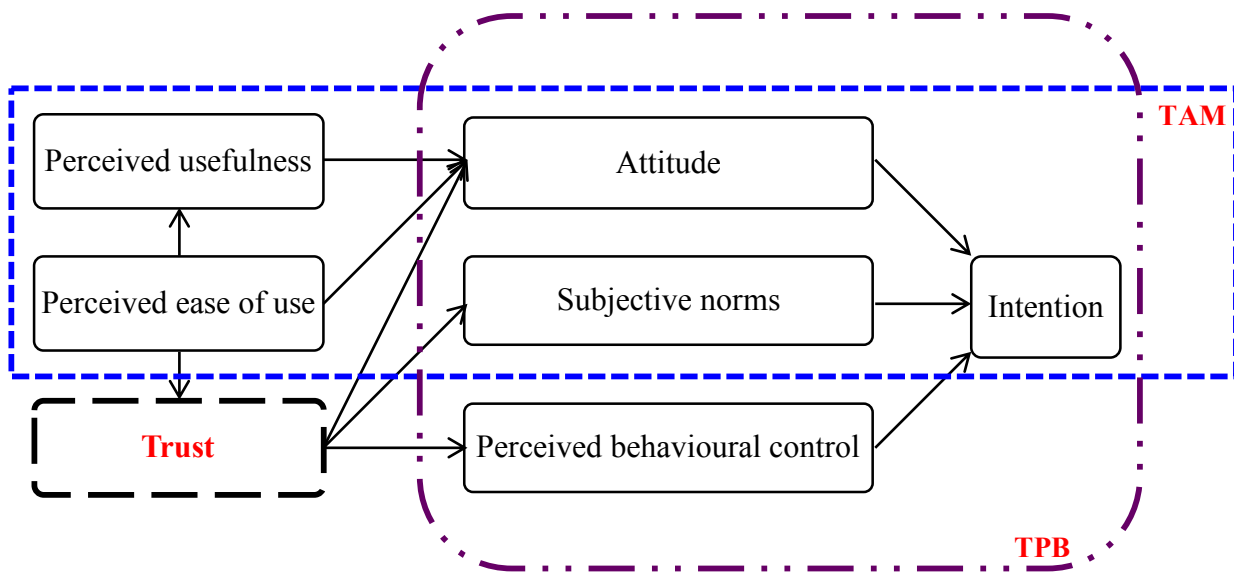


Figure 2.1 - Research Model (Adapted from Davis *et al.*, 1989 & Baraghani, 2007)

Evident in Figure 2.1 are a number of theories used to assist in understanding, predicting and explaining the factors influencing the customer perceptions on adoption of Internet banking that underpinned the adopted research model. The descriptions and motivations for each one of them are briefly motivated. The technology acceptance model (TAM), initially advanced by Davis, Bagozzi and Warshaw (1989), is a popular model used in studying customer factors influencing the acceptance or rejection of new technology systems (Marangunić & Granić, 2015). Table 2.5 attests to the popularity of the TAM over slightly more than a

quarter of a century and over time, the conceptual model has been refined or extended, as the case may be (Davis, 1989; Park, 2009).

Davis (1989) proposes that acceptance of an information technology system is directly determined by the behavioural intention to use it, which is in turn influenced by the users' attitudes toward using the system and the perceived usefulness of the system. In addition, attitude and perceived usefulness are also affected by the perceived ease of use. With greater perceived usefulness and the perceived ease of use of an information system, the attitude towards a system would be favourably influenced and that would in turn lead to a greater intention to use the system. Having a greater intention to use the system would ultimately and positively affect the actual use of the system.

According to Park (2009), TAM, which appears to account for about 40% to 50% of user acceptance, provides a basis that enables one trace how external variables influence belief, attitude and intention to use. At the core of the TAM are two cognitive beliefs that have been advanced, namely, perceived usefulness and perceived ease of use. According to TAM, one's actual use of a technology system is influenced directly or indirectly by the user's behavioural intentions, attitude, perceived usefulness of the system, and perceived ease of the system. It is further suggested that external factors also affect intention and actual use through mediated effects on perceived usefulness and perceived ease of use. In terms of the relationship between perceived ease of use and perceived usefulness, it is the former that influence latter on the basis that the easier a technology to use. Over the years, the original TAM has undergone modification to explain perceived usefulness and usage intentions including social influence (subjective norm, voluntariness, and image), cognitive instrumental processes (job relevance, output quality, and result demonstrability) and experience, and accounts for about of user acceptance (Venkatesh & Davis, 2000).

The Theory of Planned Behaviour (TPB), used in many studies, is useful in providing the theoretical framework for understanding and predicting the acceptance of new information systems (Ajzen, 2002; George, 2004). The model is popular and has been widely used in predicting human intentions and behaviour based on identifying important predictors (Al-Debei, Al-Lozi & Papazafeiropoulou, 2013). According to Ajzen (1991 & 1992), the intention to perform the behaviour is at the centre of the TPB, which in turn is affected by attitude toward behaviour, subjective norm and perceived behavioural control. As with the TAM, TPB has been modified and commonly referred to as the decomposed theory of planned behaviour (DTPB) by inclusions of other constructs to improve its predictive ability and it is also not unusual to have some of the constructs being decomposed into multi-dimensional constructs (Al-Debei *et al.*, 2013; Shih & Fang, 2004). Under some theories of consumer behaviour including TPB and DTPB, some researchers consider trust as a subjective norm (Yang *et al.*, 2015).

According to Yu, Balaji and Khong (2015), trust is perceived to be fundamental to buyer-seller interactions, a means to reduce the transaction cost of an exchange and risk perception, and enhances confidence to engage in an exchange for efficient transactions. With possible concerns that customers could experience risk from technological infrastructure and the online service providers, trust should be an important consideration in influencing risk and uncertainty in Internet banking (Grabner-Kräuter & Faullant, 2008). Although defined differently but commonly defined as willingness to rely on the other party because of the belief, expectancy, or feeling that other party would act in the interest of the trusting party, trust is defined, in the context of Internet banking, as the willingness of the customer to conduct transactions on the bank's web site because of the belief or expectation they have toward the bank and bank's web site as a trusted party in fulfilling its obligations (Rousseau *et al.*, 1998; Grabner-Kräuter & Faullant, 2008).

Researchers have widely discussed the relationship between trust and TAM, and trust and TPB and in particular, it is considered as an antecedent of perceived usefulness, attitude, perceived behavioural control and subjective norms (Baraghani, 2007; Gefen *et al.*, 2003). Trust has also a direct influence on behavioural intention to use and its precursor is perceived ease of use.

Given the diverse definitions and interpretation of the constructs in the literature, Table 2.5 highlights those assumed for the study.

Table 2.5 - Definition of model constructs

Construct	Definition	Source
<i>Perceived Usefulness</i>	The degree to which a person believes that using Internet banking would enhance her/his job performance	Davis <i>et al.</i> , 1989
<i>Perceived Ease of Use (PEU)</i>	The degree to which a person believes that using Internet banking would be free of effort	Davis <i>et al.</i> , 1989
<i>Trust (T)</i>	The willingness of the customer to conduct transactions on the bank's web site because of the belief or expectation they have toward the bank and bank's web site as a trusted party in fulfilling its obligations	Grabner-Kräuter & Faullant, 2008
<i>Attitude (ATT)</i>	The person positive or negative feeling about Internet banking adoption	Davis <i>et al.</i> , 1989; Taylor & Todd, 1995

<i>Subjective Norms (SN)</i>	Represent the degree to which a person perceives that others believe he or she would use Internet banking	Taylor & Todd, 1995
<i>Perceived Behavioural Control (PBC)</i>	Beliefs regarding the availability of resources and opportunities for performing the behaviour as well as the existence of internal/external factors that may impede the behaviour.	Ajzen, 2002
<i>Intention (INT)</i>	A person readiness to adopt Internet banking	Davis <i>et al.</i> , 1989

2.6 Demographic attributes

Research on demographic variables by various studies has shown that they have moderating effects on the adoption of Internet banking (Yousafzai & Yani-De-Soriano, 2012; Wu, Jayawardhena & Hamilton, 2014). Gender is one of the demographic variables with effects on the adoption of Internet banking and this has been demonstrated by a variety of studies (Wu *et al.*, 2014). Typically, the gender effect is more pronounced on males than on females (Lallmahamood, 2015). The male population tends to be more technology savvy than female population. The age of the customers could also be an interesting factor in influencing the use of Internet banking services. Generally, most studies indicate that the younger age group are more interested in technological innovation than the older generation (Safeena *et al.*, 2013; Dauda *et al.*, 2015).

The level of education qualification, as one of the demographic attributes, has a moderating effect on the customer perceptions on adoption of Internet banking. People with higher

qualifications tend to be more risk averse to acceptance of new technologies than the less educated ones. In addition to the challenges with time to spend on exploring new technological innovations such as Internet banking, people with higher qualifications are mindful of perceived risks attributed to online fraud and trustworthiness. Employment status is another demographic attribute with effects factors influencing customer perceptions on adoption of Internet banking. The employment status could be classified differently and the categorisation may include students, government employees, the private sector and self-employed. Other demographic attributes with potential effects on adoption of Internet banking include income levels, marital status, use of computers and use and access to Internet.

2.7 Conclusion

The advent of information communication technologies (ICTs), especially the computers and Internet, has had profound changes on the banking industry. Internet banking is not necessarily about changing people's money habits but also cutting banking services time and cost associated with paperwork and other processes associated traditional banking practices of using physical branches. Notwithstanding the benefits, there are challenges to Internet banking with the prominent ones being the perceived risks attributed to online fraud and trustworthiness. In order to upscale Internet banking and address the challenges, understanding the factors influencing customer perceptions on adoption of Internet banking is imperative. Among the seven (7) factors or constructs considered and discussed include: perceived usefulness; perceived ease of use; trust; attitude; subject norms; perceived behavioural control; and intention.

CHAPTER 3

METHODOLOGY

3.1 Introduction

The different research methods used in this study are described in this chapter. The chapter also gives an explanation of the chosen method for the study and the reasons for the choice. Furthermore, this chapter describes the sampling technique used, the way the data for the study was collected and the techniques used to analyse the data. In addition, the issue of the reliability and validity of the study is also discussed.

3.2 Nature of the study

The qualitative and quantitative methods are typical two broad approaches to research with different objectives and methodologies. Qualitative methods seek to gain qualitative understanding of underlying reasons and motivations while quantitative methods are designed to quantify the data and generalized results from sample to the population of interest (Chisnal, 1997). As a quantitative study that focused on factors influencing customer perceptions on adoption of Internet banking services in Namibia, it entailed a large number of representative sample, structured approach to data collection and use of statistical data analysis techniques.

Most of the 165 research studies on Internet banking reviewed by Hanafizadeh, Keating and Khedmatgozar (2014) between 1999 and 2012 were predominantly quantitative in nature and used models or theories to understand, explain and predict the different factors and in some cases the relationship between the different factors. Against this background, the study was conducted within the quantitative paradigm to objectively seek the facts about the phenomena of Internet banking in Namibia by focusing on the outsider-perspective rather than on the

insider-perspective. By utilising a quantitative approach, an attempt was made to understand the factors influencing customer perceptions on adoption of Internet banking in the country from an independent and objective perspective of the individuals either current or potential bank customers.

As Mouton (2012) states, every research project starts with the review of the extant literature to find out what has been done in the field of study and avoid unnecessary regurgitations. The methodology adopted for this study was empirical research using traditional literature review (narrative or comprehensive) as the research method (Mouton, 2012). This methodology was the most practical/feasible given the resource constraints, complexities and bureaucratic challenges of gathering primary data from the sensitive stakeholders in what is a fairly competitive banking industry. Traditional literature review, as research method, provided excellent overviews of wider literature (Hart, 1998; Leopold, 2016; Sharifi & Yamagata, 2016). Unlike systematic literature reviews that normally require two or more authors and quantitative synthesis, the adopted method sufficed for purposes of qualitative synthesis of evidence from the literature (Rother, 2007; Saunders, Lewis & Thornhill, 2009).

