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E-banking Acceptance: An empirical study of Cameroonian Customers

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CERTIFICATION

I, CYNTHIA TAMAJONG, declare that this dissertation, submitted in fulfilment of the requirement for the award of a Doctor of Philosophy in Management, Cardiff Metropolitan University, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualification at any other academic institution.

CYNTHIA FRINWIE TAMAJONG
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ABSTRACT

Information technology has long been a significant research area. However, its nature has changed considerably since the internet became prominent just over a decade ago. There have been many studies (Chiemeke et al.,2006; Cletus, 2012, Mirabel, 2017, Inegbedion et al., 2019), with proposed theories and models relating to the Technology Acceptance Model (TAM) worldwide. The emergence of new technologies has revolutionised the way companies interact, engage, and build relationships with customers. Internet / online banking and electronic banking (or e-banking) mean the same thing and are used interchangeably in this research.

This thesis aims at determining the issues concerning electronic banking acceptance by Cameroonian customers and discuss the implications thereof. As technology continues to grow, awareness increases and there is a need for financial institutions to understand their customers, their technological and digital knowledge, and the factors people consider before accepting e-banking. To achieve this, this research addresses three important questions.

The factors found to influence acceptance include demographic factors such as age, income, occupation, income, and level of education. Other factors include trust, accessibility, ease of use, security and privacy, and customer satisfaction. From these factors, seven hypotheses were developed and answered. Unlike the past researches carried out in Cameroon, this research aims at tailoring the factors that affect electronic banking acceptance to the targeted population. Consider this as a puzzle, where factors need to be acknowledged and elaborated on, investigated and tailored solutions which works for Cameroonians, banks in Cameroon and financial institutions.

Other researches sighted factors that affected e-banking in the past, factors which were true but when linked to various locations (in this case Cameroon), the factors become inapplicable. Cameroon's internet banking is still at its primary stages, and to go by Roger's (1995) theory of adoption stages, awareness as banks are still trying to create awareness to gain the interests of Cameroonians. Factors like convenience may work in other developed and more advanced developing countries but in Cameroon, many Cameroonians face setbacks, economically, technologically and even

environmentally. These include lack of finances to afford affordable gadgets to access electronic banking, illiteracy, cost of the internet, speed of the internet, no mobile networks (signals) in some locations; factors like these affect the convenience of using technologies such as electronic banking. This research, therefore, sets out to match factors based on thorough understanding of the targeted population, hence setting this out from other previous researches.

The practical significance of this study is that it will help banks to refine their market strategies and enhance their electronic banking services. This research could also help bank managers to manipulate their most important factors accordingly to improve customer understanding and customer acceptance of internet banking. The main purpose of this research is to tailor the factors that enable e-banking acceptance and adoption to the Cameroonian people. By so doing, all other factors which may work for other countries will be eliminated and only factors which works for Cameroonians will be recommended. This way, financial institutions will be able to modify their banking systems based on the targeted population (Cameroonians). This is because past researchers like Mirabel (2017), listed general factors which affected e-banking acceptance in Cameroon, but when researched on, these factors did not directly target Cameroonians.

Quantitative analysis was used to process data using SPSS and the results were discussed in terms of their academic contributions. The challenges and barriers that affect internet banking acceptance are identified and include the cost of opening bank accounts, low income, lack of knowledge, cost of monthly bank fees, lack of e-law legislation, and slow internet services. The findings from this thesis provides the banks with more information on electronic banking, and how they can improve their services. The study further highlights implications and makes a significant contribution across all banking sectors in Cameroon.

Data was collected from customers using questionnaires. This led to the decision to base the study on the well-known TAM with extensions to make it more relevant for a developing country such as Cameroon, whose environment is significantly different from that of the western countries where the technology originated. Interviews were conducted with bank employees to get more insight into e-banking in Cameroon.

These interviews however were done to help the researcher gain more insight into the banking system in Cameroon.

Although this study was conducted at a particular site and with the use of certain variables, the findings from this paper can be implemented in other countries, both developing and developed, and can be generalised to Cameroon in the broad spectrum of internet application.

There is, however, much research to be done in Cameroon regarding online banking. Little has been done so far and online banking is still relatively new. As a result, a discussion on bit coins (Crypto currency) will not be included in this research, despite their existence in developed countries. Most African countries provide mobile money transfer options by mobile services, like Orange in Cameroon. This has been accepted and used by many Africans. There is accordingly a need for research to address why people prefer mobile money transfer services to online banking in Cameroon. Furthermore, future research needs to be conducted in more areas in Cameroon and it is advisable to conduct qualitative interviews to obtain more insightful opinions to use in future designs and survey developments, like questionnaires.

This research makes a novel and substantial contribution to the growing research areas of digital channels that are currently underreported in academic literature.

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DEDICATION

This research is dedicated to my late father, Late Mr Tamajong Cletus Achu (17th June 1948 to 17th December 2005) and late sister Ms Winifred Ngenwie Tamajong (13th September 2008). I miss you with every passing day.

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ACRONYMS

ATMs Automated Teller Machines

ATS Applicant Tracking System

BCEAC Banque Centrale de Etats de L'Afrique Centrale

BEAC Banque des Etats de L'Afrique Centrale

BIAO Banque Internationale pour L'Afrique Occidentale

BICIC Banque International du Commerce et de L'Industrie du Cameroun

CBC Commercial Bank of Cameroon

CEMAC Communauté Économique et Monétaire de l'Afrique Centrale

CFA Financial Cooperation in Central Africa

E Electronic

EFT Electronic Fund Transfer

FTC Federal Trade Commission

GSM Global System for Mobile

IB Internet Banking

ICT Information and Communications Technology

IS Information System

ISP Internet Service Provider

MFI Monitory Financial Institution

MIS Management Information System

OBIS Online Banking Information System

PBC Perceived Behavioural Control

PLC Public Limited Company

POS Point of Sale

PSB Presidential Savings Bank

SCB Société Camerounaise des Banques

SGBC Société General des Banques du Cameroon

SME Small Medium Enterprises

SMS Short Message Service

SWIFT Society for Worldwide Interbank Financial Telecommunication

TAM Theory of Acceptance Model

TPB Theory of Planned Behaviour

TRA Theory of Reasoned Action

UBA United Bank of Africa

UBC Union Bank of Cameroon

USB Universal Serial Bus

USD United States Dollars

URL Uniform Resource Locator

Y2K Year 2 Thousand

Chapter 1. INTRODUCTION

1.1 Introduction

This introductory chapter discusses the background and overview of internet banking in Cameroon. It includes how internet banking has developed throughout the years, and the types of internet banking in Cameroon., The chapter discusses the research aim and objectives, research questions, research contributions, motivations as well as the significance of this research.

Many opportunities have been created by the development of electronic services technology. It has also created some threats for several businesses and service sectors. Organisations are progressively clinging to the internet as a distribution channel, willingly or unwillingly, in order to remain competitive or gain a market share. The absence of accurate information on electronic or e-services relating to factors that are important to users and which impact their behaviour can be a big problem for financial institutions. Due to the absence of sufficient information, these financial institutions may adopt and implement services or solutions that are unhelpful to their users in trying to catch up with the rest of the world on electronic banking.

Many studies (Leimyuy, 2017, Ikpefan et al., 2018, Ngwa, 2020) have been conducted worldwide relating to e-banking adoption, e-service adoption, and even on factors that influence bank customers to adopt such services. There is much support to show that the existence of new technologies and electronic services, electronic businesses, and electronic banks have significantly affected both banks and customers positively (Zorayda, 2003).

Over the last few years, the introduction of ICT in the banking industry has been progressed tremendously; a move which has provided a way for banks to discern their products and services more effectively. The internet environment has changed drastically as traditional businesses and banks are moving their activities towards the so-called digital banking (Hussein & Issa, 2016). Banks have used branch-based operations for more than 200 years, and it was only recently that bank-branches have

started disappearing from our streets, especially in developed countries. However, the existence of numerous technologies has changed how financial services are delivered to customers. For example, automated teller machines (ATMs) displaced cashier tellers, telephones represented by a call-centre replaced the bank branches, and the internet has virtually dominated bank transactions. What this means for banks is lower transactions costs, 24-hour trading, extended business territory, and increased efficiency in daily banking processes.

Presently, banks face many competitors. For them to be able to succeed in a marketplace such as this, it is necessary to offer a wide variety of products with the latest technology. As a result, many banks, financial institutions etc. are engaging in the development of new products related to electronic banking for their customers globally.

The primary aim of this study is to determine the major factors that attract Cameroonian customers to begin e-banking. In the past, Cameroonians relied heavily on the traditional methods of banking where they kept money under their beds or in a safe place at home; some Cameroonians trusted credit unions but made sure they still had a secure amount of money stacked away in their ‘safe places'. Most people go into bank branches to deposit or withdraw money, others join credit unions to deposit and cash checks, while others continue to hide large sums of money in their homes. With the introduction of e-banking services, some people are beginning to accept the changes and break loose from their old banking ways. However, this thesis attempts to uncover the reasons for these changes and highlight the factors that enable Cameroonians to accept these changes despite being comfortable with the old banking methods and systems.

Despite all its benefits, there is still consumer reluctance to accept and use e-banking. This reluctance is common in developing countries (Al-Somali et al., 2009, 2015). According to James (2012), the prevalence of electronic banking in Cameroon is low compared to other developing countries. He stressed that even though there has been an improvement in these services, the level of electronic banking has been linked to several factors in the past including cost, accessibility, convenience, trust, reliability, security and privacy. This is supported by Alenezi et al. (2012).

In recent years, e-banking acceptance and adoption has rapidly grown in the IT field and in financial markets (Mahdi & Mehrdad, 2010). Electronic banking has extensively transformed traditional banking practices (Gonzalez, 2008, Dewan et al., 2015). According to Rafiu (2007), challenges in developing internet banking have pushed many financial institutions to invest in this market. Ta et al.(2015) later confirmed this statement; e-banking services provide customers with greater satisfaction than traditional banking (Mahdi & Mehrdad, 2010, Salhieh et al., 2011, Yousafzai, 2012, Cletus, 2012, Joseph, 2017, Godfrey et al., 2020). In the developed countries, for example, the United Kingdom, banks like Barclays Bank PLC have taken a step further and customers can process their transactions alone in branches on machines with no physical employee assistance. In Australia, ATMs are available 24/7 for customers to transfer money to others or instantly deposit large sums of money into their accounts.

There has been an extraordinary advancement in ICT. This is treated as the most powerful force for change in the financial sector. Because of ICT, the designing and delivering of services in the financial sector has changed greatly (Wang et al. 2003). This new ICT is becoming a very important factor when considering future improvements like saving money, affecting the way banks advertise, and ways of doing business in general. Because of the rapid advances in ICT and extreme rivalry in the money-saving division, the allotment of e-banking is used increasingly as a channel of distribution for budgetary administration (Mahdi & Mehrdad, 2010). This growth in ICT and internet banking has led to rising competition and reduced costs (Shah et al., 2011). Consequently, consumers now virtually carry out financial transactions without going into bank branches (Pikkarainen et al., 2004, Shah et al., 2011).

Banks use the internet in two ways. Firstly, banks that already exist physically develop websites and apps (mobile device applications). These sites and apps provide services for internet banking alongside orthodox channels as well as traditional methods (Hernandez – Murillo et al., 2010). According to Xue et al. (2011), this service is named “Click and Mortar”. A second way banks use ICT and the internet is through an internet-only model. These services are provided with no existing physical branches. This is made possible by placing in a branch a single main computer server. Through this system, all banking transactions can be conducted including depositing, withdrawing, and using ATMs.

Despite all the positive factors of ICT, a compelling step that banks must take before going through a transformation is ensuring that the electronic banking risk is properly handled and managed (Al- Alawi, 2005, Meuter, 2010).

1.2 Background of the study

Banking is a highly information-intensive activity that relies heavily on ICT to acquire process and deliver the information to all relevant users (Yousafzai, 2012). ICT is not only based on information precision but also provides ways that banks can differentiate their products and service. ICT has increased the ability of bank customers to access their account balances, pay bills, or move funds between accounts while at home or work. Before the existence of electronic banking there were challenges faced by banks to expand and capture a large share of the banking market; to do so they invested more in bricks and mortar to enlarge their geographical and market coverage. More banks have chosen another and new medium, the internet (Al-Gahtni et al., 2016). This change is explained by a quote in the Financial Times in 1996 that banking is essential to a modern economy, and banks are not. This can be seen today as brick banks are increasingly disappearing while many are providing more electronic banking. Internet banking is one form of online banking: PC direct dial banking an alternative. Before internet banking, customers using direct-dial PC banking required the use of specialised computer software provided to them and supported by their depository institution (Yousafzai, 2012).

Currently, almost no one uses PC direct dial because wireless has taken over worldwide. Richard and Kane (1999), went further to explain the three types of banking websites differentiated by regulators. These websites are purely information sites, which as the name implies are sites that provide information and services about the depository institution but no interactive capability. The second are the information exchange sites aimed at providing information and allowing customers to send information to the depository institution and make enquiries about their account. The third website is a fully transactional site which offers the earlier described capabilities as well as some extra services such as real-time account queries, transfers of funds among accounts, bill payments, and other banking services.

The internet, which is one of the world most successful inventions, has opened many doors for many businesses and banks and created many successful opportunities. These services have helped users, banks, and businesses to connect with the rest of the world by using the internet for the distribution of their services (Chau et al., 2009). Slowly, more people are moving towards internet banking, but they are very concerned about factors such as privacy and security (Malhotra & Singh, 2009). The Digital Literacy Fact Sheet in 2015 stated that computer illiteracy among most of the population is still significantly high, especially in Africa, due to poor or lack of technological infrastructure and reliable power supply, lack of proper laws controlling e-transactions, and a preference for paper money over 'virtual' cash in transactions (Digital Fact Sheet, 2015).

1.2.1 Online banking information system (OBIS)

OBIS is defined as an internet- or web-based system used by customers with expectations of carrying out a variety of transactions (via the internet) such as paying bills, fund transfers, viewing accounts as well as stock trading (Alsajjan and Dennis, 2010). When customers visit a bank's website, the first thing they do is click on a link, which provides them with entry to the OBIS or 'internet branch' (Ombati et al., 2011). Customers can then access websites and their bank accounts once their ID and passwords have been verified, and transactions can be conducted after this (Al-Abdullah et al. 2010). There has been a quick transition from traditional banking to online banking due to the existence of the internet, its low cost, and internet banking solutions. According to Yousafzai (2005), 30% of United States households had access to the internet as well as internet banking services in 2005. This increased to 37% in 2007, 39% in 2010, 60.9% in 2013 (Yousafzai, 2005, Salhieh et al., 2011, Xue et al., 2013), 67.4% in 2016, and 70.4% in 2018 (Statista.com, 2018).

An important factor in online banking is reliability. Banks do not only spend time improving services that are cost saving to them but try to create a reliable relationship between themselves and their customers. This provides customers with the comfort of always making use of available services (Giovanis et al., 2012, Mirabel 2017). Loyalty for banks is important in winning customers, given the high level of competition

in the market (Yiu et al., 2007, Giovanis et al., 2012). This will make customers more comfortable and confident with managing their finances 24-hours, 7-days a week using internet services. Gutu (2014), however, determined that the banks' positions will not change despite spending a higher advertising budget on internet banking.

Traditional financial institutions have been revolutionised by online banking (Xue et al., 2013). It is important for banks to pay attention to online banking service improvement. However, it does not stop at that, as it is also very important for banks to pay attention to their customers; these inventions are provided to improve services for bank customers. Online banking adoption by individuals is extremely significant for the success of this type of banking (online banking).

Prior studies have analysed elements that influence information system acceptance and usage; accessibility is one of the factors (Talla, 2012). However, Talla failed to expand on how accessibility affects online banking acceptance as he focused more on other factors, such as trust.

The first chapter outlines the significance of the factors that enable customers' decisions to adopt electronic services proposed by banks. In the first section of this work, the background of the study and the history of change in Cameroon with regards to banking are explained. The statement of the problem is discussed in the third section followed by the hypothesis, objectives, and research questions in the fourth. The significance of this study is explained in the fifth chapter. The concluding section explains the difference of this study to other and previous studies that have been conducted in and out of Cameroon on the same or similar topics and countries.

1.3 E-banking

Electronic banking in the 1990s was not well-utilised as businesses only used it to advertise or sell their services and products (Wang et al, 2003, 2015). Thornton et al. (2005), while focusing on customer usage of the internet, observed that in the Australian financial industry, many banks and financial institutions have competed since the deregulation was introduced in 1983. Financial institutions have now

developed new strategies to make the most of ICT. In 2007, Rafiu stated that the difficulties in supporting and developing electronic banking have encouraged many banks to invest more in internet banking. The emergence of e-banking has made many banks rethink their ICT strategies in competitive markets. From these results, it was noted that banks are likely to lose customers if they fail to respond to the emerging phenomenon of e-banking and also that branch banking is more costly than e-banking services. The tremendous growth of internet banking in recent years is a perfect indication of consumers' acceptance of this media. It means changes in the way consumers manage their money. Internet banking allows account aggregation. Account aggregation or financial data aggregation allows customers to carry out transactions or organise their finances from a single place. In other words, a customer who owns a personal account, investment account, or savings account can access all three accounts from one secure website by using the internet.

E-banking can be defined as the delivery of retail and small value banking services through the electronic delivery of financial advice, payment of bills electronically, and the provision of other electronic payment of products as well as services like electronic money. This includes both computer and telephone banking and the use of ICT by banks to provide services and manage customers' relations quicker and more satisfactorily (Charity-Commission, 2009).

Electronic banking can also be defined as "the use of technology to communicate instruction and receive information from a financial institution where an account is held. This service includes the system that enabled financial institution customers, individuals or businesses to access accounts, transact business or obtain information on financial products and services through a public and private network" (Prakash & Malik, 2008; 84 in Sanni, 2009). Electronic banking is the availability of information and services by banks to its customers by the use of computers or television (Allen et al., 2001).

Nowadays, approximately two out of fourteen banks and financial institutions in Cameroon are using electronic banking (85%) services rather than the traditional ways of banking while some do not yet have electronic banking services available to their customers (Maurice, 2018). Electronic banking, however, does not provide the direct

interpersonal contact that existed in the traditional way of banking. Consequently, it is important to provide high-quality services to win over customers who are used to the traditional ways of banking. One very important factor in electronic banking has been to understand customers' needs and how to fulfil them with the new banking service. Banks with the most experience and success in using internet channels are beginning to realise that the key elements of success or failure are not just website presence and cost but also the electronic service quality or e-SERVQUAL (Yang, 2001; Zeithaml, et. al., 2002, Green, 2008). A new version of SERQUAL, e-SERVICE QUALITY (e-SQ), has been developed to evaluate services on the internet, defined as the extent to which a website facilitates efficient and effective shopping, purchasing, and delivery (Zeithaml et al., 2002). Courtier and Gilpatric (1999) suggest that financial institutions and banks should review customers' requirements constantly so that they can understand the focus on the customer's real needs that affect their intention to extend their internet banking usage. Zuliarni (2008) confirms this by stating that the key to customer's continual usage of internet banking services is good service quality. Internet banking's constant success is derived from two groups: new customers and recurrent customers. Since it will cost more to attract new customers than to keep current customers, customers' retention is more critical than customer attraction.

The presence of account combination has made it easy for customers to access more than one account from a single access point even if they hold accounts in different banks. With these services, customers can use one account to carry out transactions, pay bills, and more by using their credit or debit accounts which they can access from anywhere in the world, assuming these other banks support account aggregation (Li, 2001; Martz, 2010, Ta et al., 2015). Customers can access account aggregation by using a URL (uniform resource locator), a username, and passwords for all the accounts, internal and external. When a customer successfully logs onto the account they are trying to access, they are transferred to the external account directly from their bank's website and can also access all bank information they have with other banks through account aggregation. This form of banking is less time-consuming and more convenient to use. Martz et al., (2010) and Inegbedion et al., (2018) went further to explain that, with internet banking, customers can access many other services like accessing their banks statements, paying bills, carrying out transactions, keeping an eye on their spending by a click of a button, moving funds from one account and

person to another etc. It is worth noting that account aggregation is also known as financial data aggregation.

People are now able to access their accounts 24/7 for many reasons including applying for loans, mortgages, checking their balances, and other financial transactions (Gerard Tchouassi, 2012). This system of banking allows financial institutions to offer an affordable and straight method of carrying out business, swapping information and selling or buying products and services (Booz, Allen & Hamilton, 1997; Bielski, 2000; DeSourdy, 2001, Gupta & Gupta, 2014). E-banking can be divided into five groups: telephone banking, internet banking, TV-based banking, mobile phone banking, and personal banking (PC) (Gerard Tchouassi, 2012). In the last few years, technological revolutions have made the change towards e-banking possible. In the late 1990s when the clicks-and-bricks euphoria hit, many banks began to view web-based banking as a strategic imperative. Many banks moved towards online banking to reduce transaction cost, use interactive marketing capabilities, facilitate easier integration of services, and other benefits that increase customer lists and profit margins. Due to competition in the banking industry, banks have had to cut costs to make it cheaper for customers to use these services and as a way of attracting more customers. This has therefore led banks to integrate these changes.

In Africa, a large poor and susceptible population are the majority of those who do not use these banking services. With the introduction of internet banking globally, banks can operate in different areas, both at home and abroad. To create a clearer picture of how internet banking has impacted many Cameroonians, banks from Cameroon that have in recent years taken up these new banking methods will be studied. Numerous studies have been completed concerning subjects in the wider context of e-banking with most relating to internet banking advantages, consumers' reliability, and the quality of the service. There has, however, been no research on customers' acceptance of these new systems of banking in Cameroon. This study will unpack the major reason that customers accept or take up electronic banking.

Since the existence of electronic banking, the way of banking has drastically changed. When customers deposit money in their banks, it is then used by banks to grant loans in the form of lending to other customers (Heffernan, 1999; Pikkarainen et al., 2006).

Previous research has shown that customers prefer to save their money in a safe place and do so by depositing it in their bank account, which earns them interest (Chalam & Rao, 2010, Gupta & Gupta, 2014). Banks, on the other hand, provide investment advice to their customers and are engaged in foreign exchange trading and processing of payments. Banks try to provide their customers with reliable services, making their customers feel safe and confident in them.

In Cameroon, most banks find it difficult to bring the unbanked to the banking sector. Most people do not use this modern banking system because of the level of poverty, lack of proof of address, high bank fees, and low-income rates. About 10 million people do not have access to day-to-day online facilities (Talla, 2013). Mobile technology offers banks a fantastic opportunity. Standard Chartered Bank recently introduced a new system whereby bank employees (agents) go out to campaign in the community and convince people to open accounts with them using the agent's phone. They understand that most residents could not open accounts with their banks because they do not have proof of address so Standard Chartered Bank chooses to use identification cards and communicate with their clients through their phone, as most people are more comfortable using their phone.

1.4 Internet banking in developed countries

Internet banking took several years to develop in developed countries. Smith (1999) identified that internet banking was only growing by 2% annually. Only 1.1% of shopping took place on the internet in the late 1990s (Ray, 2001). In the 1990s, many people feared to carry out transactions online because there were still many uncertainties surrounding it. Trailblazing companies like Amazon and eBay helped create awareness because people began to use these companies by having to shop and pay for their products online. By the year 2000, 80% of U.S banks offered e-banking. Customers' usage of e-banking services grew very slowly. For example, Bank of America was the first bank to acquire 2 million e-banking customers and this took them approximately 10 years. There was a substantial cultural change after the Y2K scare. By 2001, the Bank of America had over 3 million online banking customers, which was 20% of its customer base. About 10 years ago, information collected by the office of controllers of the currency banks showed over 69% of banks offering internet

banking services had a rise of over 52% of online shopping. Gartner Group estimated in 2009 that over 47% of United States adults, and 30% in the United Kingdom, said to have used online banking the previous month. These results were drawn after conducting a survey on 3,889 adults in the USA and the UK on the behaviour and attitudes relating to retail payments, banking, and investment services.

The numbers of banking customers in western countries are increasing and online services are being taken advantage of. According to Shacklett (2012), online banking acceptance by customers is caused by internet awareness. The increase in the adoption of electronic banking has led to free internet and home banking classes by most banks, demonstration of bank products to their customers to increase awareness, and low loan cost by banks as another way of promotion.

The worry about security and privacy of personal details is also high in developed countries. Banks now make use of highly encrypted technology and security certification as a way of reassuring many potential customers and buyers of their high level of security protection.

Prior studies (Chalam & Rao, 2010, Gupta & Gupta, 2014) have provided banks with important information on how to run their service in ways that will keep their customers loyal and attract others. For example, with online shopping, poorly designed websites and user interfaces are the primary reasons why 30% of customers turn away from online shopping after their first attempt (Raymond, 2001, Ta et al., 2015). This can also be applied to online banking and banks in general. If banks created their websites so that it is easy to get through and provide extra services such as audio and visual aids, it would make it easier for customers to process their transactions successfully.

There are many benefits for customers who use online banking. These benefits include checking their balances from home, processing transactions online, dialling from home, as well as shopping anywhere and at any time. Online services are available 24/7. For these reasons, there is an increasing rate of internet banking.

1.5 Types of internet banking

Three types of internet banking exist, and they include information, communication, and transaction.

1.5.1 Information

Information is the most basic type of internet banking. It involves banks advertising their products and services online and providing detailed knowledge about them. Most banks provide this standard of information through internet banking. Due to the vulnerability and the need to regularly update websites, suitable controls must be taken to establish and therefore prevent unauthorised changes to the website and database.

1.5.2 Communication

This level of internet banking involves interactions between banks' systems and their customers or the general public. Services at this level include electronic mail, account enquiries, and loan applications. The risk at this level is higher than that of the first level. For this reason, there is a need to have available guides to help prevent, monitor, or alert access to a bank's information or their internal network, unless authorised.

1.5.3 Transaction

This level of internal banking involves customers. This system has the highest level of risk and includes the conclusion of transactions by customers. Such transactions include accessing accounts, paying bills, and transferring funds. For this reason, there needs to be very stringent security.

1.6 Banking system – an overview of Cameroon

In the Economic Monetary Community of Central Africa (CEMAC), Cameroon is listed as the largest country. In 2010, the gross domestic product of Cameroon was projected at US$ 44.327 billion from US$ 10.26 billion in 1960 and its per capita income to be US$ 2,170 (2010). This equals almost half of the general GDP of other regions in the CEMAC zone (Jeune Afrique Economie, 2011). In the last few decades, the economy of Cameroon has grown steadily with a GDP of about 44%, of which up to 19% came from the agricultural and the manufacturing industries each in 2009 (mfw4a, 2011) and 21.3% in agriculture (2017), as reported by the Trading Economics Association.

Before the independence of Cameroon in 1960, foreign banks dominated the banking system in Cameroon. After liberation, foreign financial institutions included French banks, who financed French investments in Cameroon. The available banks at that time included SGBC (Société Générale de Banques du Cameroun), SCB (Societe Camerounaise des Banques), Groupe Société Générale, CLG (Credit Lyonnais Groupe), BICIC (Banque International pour le Commerce et l'industrie du Cameroun), and BIAO.

Several banks from the United States of America were also operating in Cameroon such as the Manhattan Bank, which was known as the Chase Manhattan Bank of Cameroon, the Boston Bank of Cameroon, and even Bank of America. Consequently, the Cameroonian authority began to acquire partial ownership by involving themselves in foreign banks like SGBC BIAO, CLG, and BICIC. This continued until 1987 when there was a financial disaster in Cameroon. This financial disaster caused prices to rise in Cameroon, trade shortages (also known as deficits), and loss of government income and revenues. This altered the growth and health of banks. The degree of change was reliant on whether the institutions involved were domestic or foreign owned.

Cameroon saw the closing of numerous financial organisations, while others changed tenure. Since then, other banks have been established in Cameroon. The body created to control banks, with authority to regulate and issue currencies named "bank

of issue" in Central African countries, is today known as BEAC (Banque de Etats de l'Afrique Centrale. This body has headquarters in Yaoundé and was established in the 1970s (1972 to be specific) to replace the Bank of the State Equatorial Africa and Cameroon. To keep the banks in Cameroon safe, BEAC created another body known as Commission Bancaire de L'Afrique Centrale (COBAC). COBAC was also in charge of other African Countries like Gabon, Congo, Equatorial Guinea, Chad, and the Central African Republic.

Many banks and financial institutions now exist and function in Cameroon. The creation of new banks has added to the existing banks such as Amity Bank, Atlantic Bank, ECOBANK (created in 2011 and available in many other African countries), Afriland bank, SCB, Union Bank of Cameroon, Oceanic Bank, CitiBank and more. Most of these banks have branches in more than one region and some in other African countries. Currently, there are 15 banks with branches scattered disproportionately. For instance, the most represented bank when relating to the number of branches it owns in Cameroon is ECOBANK of Cameroon with 22 branches in Cameroon, and 1,300 in 33 other countries. ECOBANK has over 12 locations in the capital and the economic capital of Cameroon and a few more in other cities and regions. However, they have no branches in the countryside.

Many banking sectors and financial institutions are taking advantage of the internet and providing their consumers with innovations and services to make their banking easier and better. Electronic banking began in the 1970s in Europe (Tizirai, 2011). By 1997, Cameroon banks only made their services available at physical branches but due to electronic banking invention, services are now being made available to customers online and can be accessed at any time and from anywhere in the world. The first e-banking products were introduced in Cameroon in 1977. Electronic services available in Cameroon include ATMs, point of sales (POS) machines, SMS, internet, mobile banking, and telebanking (telephone banking)

In 2009, there were only 46 ATMs throughout Cameroon (Djoumessi, 2009). Presently, ATMs can be found only in the principal cities, where bank branches are located. This contrasts with countries like South Africa, with approximately 18,000 ATMs. This makes Cameroon seem as though it has no ATMs (Douglas, 2009). 13

out of 15 banks in 2010 offered services online (African Report, 2010). Electronic and e-commerce research has been conducted in Cameroon to investigate the problems relating to these services (Nlemba, 2008). Other studies focused on topics like online banking, new technologies, and making use of computers (Mahmoudou, 2010).

Internet banking is still at its early stages in Cameroon. The focus is to spread its existence throughout the country. In 2006 it was as low as 2%, with 3.8% in 2009 and 5.0% in 2012 (Internet world stats, 2013). People can access these e-banking services by use of their mobile phone, accessing the internet, a personal computer, and a secure internet server. A country will not be able to fully access and develop e-banking services if the tools they are using are not up to date or are weak. However, more people are beginning to take up e-banking and abandoning the traditional method of banking.

Internet security remains a significant issue affecting transactions in internet-related businesses. Because the internet is an open network, there are chances of severe security threats with monetary dealings. Internet scams are well-known; many stories published by the media regarding these create uncertainty regarding the use of these services. Numerous measures on the level of security are currently being analysed in Cameroon including the hard and software security methods, however, little has been done to win most customers' trust (Mols, 1999, Hellelaw, 2009). Devices such as mobile phones are being targeted by virus writers, hackers, and text spams in the form of SMS (short message services). According to Tower Group's research in 2010, roughly 200 mobile phone viruses were identified on phones which supported PC-like applications like browsing the web on your phone, checking emails, and IM (instant messaging). This figure is doubling every six months (Blau, 2007, Wetherbe, 2012). Subsequently, interference of services or even data theft can trigger numerous problems for consumers, such as customer dissatisfaction and loss of revenue for mobile operators. Subsequently, banks will also suffer losses. This factor may lead to many banks being cautious when providing mobile banking services. Cameroon has one of the riskiest internet locations, as noted by Mcfee (Defence Web, 2010). McFee is a security company who has researched internet security. Cameroon is on the top end of the internet fraud list, which is partially due to results being listed alphabetically. Cameroon's suffix is 'dot cm' (".cm") which is very similar and often mistaken for

".com". Due to this similarity, people have been left in vulnerable situations by mistaking ".cm" for ".com" hence, leading them into the hands of scammers. People assume they are on a ".com" site when they are actually on a ".cm" site. Offenders can access secret information which in most cases may lead to the spreading of spyware, malicious downloads, and identity theft.

In 2009, Hallelaw reported that several bodies govern the Cameroon banking industries like customs law, international conventions, courts, and ministerial orders. These laws are flexible and can be changed or revised based on the socio-cultural, economic, and political developments within Cameroon. Banking guidelines in Cameroon differ between the different areas.

Many Cameroonian banks focus on serving big enterprises while small and medium enterprises are left to struggle by themselves. However, as of 2009, large enterprises in Cameroon consisted of only 8% of all other enterprises, rising to 10% in 2012 and steadily growing to 15% in 2015. Banks have recently formed new strategies to attract informal sectors and extend into rural areas through various projects (Talla, 2013).

Data gathered by Dermirguccunt and Klapper in 2012 regarding Cameroon's welfare showed that 15% of adults have one or more accounts at a formal financial institution and at least 4% have an outstanding loan from a regulated financial institution, according to the financial institution. 92% of small and medium enterprises (SMEs) were formal financial institutions while about 26% of those have unresolved issues relating to things like loans or credits. In summary, for every 100,000 adults, there are 1.43 commercial bank offices and 1.4 ATMs available for use.

Despite global ICT growth, Cameroonian customers still carry out most of their banking transactions by traditional methods. The impact of electronic banking on consumers is therefore an important area to be addressed in this research. This research will seek the reasons consumers stick to the traditional methods of banking and how these banking services could be made more convenient for both users and those who do not make use of e-banking (non-users). Through this, more insight into customers' acceptance of these services would be gained.

1.7 Statement of the problem

With current developments, the internet has become very popular and is used by almost everyone for various reasons. Manufacturers use the internet to market and advertise as well as target their customers and provide them with the services they need. Banks use the internet to provide services for their customers for their banking advantage. Many say the rate of scamming has increased since the introduction of the internet. Banks are working on their security services to satisfy their customers and avoid fraud. Dewan, Jing and Seidmann (2015) explain that the main services provided by e-banks are money transfers from one account to the another, bill payments, account balance checks, and bank statements. Other services provided by e-banking include, but is not limited to loans provisions, brokering, trading of shares, service promotions, and many other financial services (Djoumessi, 2009, Dewan et at., 2015).

Some Cameroonian banks have expanded their businesses to more countries e.g. Commercial Banks and Afriland First Bank. Internationally, electronic banking has become a focal point because it reduces the cost of carrying out transactions and allows them at a faster rate. E-banking attracts new customers and creates new markets as well as enhancing the qualities of services provided. Electronic banking in Cameroon is still at its early stages even though it was first introduced almost 21 years ago. There is a vague understanding of the factors that influence consumers to take up electronic banking. As there has been little or no study in this area in Cameroon, there is a need for a study such as this. Understanding the factors that determine whether consumers take up e-banking, and if they continue using this system of banking is important when considering other external factors that might be reasons for adoption (positive or negative).

Padachi, Rojid, and Seetanah (2007) argue that customers who long for psychological and social benefits create intimate relationships with banks. These customers yearn for face-to-face communications rather than the relationship with the virtual world of faceless internet banking. Because electronic banking does not need to have a face-to-face relationship, it makes it harder for banks to create relationships with their customers. This form of banking (internet banking) is a better alternative to clients who

create relationships with banks solely on convenience (Padachi, Rojid, & Seetanah, 2007, Ombati et al., 2011).

Even though introduced more than 21 years ago, internet banking in Cameroon is still not well known. In Cameroon, the understanding of this service is limited, which explains why acceptance of electronic banking is low. Very little research has been done in Cameroon to examine the factors that enable electronic banking acceptance (Dobdinga, 2012; Talla, 2013). For this reason, there is a need to carry out more research to find out the factors that will enable Cameroonians to accept and adopt internet banking. Investigating the demographical characteristics, social characteristics, and customers' perceptions will enable banks to develop solutions and plans that will help them to entice more customers to use their internet banking services.

Prior studies conducted in Cameroon showed that many customers avoided taking up internet banking due to the fees involved (Cletus, 2012). ECOBANK charges its customers a minimum fee of 50, 000FCFA (an equivalent of £55) to open an account. This is the average monthly salary of many middle-class Cameroonians, which is a clear disadvantage for most customers to take up this service. However, cost is not the main reason for the low rate of electronic banking acceptance. If more research is conducted to help banks improve their advertisement methods, these fees could be reduced, attracting more Cameroonians to take up these services.

Dobdinga (2012) states that the lack of home, work and digital addresses by most Cameroonians is a factor. Most regions in Cameroon do not have marked out postage codes, as in most developed countries. Cameroonians still use post office boxes, which are not acceptable by banks for internet banking registration. This needs to be revised so that internet banking can be made easier for customers.

1.8 Research contribution

The researcher expects to make numerous inputs into the marketing literature and the financial industry of baking in Cameroon. One of the first key contributions of this thesis

is the recognition of the factors that influence consumers' acceptance of electronic banking in Cameroon which this research has made possible. The thesis identifies the significant factors that influence Cameroonians to take up e-banking. Likewise, the study determines the impact of demographic characteristics on electronic banking. Such evidence proposes an understanding of the consumer choice on electronic banking and allows banks to tactically plan their products and service offerings.

The second contribution of this research is the development of the conceptual model. This model predicts and explains the reasons for customers' acceptance and adoption of online banking. It also contributes more recent data on the banking system in Cameroon. Another contribution is that this research provides information on the extent to which e-banking is known, recognised, and accepted in Cameroon while providing developed guidelines for bank management on how to maximise the rate of adoption of internet banking.

With all the obstacles facing banks and customers in Cameroon such as low incomes and high bank fees, banks must consider interested customers who fall under these categories and provide them with a cheaper and more affordable banking service. It is thus important for this research to investigate how banks can interest customers with low incomes to use internet banking as an option, and not only for the rich and high-income earners.

Lastly, convenience is a very important factor when it comes to e-banking adoption. Past research in Cameroon listed convenience as one of the factors that will make Cameroonians use e-banking (Talla, 2013). What his research failed to explain, however, is that Cameroon is still at the early stages of e-banking adoption and implementation. His research noted convenience as a factor Cameroonians consider before adopting e-banking but presented no evidence in support thereof. This research lists the factors that enable e-banking adoption in Cameroon while investigating whether convenience really affects adoption at the level at which Cameroon is with e-banking.

1.9 Motivation for this research

Several reasons motivated the researcher to carry out this study, which are as follows:

Cameroon is one of the richest and stable countries in central West Africa. However, its banking system is mostly out-dated. Apart from that, not many Cameroonians use the new banking features, which is a cause for concern.

Secondly, most developed countries have current studies of their banking system like Hussein & Issa, (2016), Joseph et al. (2017). However, very few studies have been completed in Cameroon. Knowing what role the Cameroonian government plays in the banking sector is important in order to determine improvements and encouragements. The literature on electronic banking in Africa and Cameroon shows how much little research has been conducted. Hence, this calls for a more extended study in this area.

1.10 Importance of the research

There is a need for developing countries to understand the rate of technology development and acceptance. This information is important to banks, managers, the government, and providers. Some problems, which have in the past been identified as causing slow acceptance, include information technology adoption, lack of finance, inadequate motivation (Cletus, 2012), and convenience (Talla, 2013). Other general factors include hard government policies (Awung et al., 2011), lack of infrastructure and knowledge, and instability in certain parts of the country (Adenisa, 2009, Reddy & Raju, 2016).

1.11 Research aim and objectives of the study

The results of the current study are anticipated to add to existing materials on the acceptance of new technologies and internet banking in Cameroon.

1.11.1 Aim

This research aims at establishing a model that explores the major factors responsible for e-banking acceptance and adoption in Cameroon and its implications. It is based on the respondents' perceptions of the various e-banking services, and determines whether convenience is the number one factor that encourages people to take up online banking, as Talla (2013) listed in his study.

There are several reasons why this research is important. Firstly, this research is the first of its kind to be conducted in the regions of Douala, Yaoundé, and Bamenda in Cameroon.

Secondly, when it comes to online banking research, there is a large gap in the relevant literature; the objectives of this research run to close this gap.

1.11.2 Research objectives

The main objectives are structured to determine how electronic banking services such as mobile banking, e-statements, telebanking, online banking and ATMs attract consumers' acceptance, continuous usage, or termination of e-banking usage. The research objectives, therefore, are:

1. To determine how users and non-users perceive electronic banking and evaluate factors that influence Cameroonians to take up electronic banking.
2. To develop a model/framework on the stages that lead to online banking acceptance in Cameroon.
3. To develop a model linking e-banking acceptance to Cameroonian customers.

1.12 Research Hypotheses

The hypotheses guiding the research has been summarised in Table 1-1 below. These are discussed in more detail with analyses in the subsequent chapters of the research.

H	Hypotheses
H1	Demographic characteristics have a positive influence on customer acceptance.
H1a	Gender does not have a positive influence on customer acceptance of internet banking.
H1b	Age has a positive influence on customer acceptance
H1c	Education has a positive influence on customer acceptance.
H1d	Occupation has a positive influence on customer acceptance of internet banking.
H1e	Income has a positive influence on customer acceptance of internet banking.
H2	Perceived ease of use and service quality have a significantly positive influence on customers' ability to accept e-banking.
H3	Perceived trust has a positive effect on customers' acceptance.
H4	Perceived security and privacy have positive influences on customers' abilities to accept e-banking.
H5	Perceived accessibility exerts a positive effect on customers' acceptance of e-banking.
H6	Convenience does **not** positively influence customers' acceptance of e-banking.
H7	Customers' satisfaction positively influences customer acceptance.

Table 1:1 Research Hypothesis

1.13 Methodology

This research makes use of quantitative data collection method mainly using the survey approach. This approach helps to gather data on internet banking practices by proposed users and non-users. Primary and secondary research methods are also used for better understanding and data collection. An outline of how the questionnaires are designed, translated, and negotiated to enter specific banks' samples, and ethical considerations are provided. The population, the sample size, collection method, and data analysis methods are also highlighted. Analysis of collected data was conducted using the SPSS statistical package as well as graphs and charts. Lastly, the problems encountered in the course of carrying out this research are all well laid out and discussed.

1.14 Significance of the study

Electronic banking is thought to have started in the early 1970s. Europe is still leading the online banking technology and usage in the world. E-banking has become an added feature in the banking sector. Globally, banks are re-organising their business policies to benefit from new business opportunities presented by e-banking (Wada & Odulaja, 2012). Online banking or internet banking provides customers with opportunities to carry out their transactions by using their banks' secure websites. Clients can easily check their account balances every day by simply visiting their banks' websites. There has been much boost for financial institutions with more opportunities being created since the existence of internet banking. The many new opportunities from internet banking have led to much competition in the banking market (Suganthil, Balachander & Balachandran, 2005).

Talla (2013), when mentioning why people take up internet banking, failed to show the major factors Cameroonians consider before adopting their e-banking services. Rather, he focused his research on financial factors, social influences, and on the relationships between demographic factors as the reasons why people chose to adopt internet banking. This research extends Talla's model and narrows it down to the major

factors that enable Cameroonians to accept these new ways of banking while giving up their traditional ways of banking. The research also provides detailed information on the e-banking system in Cameroon in order to prove that these factors may enable acceptance; however, there is still much hesitation on which the bank can focus. The study focuses on one of Talla's factors, convenience.

Cameroon was selected for this research because data is easily accessible from banks and because Cameroon is the largest financial sector on the CEMAC region of Africa. The economic environment of Cameroon is parallel to other African countries and, therefore, results from this research paper will also be relevant to other CEMAC countries to enable an increase in e-banking acceptance. Furthermore, most studies relating to electronic banking systems that have been conducted in Africa mostly concentrated on the South and Eastern parts of Africa, and not Central West Africa (Emma, 2009; Gardache, 2010). There has been very little research in this region and past research was more focused on topics such as conditions and laws relating to banking loans (Ngafi, 2006; Djoumessi, 2009; Mahmoudou, 2010; Halle, 2011, Thaichon et al., 2015). Other studies focused on the extension of the TAM model and financial and social factors being the main reason why Cameroonians took up electronic banking (Cletus, 2012; Talla 2013).

This research aims at extending these previous models by providing factors that influence customers to accept and adopt electronic banking in Cameroon. In addition, suggestions are made to help banks identify the areas where they are lacking in helping their customers and the general population to welcome e-banking. Findings from this research will benefit banks by providing them with online banking information to help them regulate and improve their services, while making available important materials for all banking industries in Cameroon, as well as the whole of West Africa.

Academically, it adds to the existing literature by providing more insight into what influences an effective Cameroonian internet banking acceptance. The practical significance of this study is that it will help banks to refine their market strategies and enhance their electronic banking services. This research could also help bank managers to manipulate their most important factors accordingly to improve customer understanding and customer acceptance of internet banking.

1.15 The Structure of the Thesis

The research is divided into six (6) chapters:

Chapter 1 Introduction

This chapter discusses the research aims and objectives. The problems of this research are outlined and the important questions which this research needs to answer posed. The background and the structure of this thesis are also discussed in this chapter.

Chapter 2 A review of the literature on e-banking, telephone banking, consumer behaviour, and quality and customer satisfaction

Chapter two reviews the relevant literature and discusses in detail the adoption of electronic banking, forms of electronic banking service delivery channels, electronic banking adoption, theories, reviews TAM studies, a conception of internet banking, and factors that enable e-banking acceptance. The chapter also reviews the literature on consumer behaviour, and quality and customer satisfaction

Chapter 3 The Conceptual framework

Chapter three presents a conceptual framework for this research. It opens with an introduction, demographic characteristics, and variables, followed by the research hypotheses.

Chapter 4: Research Methodology and Design

This is the main methodology chapter for the research. It explains the research methodology used, the philosophies, paradigms and research approach adopted for the thesis. Primary and secondary research, as well as the sampling strategy, data analysis, and research limitations have all been discussed in the chapter.

Chapter 5: Findings and Analysis

Chapter five discusses the analysis of the findings during the field work and the empirical research findings. The hypotheses guiding the research have been tested

here and the results discussed. Also, response rates and future considerations of using internet banking by users and non-users have been discussed in the chapter.

Chapter 6: Conclusion, Contributions, Implications, and Recommendations

This chapter draws conclusions on the research objectives. It explains how the research questions were answered, how thew objectives of the research were achieved, and explains the contributions and implications of the research. The recommendations, final thoughts, and the need for future research have all been presented in this chapter.

1.16 Conclusion

This introductory chapter sets the tone of the whole research. It discusses the research aims and objectives, background to the study and the significance of the study. The research questions and hypotheses guiding the research have also been discussed in the chapter. The chapter closes with the structure of the thesis.

Chapter 2. A REVIEW OF THE LITERATURE ON E-BANKING, TELEPHONE BANKING, CONSUMER BEHAVIOUR, QUALITY AND CUSTOMER SATISFACTION

2.1 Introduction

This chapter reviews the available literature on e-banking, telephone banking, customer behaviour, and quality and customer satisfaction.

At the dawn of the 21st era, Africa lagged behind other continents in the use of contemporary ICT in both the domestic and international trade actions. Online banking is a fairly new technology; this form of banking has become more popular during the last decades due to the speedy and widespread implementation of new forms of technologies. A definition of online banking is a system whereby a person can carry out several banking activities by use of the internet in the comfort of his or her own home (Investor words, 2008), by making use of services that permit electronic banking transactions (Bitpipe, 2008). On the 6 October 1995 in the United States, online banking was adopted for the first time. The Presidential Savings Bank (PBS) at that time had provided its clients with online banking options that were quite different from the traditional way of banking (PSB, 2008). According to current estimates conducted by Pew Research, the practice of online banking has grown speedily. In the United States, more than fifty million adults conduct their banking online (Sullivan, 2009).

This chapter discusses several internet banking acceptance models and as well as their outcomes or findings by different academics. The different types of internet banking services are also discussed in this chapter. More detailed information relating to e-banking adoption is provided based on previous research in both the developed and developing countries.

2.2 Forms of e-banking service delivery channels

Electronic banking makes use of various instruments, which can help in differentiating the services needed and used. These instruments include telephone connections, personal computers, means of payments such as bank cards and self-service ones e.g. ATMs. Below are the various forms of ICT in the banking sector:

2.2.1 Automated Teller Machines (ATMs)

A definition of ATM is, "an ATM combines a computer terminal, database system and cash vault in one unit, permitting customers to enter into the bank's bookkeeping system with a plastic card by dialling a special code number into the computer terminal linked to the bank's computerised records 24 hours a day" (Abor from Rose, 1999). Once access is gained, customers can then access many banking services. ATMs are typically positioned outside of banks' branches and at other locations such as shopping centres, airports, and places far away from the main bank of the customers. ATMs were initiated originally to function as cash supply machines.

The first ATM was placed in London in the year 1967 and accepted slips of paper with the mildly radioactive substance, Carbon 14, printed in a particular pattern, as opposed to today's plastic cards with a magnetic strip and embedded microchip. Today in Australia, many Australians benefit from a universal ATM system whereby transactions can be made from any Australian ATM regardless of which institution owns the ATM. Some institutions levy fees on transactions made from their ATMs while financial institutions typically do not charge fees to cardholders for use of their own ATMs. Because of developments in technology, ATMs now offer an extensive variety of services, such as making deposits, transferring funds between numerous accounts, and payment of bills (Abou Ali, 2016). Banks are now using this electronic banking device as a competitive advantage and selling point to customers.

Banks gain higher productivity levels during banking hours by making use of automated as well as human tellers. ATMs help avoid the excess queuing in banks by customers, meaning they save time by making use of these machines and providing them with excess time to carry out other productive activities outside of banking hours. A more cost-efficient way by which customers achieve productivity is by making use of ATMs. We can expect at least over 6,400 transactions being carried out per month compared to 4,300 per month by human tellers according to Rose (1999). Additionally, people can still carry out their regular banking activities outside of banking hours by using ATMs.

2.2.2 Automated telephone system

This type of banking requires a telephone linked to a tone dial to gain access. Users can use a menu designed with buttons to assist in the easy navigation of the system. The list of options of this service tree is typically planned to be simple to avoid spending too much time using a particular service. More information is usually directed to the client via email, which is more cost-effective.

One disadvantage of this service is that a problem may arise, and a customer will not be able to resolve it because the problem is not found on the menu. In cases like these, it is suitable to link to an automated telephone system with a banker who can resolve the issue. Communicating by means of this system securely can be done in two basic ways:

Firstly, end-to-end security entails a verbal code used to create a communication chain. This method, though very secure, is expensive which is why the army and the public administration mostly use it.

Secondly, so-called access rights are used whereby authorisation to communicate with the bank at the beginning is documented by the client. Through passive operations, the account number (which is the client's personal number) and its PIN are often used.

When opening an account, the client is expected to select from a variety of keywords, which are stored in the information system by an operator. When the client calls the

bank any time thereafter, they are supposed to provide a specific letter from the word they created before they can gain access. This word is generated by the system during the call. Ones the client provides the letters or words generated, it is then rewritten on the information system terminal by the operator, which is then either accepted or rejected. The full keywords are not visible nor will ever be visible to the operator.

2.2.3 Telephone banking

“Telephone banking (telebanking) can be defined as a form of virtual or remote banking, which is essentially the delivery of branch financial services via telecommunication devices where the bank customers can perform retail banking transactions by dialling a touch-tone telephone or mobile communication unit, which is connected to an automated system of the banks by utilising Automated Voice Response (AVR) technology” (Balachandher et al, 2001).

Telephone banking is defined as a service administered by monetary institutions that allow their customers to carry out dealings over the telephone (Vila et al., 2013). It was the first banking service that used classic telephone lines for communication dates to the 1960s and 1970s. By the 20th century, many other services had been introduced and phone banking became one of the most used services. Banks leveraged the opportunity of these developments and began communication with their clients through Short Message Service (SMS) messages. Global System for Mobile Communications (GSM) became a natural component of electronic banking. Telephone connections used in electronic banking can be prorated into an Applicant Tracking System (ATS) or client advisor; in this case, banking on the phone, and banking by use of mobile services e.g. Wireless Application Protocol (WAP), SMS banking, or a GSM Subscriber Identification Model (SIM) Toolkit.

Telebanking results in several advantages for both banks and customers (Leow, 1999). For banks, the costs of providing telephone-based services are considerably lower than services provided at bank branches. Productivity is obtained every time an ATM is used; the only exception when there is no productivity is in the case where cash is distributed. Even after working hours when banks are closed, there is still continual productivity 24 hours a day as ATMs deliver retail banking to the general

public. Customers gain retail-banking services from the comfort of their own homes or offices rather than going into bank branches. This is more convenient and saves customers' times.

One of the advantages of using this service is that people will only require a telephone to bank. Banks have assistants working around the clock ready to help their customers. Banks employ client advisors and pay their salaries, hence an increase in cost for the service. To reduce such extra cost, technical telephone systems have been put in place, which are automated to help customers and will transfer them to a human helper if a customer is not satisfied.

2.2.4 Phone banking

Phone banking involves banking services provided by classic phone lines. Bank clients gain the services they need just by dialling a specific number on their phone. The client's identity is verified by contractually agreed terms before any requested banking service information is provided. By using these banking services, clients can acquire information regarding functional and unresponsive or non-functional banking products (Davis, 1989): However, a client can also use the banks' system to pay bills or request any kind of assistance they require, such as setting or cancelling a direct debit, making payments to orders and more. In cases like this, a fax linked to the telephone will act as a channel for communication output.

The client advisor can provide information to the client after thorough verification that they are communicating with an authorised person and can provide both passive and active services as well as offer further banking products. Phones offer 'any day, anytime, anywhere' entry to banking (Abou Ali, 2016). Phones are now one of the most common means by which people access their online banking accounts (Suoranta & Mattila 2003; Gu, Lee & Suh 2009, Wang, 2015). Australia is rated as a top country in mobile phone ownership in the world (GOA, 2011). This service requires no additional system to function and like telephone banking, banks have available phone centres with bank assistance available 24 hours and 7 days a week.

2.2.5 Personal computer banking

Personal computer (PC) banking permits the bank's customers to enter information about their accounts through an exclusive network. They gain access through software installed on their personal computers. Once access is granted, they can carry out multiple retail banking activities. There has been an increase in the use of personal computers due to increasing computer literacy (Abor, 2005). This positively supports the growth of PC banking which virtually creates a bank office in the customers' homes or offices and offers 24 hour and seven days a week service.

2.2.6 Internet banking

Internet banking gives access and authority to customers so they can use their online accounts by using their banks' websites to carry out required transactions only after going through a series of security barriers put in place by these banks (Essinger, 1999). Online banking involves the same traditional banking, but over the internet.

Internet banking has several benefits and advantages to banks and their clients. One of the most important advantages includes the fact that it is cheap and, therefore, cost-saving, time-saving, achieving new segments of the society, effective, improves the bank's statutes, and results in better customer service and client satisfaction (Alsjjan & Dennis, 2010).

Banks try to make their accounts as secure as possible to avoid scams and hacks (Phadeed, 2017). They advise their customers to check their web browsers for 'https' and emphasise that web pages without the 's' after http are fake and should be avoided as it is not of the bank. This helps clients identify the web pages that are secure for them to do their personal transactions.

Banks have established systems that the customers can use from their browsers to connect to the banks directly. To use these systems, customers need to be connected to the internet on their browsers through software to access the websites of their financial institutions (Richard & Kane, 2000, Wetherbe, 2012). Electronic banking, also known as an Electronic Fund Transfer (EFT), according to the Federal Trade Commission (FTC) and the Fact to Consumers (2006), can be defined as making use

of computers and electronic technologies as an alternative for checks and other paper transactions. EFT makes use of devices like cards or codes which enables you or anyone authorised by you to access your account.

Internet banking provides more flexibility and convenience to customers and full control over their banking by using the virtual services provided (Abou Ali, 2016). Service delivery can be defined as transactional (conducting retail banking) and informational (informing customers on bank's products, etc.). Internet banking is cost-effective, timesaving, yields higher productivity, eliminates the problems of distance and time, and banks can serve their clients from all over the world from a single location.

This banking service can be used in the office, at home, and at a cybercafé, although the latter is not recommended for security reasons. A user will only need an internet browser such as Microsoft Explorer (MS Explorer) to use this type of banking. However, users mostly have an identification code to use this service. Codes like this can be provided to the user by post or by visiting the bank in person. Banks provide security for use by making use of encryption, token, or verification mechanisms like generating random non-repetitive passwords that clients need to type in to gain access before purchases made online can be confirmed. Security features protect this token, which works only when a client types in a secret four-digit PIN code. In cases where the PIN is entered wrongly three times, the token blocks it and can be unlocked when the client calls their bank. In other cases, if there is no activity for more than 60 seconds, the token will then switch itself off automatically and a PIN will be requested every time it is switched on (Abou Ali, 2016).

2.2.7 Mail banking

The possibility of communicating with banks by use of electronic services is made possible by mail banking, electronic mails, or e-mails. Banks can make transaction statements for their customers available in just minutes and avoid spending on posting out these statements to individual addresses. E-mail is not used for more complicated procedures and personal information cannot be provided by this service.

2.2.8 Branch networking

Networking of branches, inter-connection, and computerisation of stand-alone bank branches geographically by linking them into a single and more combined system in the form of an Enterprise Network (EN) or Wide Area Network (WAN) to create and share confirmed customer information or records (Abor, 2005).

This form of banking provides faster inter-branch transactions because other factors such as time and distance are not considered. Hence, there is an increase in productivity per time period. Additionally, customers from various branches can be served through one system. This division of labour among bank branches leads to an increase in productivity (James, 2012). Because the time it takes customers to travel into banks has been reduced, they are then left with more time for productive activities.

2.2.9 Automated telephone system

This form of banking involves an interaction between a customer and a machine. This is an interactive voice response system and does not involve any human input other than the caller and the machine. A telephone, which is connected to tone dialling, is required for this kind of service. An automated telephone system works on a menu through which clients can move around using buttons designed to be simple. The service is designed to be simple and easy so that customers do not spend too much time when choosing the services, they need. More information is usually sent to the client via fax or by email, which is more cost-effective.

One disadvantage of this service is that a problem can arise, and a customer will not be able to resolve it because the problem is not found on the menu. In cases like this, an automated telephone system is then connected with a telephone banker to help solve the issue. There are two ways to have a secure service for this system: end-to-end security and ‘access right’. End-to-end security is very costly to use and it is mostly used by the army or government organisations and involves having a more secure communication by use of verbal codes, while access-right needs the customers to present a full authorisations to show that they are authorised to communicate with their banks at the start before contact or communication can be made.

Clients' personal numbers (e.g. account number) and PINs are often used for passive operations. This system is activated the following way: when a client opens an account, they select several keywords (code), which are then stored by an operator in the information system. The next stage of authorisation includes customers receiving a call during which they are expected to provide some letters from the code previously generated. The operator then enters this code into their systems at this stage; it can be accepted (confirmed) or rejected (refused) based on whether they match. The operator is not able to make any changes at this stage and not even able to see the full letters in the code the customers had created. The customers are granted access when the code matches, and access is denied if the code provided does not match. The clients have options to reactivate their codes to gain access or provide other information to gain access.

2.3 Adoption of electronic banking

According to Doyle (2009) and Aghazadeh (2016), customers are invariably the best source of ideas. Innovation has commercial value only if it meets the needs of customers better than the current products. The most valuable sources are the innovative customers who are the individuals at the front line of creating new ideas and applying them or buying new products. These types of customers always look ahead and can spot problems and opportunities before typical buyers can. Rogers (1995) names this process 'adoption process' and lists its stages (five stages in total).

The five stages are as follows:

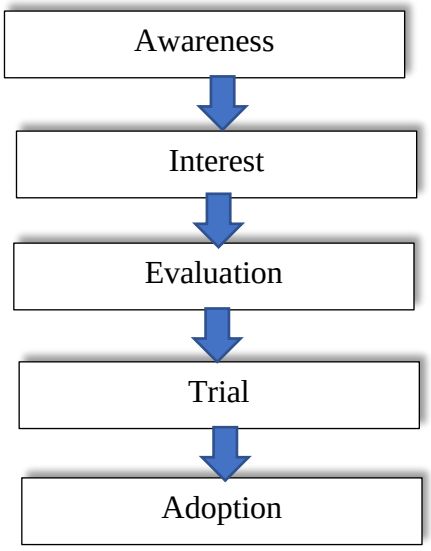


Figure 2.1: Roger's theory of adoption (1995), Ray (2006).