Extensive literature was gathered from a variety of scholarly databases using specific search strings of key words or phrases such Internet banking, online banking, e-banking, e-commerce, information and communication technology (ICT), conventional banking, Automatic Teller Machines, mobile phone banking, SMS banking, bank fraud, among others. To the extent possible, the preference was fairly recent literature of 10 years or less. The internet was also used, not as locale for research, but as a search tool particularly for grey literature, such as: Internet news, media statements, press releases, documents produced by governments, regional and international organisations, strategic initiatives, annual reports, presentations, event proceedings (meetings, courses and workshops), and technical reviews,

among others (Harriman & Patel, 2014). Grey literature (articles not formally published by commercial academic publishers) from Google and other sources was also be used given the limited research on some of the issues, especially on Southern Africa (Haddaway, Collins, Coughlin & Kirk, 2015).

3.3 Population

This empirical research study provided for a broad overview of a representative sample population. The target population were current and potential customers pertaining to the banking industry in Namibia that, according to Bank of Namibia (2016), which comprises ten (10) licensed commercial banks with the total number of bank employees estimated at 3,000 in 2000 (Ipangelwa, 2001). According to Making Finance for Africa (2016), the average number of commercial bank branches per 100,000 adults is about 6 while the average depositors with commercial banks per 1000 adults is about 311. Using this statistic and the World Population Review (2017) projection of the population of the City of Windhoek in 2017 of 322,000 (12.5%) out of Namibia's total population of about 2,567,496, the total estimated number of depositors in the City was about 100,142. The total number of depositors had to be calculated due to challenges in getting information data such as customer numbers, age profiles, qualifications and employment status from the banks given the confidential nature of such data and the desire to maintain the competitiveness age. According to United States of America Central Intelligence Agency (2017), the total number of Internet users in 2015 was 439,000, being about 22.5% of the total population.

Other demographic attributes of Namibia in terms of age structure are as follows (United States of America Central Intelligence Agency, 2017):

- 0-14 years: 37.39% (male 460,016/female 451,058);
- 15-24 years: 20.35% (male 246,266/female 249,570);

- 25-54 years: 34% (male 395,417/female 432,994);
- 55-64 years: 4.25% (male 46,769/female 56,798); and
- 65 years and over: 4.01% (male 41,518/female 56,063) (2016 est.).

3.4 Sampling

According to Saunders *et al.* (2009), the traditional sampling techniques are mainly in two categories, namely, probability and non-probability. Probability sampling techniques are mostly associated with surveys that entail making inferences from a representative and randomly selected sample population responding to research questions or objectives (Hair *et al.*, 2003; Saunders *et al.*, 2009). In the case of non-probability sampling techniques, they are not necessarily premised on having a representatively sampled population because of subjective methods used such as personal experiences, convenience and expert judgments on selected elements in the sample. (Samuel *et al.*, 2003; Saunders *et al.*, 2009). The nature of this research study necessitated the choice of probability sampling method because of its quantitative paradigm, use of a survey targeting a representative sample population.

Thus, a probabilistic sampling technique with a confidence level of 95%, error margin of about 5% and 50% response rate was used. Given the limited time and resources to do a countrywide survey, and the fact that the largest banking population was concentrated in Windhoek, the study focused solely on the City of Windhoek in the town centre in particular. To that end, a representative sample population size of 1,500 people was considered and targeting about 612 people as part of the survey in order to get a required sample size of about 306 respondents. The calculations of the required sample size and the number of people to target for the survey are provided below.

$$\text{Sample Size (SS)} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

Where,

<u>Statistic</u>	<u>Description & Value</u>
N	Population Size - 1,500
e	Margin of Error (as a decimal) - 0.05
z	Confidence Level (as a z-score) at 95% - 1.96
p	Percentage Value (as a decimal) - 0.5 (optimum sample-size)

Therefore, using the formula and values provided, the sample size was calculated as,

$$\text{Sample Size} = \underline{\underline{306}}$$

But the number of people to target/invite for the survey is given by

$$\text{Survey target/invitees} = \frac{\# \text{ of respondents needed}}{\text{expected \% response rate}} \times 100$$

Where,

# of respondents needed	306
expected % response rate	50

Therefore, people to invite to take part in the survey in order to get at least 306 people was calculated as,

$$\text{Target/Invitee to take the Survey} = \frac{306}{50} \times 100 = \underline{\underline{612 \text{ people}}}$$

3.5 Data collection techniques

According to Polit and Hungler (1999), a survey is used to obtain information from groups of people (i.e. populations). To this end, a survey would be designed to gather primary data for analysis of factors influencing customer perceptions on adoption of Internet banking in Namibia following an extensive literature review and development of the analytical framework and research model. Specifically, the survey was designed in form of a structured questionnaire administered in-person and drop-offs. The structured questionnaire (attached as Appendix I) comprised the following:

a) Demographic data:

- Gender;
- Age;
- Qualification; and
- Employment Status.

b) Constructs with Perceptions about Internet banking

- Perceived Usefulness (PU);
- Perceived Ease of Use (PEU);
- Trust (T);
- Attitude (ATT);
- Subjective Norms (SN);
- Perceived Behavioural Control (PBC); and
- Intention (INT).

c) Influence on the decision to adopt Internet banking (under SN)

- Friends;

- Media; and
- Family.

Five-point Likert scale with end points of “strongly disagree (1)” and “strongly agree (5)” was used to examine participant’s responses to each of the questions or elements in the survey questionnaire with an exception to responses in Part one on demographic data. The second section of the survey questionnaire had seven (7) constructs and the perceptions under all the constructs totalled 23. The study used a use self-administered questionnaire distributed out to the target respondents randomly or in unbiased manner with the help some research assistants.

As part of the pre-testing, the questionnaire was administered to a few potential respondents to get feedback. Initial indications from the pre-testing runs pointed to challenges in the responsiveness at the banking premises and public places like malls in Windhoek because the bank customers had no time to spare despite the fact that it was not more than ten (10) minutes of their time needed to complete the survey questionnaire. Consequently, it was decided to target colleges, big conglomerates and other public gatherings. According to Goyal & Goyal (2012), this is convenience, haphazard or accidental sampling technique with the population chosen based on their relative ease of access and it is commonly used in many practical situations.

The goal of the survey was essentially to gather information on the factors influencing the customer perceptions on adoption of Internet banking in Namibia. The survey methodology was guided by principles of statistics from the moment of creating a sample, or a group of people to represent a population, up to the time of the survey results' analysis and interpretation. A total number of 612 survey questionnaires were distributed from which 366

responded to constitute the sample size of this study. This implied that there were 60 more respondents than the needed calculated sample size of 306.

3.6 Data analysis

In order to analyse the data gathered from 366 respondents through the survey, due consideration was given to the use of statistical tools with requisite capabilities. The choice was between Microsoft Excel and Statistical Package for Social Science (SPSS) software. SPSS, which is capable handling large amounts of data, was used as the main statistical tool for data analysis and is commonly used in the social sciences and in the business world. It is also specifically made for analysing statistical data and thus it offers a great range of methods, graphs and charts. SPSS was also used for cross tabulation to compare the relationship between two variables. In this regard, it was specifically used to understanding the relationships between the demographic attributes with each of the constructs and perceptions of the study.

Microsoft Excel was also used but mainly for data entry and organisation, after which it was imported into SPSS for statistical analysis. Excel was further used for purposes of tabulations and statistical graphics (bar chart, plots and pie charts) for more visual presentation, especially that the study was a descriptive type and did not explicitly seek to explain or theorize about the relationships among the various factors influencing customer perceptions on adoption of Internet banking in Namibia. Analysis triangulation or data analysis triangulation was also used and it is described as the use of more than two methods of analysing the same set of data for validation purposes (Kimchi, Polivka & Stevenson, 1991).

3.7 Ethical consideration

Given the nature of the operations and competition in the banking industry, it was cardinal to exercise the values of professionalism, confidentiality, objectivity and integrity in carrying the research in a manner that minimises ethical implications. Any information declared confidential was treated as such and hence, the respondents remained anonymous. The research study had no negative effects on the sampled banking institutions and fully complied with the Guidelines of the University of Namibia (UNAM) on ethical aspects of scholarly and scientific research. Each respondent were given the right to withdraw and was respected if he or she opted to be anonymous.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

This chapter is a synopsis and discussion of the results obtained from the structured survey questionnaire from the 366 respondents that formed part of the study. Using SPSS, the statistical data was analysed and tabular outputs with frequencies were used to determine how often respondents answered specific questions or suppositions. Statistical graphics such as bar chart, plots and pie charts for more visual presentation were generated from the SPSS tabulations using Microsoft Excel.

4.2 Demographic and descriptive statistics

Research on demographic variables by various studies has shown that they have moderating effects on the adoption of Internet banking (Yousafzai & Yani-De-Soriano, 2012; Wu, Jayawardhena & Hamilton, 2014). In this study, demographic variables considered included gender, age, qualification and employment status of the study's respondents.

4.2.1 Gender

Gender is one of the demographic variables with moderating effects on the adoption of Internet banking and this has been demonstrated by a variety of studies (Wu *et al.*, 2014). In this research study, out of the total number of 366 survey respondents, 46.4% percent (170) were female while 53.6 percent were male. It is evident that the males were proportionately more than the females and this information is summarized in Table 4.1 and Figure 4.1 and results of this study are very consistent with those of Lallmahamood (2015) that male respondents being 54.8 percent of the total sample size.

Table 4.1 - Distribution by Gender

Gender	Frequency	Percent (%)
Female	170	46.4
Male	196	53.6
Total	366	100.0

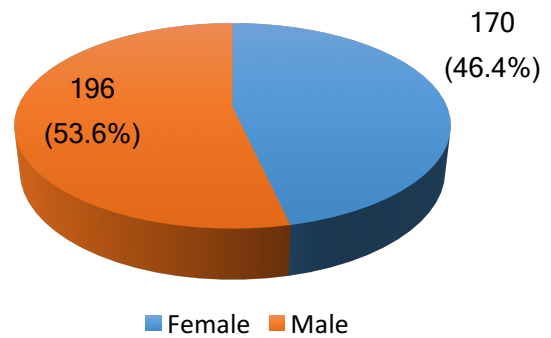


Figure 4.1 - Distribution by Gender

4.2.2 Age

The study results showed that about 61.2 percent (224) of the survey respondents were aged between 21 to 30 years while those aged between 31 to 40 years were about 21.3 percent (78). The remainder of the age groups (41-50, 51-60 and 61 or older) were 11.2 percent (41), 5.2 percent (19) and 1.1 percent (4), respectively. The distribution of the respondents by age is depicted in Table 4.2 and Figure 4.2. The study shows that respondents under the age group 21-30 were dominant followed by the 31-40 age group and that the two age groups constituted a total of about 83.5 percent of the sampled population. The results of the study are consistent with many other Internet banking related studies with total percentages of the two similar age grouping in the order of 80 percent (Safeena *et al.*, 2013; Lallmahamood, 2015; Dauda *et al.*, 2015).

Table 4.2 - Distribution by Age

	Age	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30	224	61.2	61.2	61.2
	31-40	78	21.3	21.3	82.5
	41-50	41	11.2	11.2	93.7
	51-60	19	5.2	5.2	98.9
	61 or older	4	1.1	1.1	100.0
	Total	366	100.0	100.0	

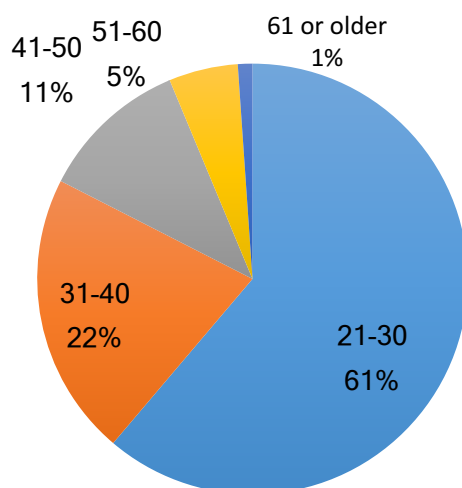


Figure 4.2 - Distribution by Age

4.2.3 Qualification

Table 4.3 and Figure 4.3 show the distribution of the respondents by level of education qualification. It is evident from the results that most of the respondents did not go beyond the Grade 12 secondary school level representing 44.3 percent (162) followed by Bachelor's Degree tertiary education level at 25.7 percent. Only 1.4 percent of the population in Lusaka Province had obtained a degree. Diploma/certificate and Master's Degree holders were 18.3

percent (67) and 11.5 percent (42) of the respondents, respectively. Interestingly, one (1) respondent, constituting 0.3%, had a qualification categorised as ‘Other’ and this could possibly have been a Doctor of Philosophy (PhD) holder who did not fall under any of the categorisations. With hindsight, a qualification category ‘Master’s or higher’ should have taken care of the respondents with qualifications such the PhD.

Table 4.3 - Distribution by Qualification

	Qualification	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Grade 12 or lower	162	44.3	44.3	44.3
	Diploma/certificate	67	18.3	18.3	62.6
	Bachelor's degree	94	25.7	25.7	88.3
	Master's degree	42	11.5	11.5	99.7
	Other	1	0.3	0.3	100.0
	Total	366	100.0	100.0	

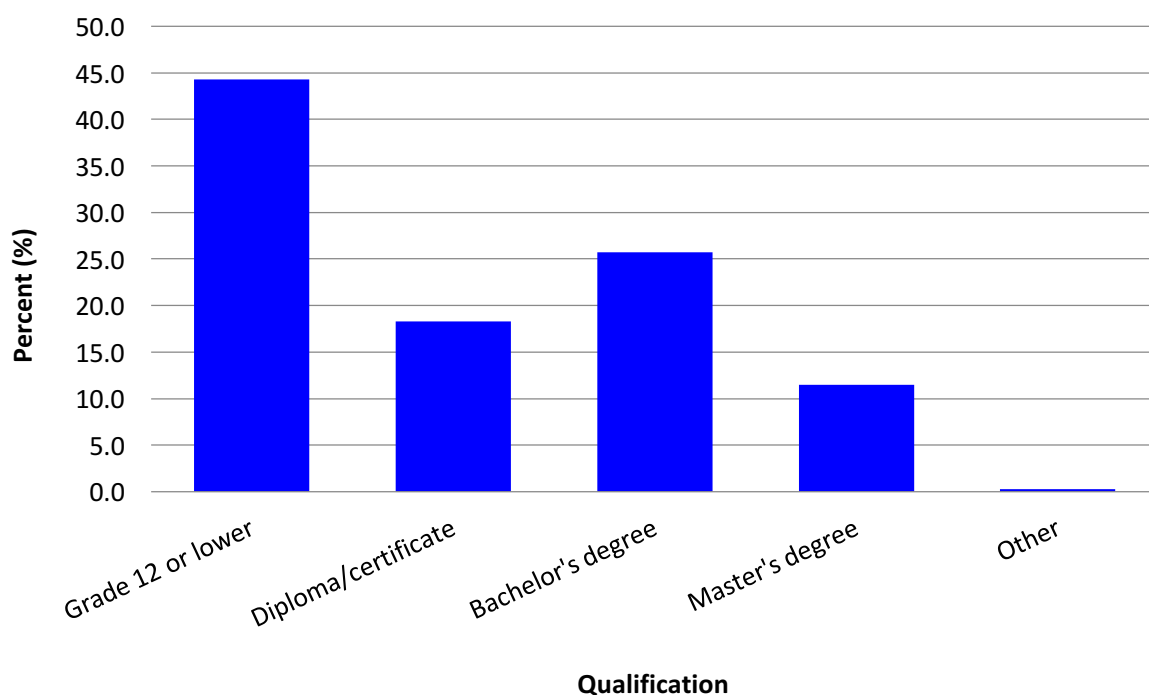


Figure 4.3 - Distribution by Qualification

4.2.4 Employment status

Of the total number of 366 survey respondents, the students comprised the largest proportion with a share of about 44.0 percent (161). About 31.1 percent (114) were Government employees followed by the private sector with a share of 16.1 percent (59). Self-employed respondents constituted about 5.2 percent (19) while ‘others’ were 3.6 percent (13). Table 4.4 and Figure 4.4 show the distribution by employment status.

Table 4.4 - Distribution by Employment Status

	Employment Status	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Government Employ	114	31.1	114	31.1
	Private sector	59	16.1	59	47.3
	Self employed	19	5.2	19	52.5
	Student	161	44.0	161	96.4
	Other	13	3.6	13	100.0
	Total	366	100.0	366	

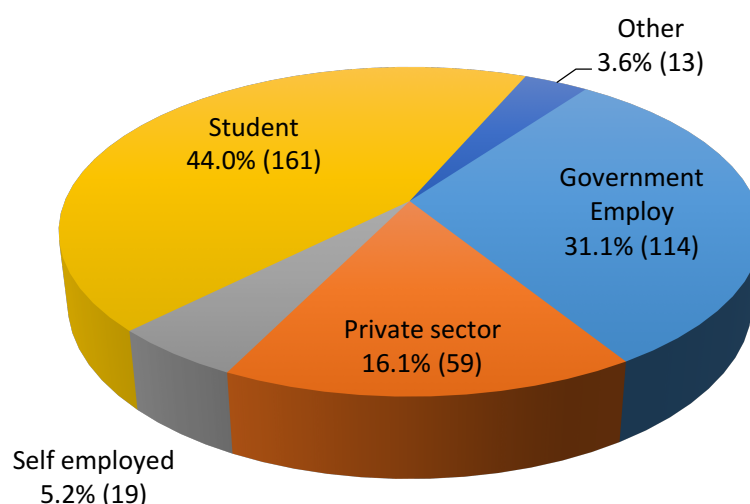


Figure 4.4 - Distribution by Employment Status

4.3 Perceptions on adoption of Internet banking

On the basis of the analytical framework and research model adopted for this study, the results from the survey questionnaire on the perception/constructs about the factors influencing customer perceptions on adoption of Internet banking from the sample population of 366 respondents are presented and discussed. The perceptions highlighted include: Perceived Usefulness (PU); Perceived Ease of Use (PEU); Trust (T); Attitude (ATT); Perceived Behavioural Control (PBC); Subjective Norms (SN) and Intention (INT).

4.3.1 Perceived usefulness (PU)

The survey results pertaining to the construct of ‘Perceived Usefulness (PU)’ comprising five (5) perceptions are shown in Table 4.5 and Figure 4.5.

In terms of whether *‘using the Internet banking site improved the respondent’s performance of banking activities (PUI)’*, those who simply ‘agreed’ were proportionally more than any other view point with about 39.6 percent (145). However, the aggregate proportion of those who ‘agreed’ and ‘strongly agreed’ was about 71.6 percent (262), implying that Internet banking was generally perceived to be useful. Cross tabulation with gender, age, qualification and employment status also introduced further insights and perspectives. From the gender dimension, the results show that the proportion of females (62) strongly agreeing with PUI was more than that of males (55). The younger age groups (21-30 and 31-40) who ‘agreed’ were more than any other view or frequency. The views from the qualification cross tabulation were varied in that the Diploma/Certificate and Master’s Degree holders who ‘strongly agreed’ were marginally higher than those who simply ‘agreed’. The majority of the ‘Grade 12 or Lower’ and ‘Bachelor’s Degree’ holders generally ‘agreed’ with PUI. Employment Status cross tabulation also portrayed the similar general viewpoint of ‘agreed’ with an exception of Private Sector that had its majority ‘strongly agreed’.

As regards the perception that *'using the Internet banking site makes it easier for respondents to do banking activities (PU2)'*, the majority with a proportion of 40.4 percent (148) 'strongly agreed'. Those who were generally in agreement (strongly agree and agree) constituted about 78.1 percent (286) of the respondents. Reviewing the cross tabulation data, the Gender results were found to be similar to those under PU1 with the majority of the females (77) 'strongly agreeing' with the perception while the most of the males (88) 'agree' with it. The rest of Age, Qualification and Employment profiles 'strongly agreed' with the perception. However, the exceptions were the profiles Age 21-30, Grade 12 or lower and Student that had their majorities simply 'agree'. These exceptional views could be due to the limited number transactions done by respondents under the sub-profiles and by extension limited access to website of the banks.

The perception *'using the Internet banking site enables respondents to accomplish banking activities more quickly (PU3)'* had the majority with 40.7 percent (149) 'strongly agree'. In total 76.5 percent (280) of the respondents were generally in agreement that Internet banking enables them to accomplish banking activities more quickly. Cross tabulation with Gender, Age, Qualification and Employment Status, all had a 'strongly agree' viewpoint with an exception of the Age Group 51-60 and Student that 'agree'. It should also be mentioned that respondents that 'agree' and 'strong agree' were at par (52 each) under the sub-profile of 'Grade 12 or Lower'. The divergent views from these two sub-profiles and parity under 'Grade 12 or Lower' could be on account of them not doing so many Internet banking transactions in order to be mindful of the time factor.

About 39.1 percent (143) of the survey respondents 'agree' that *'using Internet banking would increase the quality or output of banking transaction (PU4)'* and they constituted a viewpoint in the majority. When the respondents that 'strongly agree' and those who 'agree'

are aggregated, a total of 62.9 percent (230) generally agreed that using Internet banking would increase the quality or output of banking transactions. The cross tabulation outputs generally reflected a similar viewpoint of 'agree' across all the profiles of Gender, Age, Qualification and Employment Status. However, the sub-profiles under Master's Degree and Self-Employed had a 'strongly agree' point of view with each having just one more respondent than those who 'agree'. That point of view could have been due the fact the respondents in the two sub-profiles are more thoughtful and reflective on quality or output of their Internet related transactions.

On the perception of whether respondents *'find Internet banking site useful for banking activities (PU5)'*, the survey results indicated that a majority of 41.3 percent (151) 'agree'. All the respondents that generally find Internet banking site useful for banking activities totalled 70.5 percent (258). Aside from a few divergent views, the results from the cross tabulation showed that the 'agree' viewpoint was most prevalent in the profiles of those surveyed. A notable observation was that three (3) out of the five (5) sub-profiles under Employment Status had different views. Two sub-profiles, namely, Private Sector and Other, were marginally inclined towards 'strongly agree' while the sub-profile Self-Employed had parity between 'agree' and 'strongly' points of view. Other divergent views were under the sub-profile Age Group 31-40 and Master's Degree that had the majority respondents with 'strongly agree'. The most probable reasons for the divergent views could be due to the respondents being more thoughtful and accustomed to frequently perusing or using Internet banking site for a variety of banking activities.

Table 4.5 - Perceived Usefulness (PU) Results

Perception	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
PU1	7	17	80	145	117	366
PU2	7	6	67	138	148	366
PU3	8	15	63	131	149	366
PU4	7	34	95	143	87	366
PU5	10	13	85	151	107	366

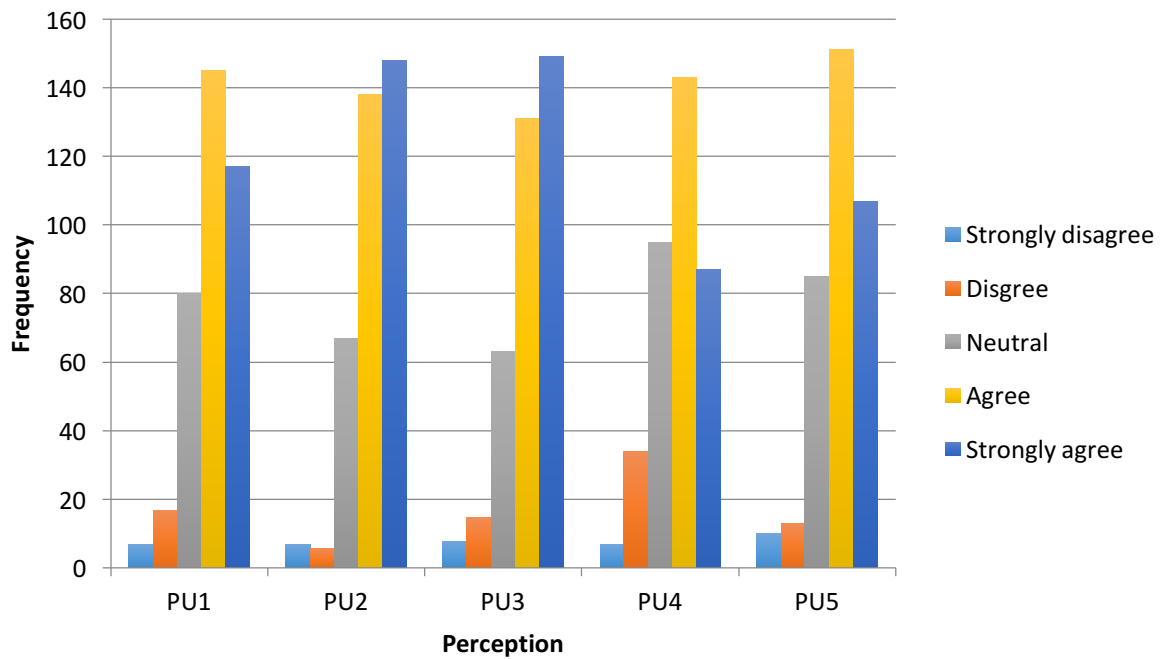


Figure 4.5 - Perceived Usefulness (PU) Results

4.3.2 Perceived ease of use (PEU)

Table 4.6 and Figure 4.6 show the summarised survey results on construct of ‘Perceived Ease of Use (PEU)’ of Internet banking with different six (6) perceptive views from the sampled population of 366 people.