2.3.1 Awareness:

The first stage is an exposure of the individual to the innovation; customers at this stage still do not have enough information to make up their minds whether to take up electronic banking or not. There is still a lack of information that is needed by customers to decide. Banks at this stage are supposed to have as much information as possible to provide for these customers.

2.3.2 Interest:

At this stage, the individual becomes interested in the new idea and seeks more information about it. Financial institutions at this point provide their customers with important information and answer any questions to help these customers with a quicker decision-making process.

2.3.3 Evaluation:

An innovation at this stage is analysed by an individual mentally by working out the conditions surrounding it before deciding whether to try it. The mental analyses done by an individual focus mostly on future anticipations. It is, therefore, important for banks to provide enough information as possible that will assist their customers to make up their minds.

2.3.4 Trial:

The individual makes full use of innovation. Some individuals at this stage may still have doubts about taking up online banking, but they will consider trying it out while considering that there is no harm in trying.

2.3.5 Adoption:

An individual makes up their mind to use the innovation. If enough information is provided to help the customers decide, the outcome will be positive and will involve them taking up online banking and dropping the old and traditional methods of banking.

This theory of adoption can be found across a range of different academic research. The study suggests that many reasons can cause customers to accept and adopt electronic banking technologies and some of these factors are based on the customers' character, such as their needs and wants. Customers are more likely to accept and adopt new products if these products satisfy their wants and needs.

2.4 Theory of diffusion of innovation

Rogers (1995, 2003) originally stood by the above five stages in his work; but later, he updated the diffusion of innovation thereby changing the terminology of the five stages. He listed them as knowledge, persuasion, decision, implementation, and confirmation. In his description, he said, "innovation decision process was an information-seeking and information-processing activity, where an individual was motivated to reduce uncertainty about the advantages and disadvantages of an innovation" (Rogers, 1995, 2003).

He explained that this innovation could better explain why users adopt new technologies, "the process by which an innovation is communicated by the use of certain channels over a period of time by the members of a social society" (Rogers, 1995, 2003). Another definition he gave for innovation is "an idea, object or practice that is perceived as new by other units of adoption or by an individual". According to him, the innovation-decision process involving the five stages (knowledge, persuasion, decision, implementation, and confirmation) typically follows each other.

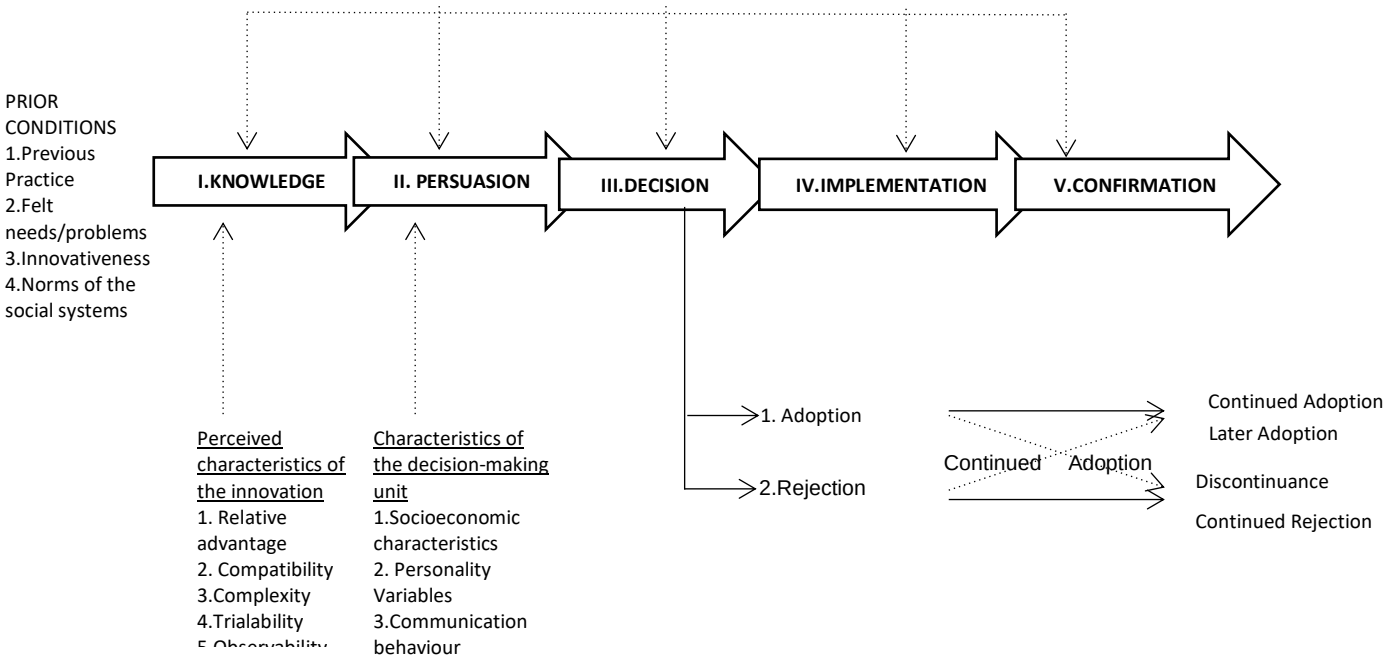


Figure 2.2 Steps in the adoption-diffusion process (Rogers, 1962, 1995, 2003).

2.4.1 Knowledge

This process starts with knowledge. At this stage, an individual learns about the existence of innovation and seeks information about the innovation. They ask questions like “what?”, “how?”, and “why?” There is an attempt by the individual to establish what the innovation is and how or why it works.

2.4.2 Persuasion

This step arises when an individual has an attitude towards innovation (negative or positive) but forming a favourable or unfavourable attitude towards an innovation may lead to a direct or indirect adoption or rejection. The individual shapes his or her point of view after knowing about the innovation. Persuasion is the next step after the knowledge stage.

2.4.3 Decision

At this stage of innovation, the decision stage, the individual decides whether to adopt the innovation. Adoption here means making use of an innovation while rejection means not making use of an innovation. Rejection can happen at any or every stage of the innovation process.

2.4.4 Implementation

An innovation is put into practice at this stage, which is the implementation stage. Innovation, however, brings the newness in which some degree of uncertainty is involved in diffusion. One outstanding problem at this stage is doubt about the consequences of the innovation. Technical assistance may be important at this point because the implementer may need it to be able to reduce the level of uncertainty.

2.4.5 Confirmation

At this stage, the innovation-decision is complete. The individual is in search of support regarding the decision made. Decisions made at this stage can be reversed in cases where there has been exposure to conflicting messages about innovation. Individuals, however, stay away from such messages and instead seek supportive messages that confirm the decision. Here, attitudes become more crucial. Later adoption and discontinuance may happen at this stage, but this will be based on what an individual think of the innovation and his or her attitude towards it (Rogers, 1983, 2003).

According to the perceived attribute theory (Oliveira & Martins, 2010), potential adoptions assess innovations based on innovation attributes such as relative advantage, compatibility, complexity, trialability, and observability.

2.5.1 Relative advantage:

Relative advantage is the level to which consumers observe a new product or service as being distinctive from or better than its substitutes. This is an important factor when deciding on which innovation can be adopted. In electronic banking, relative advantageous factors include time saving, money, and convenience (Snel, 2009). This is a significant factor that helps in the adoption of e-banking (Gerrard & Cunningham, 2007). Timesaving can motivate customers to use e-banking because customers can save time by making use of the services provided by banks at any time and from anywhere in the world rather than having to go into their bank branches in person. Research done on online banking users indicated that 79% of people considered convenience as being a significant factor to individuals when they are trying to decide on using online banking, while time saving follows with 71% (Fox, 2013).

Acceptance can be linked to relative advantage as the adoption of e-banking increases when banks believe that innovation can increase their performances (Doughfous & Toufaily, 2007). A study conducted in Malaysia on 100 customers showed that the most important factor in adoption was relative advantage, then compatibility followed by complexity. By the responses, we see that the respondents put conventional banking below relative advantage (Marhana et al., 2012).

2.5.2 Compatibility:

Compatibility can be defined as the extent to which a new product or service is consistent with consumers' needs, beliefs, values, experiences, and habits. When innovation is attuned with an individual's job responsibilities, there it is a higher chance it will be adopted (Tornatzky & Klein, 2006). It is important to consider how a technology fits into a consumers' daily banking and how they manage their finances. Many Cameroonians use their mobile phones or landlines over any other form of technology. Banks, therefore, can provide electronic banking services to customers that are accessible on their mobile phones such as telephone banking, banking apps, mobile banking, and through banking applications.

The compatibility of online banking is assisting many individuals to have more control over their finances and showing changes in the patterns of cash withdrawals and money management as a whole (Beer, 2006). There is a higher chance of adoption when responsibilities and the system values are compatible with an individual's job.

2.5.3 Complexity:

Complexity can be defined as an extent to which consumers perceive an innovation as difficult to understand or use. More technical skills and a great deal of operational and implementation efforts are needed to increase the chances of adoption of an innovation that is very complex (Dickerson & Gentry, 2007). Rogers (2003) explained that for an innovation to be described as complex the members involved would already have had a perception of a social system and declared it to be negative, which then affected adoption. For consumers who do not have previous computer experiences, or for those who believe that electronic banking is difficult to use, adoption of these

innovations may be hindered. Banks at this point will gain more electronic banking customers by making their online banking services easy to access, understand, and use.

It is easier to adopt innovations that are easy to use (Marhana et al., 2012)., Complex innovations, therefore, take longer to be adopted than less complex innovations which determine how slow diffusion will be. In Malaysia for example, internet banking adoption is greatly affected by complexity (Mohd-Suki, 2010).

2.5.4 Observability:

Observability refers to when innovation is visible and communicable to the consumer. Observability of an innovation is related to the perception of a member's social system. A positive perception will, therefore, lead to adoption. Seeing an ATM in the streets, for example, makes this type of technology more observable than telephone banking which is done from the inside of one's home (Kolodinsky et al., 2009). Many banks provide ATMs outside their brick branches, which encourages more customers as they have access to managing their finances 24 hours a day, 7 days a week, and 365 days a year. Cameroonian banks have installed ATMs outside their brick locations, which has helped reduce the queues at the counters in the bank branches to a certain extent.

2.5.5 Trialability:

Ram (1983) introduced this in his model of resistance and stated that before purchasing or adopting a product, it should be tried. Trialability can be defined as the ability of consumers to use innovation and evaluate its benefits. Trialability can decrease the uncertainty of new ideas, which is linked to the rate of adoption. In the case of electronic banking, according to Wu (2011), consumers affect the trialability of the innovation and consumers who must supply a countless of personal information before they are able to use the innovation. Trialability is a very important step that has been skipped by most banks in Cameroon. People are not given the opportunity to try new services before deciding whether they wish to adopt them or not. Innovations that allow customers to test them at the customer's own condition (high trialability) are

more likely to be adopted than innovations with no trialability (Rogers, 1995). All the above-mentioned can affect innovation.

2.6 The theoretical framework

Most studies in the domain of internet banking acceptance were based on one or more of the three following models: 1) the theory of planned behaviour (TPB), 2) the theory of reasoned action (TRA), and 3) the technology acceptance model (TAM). These theories discuss the variables affecting attitude, intention, and actual behaviour. It is, therefore, important to demonstrate these theories in this study to help ease the understanding of acceptance as an intentional behaviour. Figure 2.3 below shows an illustration of the theory of diffusion of innovation.

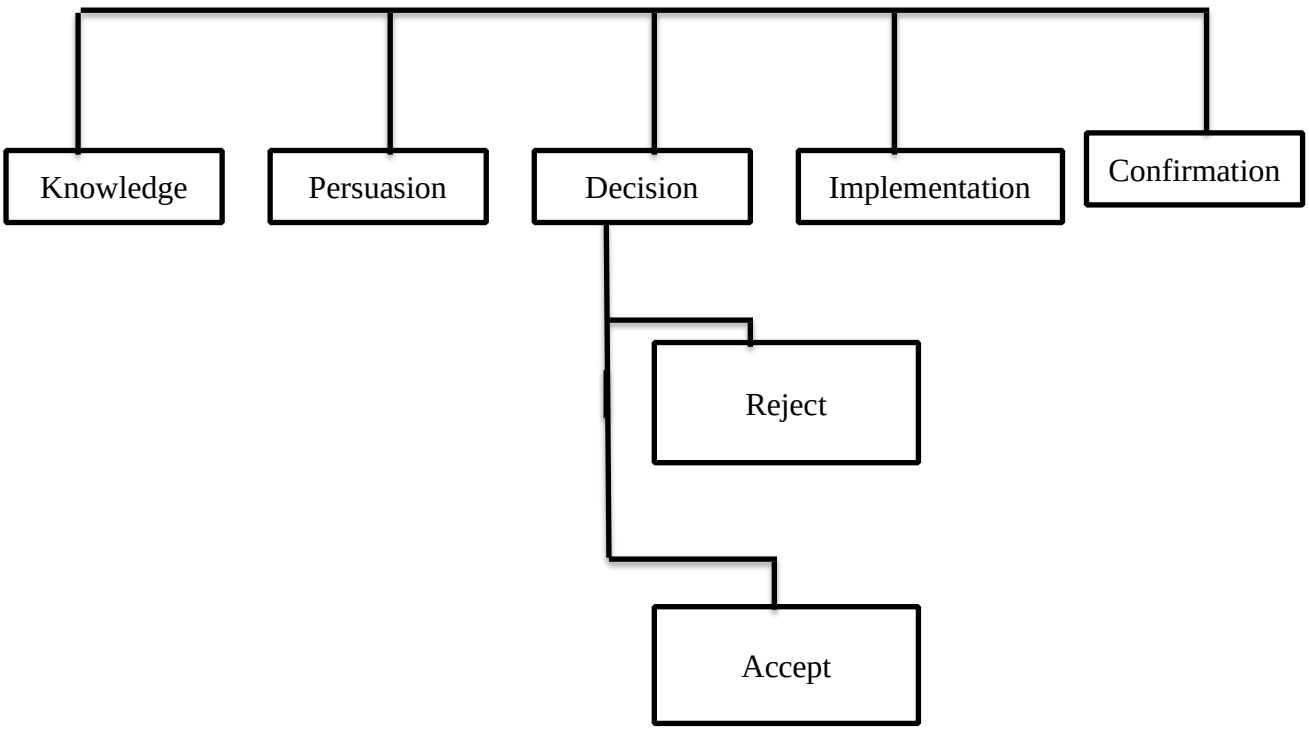


Figure 2.3: Rogers (1995), Theory of diffusion of innovation

2.7 Theory of reasoned action

In 2010, Fishbein and Ajzen's theory of reasoned action (TRA) was established from public or social thinking explaining elements that created a user's behaviour in the form of a model. This theory's chief objective is "to predict and understand an individual's behaviour" (Ajzen & Fishbein, 2010, pg.5). From the TRA, individuals are warned to first consider the consequences of their activities or actions before displaying any specific behaviour (Schepers & Wetzels, 2007).

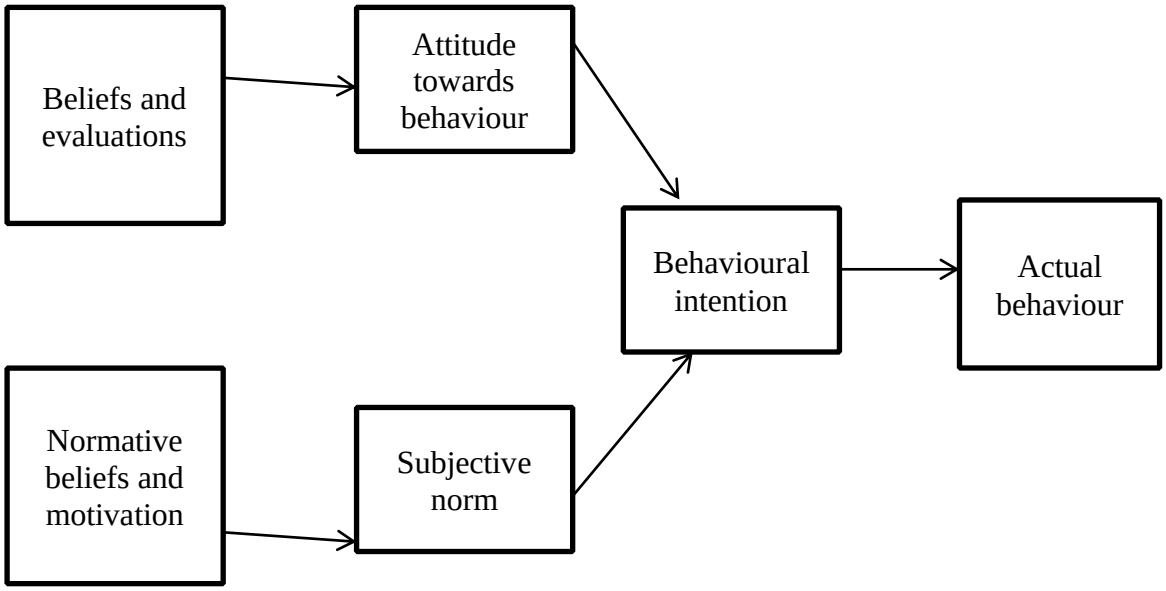


Figure 2.4: Theory of reasoned action from Davis, Bagozzi and Warshaw (1989).

Figure 2.4 above shows the TRA by Davis et al. (1989). It illustrates a flowchart showing the relationship between attitude and behaviour in human action. According to Schepers and Wetzels (2007), the TRA explains that, most social behaviours already had a predictable outcome from the intention before being performed. The TRA model defines relationships among norms, beliefs, planned behaviour, attitudes, and real behaviour. In the TRA, subjective norms and attitudes impact a person's

intention, which forecasts behaviour (Ajzen, 2006). The negative or positive behaviour of a person is known as attitude (Fishbein & Ajzen, 2010), while the subjective norm is a person's opinion of their behaviour based on the social pressure (Schepers & Wetzels, 2007). The TRA is made up of two fundamental constructs: subjective norms and attitude (Ajzen, 1991; Yzer, 2007).

The TRA has been widely used and tested in many studies (Chiemeke et al., 2006; Venkatesh, 2010; Talla,2013,) as a way of predicting and explaining anticipated and actual behaviour (Davis et al., 2008). After being applied to different academic disciplines, researchers realised that the TRA was unsatisfactory due to numerous restrictions when the TRA was applied in certain circumstantial settings (Ajzen, 2010). Davis et al. (2008) suggested that the TRA failed to accurately identify the specific beliefs appropriate in particular situations. Additionally, the TRA was found to be unsuitable for predicting situations where an individual had a low level of volitional control (Ajzen, 2010).

Behavioural Intention = Attitude + Subjective norms.

To address these limitations, Ajzen in 2010 built on the TRA to propose the Theory of Planned Behaviour (TPB).

Construct	Definition	Authors
Attitude	The behaviour of an individual in attitude when assessed could either be negative or positive	Fishbein and Ajzen (1975)
Subjective norm	Individuals are bound to perform in a certain or particular way due to the pressure from society (social pressure).	Fishbein and Ajzen (1975)

Table 2.1: **Theory** *of* **reasoned** *action (Ajzen,2010).*

2.8 Theory of planned behaviour

An addition to the TRA (Ajzen, 2010) is the theory of planned behaviour (TPB). The TRA studied individuals' behaviours in situations where these individuals did not have any control over their behaviour patterns (Sheikh, 2013). Adjustments were made to the TRA called the Perceived Behavioural Control (PBC). This addition was to help adjust circumstances where there was a lack of full volitional control by the individuals (Ajzen, 2010). The PBC helped to reduce the difficulties faced by individuals to perform particular behaviour acts (Ajzen & Sheikh, 2013). The TPB is an intention-model built from social psychology. Attitude, subjective norms, and PBC together can identify the anticipated and resulting behaviour, as suggested by the TPB. See Figure 2.5 below.

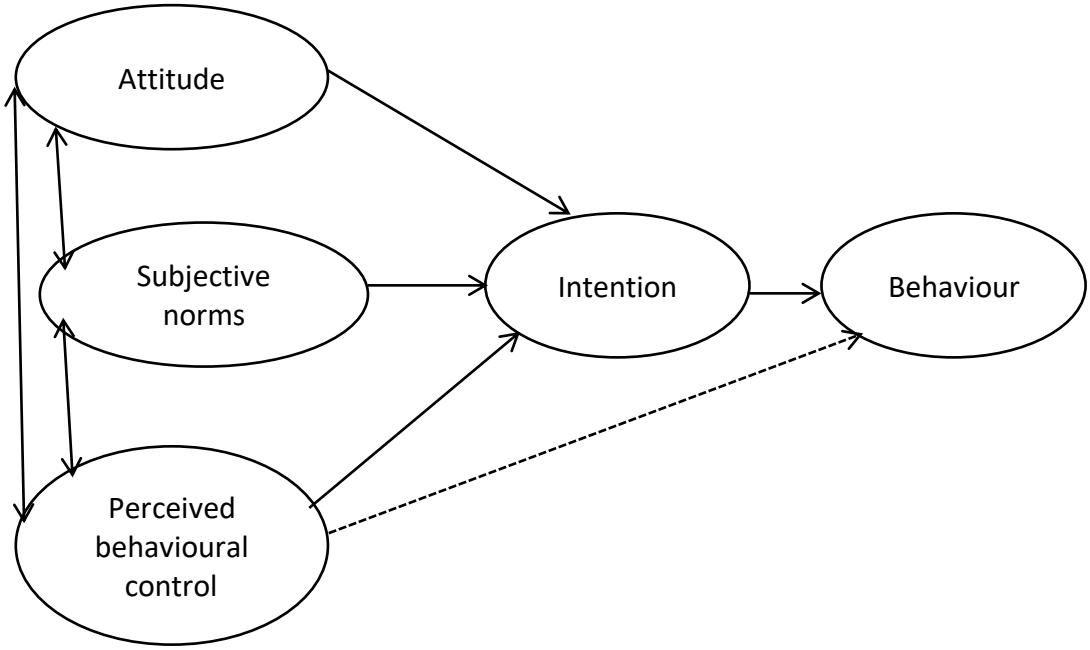


Figure 2.5: Theory of Planned Behaviour (Ajzen, 1991).

The TPB was applied by academics to predict actual and intended behaviour. It was a way of guessing a user's intention to use new information systems (IS) (Mathieson, 1991) or undertake unethical behaviour (Mann, 2012). The TPB and TRA can be compared to predict power (Madden et al., 1992; Mann, 2012). An intention to use and

actual usage can be determined by PBC (Mathieson, 1991; Hseih and Rai, 2010). PBC is defined as "a person's perception of how easy or difficult it would be to carry out a behaviour rather than the perceived possibility that executing a behaviour will generate a particular result, and it should be read as perceived control over the performance of behaviour" (Ajzen, 1991, pp. 119).

In the year 2006, Ajzen stated that according to the TPB, a human action was directed by three categories of concern: beliefs about the possible result of the behaviour, the assessments of these results (behavioural beliefs), normative beliefs (expectations of others), and the control of beliefs about the presence of underlying forces that would affect the enactments of the behaviours and their perceived powers. Behavioural beliefs produce an attitude toward the behaviour; normative beliefs influence through subjective norm; and control beliefs impact on perceptive behavioural control. As a result, attitude towards the behaviour, subjective norm, and the perception of behavioural control form the behavioural intention. Intention is, therefore, the immediate forerunner of behaviour.

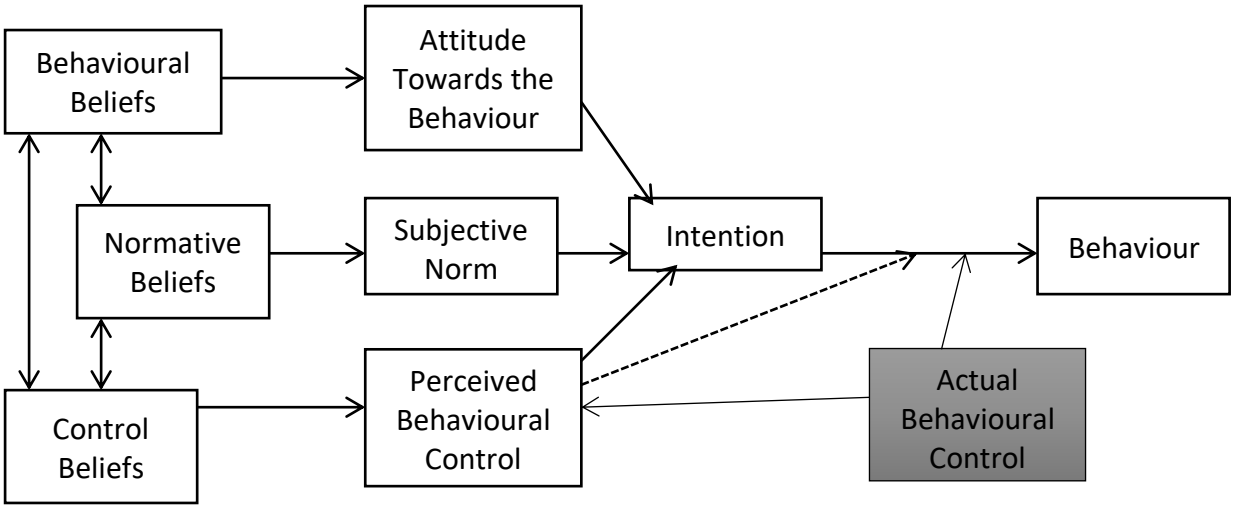


Figure 2.6: Theory of planned behaviour model. Source: http://www.people.umass.edu/ainzen/tpb.diag.html

Figure 2.6 above shows a link between one's beliefs and his or her behaviour. It shows that subjective norms, attitude towards behaviour, and PCB together will shape one' s behavioural intention and hence, his or her behaviour.

Construct	Definition	Authors
Attitude	This is an evaluation of the behaviour of an individual, negative or positive.	Fishbein et al., (1975)
Subjective norm	How an individual perceives social pressure will determine their behaviour. Their perception will determine whether they should perform the behaviour.	Fishbein et al., (1975)
Perceived behaviour control	PBC serves as a determinant to an individual whether they should perform behaviour based on how they perceive social pressure.	Fishbein et al., (1975)

Table 2.2: Theory of planned behaviour

2.9 Technology acceptance model (TAM)

There has been an increase in the use of technology recently. Worldwide annual spending on ICT is continually growing exponentially and has been estimated to reach a trillion USD (United States dollars) and still growing at approximately 10% per annum (Seddon et al., 2012). There has been so much money invested in ICT with the aim of researching more on this system and improve upon it. This investment is not guaranteed until this system is recognised and used by the targeted users (Venkatesh & Davis, 2010). By paying attention to an individual's 'intention', we can predict whether they will accept, adopt, or use new ICT systems. An individual's intention is, therefore, a very important factor to consider in acceptance when theoretically referring to social psychology (Venkatesh & Morris, 2008).

The Technology Acceptance Model (TAM) has been used in various studies when researching the reasons for the adoption of a new system or computer usage/ behaviour; some of these studies include Lu et al. (2003), Al-Hyari and Alnsour (2011) and Abu-Assi et al. (2014). Fishbein et al. (2014) developed the TRA to help predict and explain the behaviours of an individual when it comes to making use of new ICT systems in various fields. This model faced several obstacles to volitional control, leading to the extension of PBC (Ajzen, 1991, 2013). This construct could be used to predict Behavioural Intention (BI) and PBC to use.

The TPB is an extended theory of the TRA. The TAM was derived from the TRA and developed by Davies et al. in 1989. It is one of the most used models for explaining an individual's acceptance or intention to accept a new technology (Venkatesh & Davis, 2010). Chang (2003) discussed the dynamics of banking technology adoption. His thesis centred on Korean internet banking and focused more on social structural aspects like education and technology. In fact, his findings proved factors such as gender, the degree to which one is exposed to internet banking, age, and other characteristics relating to the banks among others can influence online banking acceptance (Chang, 2003).

Davis developed the TAM in the year 1989. This model is still used today to describe people's acceptance of new technologies. The TAM developed from the TRA based on modelling potential user's acceptance of information systems. This theory helps explain the user's acceptance of ICT. The TAM explains two variables that will help determine when or how a person will use a new system when they are introduced to it. Perceived usefulness (PU) is one of those variables defined as the degree to which a person believes that his or her job performance can be enhanced or changed by using a specific system (Davis, 1989, 2008, pg. 320). In the case of electronic banking, an individual willing to take up these services already has a degree of belief that engaging in this new form of banking will make banking easier and better to use.
The second variable is Perceived Ease of Use (PEOU).

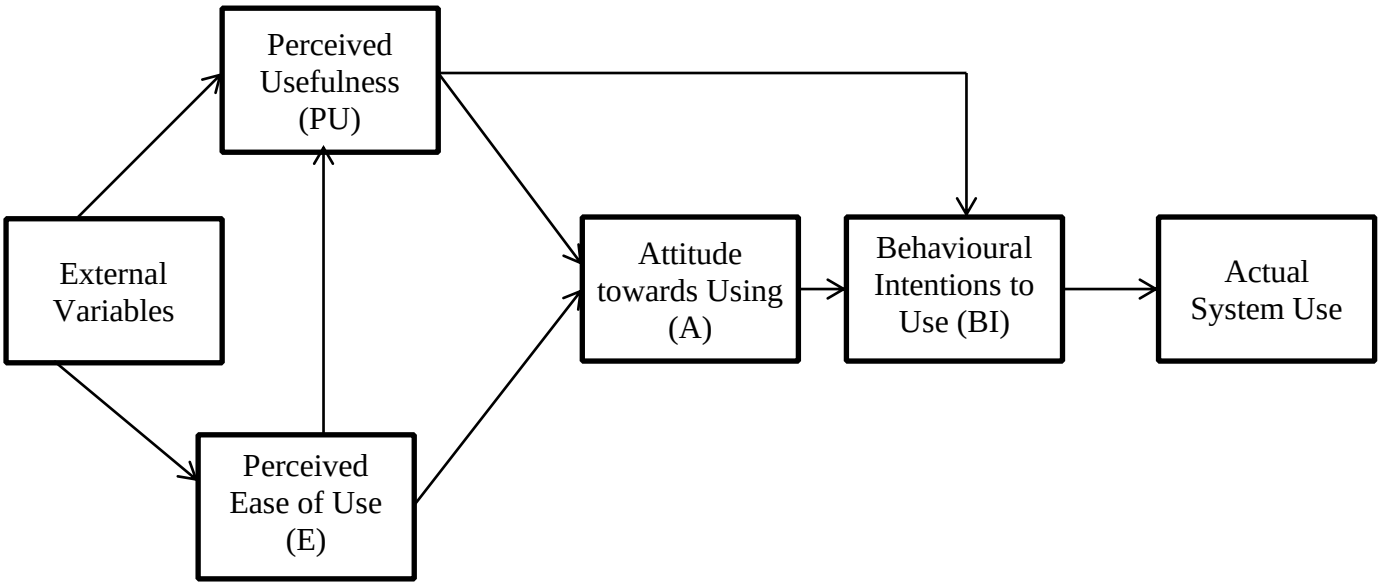


Figure 2.7: First modified version of the TAM (Davis, Bagozzi and Warshaw, 1989, p. 985). Modified by Wixom and Todd in 2005.