The majority of 41.3 percent (151) of the respondents ‘agree’ that their *‘interaction with the internet banking is clear and understandable (PEU1)’*. Together with the respondents who ‘strongly agree’ with this perception, a total of 63.7 percent (233) were found to be in general agreement. A notable observation was that 27.6 percent (101) of the respondents took a neutral view on this perception while 6.6 percent (24) ‘disagree’ and 2.2 percent (8) ‘strongly disagree’. The outputs from cross tabulation show that all under the profiles of Gender and Qualification ‘agree’ with this perception. Incidentally, two sub-profiles under the Age Group, namely, 31-40 and 51-60, were found to have those respondents who ‘agree’ and ‘strongly agree’ at parity. The respondents under sub-profile Self-Employed had a divergent view with a slight majority indicating ‘strongly agree’. This could be due to this sub-profile of respondents having more time dedicated to perusing or using Internet banking sites for a variety of banking activities.

With respect to the perception on *‘Interaction with Internet banking does not require a lot of mental effort (PEU2)’*, it had the majority of 39.6 percent (145) of the respondents ‘agree’, 26.2 percent (96) ‘neutral’ and 21.3 percent (78) ‘strongly agree’. Other respondents who shared the view of ‘disagree’ and ‘strongly disagree’ were 9.6 percent (35) and 3.3 percent (12), respectively. The respondents that were collectively in agreement with this perception totalled 60.9 percent (223). Although all under Gender and the majority under Age, Qualification and Employment Status sub-profiles had outputs under cross tabulation ‘agree’, some divergent views were observable. For instance, the sub-profiles under Age Group 31-

40, Private Sector and Self-Employed had very slender majorities 'strongly agree'. This could be explained by the fact the more spent on doing Internet banking activities; the more experience could gained to be able to do things with relative ease over time. The sub-profile Diploma/Certificate had its respondents at par in terms of those who 'agree' and 'strongly agree'. It was also observed that the respondents having a 'neutral' were relatively high and more than those who 'strongly agree'.

A majority total of 41.0 percent (150) of the survey respondent 'agree' that *'it is easy to use Internet banking (PEU3)'* while 30.9 percent (113) were found to 'strongly agree'. The 'neutral' respondents were also relatively at 21.9 percent (80) while those who 'disagree' and 'strongly disagree' were 4.1 percent (15) and 2.2 percent (8), respectively. In general, the respondents that favourably considered this perception were about 71.9 percent (263). Cross tabulation outputs for Gender indicated that the sample population responded along the same lines. In the case of Age Groups, the sub-profile 31-40 had its majority 'strongly agree'. This was also true for sub-profile Master's Degree under Qualification. As earlier postulated, the more spent on doing Internet banking activities, the more experience could gained to be able to do things with relative ease over time. The results under the profile Employment Status were intriguing in that the majority of the respondents under Government Employee and Student 'agree' while those for Private Sector, Self-Employed and Other had, in each case, a tie between those who 'agree' and 'strongly agree'.

The respondents with the highest number totalling about 46.4 percent (170) 'agree' that *'learning to use Internet banking is easy for me (PEU4)'*. Those who 'strongly agree', 'neutral', 'disagree' and 'strongly disagree' were 29.5 percent (108), 20.8 percent (76), 2.7 percent (10) and 0.5 percent (2), respectively. The respondents who either 'agree' or 'strongly agree' with this perception totalled about 75.9 percent (278). The outputs from

cross tabulation were such that females and males under Gender profile had similar views though more females (42) than males (34) had a 'neutral' point of view. Some sub-profiles such as Age Group 31-40 and Self-Employed had slender majorities who 'strongly agree' that it was easy learning how to use Internet banking. Respondents under these sub-profiles could be ardent Internet users or spend sufficient time devoted to learning Internet or computer usage. At parity among those who 'agree' and 'strongly agree' were recorded under the sub-profiles Master's Degree under Qualification and 'Other' under Employment Status.

The perception that *'I find it easy to do what I want to do with online banking (PEU5)'* had mixed survey results, particularly from the perspective of cross tabulation of Gender, Age, Qualification and Employment Status. At a more general level, the largest group of respondents were those who 'agree' with the perception having a share of 36.9 percent (135) followed by respondents who 'strongly agree' at 35.0 percent (128). A sizeable group of respondents were 'neutral' at 23.2 percent (85) while those who 'disagree' and 'strongly disagree' were at 3.8 percent (14) and 1.1 percent (4), respectively. The results show that a total of 71.9 percent (263) generally agreed with the perception. Cross tabulation outputs show that the largest group of respondents under the females with a total number of 67 'strongly agree' that they find it easy to do what they want to do with online banking while under males, it was a group of about 77 that 'agree' with the perception. Under the Age profile, groups 31-40 and 51-60 had their biggest number of respondents 'strongly agree' with the perception. The other groups 21-30, 41-50 and 61 or older had biggest numbers of respondents 'agree' with the perception. The responsiveness of 'strongly agree' was also observed under the sub-profiles Diploma/Certificate, Bachelor's Degree, Master's Degree, Private Sector and Other under the profile Employment Status. The level of experience and exposure to information technology could be the probable reasons for the 'strongly agree' point of view.

Insofar as the perception that *'I find Internet banking flexible to interact with (PEU6)'* is concerned, the largest group of respondents were those who 'agree' with it had a share of 39.1 percent (143) followed by respondents who 'strongly agree' at 34.2 percent (125). The respondents with the 'neutral' viewpoint were at 20.5 percent (75). The rest of the respondents found to 'disagree' and 'strongly disagree' were at 5.2 percent (19) and 1.1 percent (4), respectively. A total of 73.3 percent (278) were generally in agreement with the flexibility of Internet banking. From the cross tabulation outputs, the largest group of respondents under the females had 62 'strongly agree' and in the case of the males, a total of 82 'agree' with the perception. Sub-profiles with the biggest numbers of respondents who 'strongly agree' were recorded under Age Group 31-40, Diploma/Certificate, Bachelor's Degree, Private Sector and Other under the profile Employment Status. As for the sub-profile Self-Employed, it had a tie between those who 'agree' and 'strongly agree'. As earlier explained, the level of experience and exposure to information technology could be the probable reasons for the respondent who had the 'strongly agree' point of view.

Table 4.6 - Perceived Ease Use (PEU) Results

Perception	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
PEU1	8	24	101	151	82	366
PEU2	12	35	96	145	78	366
PEU3	8	15	80	150	113	366
PEU4	2	10	76	170	108	366
PEU5	4	14	85	135	128	366
PEU6	4	19	75	143	125	366

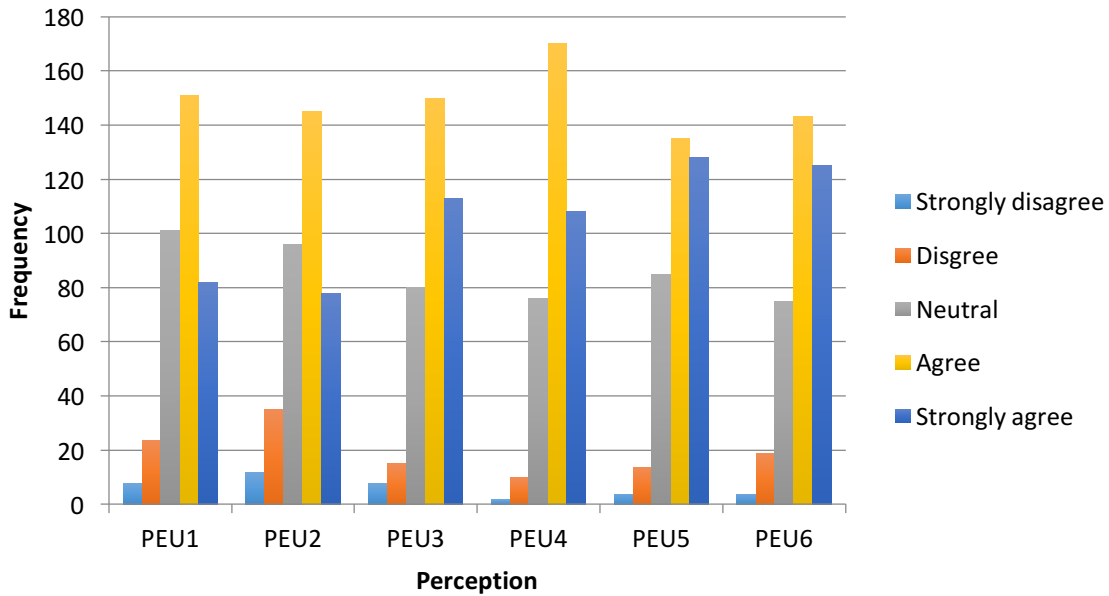


Figure 4.6 - Perceived Ease Use (PEU) Results

4.3.3 Trust (T)

As part of the survey, the construct of trust had five (5) different perceptions and results from the sample population of 366 people are summarised in Table 4.7 and Figure 4.7.

On the perception that *'the Internet banking site is trustworthy (T1)'*, the study results show that respondents had 35.8 percent (131) 'neutral', 27.3 percent (100) 'agree', 21.3 percent (78) 'strongly agree', 10.4 percent (38) 'disagree' and 5.2 percent (19) 'strongly disagree'. Although the respondents found to be generally in agreement were 48.6 percent (178), it was quite conspicuous to have the single largest group of respondents being 'neutral' with 35.8 percent (131). It would appear that the 'neutral' point of view had the effect of casting strong aspersions on the trustworthiness of Internet banking sites, especially that neutrality could not be considered as a definite or sure signal of trust.

Other than a few divergent views and differences in the order of magnitude of frequency (numbers), the outputs of the cross tabulation with Age, Gender, Qualification and

Employment Status followed a similar pattern as those highlighted under the overall study results under this perception. The few exceptions included the sub-profiles Age Groups 41-50 and 51 or older, Master's Degree and Other under the profile Employment Status that had the biggest groups being those who 'agree' that Internet banking site was trustworthy. Under the Employment Status, the Government Employee sub-profile had a tie between those who 'agree' and 'neutral' while Self-Employed had a surprising three-way tie involving those who 'neutral', 'agree' and 'strongly agree'.

The perception *'I trust in the benefits of the decisions of the Internet banking site (T2)'* were a bit more in the affirmative considering that the respondents who 'agree' comprised the biggest single group with 36.3 percent (133). The remainder of the results had 30.6 percent (112) 'neutral', 23.5 percent (88) 'strongly agree', 6.8 percent (25) 'disagree' and 2.7 percent (10) 'strongly disagree'. A total of 59.8 percent (219) respondents generally agreed with the perception. However, the respondents being 'neutral' with 30.6 percent (112) was relatively high and the second biggest single group that had profound impact on the trustworthiness of relying on the Internet banking sites for decision-making purposes. The cross tabulation outputs indicated the biggest group of respondents under Gender profile had both females and males 'agree'. This was the case with all other sub-profiles with exceptions being Grade 12 or lower and Student having 'neutral' as biggest single groups. This could have been due to lack of knowledge of, exposure to and experience with information technologies, especially Internet banking. The sub-profile Self-Employed had a tie between 'neutral' and 'agree' survey respondents.

The survey results from the perception *'Internet banking site keeps its promises and commitments (T3)'* had 38.8 percent (142) 'agree', 35.5 percent (130) 'neutral', 14.5 percent (53) 'strongly agree', 8.5 percent (31) 'disagree' and 2.7 percent (10) 'strongly disagree'. The

respondents found generally in agreement were 53.3 percent (195). With the respondents being 'neutral' having recorded as high as 35.5 percent (130) and also being the second biggest single group, the trustworthiness of the Internet banking sites in terms of keeping promises and commitments was brought into serious question. The outputs from cross tabulation had both females and males under Gender in unison with the single biggest groups being those who 'agree'. The sub-profiles 21-30 and 51-60 under the Age profile, Diploma/Certificate under the Qualification profile and Student under the Employment Status profile had 'neutral' as the single biggest groups. The most probable reasons for the inclination towards neutrality could have been due to lack of knowledge of, exposure to and experience with information technologies, especially Internet banking. The sub-profile Government Employee had a tie between 'neutral' and 'agree' survey respondents.

A similar but encouraging trend of results was also observed under the perception on *'Internet banking site keeps customers' best interests in mind (T4)'*. This perception had 44.5 percent (163) 'agree', 29.8 percent (109) 'neutral', 20.5 percent (75) 'strongly agree', 3.3 percent (12) 'disagree' and 1.9 percent (7) 'strongly disagree'. Those found to be in general agreement were about 65.0 percent (238) respondents. The respondents who were 'neutral' recorded 29.8 percent (109) and also the second biggest single group. The impact on the trustworthiness of the Internet banking sites in terms of keeping customer interests was profound but not to the same level of effect as on the highlighted perceptions under this construct. The cross tabulation of Gender, Age, Qualification and Employment Status had a similar trend of outputs with the respondents who 'agree' being the single biggest groups under all the distinctions and sub-profiles. There were no divergent views observed even within the profiles.

The study results show that the perception ‘*I trust this Internet banking site (T5)*’ reflected a generally pessimistic viewpoint. It had 37.7 percent (138) ‘neutral’, 33.9 percent (124) ‘agree’, 16.9 percent (62) ‘strongly agree’, 7.1 percent (26) ‘disagree’ and 4.4 percent (16) ‘strongly disagree’. The respondents found to be in general agreement were 50.8 percent (186). However, having the single largest group of respondents being ‘neutral’ with 37.7 percent (138) cast strong aspersions on the trustworthiness of Internet banking sites. As already stated, neutrality could not be considered as a definite or sure signal of trust. The outputs from cross tabulation were diverse across all distinctions and within each of the profiles. In the case of Gender, the single biggest grouping under females was ‘neutral’ while under males it was ‘agree’. It was hardly surprising since females are not necessarily information technology savvy when compared to the males. Other observations were such that the sub-profiles with those who ‘agree’ being the single biggest groups included the Age groups 31-40, 41-50 and 61 or older, Qualification groups Bachelor’s Degree and Master’s Degree, and Employment Status groups Government Employee. Under the Employment Status, the Private Sector sub-profile had a tie between those who ‘agree’ and ‘neutral’.

Table 4.7 - Trust (T) Results

Perception	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
T1	19	38	131	100	78	366
T2	10	25	112	133	86	366
T3	10	31	130	142	53	366
T4	7	12	109	163	75	366
T5	16	26	138	124	62	366

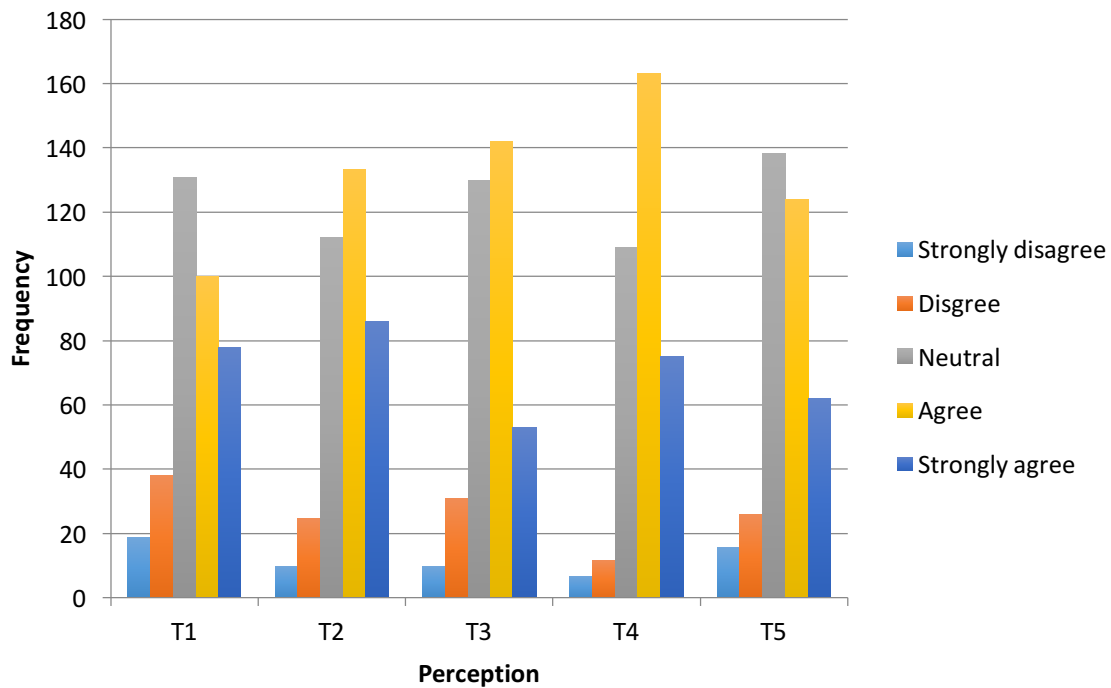


Figure 4.7 - Trust (T) Results

4.3.4 Attitude (ATT)

Attitude was a construct in this research study that had five (5) different perceptions included in the survey and the results are presented in Table 4.8 and Figure 4.8.

The study results show that the perception *'I feel using internet banking is a wise idea (ATT1)'* had 46.7 percent (171) 'strongly agree', 32.5 percent (119) 'agree', 13.7 percent (50) 'neutral', 3.8 percent (14) 'disagree' and 3.3 percent (12) 'strongly disagree'. An absolute majority of 79.2 percent (290) were found to be in concurrence that using Internet banking was a wise idea. The observation from the cross tabulation outputs was that survey results showed the same general trend across all the profiles of the constructs. Be that as it may, the sub-profiles 21-30 under the Age profile, Grade 12 or lower under the Qualification profile and Student under the Employment Status profile had relatively pronounced frequency

(number) of respondent who were 'neutral'. The most probable inference from the 'neutral' viewpoints from these sub-profiles could have been due to lack of knowledge of, exposure to and experience with information technologies, especially Internet banking.

As far as the perception '*I feel using Internet banking is a good idea (ATT2)*' was concerned, the study results were equally position with 43.7 percent (160) 'strongly agree', 38.8 percent (142) 'agree', 12.8 percent (47) 'neutral', 2.2 percent (8) 'disagree' and 2.5 percent (9) 'strongly disagree'. When compared with the previous the foregoing perception, it is observed that the frequency, in absolute terms, of those who 'strongly agree' evidently reduced while those of the respondents who 'agree' increased comparatively. However, the single biggest grouping remained that of respondents who 'strongly agree'. It can also be observed that those who chose 'neutral', 'disagree' and 'strongly disagree' marginally reduced. Despite the changes pointed out, the respondents that were general in agreement totalled about 82.5 percent (302), which was signified a remarkably high level of support in favour of the idea of using Internet banking.

A bit of diversity was evident from the cross tabulation outputs in some of the sub-profiles. Under the Gender profile, the outputs had shown the same trend as the general results with those who 'strongly agree' being the single most dominant grouping. Other notable observations were that the Age groups 31-40 and 61 or older, Qualification groups Grade 12 or lower and Diploma/Certificate, and Employment Status group Student had more respondents who chose 'agree'. Lack of knowledge of, exposure to and experience with information technologies, especially Internet banking, could have led to the respondents being a bit cautiously optimistic. The remainder of the profiles had 'strongly agree' being the single biggest groups.

The results from survey on the perception '*I like to use Internet banking (ATT3)*' were 38.3 percent (140) 'strongly agree', 33.6 percent (123) 'agree', 21.3 percent (78) 'neutral', 3.8 percent (14) 'disagree' and 3.0 percent (11) 'strongly disagree'. Notably, the single biggest grouping was 'strongly agree' and the aggregated number of respondents who generally liked using Internet banking was about 71.9 percent (263). It can also be observed that the respondents being 'neutral' with 21.3 percent (78) was relatively high. The probable reasons include lack of knowledge of, exposure to and experience with information technologies, especially Internet banking, and possibly not using Internet banking at all.

Interesting observations can be made from cross tabulation outputs. The Gender profile had outputs along the same lines as the general results with those who 'strongly agree' being the single most dominant grouping. However, other profiles did not necessarily follow a similar trend. In the case of the Age profile, it was observed that 21-30, 41-50 and 51-60 had 'agree' as the single most dominant choice. It was also true for sub-profiles Grade 12 or lower, Diploma/Certificate and Other under the Qualification profile, and Student under the Employment Status profile. A tie between those respondent who had opted for 'agree' and 'strongly agree' was observed under Age group 61 or older under the Age profile. Possible reasons for the observed diversities include lack of knowledge of, exposure to and experience with information technologies, especially Internet banking. It could also have been due to unpleasant experiences with Internet banking, particularly from the older generations.

The last perception that formed part of the survey was '*using Internet banking site is a pleasant idea (ATT4)*' under the construct of Attitude. This perception had 35.2 percent (129) 'agree', 35.2 percent (129) 'neutral', 21.0 percent (77) 'strongly agree', 6.3 percent (23) 'disagree' and 2.2 percent (8) 'strongly disagree'. A striking observation was that the single biggest grouping was a tie between 'strongly agree' and 'agree' with each recording 35.2

percent (129). The two groupings in general agreement accounted for about 70.4 percent (258) of the respondents who considered using Internet banking site as a pleasant idea. Another obvious observation was increase in those respondents who opted for ‘disagree’ when compared to other perceptions though the order of magnitude in absolute terms was not that significant.

Cross tabulation outputs show that ‘strongly agree’ had a large majority of female respondents with a total number of 62 who found using Internet banking site as a pleasant idea while under male respondents, it was ‘agree’ that had a total of 67 in concurrence with the perception. In the case of the Age profile, groups such as 21-30, 41-50 and 51-60 had their biggest number of respondents grouped under ‘agree’ while the 31-40 grouping had ‘strongly agree’ as its single biggest numbers of respondents. The sub-profile 61 or older had a tie between respondents opted to ‘agree’ and ‘strongly agree’. Three (3) of the sub-profiles (Bachelor’s Degree, Master’s Degree and Other) under Qualification had their biggest number of respondents grouped under ‘strongly agree’ while remainder chose to simply ‘agree’ with the perception. The Employment Status profile had its outputs with four sub-profiles (Government Employee, Private Sector, Self-Employed and Other) inclined towards ‘strongly agree’ and the remaining sub-profile (Student) hinged on ‘agree’. Either way, the level or lack of experience and exposure to information technology could be the probable reasons for the diverse points of view.