The original TAM theory was revised, omitting attitude. Davis conducted an empirical study among Master of Business Administration (MBA) researchers using a word processing application. Findings from their work supported some parts of this model but indicated that attitude did not mediate PEOU and PU. There was a decision to review the first TAM model; TAM was considered 'powerful' for forecasting as well as describing the behaviour of users. However, it was called to be reviewed because it was powerful when used in forecasting or describing the behaviours of individuals only on three theoretical constructs namely Behavioural Intention (BI), Perceived Ease Of Use (PEOU), and Perceived Usefulness (PU) (Davis, 1989: p. 997). Additionally, Davis et al. (1996) explain and prove that attitude can be used when considering BI.

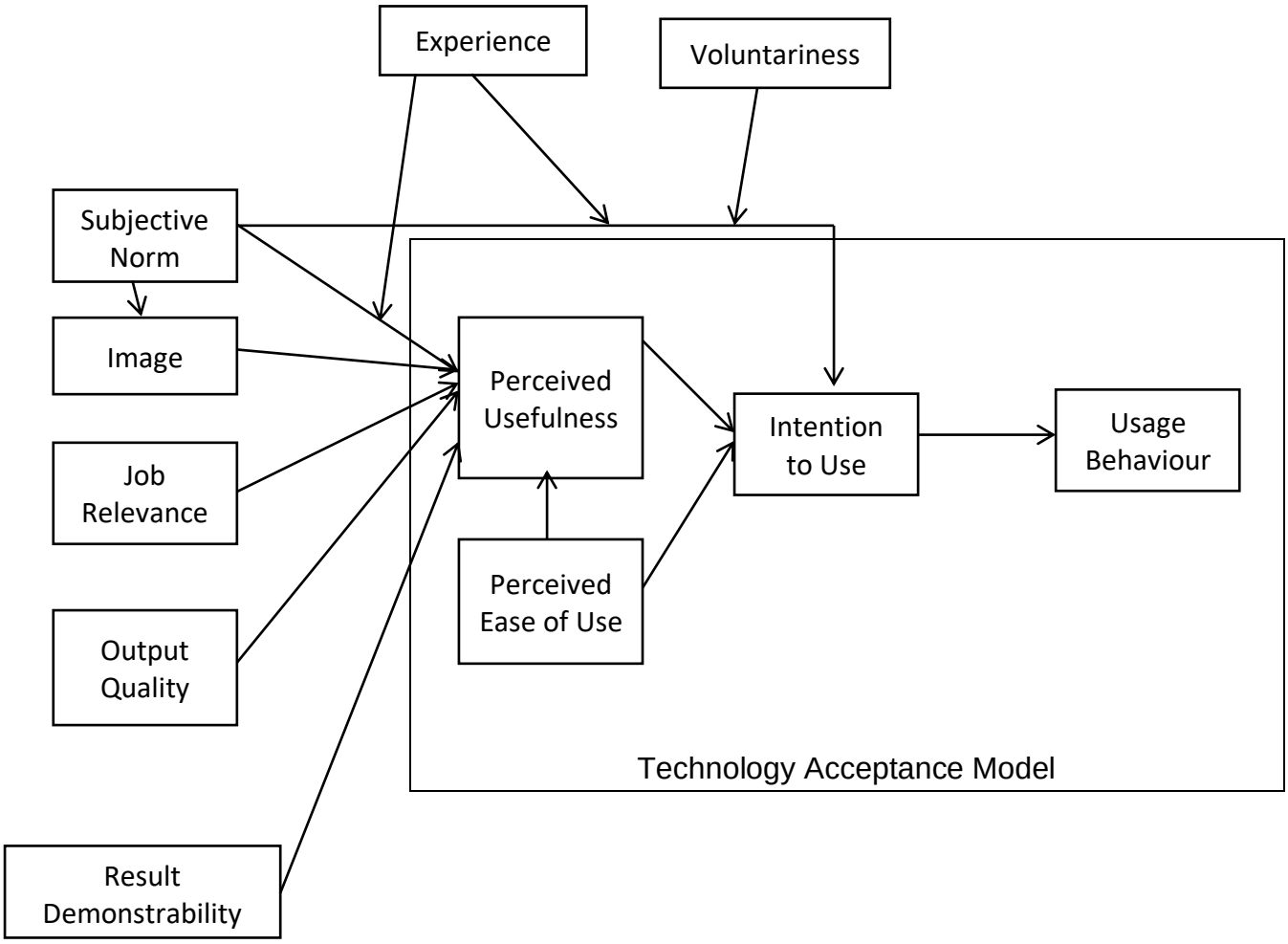


Figure 2.8: An Illustration of the Technology Acceptance Model; Davis et al. (1989)

Figure 2.8 above encapsulates the integration of the PU (perceive usefulness) and PEOU (perceive ease of use) which determines the BI (behavioural intention) to use, according to the revised TAM model. PEOU and external factors determine PU. PU is directly affected by PEOU. PU and PEOU, for example, are external variables that affect the TAM. PU and PEOU were proven to have discriminant validity because they were measured and discovered to achieve high reliabilities. The TAM has been cited by many different studies to be a suitable model when talking about the acceptance of new technologies and internet inventions like online-tax (Wu and Chen, 2009), electronic commerce (Palvia, 2009), and the internet as a whole (world wide web) (Lederer et al., 2011).

Although the TAM is highly criticised, it is used frequently by researchers to determine the technology acceptance behaviour of individuals. This helps researchers of electronic banking; in this case, to determine the behaviour that is expected from an individual when choosing to take up different forms of banking services or electronic banking in general. Previous studies have used the TAM to explore the service quality (Al-Sukkar, 2005), perceived privacy and security (Sign 2004; Laforet et al, 2005), trust (Chong et al., 2010), and wireless internet quality by mobile devices (Lu et al., 2003). In the year 2015, Rawashdeh stated that the PEOU and the PWP (perceived web privacy) affected the PU and the BI regarding the use of internet banking. Perceived web privacy, the PEOU, and the PU were also found to directly influence the BI (Rawashdeh, 2015).

User acceptance of technology has been a very important subject of study for more than two decades. Even though numerous models have been proposed to explain as well as predict the use of a system, the TAM has captured the most attention of the IS community. It is, therefore, essential for anyone willing to study user acceptance of technology to understand the TAM. Maman and Usluel's research in the year 2010 suggested that the PEOU and the PU were both important behavioural determinants. They hypothesised that potential users would select and use information reports based on a trade-off between perceived information quality and associated cost of access. Their work showed that information quality was like the PEOU. In the year 2008, Davis concluded that people used or did not use a system to the extent that they believed that this would help them perform their job better (PU), and that the beliefs of the efforts required to use a system could directly affect system usage behaviours (PEOU).

2.10 Extensions and integration of the model with the TAM

The TAM explains an individual’s adoption of several applications of ICT/IS. The PEOU and the PU are important factors when considering the intention to use based on the original TAM. Subsequently, there have been numerous extra elements incorporated in the TAM model that have been found to influence the usage behaviour. To extend the TAM, a minimum of three approaches have been suggested; they include introduction of new factors such as Subjective Norm (SN), Perceived Behavioural Control (PBC), and Perceived Resources (PR), in addition to extra or

alternate constructs of the belief, and consideration of moderators of the PU and the PEOU (Wixom & Todd, 2005). Factors that were also found to impact on the expected behavioural use were PBC by Chau et al. (2002, 2007) and Perceived Enjoyment (PE) (Hejden, 2004, 2011).

The original TAM model was extended to explain the PU and the BI usage in terms of social influence, process, and as a cognitive instrumental process (Venkatesh & Davis, 2009). The 'TAM2' was the extended model (Venkatesh & Davis, 2009), which highlighted the impact on users of three factors that were inter-related in situations where these users were at the point of deciding whether to make use of new ICT systems due to social influence. The TAM2 model underlines job significance and the quality output regarding the PEOU and the PU due to the cognitive instrumental process.

Venkatesh et al. conducted another study in the year 2008 with two voluntary and two involuntary settings. From their results, it was discovered that there were several significant determinants of the usefulness of constructs e.g. subjective norms, job relevance, and images and results demonstrability. Self-efficacy, one's perception of being able to control, being able to use, and computer anxiety are factors that may affect the ease of the use of new technology (Venkatesh, 2008).

2.10.1 TAM studies (reviewing this model in different contexts and settings)

The TAM is the most used and applied model in research studies regarding technology acceptance. This model has been used in various research settings including population.

Researchers such as Davis et al. (1989) compared the TAM to the TRA to describe the BI in using a Word document. In that study, outcomes showed a 47% variance in behavioural intention according to the TAM, while the TRA showed only 32% to accept from the BI.

In the year 2001, Chau et al. obtained data from over 360 business students. They tested the TAM by researching the effects of information technology on usage behaviour by considering self-efficacy and users' computer attitudes. To achieve the

required results, Chau made use of Linear Structural Relations (LISREL), a structural software model. This Structural Equation Modelling (SEM) software package is used in manifest variables and latent variables. Results gained from this supported the hypothesised model. One of the results showed that the PU could be used to predict the BI. Secondly, it was discovered that the PU variance was affected by self-efficacy and attitude.

Shih (2009) conducted research to explain the factors that influence an individual to accept online shopping. He used the TAM and the TRA to develop his model. He tested over 212 employees in Taiwan randomly selected from eight organisations. From the data he collected and analysed, the results suggested that PEOU of online trading and the PU significantly influence e-shopping. Another factor discovered from this research was that acceptance by users was influenced by their perceptions of an information system as well as the services provided. Shih (2009) went further by conducting an extended research in which he selected and tested 203 office workers based in Taiwan from 10 different organisations, both small and medium. Shih's results strongly supported the extended TAM.

Wang et al. (2003) used an extended TAM in an internet banking context in which two extra factors were added to the model to increase the influence of the TAM. These added factors included Perceived Credibility (PC) as well as computer self-efficacy (individual difference). They tested 123 Taiwanese users by phone interviews and analysed the data they collected by using LISREL version 8.3. From their results, it was discovered that the chosen factors played a significant part in the users' intentions to adopt internet banking. Some factors from their study showed a direct effect on acceptance; they included the PU, the PEOU, and the PC. These factors have a positive and significant effect on a user's intention to accept internet banking. Their research also showed that Computer Self-Efficacy (CSE) had a great impact in predicting the PEOU in e-banking while the PU had a less predicting effect. With regards to internet banking, people with higher computer self-efficacies have a more positive behavioural intention toward the PEOU.

In the year 2004, Pikkarainen researched what bank customers thought of internet banking. In his research, four variables were added. These variables were derived

from focus group interviews with banking professionals as well as from previous literature based on several factors such as employment, security, the quality of services, and perceived enjoyment. Data was collected from consumers in Finland (268 in total) because they had experience in e-banking usage. The PU was one factor found to influence e-banking acceptance.

In the year 2008, Al-Hajri and Tatnall conducted research that compared Oman with Australia to determine the various factors influencing the adoption of a given technology in the banking industry. The study showed an analysis of four perceptions of managers in the banking industry including relative advantage, organisational performance, customer/organisational relationship, and ease of use. These perceptions give a better insight into the motives for the adoption of internet technology. However, the study observed the views of bank managers on this subject but did not observe the views of the customers.

In the year 2013, Talla conducted an empirical study on e-banking in Cameroon. He aimed at determining the factors that affect e-banking in Cameroon. He focused his research on demographic and social aspects to determine the barriers and challenges of e-banking adoption. Using interviews and a questionnaire, he identified perceived risk as having a negative impact on the adoption of e-banking. Other factors such as attitudes as well as negative perceptions affected decision-making and led to negative consumer behavioural outcomes. Other factors such as social influences like opinions of parents, friends, as well as colleagues, were also common factors that affected e-banking adoption. His objectives determined factors like lack of knowledge, lack of trust, or the lack of information-hindered and non-users being worried about the risk of e-banking adoption. What he failed to explain, however, was how these objectives could be avoided as a way of enabling more Cameroonians to accept and adopt online banking. This research provides those implications.

In the year 2017, Mirabel carried out a research on customer perception on utilisation of e-banking in Cameroon and compared her findings to that of Finland's. The outcome of this research showed perceived reliability, trust, security and accessibility to have had a significant impact on perceived usefulness of electronic banking adoption. There was, therefore, the need to increase e-banking security, accessibility, trustworthiness

and reduce the cost of using these banking technologies to encourage customers' attitudes towards adoption of electronic banking services.

In the same year (2017), Jean Bosco in his research on the impact of mobile banking of financial performance of microfinance in Rwanda, he focused on identifying the volume of transactions and products of mobile banking services and also the relationship between transaction volume and Monitory Financial Institution (MFI) performance. By using mixed research methods and analysing his findings, he explained that there was a positive correlation between financial performance indicators before and after adoption of e-banking and recommended a decrease in mobile banking charges in order to increase adoption and usage. Meanwhile, Joseph (2017), investigated the impact of electronic banking on the profitability of commercial banks in Kenya. The Author used a descriptive research design. The sample was made up of 43 commercial banks in operations. In addition, secondary data was used for the study and data was obtained from various central banks. A multiple regression analysis method was used to analyse the data and the findings indicated that there was a positive and significant relationship between ATM transactions, POS transactions and bank profitability. The study recommended that banks should increase their ATM networks and encourage Point-Of-Sale (POS) terminals.

Inegbedion et al. (2018) aimed at determining whether an increase in Nigerians' knowledge on internet banking would increase adoption and whether perceived ease of use, perceived risk, nature of transaction would influence the adoption and use of internet banking. Customers from the Zenith Bank in Nigeria were surveyed. Findings showed that perceived risk, nature of transaction, use of the internet and perceived ease of use affected internet banking adoption in Nigeria. Another study of Inegbedion et al. (2019) focused on determining how exposing customers to electronic banking products and services would increase or affect their awareness and attitudes towards electronic banking in Nigeria. Inegbedion et al (2019) concluded that when customers were exposed to these new technologies, their attitudes and awareness towards them changed with more of them using or willing to make use of these services; however, there was the need to increase the literacy levels in regard to technologies to ease usage.

In summary, as seen from the studies above, the PU and the PEOU are the TAM variables that may influence the BI in internet banking acceptance. Users' intentions to accept and use a new technology or online banking can be predicted with the TAM. Table 2.3 below shows the TAM according to reviewed studies.

Year	Author	Technology Examined	Samples	Findings
2020	Godfrey et al.	Mobile banking	517 respondents	Results demonstrated that perceived ease of use, relative advantage as well as complexity are the main factors which help predict Ghanaians' intention to adopt mobile banking technologies. It also showed that complexity has a positive influence on perceived ease of use and relative advantage positively impacted perceived usefulness
2019	Inegbedion et al.	E-banking	480 respondents 30 bank branches 3 banks	When customers were exposed to new technologies, their attitude and awareness towards them changed with more using or willing to make use of these services however, there was need to increase the literacy in regard to technologies to ease usage.
2018	Leinyuy	E-banking	100 respondents	The findings from this research showed that internet banking is important in microfinance institutions and the more financial institutions update

				their technologies and create awareness, the more customers will become interested.
2013	Talla	E-banking	511 respondents 14 bank managers	E-banking adoption was negatively impacted by perceived risk. Attitudes and negative perceptions affected decisions and led to negative consumer behavioural outcomes. Factors like social influences, opinions of parents, friends, and colleagues were also common factors that affected e-banking adoption.
2011	Abbasi et al.	Internet	504 scholars	One of the best important factors for electronic approval and adoption was perceived usefulness.
2010	Autry et al.	Supply chain technologies	195 users	In this study, it was concluded that PEOU and PU were very important. This research was conducted in a technologically turbulent environment.
2009	Shih	Shopping online	8 organisations of which 212 employees were selected	The outcomes from this research confirmed the TAM as an important factor for acceptance.
2009	Shih	Internet usage	203 corporate workers from 10 organisations	PEOU and PU were very important in this research and influenced the information that was used to carry out this research.

2008	Venkatesh and Bala	Information technology – various offices	4 different offices with the following employees: 38, 39, 43 and 36	Results collected supported an extension of TAM, hence the 3rd TAM.
2016	Chiemeke et al.	Internet banking	12 banks who provided internet banking	The findings of this research showed that most banks provided basic websites for information with little transaction services. Most banking was still being carried out at bank branches.
2007	Chen et al.	Collection of electronic tolls	Motorists – a total of 255 individually	PU was seen to be very important and had an influence on the collection of electronic tolls.
2006	Yi et al.	PDA	222 physicians	The most important factor found in this research was PU.
2005	Wixom et al.,	Data warehouse with software for reporting.	456 employees, 7 organisations	The results collected supported the TAM.
2004	Ong et al.	Learning by use of electronics	6 international companies 140 engineers were selected	PU and PEOU were found to be important especially when considering a positive association with computer efficacy.
2001	Chau et al.,	Telemedicine technology	400 physicians	When this research was done, it showed that the TAM was more important in acceptance than the TPB. It showed the TAM to be more significant when telemedicine technology was accepted by physicians.

2000	Venkatesh	Help system online Multi-media system and Windows 95	70 employees 160 employees 52 employees	Some elements were used in this research to put together PEOU and many adjustments were made to find a conclusion on the importance of PEOU in online systems.
1999	Agrawal et al.	Using software on a personal computer	Workers with knowledge on technology, 230 in total	TAM was found to play a great part in acceptance.
1992	Davis et al.	Word processing Program plus Graphic system	200 students among whom were 40 Master's in business administration.	PU and the fact that students enjoyed using these services were found as a reason why people will adopt the internet. Other factors included PEOU and the output from using these services.
1989	Davis	Editing files and emails as well as using a graphic system	Master's in Business Administration from evening school students (40) and 12 employed people	Important reasons for adoption were PEOU and PU.

Table 2.3: Technology acceptance studies reviewed from different contexts and settings.

2.11 Applications of ICT in the banking sector

Telecommunications services are inadequate, inefficient, and very expensive. Rajasekhara (2014) explained the changes that have occurred over time in ICT in banking. ICT is a very important factor in e-banking today. Due to the existence of ICT, there have been new developments relating to banking like electronic banking, telephone banking, ATMs, investment banking, and internet banking among others. With ICT, the banking world has changed, and transactions have been made easier. Customers are now able to carry out multiple transactions at lesser costs and in less time than before. However, to say for sure that ICT is successful in banking, it is important to base it on customer satisfaction. It is, therefore, important for banks to organise events that will provide their customers in their locations of existence with more information on their services and products. Africa is the slowest continent in the world to receive and accept internet changes. Many modern ideas have been implemented in Africa to ensure the provision of ICT.

The regional African Telecommunications Organisation's main objectives are to extend affordable telecommunications services to the entire continental population by setting up an effective telecommunications infrastructure based on satellite technology. It is aimed at establishing direct links between African countries in order to improve inter-country connectivity..

The 21st century has brought drastic changes in the form of financial institutions increasingly using online channels. There has been an increase in the number of people making use of online banking (Sharma, 2009). There has been dramatic growth in e-banking, transforming the traditional way of banking (Gonzalez, 2008). Maholtra and Singh (2009) predicted a paradigm shift in marketing practices resulting in improved performance in the banking industry.

Components like software, data, hardware, network, and people are important elements to the system. When a banking service provides the customers with enough to make them comfortable using it, they are satisfied with the system when carrying out transactions with their banks. Internet-enabled electronic systems facilitate the operation to fetch these results. This is confirmed by Ponemon (2013) who pointed out

the top three banking activities used by customers online; access to their bank account information, payment of bills and the payments of products by customers to other financial institutions, e.g. deposits, credit card transactions or home loans (Mohammed et al., 2009; Ponemon, 2013).

Many banks are not making use of ICT to provide a more comfortable banking experience for their customers. Consequently, customers do not find it easy to carry out transactions and contact their banks without too much hassle (Hughes, 2003). Due to the development of new technologies, financial institutions are now able to sell their products online to the rest of the world with electronic banking being one of the most used channels made available by banks to their customers (Boyes & Stone, 2013).

2.12 Conception of internet banking

In the early years, banks were not really banks at all; they dealt primarily in coins and gold bullions. A good deal of their businesses were concerned with money changing and the supply of lawful domestic and foreign coins of the correct weight and fineness (Wilson, 2012). Businesses from all works of lives are now making use of the internet to advertise, sell and endorse their goods, products or services due to its fast growth and popularity (Chau & Lai, 2007). Tan and Teo (2000) and Mukherjee and Nath (2012) stressed the importance of the internet to institutions and companies with their focuses on financial institutions. Even though this channel has many advantages, financial institutions and banks worldwide are still faced with challenges on how to improve, develop, distribute, deliver, and operate on this platform. Banks and financial institutions are still using this channel in their daily functions, as it has become the operational norm (Chan & Lu, 2004; Foon & Fah, 2011).

The term electronic banking is defined as the provision of services or information by a bank to its customers, through a computer or television (Allen et al, 2012). Internet banking is the use of the internet as a delivery channel in which to perform the banking activity, such as bills payments, money transfers, transaction histories, balance inquiries, loan applications, and insurance services (Bankers Online, 2010). Financial institutions are using e-banking services to run their day-to-day activities. Electronic

activity customers stand to benefit from banking services such as fund transfers, statement printing, account balances, and the handling of cheques (Lee, 2009).

According to Reid and Levy (2008), electronic banking refers to internet banking. Customers can access internet banking services from anywhere and at any time and any day. These services provide customers and banks with many opportunities. There has been a wider acceptance of e-commerce over the years and all banks in Australia are now providing their customers with around-the clock online banking access and services. Cheng et al. (2007) suggested that the growth of ICT has drastically changed the banking industry. The increase in personal computers has enabled an increased usage of online banking.

Internet banking can also be defined as electronic banking and telecommunication network usage to provide customers with banking services (Nolle, 2006). By using a banks' network, customers can carry out numerous services including paying bills, transferring finances into several other accounts by just using the internet (Leong, Srikanthan & Hura, 2008).

Pikkarainen et al. (2006) define internet banking as a gateway whereby people can access different banking services like paying their bills. Internet banking gives customers access to various types of banking transactions just by the click of a mouse (De Young, 2007). Due to the low cost incurred by banks to provide e-banking, it is a very common channel used (Pikkarainen et al., 2006). E-banking saves time and money while minimising error (De Young, 2007). A delivery channel used by banks is the internet which provides online banking options like printing of bank statements, checking balances, money transfers and many more (Frust, Lang & Nolle, 2012) without customers having to visit brick or mortar banks (Sathye, 1999; Mukherjee & Nath, 2012).

Online banking previously has been described as an internet portal allowing customers access to a range of services including investments and payment of bills (Pikkarainen et al., 2006, p. 224). The introduction of internet banking has led to competition in the financial sector (Flavian, Torres, & Guinaliu, 2004, Gan, Clemes, Limesombunchai, &

Weng, 2006). When the internet was first introduced, banks did not use it for much other than to advertise their existing products and services (Frust et al., 2012).

Internet banking is another name used for online banking and both share a similar sense of function (Hamid et al., 2007). Online banking or internet banking as defined by Lloyd (2007) is the ability for an individual to transact banking services using the internet on their personal computers. Thulani et al. 2009 defined online banking as being able to use a bank's website to access their personal accounts, use the banks' products and services, and make transactions without interferences or inconveniences. When customers use online services, it saves them the time spent writing e-mails, postings, sending of letters and faxes which sometimes require confirmations or signatures (Thuani et al., 2009).
With internet banking, you can access services online from anywhere and at any time in the world just by linking up to a computer with an internet access (Perumal & Shanmugan, 2004; Thulani et al, 2009).

With PC banking, the users need to have specific software programs or a private network; this is not the case for online banking (Hamid et al., 2007). PC banking, therefore, can be defined as a situation whereby users are given access to specific financial software programs which allows them to add details even while offline and from the comfort of their homes (Hamid et al., 2007). The details customers can add while offline are then sent through to the banks via the banks' private networks. Online banking generally has helped to cut cost while enhancing customers' experiences (Hua, 2009). With internet banking innovations, customers can carry out their normal banking transactions without having to visit their banks or speaking to any member of a bank (Qureshi et al., 2008). In 2012, Allen et al. defined electronic banking as the provision of information or services by a bank to its customers by the use of a computer or the television.

There are a few disadvantages that come with electronic banking, which include fraud. Coggan (2009) said the battle against fraud is fought on two fronts: preventing people from printing fake cards (often through holograms) and preventing the use of stolen cards. There has been talk for years of using photographs on cards but, as yet the practice has not caught on in Cameroon. In other countries such as the United

Kingdom, some banks are popular for using and printing these photo cards. Barclays Bank plc is one of such banks..

E-banking includes the systems that enable individuals or businesses as well as financial institution customers to transact business, access accounts on financial services via a bank's network. Customers use e-banking services by using an ATM, a PC, or Personal Digital Assistant (PDA). Internet banking can sometimes be limited to when referring to some banking services (Daniel, 1999), but in other areas, it refers to retail and corporate banking or retail banking (Aladwani, 2007; Simpson, 2012).

E-banking refers to delivering banking products and services through electronic channels (Basel Committee Report on Banking Supervision, 1998). Lending, electronic bill payment, account management, depositing, the provision of financial advice, and the provision of other electronic payment such as electronic money are some of the products and services.

Karjaluoto et al., (2002) explained that banks offer their services via various channels that suits them including WAP technology and other telephone technologies. They also showed that internet technology is the key electronic distribution channel in the banking industry.

Internet banking is crucial for the survival of banks in the world of electronic commerce. It was estimated that financial institutions that fail to respond to the demand for internet banking services could likely lose more than 10% of their customer bases in less than five years (Burnham 1996; Orr, 2004). Today internet banking is one of the most important factors in the economy, providing many advantages for both customers and banks (Sarek et al., 2003). Operational costs for banks have been reduced with e-banking not requiring physical premises and associated employee resources, which has led to a decrease in waiting times, potentially allowing improved sales performances and wider customer reaches (Sarek & Mamorstein, 2003).

For customers, many transactions can now be carried out anywhere at any time from the bank's website (Grabner-Kraeuter & Faullant, 2008). Moreover, banking can now be conducted by customers outside of typical banking operation hours with quick

access to banking services, no need for travel, or to wait in queues (Hamlet, 2000). Electronic processing dramatically reduces the cost per transaction, with the average transaction costing approximately £1.07 for a complete bank service. At an ATM, it reduces to about £0.27 and drops to about a penny if the same transaction were to be conducted on the web. Banks can also provide customers with electronic billing options.

Costs for electronic bill delivery are significantly lower than the traditional paper-based delivery method via mail (Irvine, 1999). These cost savings can offer customers and banks alike a reduced cost of banking and still provide efficient and varied services. Internet banking would significantly help banks present a potentially low-cost alternative to brick and mortar branch banking (Orr, 2004; Dube et al, 2009).

Most banks with websites spend less than US$25,000 to create a web presence, and less than US$25,000 to maintain it (Burnham, 2007). He suggested banks concentrate more on internet banking, as it is less costly than the traditional branch banking. Forrester Research conducted a study that stated that 61% of respondents would bank with certain banks if they offered the financial services they required (Dixon, 2008). Many banks are working with the idea of providing their customers with portals. Banks do not get a revenue stream by simply having an internet presence. By offering a variety of services or products, however, banks can benefit from internet integration (Dixon, 2008). Creating financial portals where consumers can manage a broad range of financial activities like mortgages and stocks, banks can profit from offering internet capabilities to clients. Hence, banks will be saving on cost by reaching new segments of population, being more efficient, enhancing the bank's reputation, and providing greater customer service and satisfaction (Jayawardhena & Foley, 2004; Jayawardhena, 2006).

Apart from being fast and convenient, customers can take greater control of daily banking activities and transactions from anywhere and anytime. By implementing recent internet banking services, banks plan to increase profits, reduce spending, be able to reach more customers, provide better services, retain market shares, and form industrial alliances (Carlson et al., 2010). With e-banking, it has been made easy for financial institutions to sell banking products and services, increase their

competitiveness, fulfil customers' demands, and make available new services and channels while minimising their costs (Currie, 2005; Lam & Burton, 2008).

2.13 Acceptance and accessibility

These are two outstanding factors that affect consumers greatly in their decisions to use electronic banking. Technology is a key factor in the fast evolution of the world. Many people now use ICT to conduct activities from the comfort of their homes. E-banking evolution started with an ATM being introduced and now we can pay bills and access bank statements just by a simple click of a mouse (Alter, 2012). Wireless Application Protocol (WAP) acceptance is a sign that the future generation will stick to e-banking (Petrus & Nelson, 2012). Online banking has become a necessity for everyday life because of the existence of e-commerce and the need to use the internet to facilitate an enhanced online security of transactions as well as delicate information.

Perceived security and privacy, perceived usefulness, internet banking information, the service, and ease of use of websites are some of the most significant factors affecting e-banking acceptance and adoption. By concentrating on problems relating to internet banking, banks can make this form of banking more popular and easier for adoption and adaption by their customers (Pikkarainen et al., 2006). For electronic banking to be made more adaptive, banks should consider factors like creating websites that are more attractive, providing training to their customers to ease accessibility and understanding, making their website more colourful and with a lot of information and reducing their online service costs by making their new products and services available on their websites; they can also make them available to all by advertising on their pages, which will make the product more popular to their customers (Singh, 2006).

Erickson et al. (2010) agreed with Singh by stating that internet banking was a very significant element in the lives of customers. More effort was needed from banks, not just in creating a more user-friendly website, but also by being able to provide information to their customers as to why internet banking was important to them. It is important that banks pay more attention into making their websites more secure, creating a website that is easy to navigate, improving the design of their websites,

creating alternative methods whereby users can receive confirmations for transactions carried out and also making available information to clients regarding their finances in an organised manner (Hernandez et al., 2009). Banks have recently put in more effort to understand and predict individuals' behaviour. This is because individuals pay more attention to the consequences that may result from their actions and activities even before engaging in a behaviour (Ajzen, 2010).

ICT has become the backbone of many banks worldwide. This is because ICT is important to run the financial network and services of banks since they moved to a digital banking method rather than a paper-based one. There have been several difficulties faced by the digital financial services with regard to efficacy when trying to come up with solutions that will avoid a 'financial divide' affecting the poor (Maumbe, 2008). Electronic banking accessibility has faced a few obstacles such as the unwillingness of the people to engage in new forms of technology, unreliable and slow internet services, and a lack of awareness of services like e-banking. Internet banking in some developing countries remains obscured because of the extreme poverty levels and lack of/or poor infrastructures. In the year 2008, Maumbe explained that the level of education and computer literacy needed to be improved in developing countries as this would increase awareness, knowledge adoption, and a more constructive use of these services. Most of those who miss out on internet banking services and benefits are the poor and the unemployed. An efficient financial service that is functioning well will be able to invest in those poor communities to make these services and knowledge available.

By observing customers' attitudes and knowing what they think about internet banking, a researcher will be able to understand e-banking acceptance. It is, therefore, important for banks to adopt better services to enable a better and more efficient transaction processing, customised for their clients to ease acceptance (Nelubiri & Sinti, 2006). When it comes to banking in general and a technology-enabled service, customers are always in search of options that will save them money and time, as well as a secure service that is convenient and fast. For services which are technologically based, customers will search for ones that are more user friendly, less complex, and one which they would not spend too much time navigating (Walter, 2006). Awamleh, who in 2006 analysed the preferences of electronic banking services and networks in

the United Arab Emirates (UAE), supported Walter's (2006) idea. He also researched the factors influencing an individual's decision to use or not to use e-banking and the reason for the continued use of these services for both users and non-users. He explained that even though e-banking was popular in the United Arab Emirates (UAE), not all services were properly utilised and there was a continual need to improve on these services in order to achieve cost advantage.

To identify the factors affecting an individual's intention to accept and use online banking services, the TAM was used. Information analysed was collected from e-banking users and non-users or those who had intentions of making use of these services in the future based in the United Arab Emirates. Multiple regression and factor analyses were conducted to examine the data. Relative usefulness was an outstanding factor that was uncovered, and it could be defined as the importance of a new technology compared to existing ones. Of the seven factors identified from both users and non-users, differences as large as six factors were highlighted as a concern of all the seven mentioned. The factors that users were most concerned about keeping while using e-banking were usefulness, risk, security, efficacy and image. Non-users of electronic banking were more concerned about factors like usefulness as well as the confidence of use. The effect was achieved based on the gender, income, and e-commerce of the users surveyed. It is, therefore, important to know the level of usability within the electronic banking sector. In the year 2004, Anthony discussed this by stating the problems and ways by which they could be resolved.

Electronic banking costs less to carry out transactions than other channels of banking. Forrester Research (2010) claimed that by the year 2017 the number of Europeans using e-banking would have tripled to 190 million. Internet usage is popular and used in e-business like the Human Computer Interaction (HCI) principles. Users mostly prefer sites with easy to understand information, access and navigation; these and more are important for banks wishing to gain and retain more customers. Banks should, therefore, pay attention to the accessibility and usability of their sites.

2.14 Service quality and ease of use

Quality has become recognised as a strategic tool for attaining operational efficiency and improving business performance. The problem with the management of service quality, however, is that quality is not easily measurable or identifiable due to the inherent characteristics of its services. Quality, in the context of service industries, has been conceptualised differently and alternative scales have been proposed for service quality measurement (Brand, 2002; Pollack, 2009). In the last few years, service quality has gained much from researchers who are trying to understand how it affects customers, business operations, and profits (Seth et al., 2005). For an organisation to succeed, they need to pay attention to the quality of their services (Pollack, 2009).

Kassim (2014) addressed e-banking service quality. His study was focused on gaps in the Qatari banking industry and aimed at debating how to determine the finest service quality characteristics relating to e-banking. This research showed the differences in what was delivered by the banking industries and what the customers expected from their banks.

There is a demand for constant development in service quality that refers to the vendor's ability to meet the changing requirements and the needs of customers (Cristobal et al., 2007). In internet banking, continuous improvement with regards to product enhancement and customer relations is important (Jun & Cai, 2010). In the year 1995, Johnston examined banking industries by using the critical incident technique, and how customers of this banking system perceived it. He listed 18 service qualities, such as access, availability, care, comfort, commitment, competence, flexibility, reliability, responsiveness, and security etc. Service quality was used to determine customers' satisfaction; two well-known measures of knowing customers' satisfaction in a situation of private banking included the SERVQUAL and the technical/functional quality (Lasser et al., 2000, Newman, 2010).

Bahia and Nantel (2009) proposed an alternative measure of perceived service quality in retail banking that comprised of 31 items with six underlying key dimensions. The proposed factors included price, reliability, assurance etc. while Oppewal et al. (2009) suggested the use of several tests to measure the quality of a service. During their

research, they devised a method that could be used to measure service quality in retail banking. It consisted of 28 attributes with the most important four being accessibility, competence, accuracy, and friendliness; while tangibles that affected quality were demography, behaviour, and experience E-SQ (Zeithaml, 2008).

A framework describing why consumers use electronic banking products such as credit cards, electronic bill payments, stored value, debit cards, and e-cash for their banking needs was put forward by Mantel in the year 2000. Mantel (2000) explained consumer behaviour on what he listed as security, motivations, control, privacy before making use of e-banking. This conception has not changed. Mantel also stated that people were more realistic and considered many aspects when using internet banking rather than illogically defying change. Most businesses switched to electronic banking for their benefit and to sync with the rest of the world rather than following consumers' reluctance. Mantel's work concluded that consumers liked to have control over their day-to-day banking, to be at ease, and to have the power to communicate. For that reason, they will shift towards electronic banking services.

The SERVQUAL has a huge influence on buyer loyalty. It could be used by banking practitioners to promote customer retention as well as bank advocacy, all of which could eventually have a positive impact on their retail business scorecard. Customer loyalty and relations are vital elements in strategic decision-making because it is more cost-effective to retain existing customers than attracting new customers. Moreover, as revealed by Babakus and Yavas (2008), smart bank managers aimed at having a fraction of loyal and satisfied clientele because they tended to buy and spend more. Kassim (2008) highlighted several factors that influenced the quality of available e-banking services, including accessibility to customers, efficiency, and the nature of the constantly updated information that was available to customers, among others. This was supported by Mahdi and Mehrdad (2010) through their study on the influence of internet banking in Iran by applying the chi-square.

The outcome of the findings by Mahdi and Mehrdad showed that Iranian customers thought e-banking was more advantageous compared to the traditional method of banking. In other words, Iran banks offered services that provided customer satisfaction with specific reference to the use of e-banking. Similar studies by

Jayawardhena and Foley (2004) explored e-banking as a new delivery channel. They believed that e-banking could act as a contributing factor to overcome the fundamental disadvantages associated with traditional banking. Furthermore, according to Jayawardhena and Foley (2004), it was evident that e-banking, if conducted successfully, could result in an improved volume of transactions.

This increase in the volume of transactions, as predicted by Jayawardhena and Foley (2004), gained a few followers and researchers who agreed with their findings such as Birch and Young in 2007. They tried to clarify the ways in which e-banking could be improved to gain more customers like creating channels that were easy to use such as ATMs. Birch et al. (2007) explained that cash circulation would increase with the creation of more ATMs.

However, in the year 2006, Chiemeke et al. conducted an empirical study in Nigeria on the adoption of e-banking. His study identified the main inhibiting factors to internet banking adoption in Nigeria, including inadequate operational facilities, such as telecommunications facilities, operational facilities, electricity supply and insecurity. He also provided suggestions on how banks based in Nigeria reduced digital problems. It was discovered that online banking in Africa was still at its primary stages with little information made available to customers. Agboola (2006) conducted similar research on tele-banking services in Nigeria. He concluded that there was a move away from the traditional method of banking and cash usage. Malhotra and Singh (2007) support this fact in their research. They stated that a bank with younger age groups, larger branches, private ownership, and high deposits means a higher chance of this new technology being accepted and adopted.

Gaining competitive advantage and improved market shares are the focus of most current business endeavours in modern times. Hence banks use internet banking to boost their market shares by attracting and retaining customers through the use of improved and new delivery channels, for which reason there is increasing importance on factors that enable and facilitate internet banking acceptance and adoption. A survey conducted by Shah and Braganza (2007) revealed the critical success factors in e-banking. This survey which also highlighted some of the organisational factors that were critical to the success of e-banking, which involved data being collected from

financial sector organisations based in the United Kingdom who offered their services on an electronic channel by using questionnaires from the post (postal questionnaire). Investigations by Shah and Braganza (2007) further showed that while different pieces of literature reported different factors 'as key to success', these were usually based on subjective, perceptual data. Thus, a synthesis of the existing literature should be the foundation for successful and effective survey questions. Outcomes from their surveys showed several factors as critical for the successes in e-banking. These included receptive and swift responsive products or services, organisational flexibility, systems integration, services expansion/consistency, and enhanced customer care and service. Businesses can learn from this research by understanding that e-banking is not a technical issue but an important area that can help improve their existence. Organisations should also pay attention to both internal and external integration, which may include technology, channels, business process integration, and improved overall services to their customers.

Other studies attempted to measure e-banking service portals. There has been a widespread e-services of the economy to businesses through the internet in recent years. Little research has been conducted on the characteristics and services that transform websites into portals, and then to the scopes that define the customer's assessment of the quality of service available on the portal (Bauer, Malik & Falk 2006). The authors validated a measurement model for the construction of web portal quality from an e-banking study that listed the following: basic service quality, trust, security, transaction support, service quality when buying or selling, responsiveness, and value added. The results concluded that factors such as additional service, problem-solving, and core services and value were the main service categories. These categories leave banks with the option of providing the best e-business service qualities that they can. This is seen in how banks in India are making banking easy for their customers (Bauer, Malik & Falk, 2006).

Numerous studies have attempted to find the inter-relationships between the quality of service, customer satisfaction, and customer loyalty in the banking industry (Karim, 2014). Almost all studies confirm that customers adopt services that are easy to use (Jacobucci et al., 2001; Kamariah et al., 2013; Karim, 2014). Studies indicate a positive

relationship between service quality, customer satisfaction, customer loyalty, and acceptance in the banking sector (Ibrahim, 2015; Kamariah et al., 2013).

Electronic banking does not only include bill payments, but also investments, shopping, buying tickets, and planning of holidays. In fact, sources from ICICI Bank (Industrial Credit and Investment Corporation of India, pg. 5) tell us, "our internet banking base has been growing at an exponential pace over the last few years. Currently around 78% of the bank's customer base is registered for internet banking." Customers need a computer with a dial-up device or a modem and an existing account with banks offering online banking as well as patience to complete internet-based application forms. Customers then benefit from services like the following: fund transfers, bill payments, internet shopping, and bank cards etc. The living standard of an individual increases and is made easier by internet banking (Kamiya, 2006).

Deutsche Bank Research in 2005 published a study which explained the present situation briefly, stating that the most important thing banks needed to note was to retain their current customers. This was because it was more expensive to acquire new ones; however, the chances of them staying were very low. When customers are convinced to take up and join a bank but are still in doubt, there is a high chance they will leave because they will most often have been searching for better deals and offers elsewhere. Bakar et al. (2008) supported this by stating that the worst customers a bank can have are those customers who have switched from other banks. It is for this reason that banks devise ways of keeping these customers and avoid losses from them in the short run and near future.

2.15 Reliability

Reliability is defined as the level of transactional security, focusing on the elements that may contribute to the abuse of trust. This could be seen in Nitsure, R.R's work of 2003, which indicated that internet banking faced challenges. The banking industries can be changed by e-banking through low transaction costs. The problems faced by less developed countries enabling them to have less telecommunication infiltration were listed in Nitsure's work. Significant concerns like security, the ‘digital divide' between the rich and poor, authentication, management, and regulation, amongst

others, were listed. Due to electronic banking, banks have been able to organise their profits, products, services and information and are preserving the technology available to improve their activities (Suresh, 2008).

Electronic banking is here to stay. E-banking is the circuit to the future which is why financial institutions are paying a lot of attention to these channels (Asghar, 2004). Worldwide, there have been publications and the spread of positive stories relating to e-banking, which are helping to improve the services. It is, therefore, left to financial institutions to use these factors in ways that improve their services. For internet banking to survive, financial institutions must focus not only on the successful factors like stable infrastructure and high internet awareness, but also link these to the traditional ways of banking to ease usage by their customers. Availability and accessibility when help is required would affect individual perceptions of how reliable banks' online delivery channels are (Devaraj et al., 2007). Reliability in the sense of credibility has been suggested to enter through the bank's reputation for trustworthiness, believability, and honesty (Jun & Cai, 2001, Yang & Jun, 2009).

Perceived risk, service quality, price, products, individual factors, and demographic factors are some of the most significant factors that influence an individual’s decision to use e-banking. The dominant factors for adoption by customers include income, the quality of the service, risks, and level of education or literacy. As set out above, Cameroon is still in the early stages of e-banking, although it was introduced more than two decades ago. In the past, when accepting and using internet banking, many people faced problems relating to security such as hacks and online theft, finding it hard to depend on banks because there was constant failure in their systems, bank employees being unable to provide reliable information, and queuing to apply for e-banking services even as existing customers of the said banks.

Past research identified reliability as a reason people would take up internet banking (Yang & Jun, 2009). However, with Cameroonian banks still working on improving their e-banking service, this research provides suggestions as to how banks can make e-banking services more reliable.

2.16 Security and privacy

Security and privacy constitute a very important aspect of internet banking. According to Chen and Barnes (2007), the lack of security and privacy is a significant hindrance to the acceptance and implementation of internet banking. Chen and Barnes further believed that while people's understanding of the security risk of internet banking was weak, their awareness of risks tended to be high, resulting in their reluctance to accept e-banking. This confirms the views of Howcroft et al. (2002), who highlighted that although the customers' confidence in their banks was strong, their confidence in technology was rather weak. From all indications, as internet banking grows, so does consumers' awareness of security and privacy.

But how effective are the security mechanisms and systems of banks in alerting and protecting the users, from the revelation of customer sensitive information to spoofed sites? A study by Egwali (2009) revealed the existence of gaps in effective data protection and shielding customers from hoax and dubious sites.

Cheng et al. (2006) listed privacy and security as two of the most important factors in online banking services to include e-commerce, shopping online, online transactions, among others. Licker et al. (2001, 2009) described privacy as a person's ability to carry out transactions while retaining their personal identity or keeping these undisclosed and safeguarding and protecting the personal information that was being obtained. Licker et al. further argued that most customers had privacy-related concerns and issues when it came to online banking. This was as a result of their uncertainty about how and where their personal information was being stored by the organisation in question on the one hand, and why so much information (in some cases, topic unrelated information) was needed for a single transaction on the other hand.

Research by Yang and Jun (2009) revealed that internet users had significant concerns about their security and privacy, particularly the collection and use of personal data along with transaction information. Security is typically understood in terms of the physical environment, while financial privacy and security are concerned with the extent to which personal information is transmitted to others and protecting data from unauthorised disclosure, modification, and destruction (Parasuraman, 1988,

Undo, 2001). In terms of internet banking, security particularly encapsulates the idea of a transaction guarantee. This could be either directly in terms of a flawless transfer of money and payment-credit information, or indirectly in the form of transition of risk (Liao & Cheung, 2008).

There has been a rapid growth in online banking in recent years leading to lower cost operations due to increased competition leaving financial institutions to offer excellent opportunities for all parties involved and unparalleled convenience for the consumer (Ponemon, 2012). As growth continues, it is crucial that financial institutions know the risks associated with it and are ready to provide the necessary controls to prevent those risks. Distrust and concern are two characteristics that customers are beginning to question regarding their security statuses during online banking.

Privacy can be defined as the rights of individuals and organisations to determine for themselves when, how, and to what extent personal information is to be transmitted to others (Undo, 2009). E-banking provides a more convenient way of banking to customers by the use of the internet. It is now easy to have access to a computer, a relative advantage (Gerrard & Cunningham, 2006).

An important factor that attracts customers in e-banking delivery is their interactivity with five key success: service quality, issues that are related to security, convenience, internet speed, and timeliness of service product variety or diversity features (Ainscough & Luckett, 1996; White & Nteli, 2004).

Online banking, however, has a few drawbacks. Complicated and time-consuming setup procedures placing users under pressure to learn how to effectively navigate sites are gradually being addressed. The Internet Service Provider (ISP) connection is needed by users to be able to use the internet as well as basic computer skills and knowledge. Due to ‘trust’, some people have refused to use online banking or even create accounts. There are three levels of trust in this case. Firstly, the trust in the providers whereby services are delivered with little or no errors and faith to be able to navigate the system properly. According to Bruce (2009), it takes a while for someone to put his or her trust in something like the computer, the internet, or a faceless network.

Trust is a very important factor in e-banking because customers will bank with a financial institution based on the trust they have for them (Atherinos, 2009, Tan, 2010). Privacy may affect a user's plan to adopt the e-based transaction system. Almost all bank sites use encryption technology to protect customer privacy by using a unique identifier like passwords to restrict access. A secure protocol used on credit cards to protect information is known as the Secure Socket Layer (SSL). In the USA, shoppers were worried about a few things e.g. whether they will receive the same item they bought online, if they will receive it at all, if their personal email addresses will be sold, whether their financial information is safe and protected, or if they will start receiving junk emails from other parties (Nielsen, 2009).

Customers always prefer to shop on a secure website; therefore, it is important for organisations to provide that security to their clients as it will keep them coming back (Lee et al., 2006). In the year 2010, Featherman et al. researched different ways in which privacy risk could be reduced to enhance e-service adoption. Results collected suggested that privacy risks had a significant effect on e-services and served as a hindrance for adoption. There is always an encounter of threat from internet banking by consumers due to uncertainty. However, with the provision of more knowledge, ease of use and better security, potential risks can be prevented or lessened.

Banks now understand these concerns and seek to increase customer satisfaction by developing systems that provide more secure access to internet banking. Customers are also reassured of security through the display of privacy statements, safety features, and trusted parties. For example, the display of a trusted third-party logo guarantees a certain level of security and significantly influences how customers evaluate the trustworthiness of e-vendors (Jiang et al., 2008). Security, therefore, plays a significant factor in the operations and functions of electronic banking. There are numerous protocols for the security of encrypted data packets transmitted via the internet (Kolsaker & Payne, 2002; Dong-Her et al., 2007). Customers are largely unaware of such encryption techniques.

There are specific forms of general internet browsers that are intolerable to some banks because of security limitations (Dong-Her et al., 2007). When we talk about trust, we can note that one simple or little mistake by a bank could mean a loss of up

to half of its customers with trust issues as they will move to other providers they can trust (Ponemin Institute, 2012).

2.17 Convenience

Convenience is the state or ability to proceed with something without difficulty. From the consumers' perspective, electronic banking provides a very convenient and effective way of managing one's finances due to its accessibility and the availability of current information. For corporate customers, sophisticated cash management packages offered through internet banking provide them with easily accessible current information, thereby facilitating timely funds management decisions. E-banking enables customers to carry out a diverse range of banking transactions electronically through the bank's website anytime and anywhere using different media. This results in customers no longer being confined to the opening hours of banks, minimising the importance of travel and waiting times and making banking service information readily available and accessible to their users when needed (Hamlet, 2000; Grabner-Kraeuter & Faullant, 2008).

Customers will only start to consider taking up electronic banking after getting such information about the services from their banks (Nasim, 2009). Customers who already make us of the internet in general or have an internet connection at home are more likely to take up electronic banking; and at this stage, all they need to do is determine whether it is a convenient way of banking. Cameroonian banks currently provide basic online banking options such as customers viewing their account transactions and enjoy account monitoring at all times. However, most Cameroonians do not have internet connections. And for this reason, most Cameroonians still find themselves using bank branches and some banks still make their customers come into branches to print out their online account statements.

ComScore Networks in mid-2004 researched an industry to measure consumer attitudes and behaviour in relation to online banking in the United States of America (comScore, 2005). The results showed that over 22 million users in the first quarter of the year 2000 logged into an account from one or more of the nation’s top ten banks

(Strasburg, 2010). By the first quarter of the year 2003, this number had grown by 29% (comScore, 2005). 20% or 4.6 million people of the 22 million users regularly used the internet for online bill payment offered by one or more of the top ten financial institutions. This report also highlighted that at the end of the first quarter of the year 2004, the usage of online services for bill payment services increased by 37% (Strasburg, 2010).

2.18 Trust

Users limit their online activities due to trust (Hernandez et al., 2009, Hernandez-Ortega, 2011). As the internet becomes more popular, users are becoming more and more sensitive about the activities on the internet and they take caution in using their information for fear of privacy breach and personal information theft that may occur from their use of these platforms (Gefen et al., 2003, Hernandez et al., 2009). Users have trust issues when using the internet especially in situations where they are not sure or are less informed as to where their information is stored, and also if it is being protected by the people on whom they are depending to look after them (Kramer, 2009, p.571).

An individual's behavioural intention to accept and use a vendor's services is highly dependent on PR (perceived risk) and the fact that they are uncertain about the vendors' intention to secure their private information (Wang et al., 2003). To change these perceptions, vendors are encouraged to be more transparent about how they intend to store, use, and protect their customers' information; in so doing, a positive outcome can be expected (Gefen, 2000; Gefen & Straub, 2004).

One way of explaining the relationship between sellers and buyers in electronic commerce has been the use of trust (Gefen, 2000; McKnight et al., 2010). Much research has explained trust in different disciplines of life. Each study has its own idea of what trust means to different disciplines, but the one constant factor is the lack of agreement among researchers regarding trust (Lewicki & Bunker, 2005). Some researchers describe trust as being able to display a constant propensity to willingly depend on others across a broad spectrum of situation and persons (Chervany, 2008).

“Interactions between individuals and cognitive-emotional reactions to such interactions determine actual behaviour” (Mcknight & Chervany, 2008, p. 46). Others state that there is a relationship between the trust being a belief and trust as an intention (Aslam et al., 2011). Other studies showed that some individuals were willing to stay vulnerable to their trustees (Gefen, 2000; van der Heijden, et al., 2008). In general, customers who proceed with their dealings online trust their providers (Gefen, 2000; Hernandez et al., 2009).

Alsajjan et al. (2010) explained that trust played a very important part in online banking as it helped increase the level of acceptance when trust was gained. Trust can take several forms like calculus-based trust; this is linked to logical trust, which is important in financial institutions in their communication. The other forms or types of trust include rational trust and institutional trust (Kim et al., 2011). By calculating the weight of profit of financial institutions, one can determine the level of trust they get from their customers. This is because the higher the number of people who trust an institution, the more they use their services and hence, an increase in the profits of the institutions. A gradual construction of a relationship between the customer and the trustee will result in rational trust. Rational trust is trust that comes about because the customer has confidence in the trustee. Institutional trust can be defined as a situation whereby an organisation or an institution pays attention to ideas relating to trust by avoiding anything that will result in risk as a way of gaining trust from their customers; it is a trust relationship between an institution and an individual.

Trust is a very important factor in e-banking and affects acceptance. The level of security a bank provides to its customers determines the level of trust that the bank commands. When customers lack trust, it is because they lack security and hence a lack of credibility in the system (Adesina & Ayo, 2010). Adesina and Ayo (2010) believed that security reasons and lack of credibility in the system were the key reasons for the low level of acceptance of e-banking, as these resulted in a lack of trust. When implementing online banking services, banks should put trusts at the forefront in order to help them provide the right services, and to gain the trust of their customers.

Previous studies confirmed the importance of trust in e-banking and e-commerce and confirmed that customers' behaviours, purchase intentions, and attitudes towards a given service would be greatly impacted by trust (Somali et al., 2009). Somali et al. went on to explain that it would be important for banks to design e-services in such a way that risk and security problems were eliminated as this would help gain trust from their customers. Online merchants can be successful on this platform if they work on building the trust of their customers. Because online transactions are anonymous, customers tend to be more sceptical; and this impacts their internet buying intentions (Chen & Barnes, 2007).

Several researchers have different definitions and understandings of trust in relation to online banking (Somali et al., 2009; Adesina et al., 2010; Kim et al., 2011). Trust can be defined as a one party being willingly vulnerable to another party with hopes that whatever action the party takes will be important to the trustee regardless of whether the trustee's actions can control or monitor the party (Mayer et al., 1995, p. 712). Banks and financial services take these factors into consideration when trying to implement or better their services. When considering carrying out transactions online, customers need trust. Trust in online banking is, therefore, more important than in offline banking.

2.19 Customer satisfaction

Customer satisfaction is a key interest of banks due to the stiff competition in the financial industry. Banks are struggling to offer quality products and services in a bid to maintain existing customers and pursue new ones. Customers are constantly looking for the best services as they want the best value for their monies. Titko et al. (2010) emphasised that customer satisfaction was very important in determining the survival of banks in a competitive market, which was why banks paid a lot of attention to retaining their customers (Kattack & Rehman 2010). Banks will survive in a competitive market due to service quality; this is because they sell undifferentiated products (Bahia & Nantel, 2000; Aldlaigan & Buttle, 2009).

Competitive advantage can be gained by the banks who offer high-quality services because if the benefits of improved quality of services are great, market share will increase profits and increase customer retention (Beaujean et al., 2007). Banks need to focus hereby on reducing customer defection rates, as this will ultimately lead to an increase in value for the company and customer. Customers can rate the quality of a service provided before using it and even after using it. With great service quality comes satisfaction, which will lead to customers being loyal. Customers will stay loyal if the quality of the services provided is satisfactory.

Figure 2.9 Customer satisfaction

Zeithaml et al. (2012) state that customers can assess products and services via three processes: experience qualities, credence qualities, and pre-purchase or search qualities. Post-purchase features that customers assess are experience qualities. On the other hand, customers make up their minds whether to purchase certain products by making use of search qualities such as see, touch, and feel. At the post-purchase stage, consumers can no longer access these features.

Customers who find it hard to use a bank's services is credence due to lack of skills and knowledge need to be able to carry out these tasks. As a result, customers focus on the banks' reputations before making purchases. Trust keeps customers coming back. Banks, therefore, must make their customers trust, not only them, but also their services so customers do not 'jump ship' (Mukherjee et al., 2003; Vatanasombut et al., 2008). It is, therefore, important for banks to research more on the behaviours of their customers as a way of enhancing a better relationship with them (Kasanoff, 2001).

An investigation conducted using QFD (Quality Function Deployment) to determine the quality of services and the satisfaction of customers in service industries is significant. In this study, both internal and external factors are considered in the management of service problems and innovation using QFD (Picado, Gonzalez & Eckelman, 2008). Another approach for analysing services for QFD is by using the Customer Window Quadrant (CWQ) and the action plan matrix. Finally, the directions and suggestions are offered for application and use in the future with a particular interest in the management of problems relating to e-banking.

Customer satisfaction is an important factor in e-banking acceptance. Banks are obliged to provide the best customer service to their customers because of the high level of competition involved in the financial industry. Banks work diligently to offer quality products and services to keep their existing customers and gain new customers. Customers are always looking for the best services by always searching around. Customer satisfaction is an outstanding factor as to why people will take up e-banking (Kotler, 2012). However, the big question here is, why are many Cameroonians who are satisfied with the idea of e-banking not making use of them? Through this research, the researcher is able to provide and discuss the implications of customer satisfaction.

2.20 Customer behaviour

An individual's decision to buy to a greater extent is influenced by the characteristics he or she possesses. These characteristics can be influenced by cultural, psychological, personal, social or environmental influences. Such characteristics may include age, life cycle, occupation, living standards, and self-concept (Kotler et al., 2011). According to Kotler, age will affect the buying behaviour of an individual. As a person ages, his or her demand for things such as food or clothing will vary. and the person's family lifestyle will also affect the way and things he or she buys. An example is a spinster's way of spending will be different from someone who is married.

Pew Internet and American Life Project published a study that stated that over 53 million people use electronic banking, with a prediction of 130 million by the year 2017 (Sullivan, 2005). Electronic banking was forecast to pass 161.1 million electronic banking users in the United States of America by the end of the year 2019 (Statista,

2020). As of February of 2020, a research published by Jovan Milenkovic on Kommando Tech found out that over 80% of the United States population prefer to use electronic banking than go into branches (the United States has a population of 331 million people). This figure embodies 44% of all who use the internet, which is one-quarter of all adults based in the USA. The growth of this channel is impressive. In the year 2000, about 14 million people made use of internet banking. In 2002 the figure rose to 37 million (Fox, 2013). It also found that 13 million Americans carried out their banking services online. This is an increase of 58% from late 2002 (Fox, 2005).

The research also showed the usage of online banking between males and females. It claimed that men (49%) use the internet more than women (39%) (Fox, 2013). These results are different from the findings from the year 2002 that showed that men and women use the internet for banking services equally. From both findings, people between the age groups of 29 years to 39 years used online banking the most. The estimated population of internet banking users was approximated at 2% in the year 2016 and 3.8 percent in the year 2009 (Statista.com, 2012). It was estimated to rise by 6% by the year 2017 (statista.com, 2012).

According to Pew's report, there has been an increase in internet banking because of the increase in the speed of the internet (like cable and DSL) due to competition in the market (Fox, 2013). There was an increase to 12.4 million online banking users registered with Bank of America at the end of 2004 according to Betty Reisse, the spokesperson for Bank of America, which is equivalent to 50% of those who own checking accounts with the bank. This finding supports the findings from Pew. Financial Institution's stance which says, adopting electronic banking can be attributed to factors such as convenience for customers, competitive advantage, and customer service while providing customers with the best of care (Roche, 2012). Cost is reduced when customers can access their financial statements online by a click of a button rather than having the banks to post paper statements (Roche, 2012).

Balasubramanian (2008) explained that electronic banking was creating a new way of banking and altering the phase of traditional banking. The banking industry has revolutionised, and banks worldwide are now continually investing in technology. Technology has also assisted banks to improve their products and their deliveries

profitability. The risk and the complexity of technology are important to enable the provision of good customer service which is important for the individual's day-to-day usage.