Table 4.8 - Attitude (ATT) Results

Perception	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
ATT1	12	14	50	119	171	366
ATT2	9	8	47	142	160	366
ATT3	11	14	78	123	140	366
ATT4	8	23	77	129	129	366

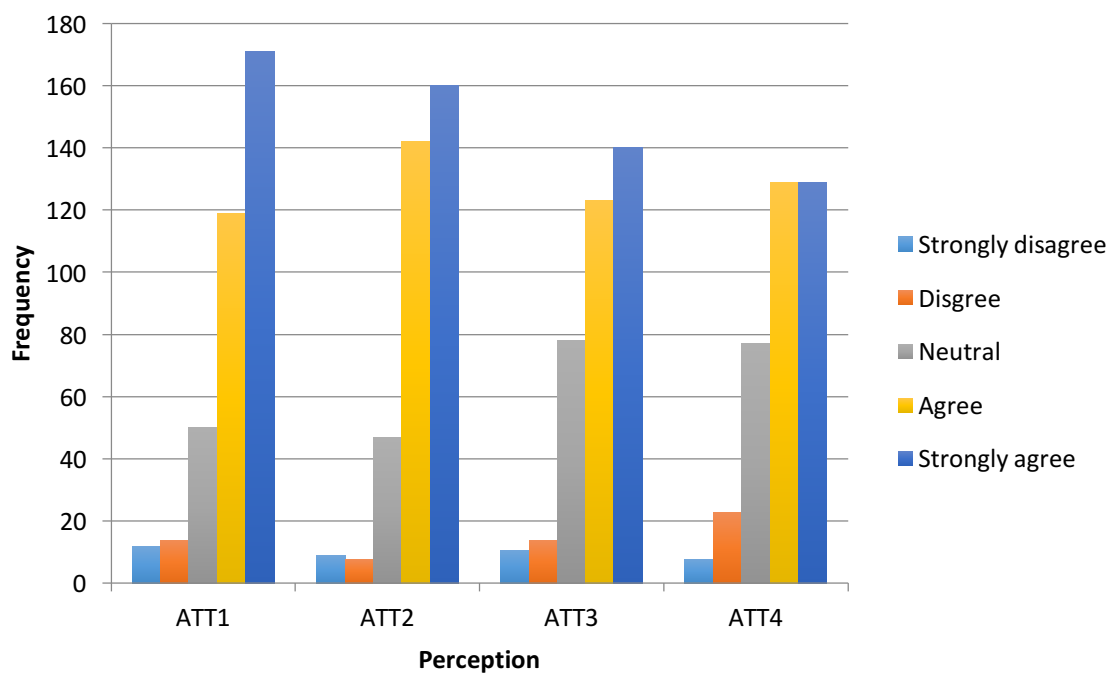


Figure 4.8 - Attitude (ATT) Results

4.3.5 Perceived behavioural control (PBC)

Table 4.9 and Figure 4.9 show the survey results on construct of ‘Perceived Behavioural Control (PBC) of Internet banking with different two (2) perceptive views from the sampled population of 366 people.

The first perception was on *'I would be able to operate Internet banking (PBC1)'*. From the results under this perception, 38.5 percent (141) of the respondents 'agree' followed by 36.6 percent (134) who opted to 'strongly agree'. The rest of the results had 17.8 percent (65) 'neutral', 4.4 percent (16) 'disagree' and 2.7 percent (10) 'strongly disagree'. When the 'strongly agree' and 'agree' respondents are aggregated, a total of 75.1 percent (275) were generally in concurrence to be able to operate Internet banking. A relatively high number of the respondent who opted to be 'neutral' could be sign of a combination of many reasons including lack of exposure to Internet banking and its potential benefits, and the unwillingness arising from perceived or real risks.

The cross tabulation outputs offered better insights to understand and explain the diversity of results from the different profiles and within the profiles. From the Gender perspective, it was evident the results for both females and males followed a similar pattern along the lines of the tabulated general results. The 31-40 age group had the majority of its respondents under 'strongly agree' while the 61 or older age group had a tie between the 'agree' and 'strongly agree' respondents. It was also observed that respondents with Diploma/Certificate and Master's Degree had 'strongly agree' in the majority. The rest of the sub-profiles had 'agree' respondents in the majority. With an exception of the Student sub-profile having 'agree' in the majority, the rest of the sub-profiles under the Employee profile had 'strongly agree' in the majority. In the lower brackets of age, qualification and employment status, it was apparent that the 'agree' respondents were in the majority. Aside from the likelihood of limited access to information technology (resources), lower levels of financial resources or income to warrant frequent Internet banking transactions could be among other challenges.

The second perception was *'I have the resources to use Internet banking (PBC2)'* and it had 'agree' having the majority respondents of 34.7 percent (127), 'strongly agree' with 32.8

percent (120), ‘neutral’ with 20.8 percent (76) ‘disagree’ with 7.9 percent (29) and ‘strongly disagree’ with 3.8 percent (14). Collectively in agreement were a total of about 67.5 percent (147) of the respondents. A general increase was also observed in the frequency of the ‘neutral’, disagree’ and ‘strongly disagree’ respondents probably due to reasons advanced under the first perception.

Cross tabulation outputs revealed that ‘strongly agree’ respondents were in the majority insofar as females were concerned while males had the ‘agree’ respondents in the majority. Two of the sub-profiles under the Age profiles had the ‘strongly agree’ respondents in the majority and these were 31-40 and 61 or older age groups. The ‘agree’ respondents in the age group 21-30 remained relatively high totalling 82. In the Qualification profile, all the sub-profiles outputs remained consistent with the general results with an exception of the ‘Other’ sub-profile with the only respondents who opted for ‘strongly agree’. The general trend of outputs under the Employment Status profile was such that the ‘strongly agree’ respondents were the majority under four out of the five sub-profiles. The only exception in the profile was the Student sub-profile that the ‘agree’ respondents in the majority and a relatively very high ‘neutral’ respondents. The reasons postulated under the first perception could explain the divergence of views from the respondents under the Student sub-profile.

Table 4.9 - Perceived Behavioural Control (PBC) Results

Perception	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
PBC1	10	16	65	141	134	366
PBC2	14	29	76	127	120	366

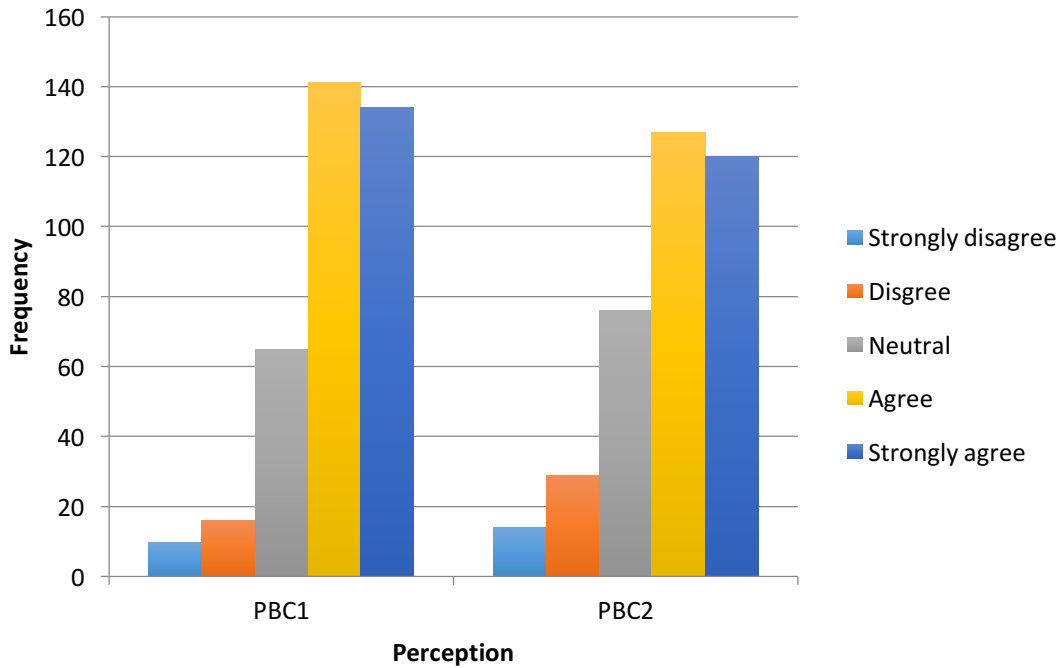


Figure 4.9 - Perceived Behaviour (PBC) Results

4.3.6 Subjective norms (SN)

The construct of Subjective Norms in this research study was a subject of three (3) different decision influencers, namely, friends, media and family. Table 4.10 and Figure 4.10 show the results of the survey under the Subjective Norms.

With regard to the first decision influencer ‘friends’, the ‘agree’ respondents were in the majority with a total of 38.8 percent (142) followed by the ‘strongly agree’ respondents with 26.8 percent (98). The rest of the results were 20.8 percent (76) ‘neutral’ respondents, 7.4 percent (27) ‘disagree’ respondents and 6.3 percent (23) ‘strongly disagree’ respondents. The respondents who were generally in the affirmative that friends had an influence in their decision making to adopt or consider Internet banking were about 65.6 percent (240). Under cross tabulation, the outputs under the Gender profile were found to be consistent with the general results under this decision influencer. In the case of the Age profile, it was observed that ‘strongly agree’ respondents were in the majority under the age groups 31-40, 41-50 and

51-60. Other than a tie between the 'agree' and 'strongly agree' respondents under the sub-profile Bachelor's Degree under the Qualification profile, the rest of the outputs were also in consistent with the general results. It was also only the sub-profile Government Employees that had a divergent output of having the 'strongly agree' respondents under Employment Status profile being in the majority.

The second decision influencer '*media*' had survey results indicating the following frequencies of respondents: 36.3 percent (133) 'agree'; 29.5 percent (108) 'strongly agree'; 24.9 percent (91) 'neutral'; 5.5 percent (20) 'disagree'; and 3.8 percent (14) 'strongly disagree'. Thus, the total number of respondents in concurrence with the influence of the media was 65.8 percent (241). The outputs from cross tabulation portrayed a consistent trend with the general results under the Gender profile. This was the case in most of the profiles with an exception of the following sub-profiles that had 'strongly agree' respondents being in the majority: 61 Or older age group; Master's Degree qualifications; and Other employment status. It can be postulated that the older and well-educated generations tend to pay attention to the media and hence the relatively stronger influence on the decisions insofar as Internet banking is concerned.

The third and last influencer under this construct was 'family' that had the following results from the survey: 34.2 percent (125) 'agree'; 29.0 percent (106) 'strongly agree'; 25.4 percent (93) 'neutral'; 6.3 percent (23) 'disagree'; and 5.2 percent (19) 'strongly disagree'. The total number of respondents that were generally in agreement was 63.3 percent (231). The cross tabulation outputs had some interesting insights and perspectives. Under the Gender profile, it was observed that the 'strongly agree' respondents were in the majority among the females confirming the usual strong family ties advocated by them. Interestingly, it was a tie between 'agree' and 'strongly agree' respondents among the males. Generally, the 'strongly agree'

respondents were in slight majority in most of the profiles. The divergent views were under the sub-profiles Bachelor’s Degree and Other qualifications, and Government Employee status in which the ‘agree’ respondents were in the majority. The 51-60 age group and Other employee status have ties between the ‘agree’ and ‘strongly agree’ respondents.

Table 4.10 - Subjective Norms (SN) Results

Perception	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
SN1	23	27	76	142	98	366
SN2	14	20	91	133	108	366
SN3	19	23	93	106	125	366

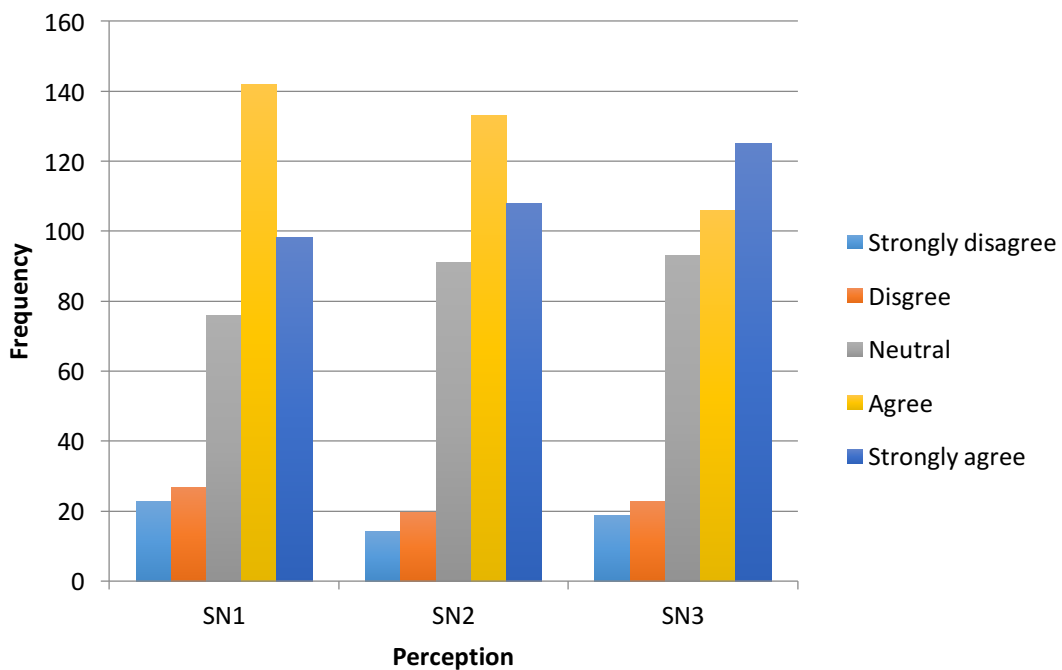


Figure 4.10 - Subjective Norms (SN) Results

4.3.7 Intention (INT)

As part of the survey, the construct of intention had four (4) different perceptions and results from the sample population of 366 people are summarised in Table 4.11 and Figure 4.11.