The discriminating customers' prospects have begun to change regarding quality and service. With the existence of computers and ATMs, the gap between customers and the banking personnel is broadening. Unless there is a change of heart, even the biggest banks will find it difficult to survive on their expected false glory. The banks that will survive this and prosper are those who see the reality and react early. For those who choose to stick to the traditional paths, they will soon realise a drop in their market shares. Long queues have become a thing of the past as no customer wishes to be in those anymore. Mishra (2015) studied customers' satisfaction for services they received from the Urban Cooperative Bank and his results showed that, because of the competitive way in which these banks functioned, it paid a lot of attention to the requirements of its customers

The African Telecommunications Union was established in 1999 to promote accelerated development of ICT in Africa to improve services, access, and interconnectivity between African countries. The organisation aimed to address issues including joint capacity building, regional policy convergence, financing of joint projects, exchange of information, and standardisation of tariffs and technology. E-banking is the most recent delivery channel in many developed countries with widespread agreement, such as channels that will significantly impact the banking sector (Daniel, 1999; Jayawardhena, 2008).

Internet banking provides the traditional players in the financial services sector the opportunity to add low-cost distribution channels to their various services (Nehmzow, 1997). He stated that internet banking created threats to traditional banks' market share, because it neutralised many of their competitive advantages to have a traditional branch bank network; agreeing with him is Özdemir et.al, (2008) who explained attitudes towards technology and how they impacted consumer behaviour in an ICT environment. They did so by identifying the beliefs, attitudes, and intentions of consumers towards e-banking. From Nehmzow's (1997) findings, he explained that when people had a negative attitude towards certain factors, it affected their decision

making. In this case, his findings showed that negative thoughts towards demographic factors, technology, and valuing personal service would affect internet banking adoption (Nehmzow, 1997).

Customers are demanding much more from banking services. They want new levels of flexibility and convenience, which is beneficial because it saves cost, time, and space. It is quick to respond to complaints and its delivery of improved services, (Turban et al., 2000; Abadi & Nematizadeh, 2012) on top of powerful and easy to use financial management tools, products, services; it provides these services by exploiting an extensive public network infrastructure (Ternullo, 2007). Banks, therefore, work on their services and many problems are being addressed as electronic banking is becoming more and more acknowledged.

According to Booz-Allen (2009), a household survey conducted that asked people why they did not have a deposit account discovered that most families reported that they did not have accounts because they had almost no month-to-month financial savings to keep in them. Others responded citing high bank fees, bank minimum requirements which were too high, and wanting their financial records kept private. For these reasons, they were not comfortable dealing with banks. Many people who did not have an account or use internet banking said it was because they encountered a few problems from their banks. Hence, there was a need for continuous improvement (Yang et al., 2008). They did not have financial savings; therefore, there was no hardship from not having access to a financial institution to safeguard such savings. Their payment services were not a problem for them for several reasons. Many received and made few non-cash payments. Others cashed pay checks for free at an accommodating deposit institution, grocery store, or other businesses. Financial

Consultancy Celent (2007) explained that the European market would grow from 7 million mobile banking users in the year 2009 to 115 million by the year 2012. All these showed increases in electronic banking acceptances and adoptions. Today, one in four people use internet banking (Financial Times, 2010). Banks err by thinking that being large and diversified means that they are stable. Some researchers agree that being large means they are stable but does not necessarily make them diversified (Financial Times, 2010). Regardless of the size of a bank, they need to be confident

to be able to gain grounds wherever they are because when a bank is confident, it shows through their actions and that helps to attract more customers, but less confidence means losses (Hoflich, 2011, pg. 10).

The internet is easy to access and most often whenever we hear of electronic banking, we think about accessibility. Accessibility can be defined simply as the quality of being at hand when needed. The term ‘web accessibility’ refers to the application of websites content to help users with disabilities be able to use all services.

This explains a customer’s attitude to online banking. It all boils down to the impact on the customers. A customer will have a positive attitude toward internet banking when customers feel that using internet banking provides benefits for them (Al- Somali et al., 2008). In a nutshell, when customers trust a bank, they will switch from the traditional way of banking to internet banking with the same bank. Hence, factors such as income, age, gender, education, trust, income and employment are important and may affect internet banking adoption. Banks can also benefit from e-banking like spending less, lowering the cost of their services, and widening their markets using the internet to provide their services (Flavian et al., 2006).

Banks that use the internet as an additional channel or those banks using only the internet as a delivery channel are now on an equal level to offer their banking services on the internet in order to compete with customers all over the world. "This could be the reason why the internet is widely seen as the most important delivery channel in the era" (Mattila & Pento, 2002); Dube et al., 2009, p.261). Banks use internet banking services to cut costs. These banking services save the banks both time and money and minimise the chances of banking errors (Dube et al., 2009).

Electronic banking offers services regardless of geography and time, and banks provide their services to customers for them to use at their conveniences. Pikkarainen et al., (2004) agree that banks use online banking because it is one of the cheapest delivery channels for banking products. The world is quickly becoming globalised throughout the use of the internet, and the World Wide Web (WWW) and these new challenges and opportunities mean a rise for new competitors in the global banking market. This can be seen through the opportunities brought forth by e-banking such

as speed, convenience and round-the-clock availability made by online banking services (Abu Shanab & Pearson, 2007).

However, in the year 2002, Karjaluoto et al. argued that banking was not limited to geographic or time factors. Customers, regardless of where they were in the world, could make use of these services 24/7. They explained that customers could now use internet banking services without worrying about time or effort as they could now carry out various activities in less time.

Competition is an important factor as it enables financial industries to provide the best to gain customers. By introducing good electronic banking services, banks can retain their existing customers and even gain new ones. E-banking has led to banks focusing on various services and building bank-customer relationships. Ali and Akter (2010) stated some advantages available to banks, made possible by electronic banking such as mass customisation to suit the likes of each user, innovation of new products and services, more effective marketing, and communication at lower costs.

To know the demand level of internet banking, banks look at the number of people who have adopted and are using the internet. One very important factor in this is the speed and cost of the internet (Lee et al., 2012). Lee et al.(2012) also claimed that customers' confidence was a very important factor in e-banking acceptance. The way banks handle problems relating to e-banking errors and security will also affect adoption. The failure of the internet in retail banking is mostly attributed to the lack of the trust that the consumers have in the electronic channels (Dube, 2009).

Provision of infrastructure facilities is another factor that could lead to a quicker diffusion of innovation. The download speed of a website determines the satisfaction of a web-user. Other important factors include web-design, navigation, and content (Dube et al., 2009).

Although internet banking has many advantages, some customers still face difficulties using it, such as difficulties in navigating, slow performance from services, lack of help from service providers, doubts to use those services due to hearing from others about the negative factors associated with them, and poor interactivity (Ali et al., 2010).

Observing customer behaviour closely and analysing it can help resolve such internet banking problems (Xin & Li, 2009). Xin & Li, (2009) also indicated that customers were always willing to use a service again based on their perceptions and attributions of the new technologies and services. A customer's loyalty to using electronic banking can be affected by factors like trust, habits, and reputation (Beh et al., 2010).

Customers prefer certain relationships with their banks; such relationships, however, vary from one bank to another. The means of communication a customer wishes to use with their banks is based on the relationship they have with them. For example, some people prefer using a computer to connect and communicate with their banks while others prefer face-to-face as it is more emotional while computer-mediated communication is less personal. Customer satisfaction is very important to banks and by providing good security to their customers; banks can positively influence customers' decision making to use their services (Gerrard & Cunningham, 2003; Khan, 2010, Kombo et al., 2016).

Although some people would rather establish more friendship-like relationships with their banks, others prefer their banks to provide them with efficient services hence keeping more impersonal associations (Wan, Hui, & Wyer, 2011). In other words, people who prefer face-to-face relationships with their banks seek social and psychological benefits to the detriment of online banking. Wang (2009) explained that a bank's "richness" and powerful existence could affect the relationship between its employee and customers. For customers who focus on building their relationships solely on service efficiency, e-banking is a great option. Mattila and Mattila (2010), in their research on Finnish banking customers (users and non-users), listed security as a factor which affected e-banking.

Financial institutions, especially banks, seek new ICT. Banks which are always looking to cut their costs, improve customer satisfaction levels, be more efficient, and ways of differentiating their products and services to stand out from the others. Most banks are now implementing self-service technologies to help reduce queues and improve transactions (Perumal et al., 2004). In the year 2009, Gandy estimated that in the United Kingdom, 7% of people used internet banking and stated that it should have increased to 68% by the year 2012. There was also a similar rise in internet banking

around Europe in countries like Germany and Norway. The Asia-Pacific, the United States of America and Western Europe had up to 6.1 million internet banking users in the year 2010, an increase from 1 million in the year 2000. Currently, about 9 in every 10 people make use of the internet banking today (Fox, 2020).

Financial institutions are constantly investing in e-banking to provide their customers with 24-hour services like installing free internet at some locations, providing online services devoid of queues, and providing enough ATMs, while continuing to conduct most businesses at their existing brick and mortar branches (Dizon, J.A. 2009). Francisco M. Caparros, Jr., senior vice-president of the Asia United Bank and president of Banc Net, explained that the most important factor in e-banking was convenience as clients preferred instant solutions and disliked waiting. E-banking transactions are carried out easily and customers have little or no paperwork to complete or fill in, especially when banks provide just enough information that would not in any way discourage the customers.

Some prior studies have shown that across international borders, internet users have similar behaviours. Some of these studies were conducted in the context of traditional cultures but the behaviours found were similar regardless of location. Others have investigated customers' preferences for e-banking (Rouibah, Ramayah, & Oh, 2011). Talla (2013) stated that customer behaviour affected e-banking adoption. Some of the factors he listed included social influences, and opinions of parents, friends, and colleagues.

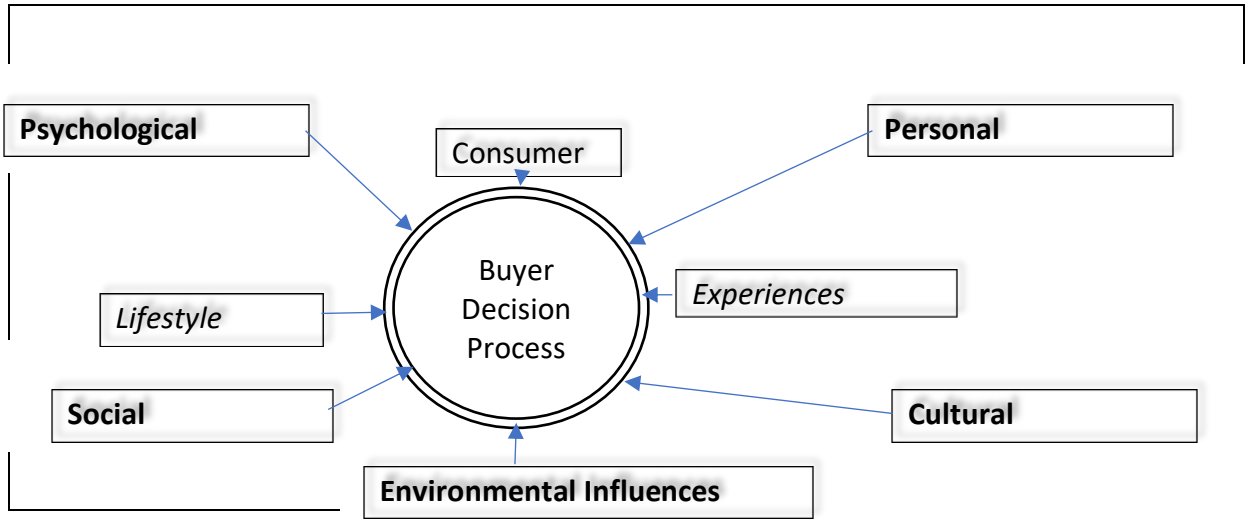


Figure 2.10 Summary of factors influencing consumer behaviour/decision making

2.2.1 Pre-study conceptualisation

The researcher plans on expanding the existing TAM by Davis (1989). Even though the general TAM shows that PU, PEOU determines BI, over time, it has been discovered TAM changes.

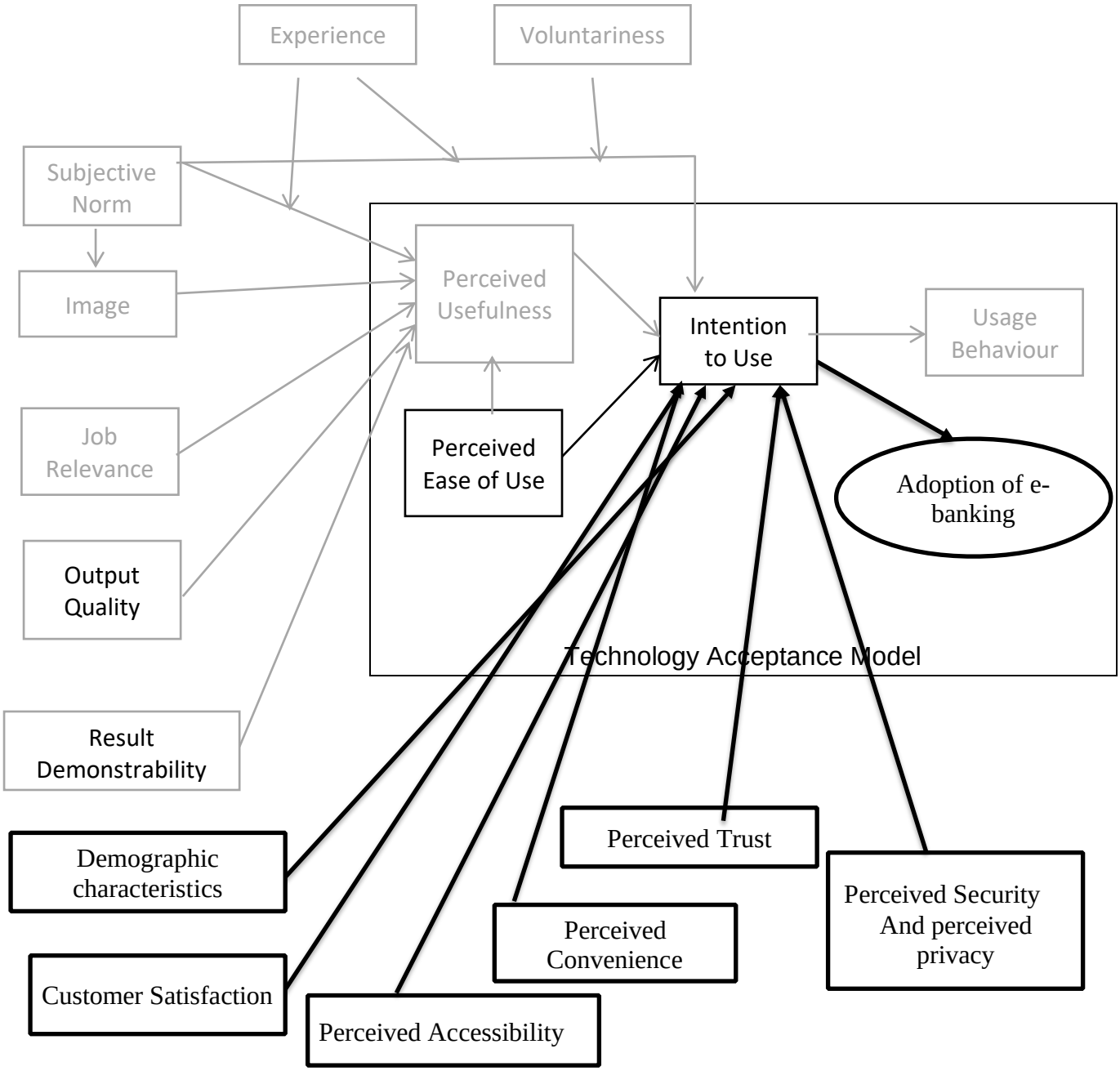


Figure 2.11: Research model for this thesis (TAM extension). Source: the authour adapted from TAM by Davis (1989).

By using TAM, researchers of electronic banking are able to predict or determine behaviours expected from consumers (Rawashdeh, 2015). Even though TAM is very important when determining consumer acceptance of new technologies, over time, a lot of generalisation has been done in regard to TAM.

There is, therefore, the need to narrow the factors that affect electronic banking in the context that the researcher is correctly researching on: Cameroon. The researcher has, therefore, adapted the original TAM to include the factors that related to electronic banking acceptance in Cameroon such as demographic characteristics, perceived trust, perceived security and privacy, perceived convenience, perceived accessibility perceived ease of use and customer satisfaction which led to the intention to use and, therefore, the adoption of e-banking. These factors are further investigated and critically explained in the next few chapters.

2.22 Conclusion

This chapter has reviewed the available and relevant literature on the research subject matter. The main research literature topics have been discussed and supported by theories and models. The researcher was able to concisely explain the forms of e-banking service delivery channels like ATMs, automated teller machines, telephone banking, phone banking, personal computer banking, internet banking, mail banking, branch banking and automated telephone system.

By referring to Rogers' (1995) theory of diffusion of innovation, more insight was provided about the five stages of adoption, (Rogers, 1995). This theory stated that the 'innovation decision process was an information-seeking and information-processing activity, where an individual was motivated to reduce uncertainty about the advantages and disadvantages of innovation'. This theory also listed five stages: knowledge, persuasion, decision, implementation and confirmation. By adapting more theories, the researcher shed more light on the topic at hand. Other theories used include the theory of reasoned action (TRA) by Davis (1989) which is used to predict and understand individual's behaviour.

The theory of planned behaviour (Ajzen, 1991), an extension from the TRA which when applied to academics was used to predict actual and intended behaviour. This theory was a way of guessing a user's intention to use new information systems (Mathieson, 1991) or undertake unethical behaviour (Mann, 2012). The researcher then went on to explain the Technology Acceptance Model (TAM) by Davis (1989). TAM like TPB was derived from TRA, developed and used to explain an individual's acceptance or intention to accept a new technology.

The TAM included two variables, PU and PEOU which have been used vastly in many researches (Venkatesh, 2010, Lederer et al., 2011 and Abu-Assi et al., 2014) to explain acceptance. The TAM was extended by Davis three times and has been modified to include perceived usefulness, perceived ease of use and perceived credibility by researchers like Wang et al. (2003). Researchers from Africa who made used of the TAM in their research included Talla (2013), Cletus (2012) and Chiemeke et al (2017) amongst others.

The researcher in this chapter also showed the use of Information Communication Technology (ICT) in the banking sector. For ICT to be considered successful in the banking sector, it has to be based on customer satisfaction. While explaining the concept of internet banking, it is worth nothing that is the use of the internet as a delivery channel in which to perform the banking activity, such as bills payments, money transfers, bank statements as well as loan applications (Banker online, 2010).

This chapter also made it clear that by observing customers' attitudes and knowing what they thought about internet banking, as the researcher can understand electronic banking. Service quality plays a very important part in new technology acceptance and adoption and helps to determine customer satisfaction. Previous studies like the one by Karmariah et al in 2013 indicated a positive relationship between service quality, customer satisfaction, customer loyalty and acceptance in the banking sector.

This chapter also covered other important factors like reliability, security and privacy, convenience, trust, customer satisfaction and customer behaviour. The researcher made sure to provide enough literature relating to the topic at hand while understanding the fact that there were some existing gaps in the literature that needed to be investigated, and then closed. There is, therefore, a need for this research to not only identify the factors that influence e-banking acceptance, but also provide implications of these factors to the banks, the government, and Cameroonians.

The next chapter outlines the structure/framework of online banking in Cameroon.

CHAPTER 3. CONCEPTUAL FRAMEWORK

3.1 Introduction

In this chapter, a model is drawn based on the findings from the previous chapter (literature review) on the reasons that enable people to take up new technologies, in this case, electronic banking. This theoretical framework combines the innovation of the adoption theory, the theory of adoption, and the TAM, with personal additions from progressive studies. It is presented below and divided into different sections. In the context of the framework, the decision to accept and adopt electronic banking services is the dependent variable, while the independent variables comprise the main characteristics of electronic banking services.

This presents the research model, demographic characteristics such as gender, income, occupation, education and age. All the variables that are used to build this model are defined in this chapter. The chapter also presents the hypotheses guiding the research.

3.2 Demographic characteristics

These include age, gender, education, occupation, and income.

3.2.1 Education:

Education plays an important part in this research, as it helps to show the level of education of both users and non-users of electronic banking in Cameroon. When people become more educated, they become more comfortable and confident in using new technologies because an individual's literacy, in this case on the internet, is positively correlated to his or her level of education (Teo, 2007). For instance, a university student is more confident in using new internet technologies than someone in high school or who is not literate.

3.2.2 Gender:

By using the gender characteristic in determining the reason for internet acceptance and adoption in Cameroon, differences in behaviour between male and female toward the adoption of e-banking technology is illustrated. This has an impact on customers' decisions to take up electronic banking in Cameroon. Some studies showed that more males use electronic banking services than females (Yuan et al., 2010).

3.2.3 Occupation:

People who have highly paid jobs are more likely to engage in e-banking than students or people with low-level occupations (Yvan et al., 2010). High-income earners always aim for a high level of education to keep them at a progressive level. When we talk about occupation, other factors are closely related such as education and income. It is worthy to note that most users of electronic banking have had certain, or if not, high levels of education or have 'better' or well-paid occupations than non-users (Karjaluoto, 2002). We notice that more and more students are beginning to accept and use e-banking in Cameroon as it facilitates transactions reliably, conveniently, and securely.

3.2.4 Income:

This characteristic shows how customers' behaviours in adopting a new technology is influenced by their incomes. This factor is important in this research because it shows how people who earn more are more likely to accept and adopt electronic banking services than lower income earners. Electronic banking adoption is lower amongst lower income earning groups than we see with people who fall in the middle or higher-earning groups. People who have more money saved up were found to use e-banking (Yuan et al., 2010).

South Africa ranks the same as Cameroon as both countries are considered as upper-middle-income countries. However, Cameroon is very different to South Africa with regards to the number of people who use the internet and the level at which the internet is; it is safe to say that Cameroon is still behind (The World Bank, 2010). Income plays a significant role in the acceptance of e-banking in most countries.

3.2.5 Age:

The acceptance of a new technology is influenced by age, as mentioned in prior studies (Talla, 2013). People who are younger tend to be interested in new things and technologies while older people have a negative attitude towards new technology. For that reason, it is expected that less people who are older will accept electronic banking as a banking option as they prefer to stick to the traditional ways of banking. A study by Yuan in 2010 proved that less people (most of them old) use the internet than young people. Another study by Karjaluoto (2002) showed that a majority of internet users fell between the ages of 35 and 40.

3.3 Variables, definition, and reference

As drawn from the literature review, there is a need to expand on the variables that help build this research. This include their use for statistical and hypothetical purposes. These variables as listed in Table 3.1 below also provided a pool of factors that were used in the development of the hypotheses guiding the study.

Table 3.1 below explains each of the variables.

Variable	Definition and decision to adopt	Reference
Relative advantage	New products and services are introduced daily. When a customer thinks that a new product is better than its substitutes, they turn to use that product.	Snel, (2009)
Compatibility	This is when the products available and provided to customers for their needs, value or belief are consistent. When a product is compatible with an individual's values, they are more likely to adopt it.	Tornatzky and Klein, (2006)

Complexity	When an individual perceives that it is difficult to use or to understand an innovation, it is known as complexity. When an innovation does not pose a lot of difficulties in terms of usage, they are more likely to be rapidly adopted. On the contrary, if an innovation means the adopter needs to learn or acquire new skills before being able to use it, adoption will be slow or rejected.	Marhana et al., (2012)
Observability	This is when an innovation is made visible to people, providing them with more awareness. Taking the example of the invention of internet banking, seeing ATMs on the street corners may make this technology more observant than telephone banking which is conducted inside one's own home.	Kolodinsky et al., (2009).
Trialability	This is when an individual is willing to try an innovation and access its benefits. When a person decided to try an innovation to know the benefits, his or her level of uncertainty about that innovation is less and when this happens, the person will be more willing to try or adopt that innovation.	Kolodinsky et al., 2009

Service quality and ease of use	People are bound to adopt a particular service based on its quality. In the last decades, service quality has caught the attention of many researchers on the impact it has on business operations, profitability, customer loyalty and satisfaction.	Kristensson et al., (2008)
Reliability	Reliability is defined as the level of transaction security, focusing on the elements that may contribute to the use of trust. To provide customers with services they can rely on, financial institutions are creating multiple channels and different e-banking services available to all.	Asghar, (2014)
Security and privacy	Security and privacy can be defined as being able to keep the identity of an individual confidential during and after they use services, data and transactions. In order words, it means staying protected while making use of services online.	Licker, (2009)
Convenience	This is the state of being able to proceed with something without difficulty. Customers are more likely to adopt a service if it means they will not waste time or be hassled to.	Grabner-Kraeuter and Faullant, (2008).

Trust	This is when an individual can access services with no fear of being left vulnerable. Most people avoid using the web due to trust and for that reason; they leave some online transactions for face-to-face encounters.	Hernandez et al., (2009).
Customer satisfaction	This is necessary to retain existing customers. Over two-thirds of people who are satisfied with their banks say they are not willing to change banking provider. They are happy to stay with their provider, buy from them and even recommend others to join their provider. On the other hand, up to three-quarters of customers who are not satisfied with services from their financial institutions will neither continue its use nor recommend it. A satisfied customer will return for more.	Vatanasombut et al., (2008)
Customer behaviour	This describes to the processes in which an individual, group or an organisation use to select, secure, and use or dispose of products and services. An individual's decision to buy to a greater extent is influenced by the characteristics he or she possesses.	Kotler et al (2011)
Age	People who are younger tend to be interested in new technologies, which explains why there is a higher percentage of internet banking users in the younger age groups. Age and	Yuan et al., (2010).

	adoption of an innovation are strongly related.	
Gender	This impacts customers' decisions to take up electronic banking. Some studies show that there are more male users of electronic banking services than female.	Yuan et al., (2010)
Education	The higher an individual is educated, the more likely he or she is to accept new technologies. When someone is highly educated, they tend to be more confident and more comfortable using any technology.	Yuan et al., (2010)
Income	People who earn more are likely to accept and adopt electronic banking. From previous researches, it had been noted that people who fall in the middle- or higher-income earning class adopted the internet and people who earn less are less likely to adopt the internet.	Yuan et al., (2010)
Occupation	It is common to relate occupation to income. This is because most people with 'good' occupations turn to earn a high income and, in most cases, must climb the educational ladder to train for better positions., People with 'good' occupations, therefore, will adopt the internet while people with low paid jobs are unlikely to.	Yuan et al., (2010)

Table 3.1: Definition and or explanation of variables that help determine individual intentions to adopt electronic banking

3.4 Research hypotheses

The researcher has adapted and summarised Davis (1989) model to match current research. This shows how perceived security and privacy, perceived trust, perceived accessibility, perceived convenience, customer satisfaction, perceived ease of use and demographic characteristics which all influence Cameroonians' adoption of internet banking

The Conceptual Framework in Figure 3.1 below also serves as the source from which the variables used in the hypotheses development have been extracted.

The Conceptual Framework

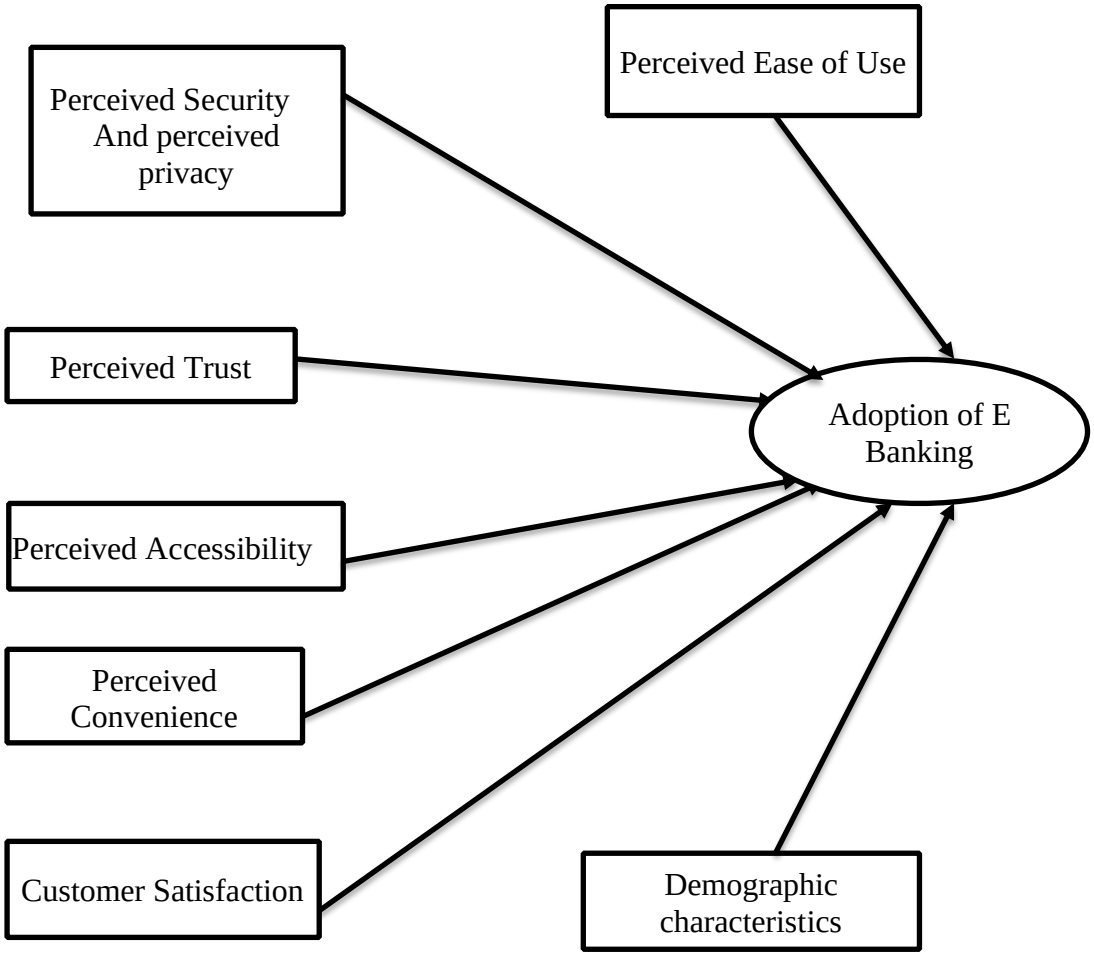


Figure 3.1: Adapted from Davis (1989). Source: Author

3.4.1 Demographic characteristics

Prior studies have shown that demographic characteristics such as age, income, gender and occupation affect the acceptance and adoption of technology. For example, some studies show that more males use electronic banking services than females (Yuan et al., 2010). Another study by Talla (2013) conducted in Cameroon showed that more high-income earners use internet banking as opposed to those who earn less. Cletus (2012), in his research conducted in Cameroon, stated that the level of internet acceptance increased with the level of education. He claimed people who have high levels of education would tend to adopt or have open minds about new technologies. Users of internet banking services tend to be more educated and well placed in the occupational world than non–users (Karjaluoto, 2002). For this reason and more, the hypotheses below were developed:

H1: Demographic characteristics have positive influences on customer acceptance.
H1a: Gender has a positive influence on customer acceptance of internet banking.
H1b: Age has a positive influence on customer acceptance.
H1c: Education has a positive influence on customer acceptance.
H1d: Occupation has a positive influence on customer acceptance of internet banking.
H1e: Income has a positive influence on customer acceptance of internet banking.