The perception '*I intend to use internet banking within near future (INT1)*' had the following survey results: 40.4 percent (148) 'strongly agree', 36.9 percent (135) 'agree', 15.8 percent (58) 'neutral', 3.3 percent (12) 'disagree' and 3.6 percent (13) 'strongly disagree'. An absolute majority of 77.3 percent (283) were in concurrence of the intention to use Internet banking in the near future. The review of the cross tabulation outputs indicated that the 'strongly agree' males respondents under the Gender profile were in the majority and this is hardly surprising since they are renowned for being information technology savvy. Aside from the 21-30 age group, Grade 12 or Lower qualification and Student employment status, the rest of the profiles had the 'strongly agree' respondents in the majority. The issue of exposure and resource availability could have played a significant part in the 21-30 age and Student employment status insofar as the future intentions of using Internet banking were concerned.

With regard to the perception '*I plan to use Internet banking (INT2)*', its survey results were 40.2 percent (147) 'strongly agree', 43.4 percent (159) 'agree', 12.0 percent (44) 'neutral', 1.9 percent (7) 'disagree' and 2.5 percent (9) 'strongly disagree'. The respondents that were general in agreement totalled about 83.6 percent (306), a significant level of the intention of to use Internet banking. Some level of diversity was evident from the cross tabulation outputs. From the Gender perspective, both the females and males had slender majority respondents with a 'strongly agree' viewpoints. In the Age profile, it was only the 31-40 age group that had 'strongly agree' respondents in the majority. The 'strongly agree' respondents were also in the majority in the Qualification and Employment Status profile. The only

exceptions were Grade 12 or Lower and Student sub-profiles that had ‘agree’ respondent in the majority. Lack of knowledge of, exposure to and experience with information technologies, especially Internet banking, could have led to the respondents being a bit cautiously optimistic about using Internet banking in future.

The results from survey on the perception *‘I expect to use Internet banking in near future (INT3)’* were as follows: 39.1 percent (143) ‘strongly agree’, 39.1 percent (143) ‘agree’, 15.3 percent (56) ‘neutral’, 3.6 percent (13) ‘disagree’ and 3.0 percent (11) ‘strongly disagree’. Notably, the ‘strongly agree’ and ‘agree’ respondents had a tie and the aggregated number of respondents who generally expect to use Internet banking in the near future totalled 78.2 percent (286). The cross tabulation outputs point to the ‘strongly agree’ males respondents under the Gender profile being in the majority. Further observations were that the 21-30 and 51-60 age groups, Grade 12 or Lower qualification and Student employment status had the ‘agree’ respondents in the majority. The Self-Employed sub-profile had a tie between “agree” and ‘strongly agree’ respondents. As explained, the issue of exposure and resource availability could have played a significant part in the 21-30 age and Student employment status insofar as the future use of using Internet banking was concerned.

Under this construct, the fourth and last perception on *‘I am determined to use Internet banking soon (INT4)’* had 37.4 percent (137) ‘strongly agree’, 38.5 percent (129) ‘agree’, 16.9 percent (62) ‘neutral’, 4.1 percent (15) ‘disagree’ and 3.0 percent (11) ‘strongly disagree’. The ‘strongly agree’ and ‘agree’ respondents totalled 75.9 percent (266). Another obvious observation was increase in those respondents who opted for ‘disagree’ when compared to other perceptions though the order of magnitude in absolute terms was not that significant. Cross tabulation outputs showed that the Gender results were consistent under this perception. Apart from the 31-40 and 41-50 age groups, Bachelor’s Degree and Other

qualifications, and Private Sector, Self-Employed and Other employee status that had ‘strongly agree in the majority, the rest of the profiles and sub-profiles were along the trends of the general results. Similar reasons already cited under this perception could be advanced for the diversity of the results of the survey.

Table 4.11 - Intention (INT) Results

Perception	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
INT1	13	12	58	135	148	366
INT2	9	7	44	159	147	366
INT3	11	13	56	143	143	366
INT4	11	15	62	141	137	366

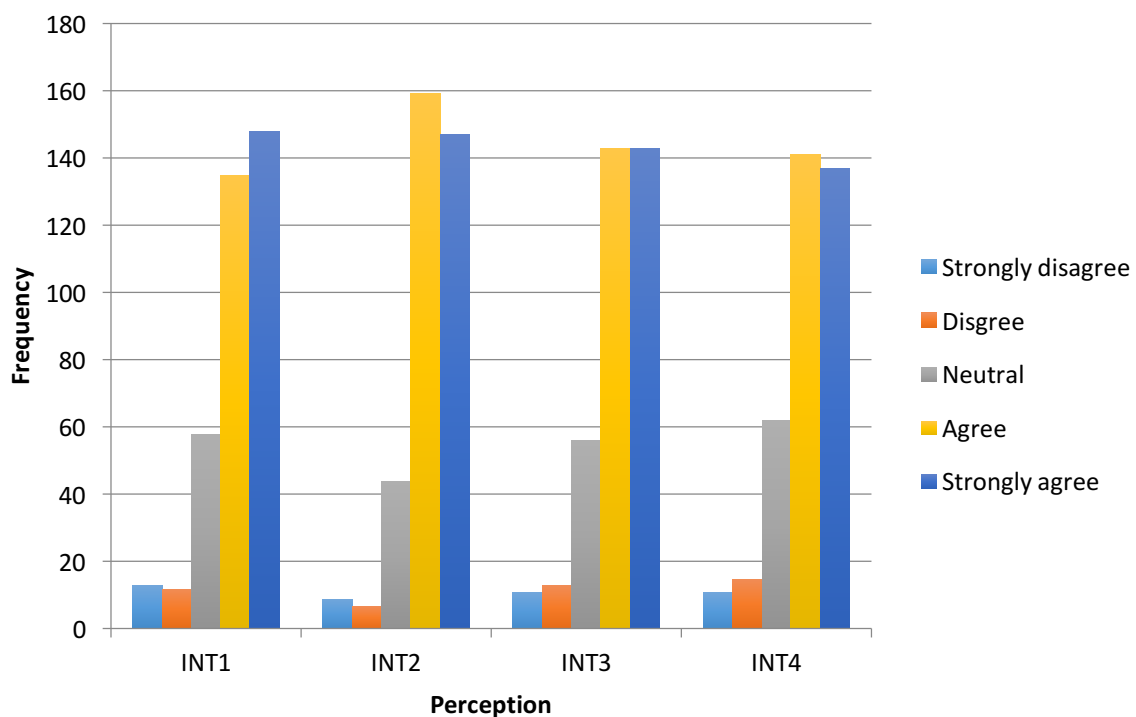


Figure 4.11 - Intention (INT) Results

4.4 Discussion

The results of study clearly highlight that Internet banking, through its properly designed and useful bank sites, could improve the performance of their banking activities, make it easier to do banking activities, accomplish banking activities more quickly and increase the quality or output of banking transactions. However, the levels of influence of the demographic attributes are worth considering in the quest to increase the penetration of Internet banking. Figure 4.12 shows the simple averages of the seven (7) constructs.

Some of the constructs and responses therein could have mutually exclusive, implying that the occurrence of one precludes the occurrence of the other. Without hypothesising and using appropriate technology acceptance models to test the hypotheses and theorising the relationships among the various constructs, it was difficult to confirm the direct and indirect relationships between or among the constructs or factors. In addition, the chi-square test, used widely for more than a Century in many instances including testing the association between two categorical responses was not used in this study (Sharpe, 2015; Shih & Fay, 2017). According to Pandis (2016), the chi-square test examines whether the alignment status (presence or absence) and gives only evidence of an association or no association but it does not produce effect estimates and confidence intervals. This test would have been particularly useful in testing the validity against demographic characteristics. Data was a challenge to obtain and thus, the results shown in Figure 4.12 and the discussion of the same herein under are of an illustrative or indicative nature to demonstrate an empirical study and inform future related studies.

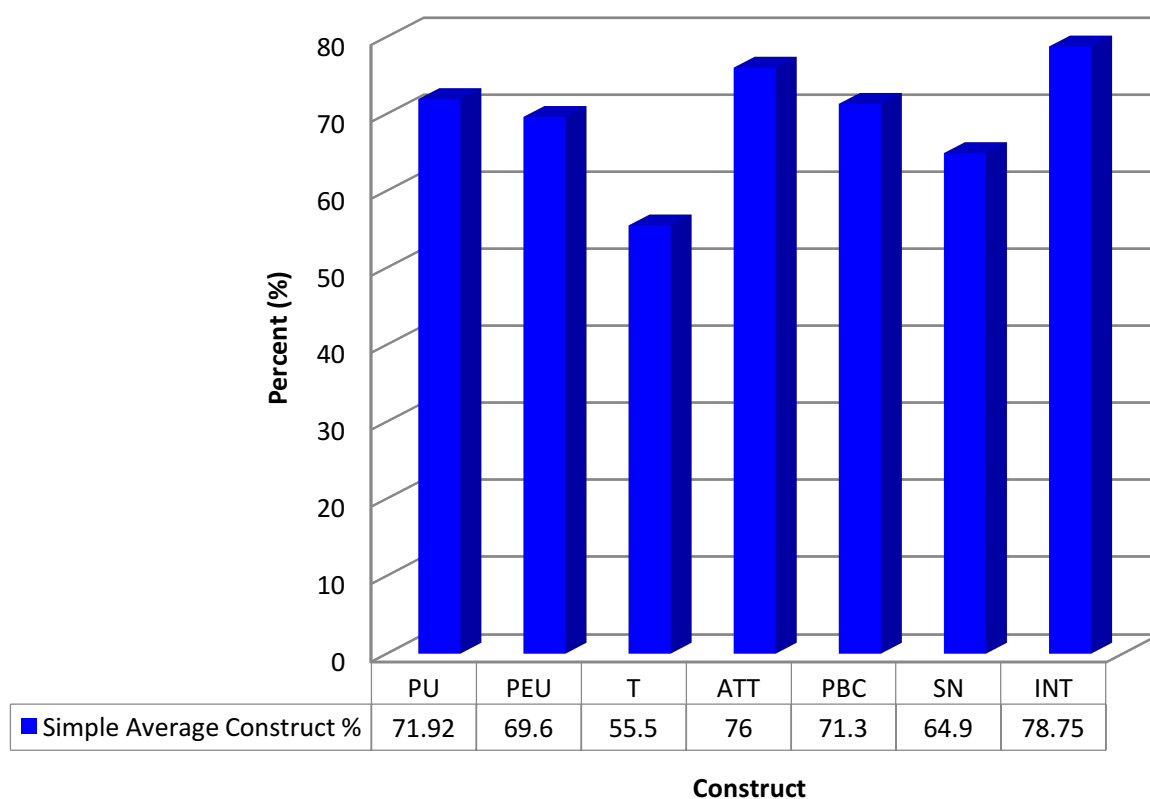


Figure 4.12 – Average Construct of Percentages

Davis *et al.* (1989) define the construct of ‘*Perceived Usefulness (PU)*’ as the degree to which a person believes that using Internet banking would enhance her/his job performance. With an average of about 71.92 percent of respondent in concurrence under the construct of ‘*Perceived Usefulness (PU)*’ of Internet banking, this construct has a positive impact on influencing customer perceptions on adoption of Internet banking. The findings of this study are consistent with other studies (Davis *et al.*, 1989; Lee, 2009).

From the perspective of ‘*Perceived Ease of Use (PEU)*’, the study had useful and informative insights on Internet banking being clear and understandable, requiring less mental efforts and being relatively easy and flexible to learn, interact with and use. The results from the study on the perceived ease of use of Internet banking were varied and highlighted the challenges in that regards. However, an average of the 69.6 percent of the perceptions under this construct

indicates it has a positive impact on customers insofar as their adoption of Internet banking is concerned. The results of the study also brought to the fore the absolute need to pay special attention to ease of use of the Internet banking technology. The study findings are consistent with other research findings on Internet banking (Davis *et al.*, 1989; Luarn & Lin, 2005; Aderonke, 2010).