3.4.2 Perceived Ease Of Use (PEOU)

Perceived Ease Of Use (PEOU) refers to “the degree to which a person believes that using a particular system would be free of effort” (Davis, 1989). PEOU can be seen in previous studies as having a very important part to play in the adoption of technology. Past researches show PEOU as becoming stronger over time (Venkatesh et al., 2012). PEOU from prior studies can be summarised as when an innovation is perceived as not being difficult to navigate (Gefen et al., 2008). PEOU enables customers to perceive a new product or service as better than its substitutes (Rogers, 1983). Many researchers included PEOU in their studies about customer acceptance of internet banking.

The process leading to the final electronic banking outcome is referred to as ease of use, according to Cletus (2012). The convenience one experiences when using

internet banking can be considered as ease of use. Drivers of growth, as stated by Consult (2012), in e-banking are influenced by PEOU. When merged with convenience, PEOU makes it easy to use e-banking and the internet in general.

When an innovation is considered as easy to use and navigate, it is considered as PEOU (Kim, 2010). It is also when an individual considers a substitute for a product to be worse than a new product (Rogers, 1983, 2013). In the case of internet banking, ease of use is important to customers because they will need to involve very minimum efforts to get around using the available services. Yoon (2010) asserted that PEOU has a strong relationship with other factors related to e-banking adoption; for example, Perceived Usefulness (PU) and the experience of an individual. Customers are always willing to try new technologies to assess their benefits, known as PEOU (Consult, 2002). PEOU has been said to have an impact on online banking acceptance; and in Malaysia, it was found to influence the behavioural intentions of Malaysians regarding internet banking acceptance (Pikkarainen et al., 2004; Ndubisi, 2006).

In the year 2013, Azad et al. established that internet banking between banks in Iran is influenced by information knowledge, and design. The quality of a service can determines whether using it will be facilitated. When a system is easier to use, more tasks can be carried out in less time than systems that are more difficult to use.
Below is the hypothesis that was framed:

H2: Perceived ease of use will have a positive influence on customers' ability to accept e-banking.

3.4.3 Perceived trust

Previous studies have revealed that trust is a very significant aspect to consider before taking up an activity and considering adopting any form of technology. Personality theories viewed trust as an individual characteristic (Papousek et al., 2009). Papousek went further to explain that trust could be conceptualised as a belief, expectancy as well as a deep feeling rooted in a personality which in most cases could have originated in the individual's early psychological development. Perceived trust in

internet banking is defined as willingly performing banking transactions by use of the internet while expecting the bank to carry out its responsibilities regardless of the ability of the customers to monitor the bank's actions on the web (Noventa et al., 2010). This action is carried out based on the trust between both parties involved in the exchange of information (Rotchanakitumnuai & Speece, 2003) and banks must establish proper strategies that will help build the trust of customers who use the internet (Popoola & Arshad, 2015).

Customers' perceptions of internet banking can be shaped by elements such as trust especially when individuals are not certain about the reasons or intentions of the people on whom they depend, in this case, banks. It is, therefore, important for banks to be transparent for individuals with such issues in order to gain their trust (Kramer, 2009, p. 571). With trust held very dearly by customers, there is a reason to look deep into this aspect to understand why Cameroonians will accept internet banking as their day-to-day system of banking.
The hypothesis below is, therefore, formulated:

H3: Perceived trust has a positive effect on customers' acceptance.

3.4.4 Perceived security and perceived privacy

Perceived security can be seen in previous studies as having a very important part to play in the acceptance and adoption of technology. Security is one of the most recognised and significant factors affecting electronic banking adoption. They are both a common factor in the unwillingness to use internet banking services. Security has been at the centre of many prior studies on e-banking. One outstanding definition of security was by Cheung and Chang (2013) who described it as a situation whereby network or data resources were under potential risk. When an event or condition like fraud, abuse, destruction, or disclosure can potentially affect the condition of a network, it is considered as 'security' risk (Cheung & Chang, 2013).

To be certain about the security of a network or data, there is the need for firewalls, encryption, and the availability of digital signatures (Adesina & Ayo, 2010). When an

individual has a positive perception about security, his or her confidence level is boosted in relation to internet banking hence, leading to an open, substantive and influential information exchange. Previous studies showed that many people who used the internet considered their privacy and security first before engaging in online activities. They were concerned their personal information might be left unprotected from transactions made by them (Yang & Jun, 2011). For this reason, security plays a very important part in internet banking acceptance. Customers will accept and use these services if they are assured their information and data are securely protected.

Prior studies have shown that privacy is very important when considering adopting and or accepting any forms of technology. Privacy can be defined as the extent to which the information of an individual or that of an organisation can be transmitted to others. A person or an organisation, therefore, has the right to decide how, when and to what extent their information can be shared with others (Undo, 2009). Customers are more scared of using online financial services for fear of their personal and financial information being shared online for the world to see (Cheung et al., 2013). With many studies conducted in this area like Cletus, (2012); Inegbedion et al., (2019), e-banking services have been made safer by the use of encryptions and firewalls by financial institutions and banks to protect their customers from the internet universe.

For this reason, more customers are considering using these services. Zeithmal et al. developed the E-SERQUAL in 2002, which had been (and continues to be) widely accepted across different industries. The E-SERQUAL was developed to help in the measurement of electronic services. These services included privacy responsiveness, fulfilment, reliability, contact, reliability, and efficiency. When there is a breach in security, several other services are affected. All sorts of problems are triggered when information is entered on the system; and this can cause destruction of the system, and clients becoming unhappy with the security of the web system (Khan, 2007). Hence, the formulation of the following hypothesis:

H4: Perceived security and privacy have a positive influence on customers' ability to accept e-banking.

3.4.5 Perceived accessibility

Prior studies have shown that accessibility is very important when considering technology acceptance. Banks should, therefore, make their websites more colourful, easy to navigate, secure, and with more important information for their customers; this way, customers will use the website with more confidence and spend less time in completing tasks and transactions (Hernandez et al.,2009). Previous studies showed that the easier a technology was made, the more accessible it was for customers and more customers were likely to adopt the technology (Maumbe, 2008). The following hypothesis was, therefore, formulated:

H5: Perceived accessibility exerts a positive effect on customers' acceptance of e-banking.

3.4.6 Convenience

Convenience is the state of being able to proceed with something without difficulty. With electronic banking, customers can carry out internet banking services from anywhere in the world and at any time by just logging onto the websites of their banks. This means customers will no longer have to wait for banks to open, or to travel long distances to their banks, or stand in long queues to carry out a service because everything they need can be done at any time, and from anywhere (Hamlet, 2000; Grabner-Kraeuter & Faullant, 2008).

The more convenient a technology is made, the more customers are encouraged to accept and adopt these services (Nasim, 2009). Even though this is true in most contexts, convenience is not an outstanding factor in the Cameroonian context because most customers are still confined to banks' opening hours for several reasons. This research sets out to understand whether convenience is the primary reason Cameroonians take up electronic banking. The following hypothesis is then formulated:

H6: Convenience will not positively influence a customer's acceptance of e-banking.

3.5.7 Customer satisfaction

Banks pay a lot of attention to customer satisfaction due to the constant increase in competition in the financial institution. Banks are, therefore, focusing on the quality of their services as a way of attracting new customers and retaining the existing ones. Customers, however, are in search of the best services and so they are always in search of better deals and offers. A bank's survival in such a competitive market will depend greatly on the satisfaction their customers get. By paying attention to customer satisfaction, banks can provide a successful e-banking experience to their customers, which includes providing each customer with a personalised banking service experience that matches his or her needs (Mattila, 2013). Eid (2010) confirmed this by stating that electronic satisfaction (e-satisfaction) can be achieved if the customers are made to feel secure when they use these services. For this reason, the following hypothesis is formulated:

H7: Customers' satisfaction will positively influence customer acceptance.

This research has discussed the literature that is relevant for the acceptance of ICT/IS. This research also highlights the need to determine the factors that enable online banking acceptance. This research will determine, develop, and present factors that affect BI and lead to e-banking adoption. From the literature review, it was discovered that the TAM was more important, clear, and more focused when talking about IS usage than comparing it with the TRA and TPB. The TAM model showed that the PEOU, PU, and convenience helped consumers determine whether to use internet banking. It is also important to consider external factors when using the TAM to determine whether results can be affected (Davis et al., 1989, Venkatesh et al., 2012). External factors that were considered included trust, convenience, security and privacy, acceptance, satisfaction, and accessibility. These variables have been discussed above earlier in the chapter.

Of the variables listed above, customer satisfaction is the most important factor in customers' acceptance while other external factors such as security and privacy and accessibility (AC) has a direct impact on the PEOU.

3.6 Conclusion

From the existing model/framework, a new research theory and the hypotheses guiding the study was developed based on the topic at hand. A model was developed based on the factors influencing electronic banking as seen in previous chapters. In this chapter, the researcher also formed the hypotheses of this research from variables including perceived trust, perceived security and privacy, perceived accessibility, perceived ease of use, perceived convenience and customer satisfaction.

The next chapter describes the research methodology and design used for the research.

Chapter 4. RESEARCH METHODOLOGY AND DESIGN

4.1 Introduction

This chapter sets out the methodology and the research design used in this study. Methodology is the description and the analysis of methods that have been chosen to conduct the research, and the limitations, resources, and outlines of assumptions and consequences associated with the research (Naidoo, 2006). It aims at achieving the aim and objectives of the research. This chapter discusses the research methods used and provides explanations of primary and secondary research methods used. The respondents who participated in the research are listed. An outline of how the questionnaires were designed, translated, and negotiated to enter specific banks' samples, and ethical considerations are provided. The population, the sample size, collection method, and data analysis methods are also highlighted. Lastly, the problems encountered in the course of carrying out this research are stated.

This research involves the use of quantitative data collection using the survey approach. This approach helps in the data collection process, which shows the e-banking usage by targeted users and non-users.

4.2 Research philosophies

The idea that there are different views of the world and the processes that operate and manipulate these views within it constitute part of philosophy. Our individual views of the world are linked to what we perceive as reality. Our individual perceptions of reality affects how we gain knowledge of the world and how we act within it. This means that in most situations, our perceptions of reality and how we gain knowledge affects how we conduct our research.

With each research approach comes a hidden philosophical assumption as a way of determining which methodology is the most appropriate to use. According to Guba et al., (1994), research method questions are of secondary importance when considering the appropriate philosophical approach in a study. Saunders et al. (2007) outlined the important factors when designing a research project. They did so by stating "these assumptions will underpin your research strategy and the methods you choose as a

part of that strategy" (Saunders et al. (2007) p.101). The best philosophical approach for this study, therefore, is determined in this section. Each of these elements is different in its own way and affects how a researcher thinks about the research process (Saunders et al., 2007). Research is guided by a set of beliefs, known as a paradigm.

4.3 Research paradigms

This is a way of thinking about the world. A research paradigm is "the set of common beliefs and agreements shared between scientists about how problems should be understood and addressed" (Kuhn, 1962). The general rule to guide researchers includes them following a set of boundaries when carrying out their research in research methodology as part of a paradigm (Guba et al., 1994). Our way of looking at the world depends on paradigms. This is an important concept because it shows us that the ways by which we view the world on a day-to-day basis are very likely to influence how we conduct research (Kuhn, 2011). This means that what one sees depends on what they look at, their previous visual/conceptual experiences and how they view them. In 2011, Kuhn stated that there was no way to prove that one paradigm was different from the other. He went on to explain that these three beliefs were so interrelated with the enquiry paradigm that answering one question limited how the other could be answered. Positivism is a paradigm or an enquiry that searches for the truth or facts about reality.

Contrary to the positivist paradigm is the phenomenological view (Collis et al., 2003), which uses qualitative and naturalistic approaches to inductively understand the experiences of humans in the context of a specific setting (Amaratunga et al., 2002). In a nutshell, the phenomenological view is concerned with the understanding of human behaviour while positivism is concerned with searching for the truth. Between the positivism paradigm and phenomenological views is pragmatic philosophy, which shares characteristics of both views. This is called a mixed approach (Johnson et al., 2004). This mixed approach does not favour either of these views but draws from the strength and minimises the weaknesses of both in research philosophy and a study. Combining both methods provides better insights into the problem than either one on its own (Creswell, 2015). Positivism uses quantitative or experimental methods to test

the hypothesis in a study while the phenomenological view uses qualitative methods. Guba also listed ontology, epistemology, and methodology as the basis of a paradigm.

4.3.1 Epistemological aspect

Epistemology is regarded as “acceptable knowledge in a field of study” while ontology is considered a “reality” (Bryman, 2001). When viewing paradigms, it is important to look at the epistemological aspects. It is a branch of philosophy that studies knowledge or the process of “knowing”. A researcher can assume that there is knowledge waiting out there to be discovered; so our job is to uncover this universal unchanging and absolute truth. This concept shows that a person’s reality can be affected based on his or her view of the world and what they perceive (Bryman, 2001). Some believe that people develop knowledge based on their experience. Knowledge, therefore, is a social construction of whatever we say it is. This reflects our belief regarding the kind of environment we want to live in (Creswell & Plano Clark, 2011). Epistemology and methodology are driven by ontological beliefs. Epistemology, however, is more philosophical than methodology.

4.3.2 Ontology

Ontology, according to Healy and Perry (2000), is the reality a researcher wants to study while epistemology is the relationship between reality and a researcher. Ontology is, therefore, considered as the theory of “being” and epistemology, the theory of “knowing”.

> “It is possible to identify and communicate the nature of knowledge as being hard, real and capable of being transmitted in a tangible form, or whether knowledge is of a softer, or even transcendental kind, based on experience, more subjective, spiritual with an insight of a unique and essentially personal nature. The epistemological assumptions in these instances determine extreme positions on the issues of whether knowledge is something which can be acquired on the one hand or is something which has to be personally experienced on the other” (Cohen et al., 2000, p. 06).

The two dominant aspects of reality in ontology are realism and relativism. Realism is a belief that a reality exists. Within the quantitative or positivist paradigm of research is realism, which is the ontological perspective. Ontology is better understood as the nature of truth untainted.

Relativism, contrary to realism, searches for meaning in the experience of the individual. Relativism is the belief that reality cannot exist without context; the belief that multiple truths may conflict but are still true. Relativism is the ontological perspective within the qualitative paradigm of research. To ensure that this is followed, therefore, the researcher in carrying out this research remains uninvolved emotionally in the topic at hand so as not to influence the results.

This research is based on finding the factors that attract Cameroonians' acceptance of electronic banking. There are multiple versions of reality. This is not the same with positivists who assume that reality is fixed, directly measurable, and knowable; and that there is just one truth and one external reality.

4.3.3 Methodology

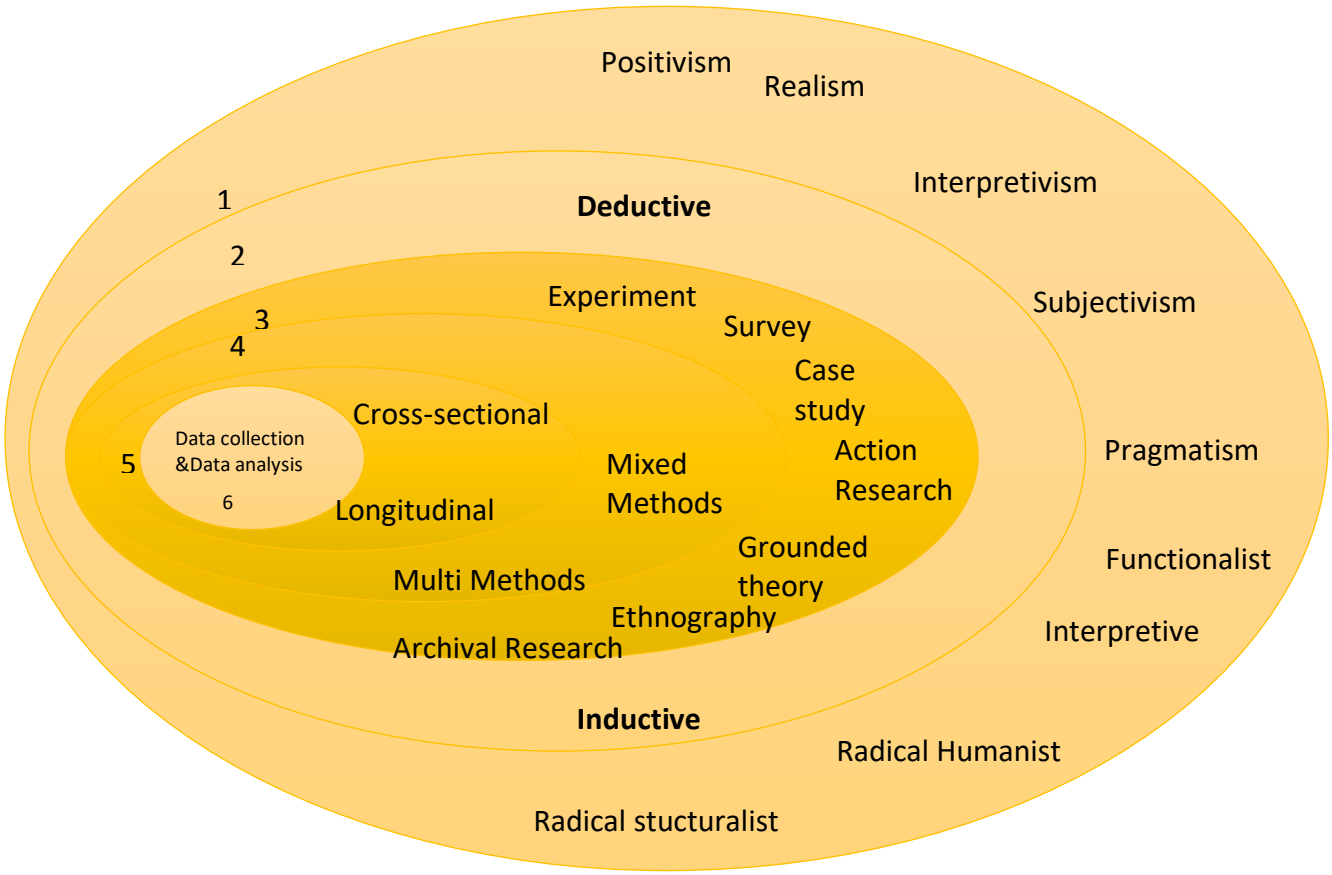
There are two approaches to methodology: positivist (Hussey et al., 1997) and interpretivist (Mingers, 2001). The positivist approach is more scientific, quantitative method while the interpretivist approach is more of a qualitative approach. The positivist approach uses a more scientific method in collecting data, and the results from this collection are analysed by the use of a quantitative method statistically with an external influential factor. Both approaches have impacts on the research being conducted in their own way, but with the same result (Bryman, 2001). This research however, distances itself from interpretivism.

It was argued that positivists search for a generalisable rule and pay more attention to quantification while ignoring more important facts, and yet refuse to pay attention to the complex and conditional nature of reality. Positivists claim that by using standardised instruments, they can observe and measure an objective reality void of bias. However, interpretive constructionists accept that there is a reality. They also claim that even though it cannot be measured directly, it can be perceived by people

differently because they each view it through their own lenses based on their previous experiences, knowledge, and expectations. The lenses affect how people see and how they interpret what they find. Realities that have already been observed and explained can be predicted based on that.

Positivism can be traced to history with much information available on this field relating to our societies. Nowadays, when knowledge is not based on positivist thoughts, it is said to be scientific and therefore considered as invalid (Walsham, 2014). There is a positive relationship between positivism, natural and physical science (Walsham, 2014). There are many debates on this issue in social sciences; the positivist paradigm is entirely suitable (Walsham, 2014). Positivists see themselves as natural recorders.

This research uses both ontology and epistemology. However, it focuses more on epistemology with brief information on ontology. Epistemology was considered as it helped the researcher to determine if this research was based on the theory of knowledge. This is a justified true belief of knowing the reality. However, the specific factors that enable Cameroonians to adopt e-banking have not been truly justified. To test the hypotheses proposed for this research and validate them, a positivist approach is used. It is, therefore, important to study the literature relating to this topic in order to construct an appropriate theory and hypothesis, as this is a normal positivistic approach (Hussey and Hussey, 1997). The general idea, therefore, is to use a quantitative method.



1- Philosophies
2- Approaches
3- Strategies
4- Choices
5- Time horizons
6- Techniques and procedures

Mono Method

Figure 4 1: The research onion (Saunders et al., 2012)

Positivism ←…… → **Phenomenology**				
Orientation	**Positivism**	**Post-positivism (Realism)**	**Critical theory**	**Interpretivism**
Ontology	Understanding reality. The only way of knowing the true nature of something is by testing the actual objects in the world by use of theories.	"Real" reality but only probabilistically or imperfectly apprehend-able.	Historical realism - Social reality. This is when humans or an organisation can exist anywhere and not just in a particular area or state.	This is relativism – through the actions of humans and by the way humans interact; a social world is shaped.
Epistemology	Objectivist, verifying hypothesis through thorough testing, using universal laws, explanation, control, as well as prediction.	Objectivist critical tradition – finding the existence of truth.	Subjectivist – Knowledge can be found in the society and from historical practices. This option can be conducted through a theoretical framework when carrying out research.	Subjectivist understanding of the social world from the participants' perspectives. The researcher's beliefs and values can intervene to shape their investigations.
Methodology	Hypothetical – deduction, manipulative, verifying the hypothesis, quantitative method	Modified experimental method. May sometimes include quantitative methods.	Dialogic – interpretive case study, ethnography, and action research mainly.	Dialectical - this is done by explaining and through action research.

*Table 4.1 Ontology, epistemology and methodology summarised***.**

The present study relies on quantitative method such as literature and questionnaires. Data was collected through questionnaires. The positivism paradigm was adopted in this research because ‘truth’ as we know is out there to be discovered.

4.4 Research approach

These are the plans and the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation. Selecting a research approach is mostly based on the researcher’s personal experiences or the audiences for the study. The research approach for the study assumes a quantitative method. According to Andresen and Walther (2013), a quantitative or qualitative approach is not different and should not be viewed so, but rather they should be looked at as two ends of the same ‘sword’. Every approach varies with respect to the kind of approach used. Some studies are centred on the quantitative approach and vice versa

. A deductive approach is used, which refers to how existing theories and models are discussed and evaluated. Deductive means moving from general to particular (Collis et al., 2003). In this research, the existing literature was used to identify the factors that enable Cameroonians to use e-banking and then surveys were carried out using questionnaires. By using this approach, hypotheses were developed from the conceptual model (See Figure 3.1 in Chapter 3) and tested statistically and/or mathematically for the approval or disproval of the hypothesis. Data was collected through questionnaires to understand customers’ perceptions of online banking. This data was evaluated using the Statistical Package for the Social Science (SPSS).

Brief definitions of the quantitative and qualitative approaches are as follows:

4.4.1 Quantitative research

This type of approach can be used to test objective theories. Studying the relationships that exist among variables can test these theories. On the other hand, variables can be measured by using statistical procedures to analyse numbered data. There is a set structure that guides the final report and consists of introduction, theory, literature,

methods, results, and then discussion. When using this approach, researchers test their theories deductively and avoid things that may alter their findings like protecting themselves against bias, providing explanations, and generalisations based on their findings (Brannen, 2016). This research is centred on this research approach. This research method helped the researcher to measure the data collected on e-banking adoption. The method assisted in designing the different stages including the planning of the kinds and number of people who participated in answering the questionnaires.

The quantitative method is a flexible research design method to use as it can change at any time within the research process. This is because it is not a step-by-step process. Getting detailed information about participants becomes easy in this case because it involves different methods of collecting data, such as interviews and questionnaires.
A questionnaire was created in this research and distributed to both users and non-users of electronic banking. Questions consisted of both open and closed questions. Open questions allowed respondents to provide their views.

4.4.2 Qualitative research

There has been a growing interest in the use of qualitative and quantitative research approaches since the 19th century, which continues today. With this type of research approach, there is the need to create questions, collect data from the participants, analyse data collected inductively, and then interpret the data collected. Inductive data analysis, unlike deductive, draws conclusions from particular to general themes. The structure of the final report is more flexible and those who make use this type of approach support the inductive style by focusing on the individual meaning as a way of understanding the bigger picture of the situation.

The study aims to investigate both users and non-users of electronic banking in Cameroon and why they embraced or refused to embrace new banking systems. This involves an investigation of which factor is most important to encourage people to take up these services and their implications. This approach helps to capture human experiences; however, this approach was not used in this research. The main methods

of data collection in this research were through questionnaires, these were distributed to both of users and non-users. This method was not only quick because of the limited time the researcher had to collect data, but it was cheaper to administer questionnaires.

	Qualitative approach	**Quantitative approach**
Objective	Understanding the reasons and gaining motivation in a qualitative way.	Quantifying the data and generalising the results from samples with the population that is needed.
Sample	Small numbers of non-representative cases.	Large numbers of representative cases.
Data collection	It is unstructured.	It is structured.
Data analysis	This is mainly non-statistical.	This is mainly statistical.
Outcome	An original understanding is created.	Need for an alternative action.

Table 4.2: Qualitative versus quantitative research. Source; Chrisnal (1997)

4.5 Primary research

This method of data collection is essential and can be done through several means including observing, surveying, or conducting experiments on the topic that are set to achieve proposed research objectives. In this research, the method of data collection was done through questionnaires. Data was collected for the first time; hence, primary data. This form of data collection, according to Saunders et al. (2007), has a low bias because it is not processed or evaluated by earlier researchers. To get accurate and current results for this study, it was very important to use this approach as it provided first-hand data; (primary data).

The methods of data collection in primary research include surveys, observations, and focus groups. However, this study uses surveys/questionnaires only. This tool is appropriate for the evaluation of the research aims and objectives. The method reduces any form of bias, costs less, is very flexible because the same questionnaire being used to obtain information from a large population, and personal information and facts can be gathered through questionnaires from respondents.

Questionnaires were distributed to 30 customers from each of the 10 selected banks making the total number of 300 questionnaires. The questionnaires were delivered in person by the researcher to achieve reliability.

4.6 Sampling strategy

4.6.1 Population

"Factors such as the sampling units, elements, and time are the main terms that should define the target population'' (Malhotra, 2004). In this research, the targeted population are customers from 10 well-known Cameroonian banks that use electronic banking. These banks include Ecobank, Afriland First Bank, CBC (Commercial Bank of Cameroon), CitiBank, UBC, Atlantic Bank, BICEC, SGBC, Standard Chartered and UBA. The population for this research consists of users of any of the above-mentioned banks and non-users of online banking. These banks are found in Yaoundé and Douala the two focal regions/points of this research.

A targeted population number was between 200 and 300 and included anyone aged 18 and above, who used or did not use electronic banking systems, and was a customer of one or more of the above-mentioned banks. There was no gender, ethnicity, height, occupational, educational level, or status discrimination. However, data is analysed based on these demographic characteristics because it gives a clearer picture of how electronic banking services impact users and non-users of internet banking.

- Population elements: Respondents who are above 18 years of age, with or without a bank account.
- Sampling units: Banks.
- Limits: Cameroon (Yaoundé and Douala) regions only.
- Time: June, July, August 2017 (questionnaire).

Questionnaires were distributed via several methods including personally handing them out at bank locations, shopping centres, and city centres. Data collection was conducted from the middle of June to the middle of August 2017 and then in February of 2018 in these 10 bank branches in Cameroon. From the literature, it was noted that the group of interest for this research would be referred to as the targeted population selected based on the objectives of this thesis (Bush, 1999; Zikmund, 2005). According to internet live statistics (2014), the total number of internet users in Cameroon was estimated at 2.5 - 3 million people, which represented approximately 2.53% of the total internet population in Cameroon. Cameroon, however, shares approximately 0.01% of the world's internet users, which are approximately 3,424,971,237 as of 2016.

It is, therefore, impossible for everyone who makes use of the internet in Cameroon to be approached by the researcher. An interpretation of the data in these categories will indicate whether electronic banking services have different impacts on different people following their ages, genders, occupations or statuses.

However, the results highlighted the major factors that enabled people to use electronic banking in Cameroon.