With profound impacts on the factor influencing customer perceptions on adoption of Internet banking is trust and the construct of “*Trust (T)*” in this study provided interesting results. Important consideration to customers on trust related matters are trustworthiness of the Internet banking sites in many respects including security and its outputs in terms of aiding sound decision-making. Abundantly clear from the results of the study was that trust was considered a major challenge to customer adoption of Internet banking in Namibia. A relatively low average of 55.5 percent from the surveyed perceptions on trust attests to the absolute need for special attention to addressing trust related imperatives. Several studies have highlighted the importance of trust to the adoption of Internet banking and the findings of this study are consistent with them in terms of highlighting the trust imperatives (Luarn & Lin, 2005; Grabner-Kräuter & Faullant, 2008).

As with other technological innovations, attitude can be an important determinant or enabler in introducing a new technology and in the process of its adoption by the would-be or potential users. In this study, the construct of ‘*Attitude (ATT)*’ addressed a number of perceptions including whether using Internet banking was a wise or good idea, the likelihood of using Internet banking and how it felt using an internet banking site. The survey results under this study not highlighted how important a factor was attitude in influencing customer perceptions on adoption of Internet banking but also the positive attitude demonstrated or confirmed from the sampled population. The perceptions that formed part of the study under

the construct of attitude averaged 76.0 percent, a figure signifying a relative high and positivity towards the adoption and use of Internet banking. This is consistent with the findings of other studies on customer attitude towards adoption of Internet banking (Davis *et al.*, 1989; Taylor & Todd, 1995).

Beliefs regarding the availability of resources and opportunities to perform a particular behaviour as well as the existence of internal/external factors could impede the behaviour to adopt Internet banking (Ajzen, 2002; Luarn and Lin (2005). Under the construct of '*Perceived Behavioural Control (PBC)*' were two perceptions on the ability to operate Internet banking and the availability of resources for the same. The results of the study indicated that the ability in terms of operating Internet banking was not so much of a challenge. However, the resources to enable one use Internet banking presented a major challenge depending on the class and endowment of customers. This was quite apparent in the responses from the students in the study. For the two perceptions under the construct of perceived behavioural control (PBC), the simple average was 71.3 percent.

The construct of '*Subjective Norms (SN)*' represented the degree to which the respondents perceived that others believe they could use Internet banking and they are important factor in adopting Internet banking (Taylor & Todd, 1995). Essentially, it was about influence or source of influence. Three influencers formed part of the study, namely, friends, media and family. The results from the study indicated that the media had the biggest influence followed by friends and lastly family. It should be mentioned, however, that the difference between the three influencers was marginal and could have the same effect depending on the contextual situation. The three influencers averaged 64.9 percent under this study.

Last but not necessarily the least was the construct of '*Intention (INT)*' that was considered under the study and it focused on the respondent's readiness to adopt Internet banking (Davis

et al., 1989). The specific perceptions under this construct included the intentions, plans, expectations and determination to use Internet banking in the near future. It was quite apparent from the results of the study that the respondents had high intentions as evidenced by an average of 78.75 percent.

When analysing the results of this study, it worth mentioning that demographic attributes of the respondents play an important role in appreciating and deciphering their responses. The cross tabulation of demographic attributes such as gender, age, qualification, employment status, among others, was useful. Thus, the inclusion of relevant demographic attributes cannot be over-emphasised.

4.5 Conclusion

The study confirmed that the constructs and the perceptions under each one of them were cardinal in understanding the factors influencing customer perceptions on adoption of Internet banking in Namibia. Furthermore, the study had demonstrated the significance of the constructs in that regard. The demographic attributes were also important in understanding perceptions on adoption of Internet banking and considering as many relevant attributes as possible can only better inform the study.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the main findings, implications of the findings and recommendations arising from the study.

5.2 Conclusions

The advances in technology and competition, both in the market and for the market, have profoundly affected the operations of the banks, particularly the reliance on technology in the provision of expanded and cost competitive banking services and product ranges. Internet banking is also widely perceived as the most important and most popular delivery channel for banking services in the cyber age. The emerging Internet banking phenomenon has not spared Africa and it is also sweeping through Namibia with most banks adopting electronic systems such as ATMs, cellphone banking and online banking as part of their business strategies. However, little or virtually no empirical evidence on Internet banking in Namibia and the extent to which such banking services have been developed, popularised, utilised and localised in the country remains largely unknown. Consequently, Internet banking in Namibia continues to receive greater attention in the light of the global advances made in the information and communication technologies.

The study reveals that electronic banking services offer good prospects to both the banks and the customers. Customers could also benefit from the convenience, speed and round-the-clock availability of Internet banking services. Namibia, as a country, also stands to benefit from increased Internet banking usage by virtue of the improved financial inclusion in the economy as regards ease of access, availability and usage of the formal financial system.

Although Internet banking presents a lot of opportunities, it also has its own challenges such as fear of losing money when transacting online due to risks manifesting in form of Internet scams and fraud. As more financial institutions including banks implement and adopt Internet banking services, it is vitally important for these institutions to identify factors that influence users' intention to adopt or use their services. Unless the factors that influence customers' intention to adopt Internet banking are studied, challenges pertaining to the low penetration rate of Internet banking would continue to be prevalent. Furthermore, understanding the factors influencing customers' intention to adopt Internet banking would help the banks to better formulate their marketing strategies to increase Internet banking usage in the future.

This empirical study examined the factors influencing customer perceptions on adoption of Internet banking services in Namibia. In particular, the study focused on the demographic variables such as gender, age, qualification and employment status, perceptions about Internet banking through constructs such as perceived usefulness, perceived ease of use, trust, attitude, subjective norms, perceived behavioural control and intention and influence on the decision to adopt Internet banking from the perceptions of friends, media and family. The study confirms that the perceptions under each construct had significant impacts on influencing customer perceptions on adoption of Internet banking in Namibia. Furthermore, the study demonstrated the importance of considering the demographic and contextual attributes in analysing and understanding perceptions on adoption of Internet banking.

The implications of the study are such that it will contribute to the increase and improve the level of awareness of about Internet banking in Namibia and assist in confidence building in such banking services. It would also assist the banks in their advocacy initiatives, advertisements and right targeting of prospective Internet banking customers. This study would also inform the banks in developing responsive capacity building programmes to

support their endeavours and business strategies related to Internet banking services. Furthermore, both the banks and customers would be motivated should consider Internet banking as a strategic (business/personal) necessity in carrying banking services.

5.3 Recommendations

With the relatively low penetration of Internet banking services in Namibia and potential benefits for such services in the light of technological advances globally, the banks need to intensify awareness campaigns through various channels of media to change the attitude of customers towards Internet banking. It would also be important to reach-out to educational institutions since students constitute a potential big market for Internet banking services. In this regard, specific and targeted messages should be developed to highlight benefits of Internet banking taking into account all the factors influencing customer perceptions on adoption of Internet banking services in Namibia covered in this study. Worth highlighting would be potential benefits to customers in terms of the convenience of doing banking services anywhere and anytime at lower costs.

The bank websites in general and Internet banking sites in particular should be designed in such that they are ease to use or navigate and provide as many comprehensive features and services as practicable possible. Appropriately designed, sophisticated enough and high performance websites would not only motivate the users or customers to explore the features and banking services but also lead to increasing the perceived ease of use and usefulness and favourable intention to use Internet banking. In addition, the banking websites should be easily accessible but secure, have faster/quick connection speeds and available on a 24-hour basis with minimal outages and downtimes, and quick response time.

In order to boost customer's confidence, trust and allay fears of insecurity and online fraud and theft (identity or money), banks could organise demonstrations using road shows and

presentations (including videos) or arrange hands-on training to demonstrate to the user-friendliness (ease of use) of Internet banking sites and services. As part of building confidence and trust, the banks also ensure that the costs of the services are affordable. This would go a long way in developing positive attitudes towards, and perceptions of the usefulness and ease of use of Internet banking services.

Given the challenges to determine the population size for this study arising from data secrecy and getting a fairly representative sample size in order to have findings that would be very generalisable, it is recommended to have a larger and more representative sample population beyond the City of Windhoek. This would be imperative since concentration on a particular location (City of Windhoek) cannot be entirely representative of the whole Namibia because results could vary with location and the demographic attributes of the population. Furthermore, additional demographic attributes, variables or constructs should be considered in future studies for more informed results. For instance, it would be useful to have ideas on the income levels, marital status, use of computers, use and access to Internet and use of Internet banking.

It is also recommended to have future studies that are more than just a descriptive type to enhance their depth and validity. In this regard, it is further recommended to use appropriate technology acceptance models that would test the hypotheses and help in understanding, explaining or theorising about the relationships among the various factors influencing customer perceptions on adoption of Internet bank in Namibia. It would also be extremely important to reach-out to the banking industry in Namibia to assist in securing general information more weighted by the existing users that could assist in generalising the results of future studies for the whole of the country.

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APPENDICES

APPENDIX I

SURVEY QUESTIONNAIRE

ON

**“FACTORS INFLUENCING CUSTOMER PERCEPTIONS ON
ADOPTION OF INTERNET BANKING IN NAMIBIA”**

My name is Namakau Muyunda SICHONE, a student at Namibia Business School (NBS) at the University of Namibia (UNAM). I am pursuing a Master of Business Administration (MBA). I am carrying out a Research on the “*Factors influencing customer perceptions on adoption of Internet Banking in Namibia*”. This survey is being conducted to write a thesis in partial fulfilment of the requirements for a Master of Business Administration of the University of Namibia and it is expected to be of value to the banking industry and its customers.

Kindly render the necessary assistance by completing the attached questionnaire on some aspects of Internet Banking services.

Please note that your response will be treated in the strictest confidence and will not be divulged to a third party.

This survey will take you less than 10 minutes to complete.

Thank you in advance.

SECTION A: BIOGRAPHICAL DATA

Please respond to the following questions by making an “X” in the appropriate space provided.

1. Gender

- Female
- Male

2. Age

- 21-30
- 31-40
- 41-50
- 51-60
- 61 or older

3. What are your highest qualifications?

- Grade 12 or lower
- Diploma /Certificate
- Bachelor’s Degree
- Master’s Degree

4. Employment status

- Government employee
- Private sector
- Self-employed
- Student
- Other

Specify.....

SECTION B: PERCEPTIONS ABOUT INTERNET BANKING

Please select the appropriate responses that best describe your perceptions of Internet Banking

Perception		Strong Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
INT1	I intend to use internet banking within near future					
INT2	I plan to use Internet banking					
INT3	I expect to use internet banking in near future.					
INT4	I am determined to use internet banking soon.					
ATT1	I feel using internet banking is a wise idea					
ATT2	I feel using internet banking is a good idea					
ATT3	I like to use Internet banking					
ATT4	Using Internet banking site is a pleasant idea					

Perception		Strong Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
PBC1	I would be able to operate Internet banking					
PBC2	I have the resources to use Internet banking					
T1	The Internet banking site is trustworthy					
T2	I trust in the benefits of the decisions of the Internet banking site					
T3	Internet banking site keeps its promises and commitments					
T4	Internet banking site keeps customers' best interests in mind					
T5	I trust this Internet banking site					
PU1	Using the Internet banking site improves my performance of banking activities					

Perception		Strong Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
PU2	Using the Internet banking site makes it easier to do my banking activities					
PU3	Using the Internet banking site enables me to accomplish banking activities more quickly					
PU4	Using IB would increase the quality or output of banking transaction					
PU5	I find Internet banking site useful for my banking activities					
PEU1	My interaction with the internet banking is clear and understandable					
PEU2	Interaction with internet banking does not require a lot of mental effort					

Perception		Strong Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
PEU3	It is easy to use internet banking					
PEU4	Learning to use internet banking is easy for me					
PEU5	I find it easy to do what I want to do with online banking					
PEU6	I find internet banking flexible to interact with					

**SECTION C: INFLUENCE ON THE DECISION TO ADOPT
INTERNET BANKING**

Please select the appropriate responses that best describe what influenced your decision to adopt Internet Banking

Decision Influencer		Strong Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
SN1	Friends					
SN2	Media					
SN3	Family					

Acronyms

ATT	Attitude
INT	Intention
PBC	Perceived Behavioural Control
PEU	Perceived Ease of Use
PU	Perceived Usefulness
SN	Subjective Norms
T	Trust