Year	Internet Users**	Penetration (% of Pop)	Total Population	Non-Users (Internet less)	1Y User Change	1Y User Change	Population Change
2017*	**4,909,178**	20.0 %	24,513,689	18,549,812	30.5%	1,817,244	2.71%
2016	**4,311,178**	18 %	23,924,407	19,613,229	16.5 %	609,593	2.49 %
2015	**3,701,585**	15.9 %	23,344,179	19,642,594	47.8 %	1,196,553	2.51 %
2014	**2,505,032**	11 %	22,773,014	20,267,982	76.2 %	1,083,517	2.53 %
2013	**1,421,515**	6.4 %	22,211,166	20,789,651	15.2 %	187,143	2.55 %
2012	**1,234,371**	5.7 %	21,659,488	20,425,117	16.9 %	178,418	2.56 %
2011	**1,055,953**	5 %	21,119,065	20,063,112	19.3 %	170,555	2.57 %
2010	**885,399**	4.3 %	20,590,666	19,705,267	14.9 %	114,537	2.57 %
2009	**770,862**	3.8 %	20,074,522	19,303,660	15.9 %	105,467	2.58 %
2008	**665,394**	3.4 %	19,570,418	18,905,024	19 %	106,406	2.58 %
2007	**558,988**	2.9 %	19,078,100	18,519,112	48.2 %	181,700	2.59 %
2006	**377,288**	2 %	18,597,109	18,219,821	48.4 %	123,029	2.59 %
2005	**254,259**	1.4 %	18,126,999	17,872,740	47.4 %	81,810	2.6 %
2004	**172,449**	1 %	17,667,576	17,495,127	70.4 %	71,269	2.61 %
2003	**101,180**	0.6 %	17,218,591	17,117,411	67.1 %	40,628	2.62 %
2002	**60,552**	0.4 %	16,779,434	16,718,882	33.7 %	15,256	2.63 %
2001	**45,296**	0.3 %	16,349,364	16,304,068	12.8 %	5,139	2.65 %

*Estimate for July 1, 2017

****Internet user*** = individuals who can access the internet at home, via any device type and connection.

Table 4.3: Internet users by country (Cameroon, 2016).

4.6.2 Sampling

Anyone who uses the internet is an important target population for this research. Hence, current users or non-users of online/internet banking were selected. However, it was not possible to access information regarding already collected data of people in Cameroon who use the internet, as it does not exist. The researcher, therefore, decided to administer survey questionnaires in person to identify the subjects for this study. This included approaching customers, explaining to them about the research, and convincing them to participate in the questionnaires if they fell into the required category. It is also important to note that it was impossible for the researcher to approach every single person to participate in this research.

In most cases, people are likely to draw conclusions based on their surroundings whether regarding a place, thing, or person (Gall et al., 2012, Venkatesh et al., 2013). Selecting a group of people to represent a larger population or idea is known as sampling. Sampling is done in order to gather data from a selected group of people who represent the population (Gay & Airasian, 2003; Gall, 2012). A good population generalisation comes from selecting the right group of people to represent the whole population.

In some circumstances, it is impossible to reach the relevant members of a population necessary for a sample in the social sciences and management information systems (MIS). Setbacks are most common when trying to reach the right members to use as a sample especially when there are certain limitations like time, engagements, finances, and efforts needed (Gay & Airasian, 2003). When setbacks like these occur, they can be resolved if the researcher reduces the number of participants needed to act as a sample retaining, however, the right categories of people to represent the larger population. Sampling is reducing the number of participants of a larger population into a manageable group (Plano Clark, 2011). Sampling is commonly used in situations like opinion polls, large and small studies, and when carrying out market research. Sampling in every research is very important because if it is not done correctly or is biased, the sample can provide an incorrect conclusion.

A non-probability sampling technique is an ideal technique to use in this research. This sampling technique gathers samples in a process that gives all individuals in the population an equal chance of being selected. This was an ideal sampling choice because the researcher had a limited time in the field to conduct the research, and this technique was good in avoiding a biased situation in the data collection process. This was noted as the only way in which bias could be avoided. Also by using a random selection process, it is free of having a result void of samples being accurate (Mouton, 2008, p. 139).

Based on the subjective judgment of a researcher, any non-probability technique can be selected from a range of alternatives (Creswell et al., 2011). Collecting sample elements from the population is not done solely for statistical representation of that population when using non-probability sampling. It is then for the researcher to use his or her own personal experience and expert judgment when selecting elements to use as samples. Hence, it is impossible to know which element will be selected from the population as a sample. Convenience sampling involves selecting members who can provide information and are willing to be participants of a study (Samuel et al., 2013). This form of sampling (convenience sampling) is most common in non-probability sampling. With non-probability sampling, researchers can carry out many interviews cost-effectively and quickly. However, this research uses purposive sampling (Samuel et al., 2013).

Purposive sampling is an ideal sampling method. By using this method of sampling, banks in the Cameroon were provided with an independent and equal opportunity of being selected as a sample for this research (Mouton, 2008). It aimed at meeting certain characteristics and in this case, at finding out the impact of electronic banking services of consumers who used these services in the Cameroonian banks. Hence, only customers of one or more of the aforementioned banks that used electronic banking and above the age of 18 were selected to take part in this research.

The researcher collected information from the Ministry of Finance in Cameroon and from other secondary data of banks that were available for a purposive random sampling technique.

	Banks used	Headquarters
1	Afriland First Bank	Yaound**é**,
2	SGBC (Société Générale des Banques du Cameroun)	Douala
3	Standard Chartered Bank (SCB)	Yaound**é**,
4	United Bank of Africa (UBA)	Douala
5	BICEC (Banque Internation du Cameroun pour l'épargne et le Crédit)	Douala
6	ECOBANK	Douala
7	Commercial Bank of Cameroon (CBC)	Yaound**é**,
8	Union Bank of Cameroon (UBC)	Yaound**é**,
9	Atlantic Bank of Cameroon (ABC)	Douala
10	CitiBank	Douala

Table 4.4: Cameroonian Banks Used for the Research. Source: Jeune Afrique Economique (2010).

4.6.3 Sample size and data collection

Sample size is crucial in all statistical analyses. If the sample size is large, it means the statistical analysis will be complex (Rubin, 2000). Sample size affects the results of research. In 2005, Kline suggested that 200 and larger participants is an ideal sample size for a very complicated path model. Most researchers agree with the idea that a sample size that is perfect to provide a positive result should range between 200 and 400; sample sizes that exceed 400 - 500 provides results that are indifferent hence are not advisable. The larger the sample size, the smaller the error or bias; the opposite is true (Polit et al., 2012). To reduce the level of error or bias in a study, the researcher should use an appropriate sample size that matches his or her research.

Collecting useful information and opinions from targeted participants about the research questions or topic is known as data collection. Data can be collected for this

study by several methods. They are postal service, face-to-face with participants, phone calls, emails, or a combination of these methods. The researcher collected data through several methods, such as emails, distributing questionnaires in person, phone calls etc. (Davis, 1989; Wang et al., 2003; Pikkarainen et al.; 2004).

In this research, the researcher employs face-to-face contact. A personal meeting of participants from 10 selected Cameroon banks was conducted at the banks. The researcher also sent out emails with questionnaires to some respondents who then filled them out and returned them. A few calls were made to some participants to ask the questionnaire questions and the responses given by the participants were filled out. This research followed guidelines put in place for all researchers by using the advice sample sizes as indicated by Blanche et al. in 2006.

To avoid bias, the researcher paid attention to selection bias. In this research, this type of bias was reduced by the random selection of participants. However, participants who are unaccounted for because they withdrew from the study or because of loss of follow-up can result in sample bias. By using purposeful sampling, bias is reduced because the sample is constantly refined to meet the study's aims. Measurement bias, on the other hand, can occur if a tool or instrument has not been assessed for its validity or reliability. Questions need to be constructed accurately to avoid confusion and inaccuracy. The researcher constructed questions to be direct and well understood to avoid misunderstanding. No characteristics were used to differentiate between the respondents, such as appearance, race, ethnicity nor religion.

The banks researched are ECOBANK, Afriland First Bank, Atlantic Bank, UBA, UBC, SCBC, BICEC and CitiBank. Afriland was selected because it is a private bank and has a history of adopting recent internet banking technologies. ECOBANK was selected because it is available in more than 20 other countries and this is important to see how it functions in Cameroon. The United Bank of Africa (UBA) also has several offices around Africa and is one of the new banks to join the Cameroon market. UBA has proven to be very successful in the Nigerian financial market. BICEC and SGBC are state banks and important for this research because they can be compared to other banks that are privately owned. Standard Bank is located in other African countries and in Europe. With Europe being so advanced in internet banking, it was

an interesting choice to see if the services had been extended to Africa in general, and Cameroon in particular. SCBC and CitiBank are both French banks and belong to a huge financial group. UBC was one of the first banks to introduce internet banking in Cameroon and are always working on providing cheap internet banking services to their customers. This was a compelling reason to select it for this research. ABC (Atlantic Bank of Cameroon) is a French bank and also based in other African countries like Senegal and Togo. Hence, it would be good to see how it progresses in Cameroon.

The researcher administered questionnaires to customers of banks. These customers were either individuals who already used their bank's internet banking services or individuals who were not users of these services and may not have belonged to a bank. Cameroon has many bank locations scattered all over the country. The researcher, however, could not visit all cities and banks locations. It was, therefore, important to narrow the location to the important cities of Douala and Yaoundé. Douala is the economic capital and Yaoundé is the political capital. Most of the banks have their headquarters situated in Douala and/or Yaoundé.

Questionnaires could not be distributed in Bamenda due to an ongoing civil war (developed from a strike over time). It is worth nothing that Bamenda was selected as one of the regions for this research. Bamenda is the agricultural capital of Cameroon; however, this region had to be dropped mid-way through the research because of an on-going strike which was taking please in this region at the time. The researcher was unable to distribute questionnaires which could have been misinterpreted as the researcher trying to take a political stance, and hence deemed unsafe. Because of time restrain, the researcher was unable to wait for peace to reign in the area. For this reason, it was appropriate to carry out the research in Yaoundé and Douala as these two regions were equal representations of Cameroon as a whole.

To calculate the sample size, the following formula stated by Newton et al., 2012, can be used.

$$\text{Sample size} = \frac{\text{Total response required}}{\text{Response rate}^* (1\text{-}r^2)}$$

Assumptions: a multiple regression analysis with r^2 (effect size) of 0.1.

By using the above calculation, 300 subjects or more will be required to acquire 250 responses. This will mean a 90% response rate, which is equivalent to 0.1 of the r^2 value. In this research, there was an estimated participation of 300 participants and a total of 260 returned questionnaires. Some questionnaires were excluded for varied reasons, and as such, not all questionnaires that were collected had all the information that was needed or took long to return, or exceeded the deadline of the study, while others did not fill out their questionnaires at all and some customers refused to participate in the research. Six incomplete questionnaires of the total returned were discarded and 254 questionnaires were found suitable for data analysis.

4.6.4 Ethical considerations

Topics like trustworthiness, ethics, data sampling, data collection and processing are research issues in the methodology. When we talk about a fair way for researchers to carry out a study, we refer to ethics (Makhanya, 2006; Parker, 2016). Ethical issues are bound to arise at any or every stage of this research, which is why the researcher stayed alert to avoid any confrontations. Some ethical issues are direct and easy to handle while others can be very complex. Thus ethical measures were seriously considered throughout this research. These measures are:

1. Assuring those participating that their views and responses were considered as strictly confidential. This was not violated.
2. Each participant was informed of the purpose of the study as well as the time required to participate.
3. The researcher asked for permission at all locations and institutions from the managers in charge of the banks.

4.6.5 Pre-test and pilot study

Carrying out a pre-test and a pilot study is very important in every study at the level of questionnaire development (Sekaran et al., 2013). This is an important stage before the final stage of data collection. It allows for the correction of mistakes, which may lead to the collection of wrong or unwanted information. In this thesis, the researcher conducted a pre-test and a pilot study before administering the final questionnaires to the chosen population. This pre-testing and pilot study helped to highlight errors, misinterpretations, and errors that might have been missed while developing the questionnaires.

4.6.6 Pre-testing the questionnaire

Pre-testing is done with a smaller group that may also represent the sample size to eliminate errors before administering the final questionnaires. This stage helps to correct questions that are hard to understand or interpret by the targeted population (Sekaran, 2013). Pre-testing is very important at all stages of developing a questionnaire (Baines and Chansarkar, 2002). The researcher in this study distributed questionnaires when pre-testing to 10 online banking customers in Cameroon. A return of 250 questionnaires was expected to give a good response rate (90%). Selecting internet banking users as well as non-users of online banking services is ideal because the online users have an idea of what online banking is all about, hence the targeted populations needed for this research.

To improve the questions on the questionnaires, respondents were allowed to provide suggestions. Feedback from the respondents was used to improve the questionnaires. By using pre-testing, very insightful information was collected from respondents; for instance, an online banking customer of SGBC (Société Générale de Banques du Cameroun) suggested that age was not something she was comfortable providing in the section where age was asked and for that reason, she had left that section unanswered. Another respondent also noted that it was necessary to provide more options from where they could select rather than leaving it to them to write down their ages in the sections.

These suggestions were used in developing the final questionnaires. Respondents were not asked to provide their ages. However, the ages were grouped so respondents could choose from an age group. This way, information collected could be interpreted according to age groups and ranges rather than specific ages. One respondent said he felt uncomfortable mentioning how much he earned. Putting income earned in ranges so respondents could choose one option rather than stating their exact incomes resolved this. The respondents were expected to answer the questions and at the end of it, asked if the questions made sense and were easy to understand.

A researcher needs to carry out a pre-testing and a pilot study because responses will help in mending areas on questionnaires and in the data collection process that would help prevent confusion, avoid errors or misinterpretation by participants. Furthermore, respondents were allowed to propose possible problems with the questionnaires designed in order to improve the final survey questionnaire.

While carrying out the pilot study, the researcher personally visited 10 banks in Douala, the economic capital of Cameroon. The region of Douala was selected because it was (and still is) the economic capital of Cameroon with the largest town and the centre for commercial businesses while Yaoundé was selected because it is the political capital of Cameroon. Bamenda, the agricultural capital of Cameroon was selected but not much could be done at the time the research was being conducted due to political instability in Bamenda; thus questionnaires were not distributed in this region. The researcher pleaded with bank employees to help in the distribution of questionnaires to the customers. They also agreed to collect additional information from those who accepted to participate in case follow-ups were needed. 60 questionnaires were distributed across all 10 banks, so six questionnaires per bank. In the end, after several calls and follow-ups, 40 questionnaires were returned with a 72% response rate.

4.6.7 Survey questionnaire and questionnaire design

Survey questionnaires are used to collect data that is necessary for research. In this research, the researcher presented the questionnaires with cover letters containing information, such as the reason for the research, and provided the respondents with a confidentiality statement. Respondents were informed that participation was optional, and a detailed explanation of the research was provided. People were informed that the researcher was only out to investigate factors that affected electronic banking acceptance. Respondents were given the right to withdraw at any stage of the process if they felt uncomfortable or for any other reasons. Only people aged 18 and above could participate in the survey. The researcher made available information in case respondents needed to get in touch for more information. Contact details provided were email address and phone number.

Questionnaires are one of the best methods that a researcher can use to collect information from the general public; and if done right, they can collect accurate data. It is also important and easy to do if the researcher knows exactly what they want and can frame their questions to collect the right information (Zikmund, 2000; Sekaran, 2013). Questionnaires were distributed and received back. These were those that would help meet the aims and objectives of this study and analysed by the using a quantitative method. The researcher followed a few stages when developing the questionnaires to ensure no mistakes were made.

Respondents who participated in the pre-testing stage were very helpful and provided the researcher with much needed feedback, which helped to develop the final questionnaire for this study. Based on their feedback, some details of the questionnaires were amended and redesigned; for example, income and age of participants were put in groups rather than asking for specific ages or income. For example, ages were set between ranges 21-30 and incomes 10.001FCFA - 20.000FACFA. This also made it easier for the researcher when analysing the data collected.

300 questionnaires were printed and handed out. Participants were assured the information they provided would be kept confidential and used only for the research in which they were participating.

The researcher handed out the final drafted questionnaires personally to note how many were handed out and to stay in control, making sure that enough were completed and returned. These questionnaires provided information on how the customers felt about using e-banking and how satisfied or dissatisfied they were by using this new system of banking. It was divided into three sections; the first section entailed the gathering of personal information about respondents. This included their ages, genders, jobs, educational levels and occupations.

The second section contained respondents' satisfaction, loyalty to their banks, and the main reasons that attracted them to bank online. They would be able to tick from a list of suggested options that would build up the framework. Questions were set in a Likert scale format, so respondents could choose options that related to them - 1= 'strongly disagree', 2 = ‘disagree’ 3 = 'neither disagree nor agree', 4 = 'agree' and 5 = 'strongly agree'. This method has been used in previous studies including measuring the customer’s perceived privacy, security, and trust, (Cheng et al., 2006, Chong et al., 2010, Yoon et al., 2010, and Giovanis et al., 2012), web service quality (Giovanis et al., (2012), customer satisfaction and feedback (Kardaras & Papathanassious, 2001 and Yoon et al., 2010) and other studies with dependent variables (Pikkarainen et al, 2004; Cheng et al., 2006).
The questionnaires distributed were the same for both groups of participants (people who used internet banking and those who did not use internet banking). Questions were mixed for both groups and provided information on why users of electronic banking decided to accept and adopt these services, and why non-users preferred to bank with the said bank and not make use of the electronic banking services.

The third section collected information about non-users. They were asked to choose from a list of options to indicate the most important factor they would consider if they ever were to consider using internet banking.

To increase the response rate, a snowball sampling technique was applied. An additional 20 questionnaires were printed and handed to the bank employees. The idea was to give two willing employees from each of the 10 banks a questionnaire, to give the questionnaire to a respective colleague, family or friend who they thought might be interested or met the criteria, i.e. electronic banking service user. After a few days, the researcher returned to the various banks to collect these questionnaires. These 20 questionnaires were included in the total number that was distributed. This survey was found to be an an appropriate data collection method. It was expected to last a month (31 days) and returned responses of between 205 and 255 questionnaires which were required to draw conclusions. This was about 90% questionnaire return expectation.

Conclusions can be acquired from experimentation or experience when using a deductive approach (Fisher, 2011). In a data collection process, therefore, specific conclusions are guided by theories and concepts. In an inductive approach, after data has been collected and analysed, it is only then that theories can be derived. Conclusions can be drawn from experiences and experiments in this type of approach. The researcher drew conclusions from existing theories from literature and models and from real-life situations, which was why a deductive approach was used.

4.6.7 Questionnaire translation

30% of the questionnaires were translated into French because Cameroon is a bilingual country. The regions this research concentrated on were Bamenda, Douala and Yaoundé, which were both French and English-speaking regions (with a majority of French-speaking Cameroonians). However, Bamenda is an English-speaking region in Cameroon. To get the right information, respondents were asked to answer all questions and understand what they were taking part in; hence the translation was necessary. Respondents were able to choose questionnaires based on the languages they were most comfortable and familiar with. In doing so, one important factor that was a problem was the fact that, in the course of language translation, the sense could have been lost which could lead to inaccuracy. Hence, questionnaires were carefully translated to avoid loss of information. It is important to carefully translate so the

meaning of questions was not lost or altered which can lead to a change in the data that will be collected (World Vision International, 2011, pg. 13).

Translating questionnaires to French has its limitations, such as ensuring that questions were asked consistently each time; hence, information received was consistent from all respondents. The researcher gave the French version to a professional who checked and corrected the questionnaires to avoid difficulties in understanding. It is important to translate the questionnaires in the respondents' mother tongue, as this will make it easy for people to participate in the data collection process (World Vision International, 2011).
Translating questionnaires also makes respondents save time by not translating the questionnaires themselves; and also to make sense of the questions before answering (Wansink et al., 2010; Talla, 2013). The respondent rate is bound to be high when participants can read and understand the questions. If a questionnaire is well-translated, respondents are likely to answer all questions with little or no errors

Dillman (2009) went on to say that the motivation of people to willingly participate in the data collection process (questionnaires in particular) came from the fact that they understood the language on these questionnaires. Accurate time was, therefore, allocated for questionnaires translation. The questionnaires used in this research in both English and French are included in Appendix C.

Variable	Category	Frequency	%
Gender	Male	30	75
	Female	10	25
Age (Years)	<20	3	7.5
	20-30	15	37.5
	31-40	14	35
	41-50	5	12.5
	51-60	2	5
	>60	1	2.5
Education	<Than high school	2	5
	High school	5	12.5
	Diploma	19	47.5
	Bachelors	11	27.5
	Postgraduate	3	7.5
Occupation	Student	7	17.5
	Government employee	10	25
	Private sector employee	17	42.5
	Businessperson	6	15
Income (in Cameroon francs=Frs)	<100,000	2	5
	100,000-200,000	10	25
	200,001-300,000	13	32.5
	300,001-400,000	8	20
	400,001-500,000	5	12.5
	>500,000	2	5

Table 4.5: A Demographic profile of respondents of pilot study

The Demographic characteristics from carrying out a pilot study are found in this section. The pilot study in Table 4.4 above shows participants with regards to gender, age, occupation, education, and income and are displayed in Cameroonian currency (CFA Francs). There were 40 respondents in this pilot study (N=40).

From the results, there were 75% male participants (n=30) and 25% female participants (n=10). Most of the participants were between the age group of 20 to 30 years old (N=15, 37.5%) and the age groups 30 to 40 years old were 35% (n=14). It also showed that up to 47.5% (n=19) of the participants had diplomas and participants who claimed to have bachelor's degrees made up 27.5% (n=11). From these results, more Cameroonians are highly educated which is opposite to a research that was done in the year 1998 by the Demographic census. Those who participated and were educated proved that they had at some point in their studies used or had an encounter with a form of technology, which meant they were good with computers and the internet. Over 75% of respondents who participated in the pilot study (n=30) were employed in either a public, private or government sectors. Coincidentally, the number of students and business people who took part in this study were same at 17.5% (n=7). A 66.7% response rate was achieved at this stage of questionnaire development, which was very impressive and encouraging.

4.7 Secondary data

Secondary data collection was necessary for this research too. This was information from past research, articles and journals. Journals were sourced from newspaper centres to gain more information on how the banking system had changed with time. Information on electronic banking that appeared in newspapers was taken and recorded. Past articles were researched and information on the electronic banking statistics in the past were recorded, updated, and used in this study.

Every research project must begin with a review of the existing body of knowledge (Mouton, 2008). All available literature on e-banking was reviewed in this study to understand the concept of electronic banking and why there was reluctance by some banks and customers to adopt these services. The theoretical framework was created

from the literature review collected for this study. The researcher-collected information for the literature from both published and unpublished materials. Secondary data was also used from information gathered, analysed, and published and made available to the general public (Talla, 2013). After much follow up, the researcher was given access to published and unpublished articles at an office in Ndamukong Street and advised to remain anonymous. To appreciate the information collected, it was important to focus on reliable information by knowing when and how it was collected and who collected it. The researcher used information already collected on internet banking all over the world; this helped in understanding how internet banking had progressed over the years (Alawneh & Hattab, 2009). By using articles that were published about e-banking and books written by e-banking experts, it was easy to understand the general factors, attitudes, and concerns of e-banking in Cameroon (Talla, 2013).

4.8 Organisational factors

After the survey process, the researcher conducted a few interviews with some bank employees. The outcome from these interviews only assisted the researcher with an in-depth understanding of the topic but did not alter the outcomes of the findings. Some important facts were noted during the interviews and are shown below:

4.8.1 No strategic plan

The lack of strategic planning is one of the most important factors that hinder improving electronic banking services in Cameroon. Cameroon has the potential to benefit from modern electronic banking services but there is a lack of a clear national strategy that slows down the technology adoption rates of banks and the country. One of the bank employees said that they lacked facilities to improve e-banking technology adoption and a national plan for their banks because senior government officials had not yet realised the value of e-banking technology. E-banking is, therefore, not a government priority. However, a few bank employees stated that the government was just now realising the importance of a national strategy to the country's finances and was making efforts towards providing better support and protection to both financial

institutions and the people of Cameroon. The government was also helping by supporting hardware and software importation into the country and making it affordable for banks that could not afford these facilities. They predicted that with help from the government, much could be done to improve e-banking services and would be able to attract more people to accept and use these services.

4.8.2 Electronic laws and legislation

There is also a lack of strong e-laws to protect both banks and Cameroonians. Some employees stated their fear of using information technology and the internet even though they were knowledgeable enough to use these systems. The laws in Cameroon did not protect people using the internet, therefore, individuals must take care of their own safety. Because many were not sure of how to protect themselves from these services, they became reluctant to accept and use e-banking services.

4.8.3 Resistance to change

Resistance to change was another important factor worth noting. One bank employee indicated that people were not only reluctant to accept change but also were in denial of accepting new changes. Some even stated that certain employees were not happy with the adoption by their banks to provide people with electronic banking services as many people were already used to the traditional method of banking or cash handling. A conclusion drawn from this was reluctance to accept electronic banking, as it would affect the normal performances and activities of the banks. Most of them feared losing customers due to these changes.

4.8.4 ICT knowledge and awareness

It was reported that there was a lack of ICT knowledge among most Cameroonians. Most people had low levels of awareness and limited knowledge of computer usage and manipulation. The workforce found it hard to manipulate the new technology, so many difficulties and delays in transactions occurred. One bank employee stated that their bank was training some employees in ICT so that there could be a better service provision. This was one factor that prevented banks from carrying out better electronic

banking service provisions. It was noted that ICT knowledge was one of the factors that was considered for employee recruitment. One manager stated, *"We have made ICT knowledge, internet banking awareness our number one priority when looking for new recruits".*

Another issue reported by bank employees was how short and inefficient the ICT courses they took were and how expensive they were for them. Consequently, most people still lacked ICT knowledge even after taking ICT courses. Others shied away from these courses due to the cost. One employee explained how disgusted they were with the cost:
"It was crazy how much money I paid to take up a course that lasted for three months. What I learned in the end was something I could learn at home in the space of a week. Sometimes I even had to share a computer with a classmate because there was not enough for every individual".

A manager spoke out with great emotion about the cost of taking up online banking:
"I sometimes have pity for these people who make use of our services".

When the researcher asked why he said:
"some people come in because they have been informed on how secured banking online would be for them but then to start up an online banking account, they needed to pay an upfront fee of 50.000FCFA. This was a lot of money and you will be surprised to learn some people did not make up to that amount a month and for others that was their monthly salary".

4.8.5 Cost of using electronic banking

The most common aspect stated by bank employees was the cost of using e-banking services. When asked which factor was most common for people who take up internet banking, all five employees interviewed listed income. When asked why, one employee stated how expensive it was to start up an e-banking service even if you were an existing customer with a bank account with them. She explained how it was expensive to get an online bank account or even to move from your existing account to an online banking service:

“it is very expensive!’ she exclaimed. ‘You would think going cashless will save you money – sure it will in the long run, but the problem is the start-up process. You do not only need to have a certain amount for a trust silver (individual account), but you cannot go below that minimum or your account will be charged and if you go empty, it would be shut down”.

Another employee claimed people had money, but some choose not to use online banking because they needed to provide evidence of pay slips to proof where the money came from. He even noted an example of a man who ran a project managing the construction site for his brother’s building because his brother was overseas and sent him money via money transfer services such as Western Union. He said:

“My bank would not let him obtain an online account unless he provided proof of his income”.

From this interview, the researcher was told how having a minimum sum of money to open your account and to stay in your account at all times was not the only issue. It was also understood that, apart from the minimum CFA 50.000 FRS needed to start up, another CFA6.500 – CFA 15.000 was needed for individuals who desired to own bank cards. Businesses also needed ministerial permission to be able to own an online banking account, a process which could take six months to a year.

4.8.6 Convenience and reliability from the view of the banks

One issue this research aims at determining is whether convenience is the most important factor for why Cameroonians accept e-banking. When asked, several bank employees stated that, it would be unfair to say the banking system in Cameroon had reached a state to be considered by people as a convenient way to bank. It was noted that, the banks provided internet banking, but the services offered were limited to checking accounts online, printing out bank statements, and for people with cards to use ATMs. They said most of their card holders and online bankers still came into the branch for authorisation to carry out certain transactions and everyone still needed to come in and complete an e-banking form and wait a week at least to be approved based on the information provided.

One employee said, more often than not they had to revert to the traditional method of banking because the system was constantly down and with the strike going on, the internet had been disconnected from Bamenda for over a year. Thus, all transactions were conducted in the traditional way and people could not use their online accounts. ATMs were constantly out of service and money, a threat for hackers, or jammed by an unauthorised card.

4.8.7 Efforts by banks

For people to be able to use certain services, they must have enough information (Wang, 2015). From the interviews, the researcher gathered this was not the case with Cameroonian banks, or at least the banks this research was focused on. Employees stated how expensive it was to run an advert on television about the services offered. Before the strike in Bamenda, companies like MTN (mobile networks) sent their employees to run campaigns in the streets to encourage people to use their services. The United Bank of Cameroon (UBC) started this in Bamenda; but due to mobility limitations, these campaigns were on hold for the safety of the banks and their employees. It was understood that each branch stored flyers with details regarding online banking for their customers, but one employee noted not many people walked into the banks for online banking flyers unless they came in for that exact purpose. He went on to say that most people thought only the rich or people with high earning jobs used electronic banking and looked at people with bankcards as ‘fortunate’. The researcher was even directed to all three websites to obtain more information regarding online banking, however, not much was found. These banks did not provide enough information on their sites nor did they use their websites to advertise and encourage Cameroonians. The UBC bank provided a lot of information but not enough for someone who was looking to accept e-banking.

4.9 Data analysis

This stage involves the researcher treating the data collected fairly to produce compelling analytical conclusions while ruling out alternative interpretations. This process consists of data reduction, display, conclusion, and verification (O’Toole &

Beckett, 2010). Selecting, focusing, and abstracting as well as transforming the raw data is the process of data reduction. This data is then displayed by organising an assembly of information that permits a positive conclusion. The next step in this stage involved selecting the necessary information, concluding the data, and then deciding on the meaning from the beginning of the data collection.

Information collected was explained in tables. This study used quantitative research, which helped in the deductive methods. SPSS was used to process raw data to make sense of the information. Analysis involved the use of graphics, diagrams, and statistics to interpret the question of why people adopt online banking in Cameroon. Recommendations were given based on the outcomes and interpretations of knowledge gathered.

The SPSS (Statistical Package for Social Science) was used and data that was collected from the survey was recorded for analysis, discussion, and presentation in this research. To test the data distribution, the raw data collected was run through chi-square. Microsoft Excel was used for the descriptive statistics to help analyse the demographic information.

4.9.1 Validity and reliability

Some aspects of the validity in this research involved creating a valid framework from the literature and choosing a sample to represent the population from 10 banks. These banks included both public and private sectors. Public banks included BICEC, SGBC, Afriland First Bank, Ecobank and Standard Bank in the private sector. Questionnaires were sometimes explained to respondents for better understanding. Translating some questionnaires from English to French and letting participants decide on the language they felt most comfortable with showed how valid the research was. 30% of the questionnaires were translated into French. This was because Cameroon is a bilingual country.

The regions this research concentrated on are Douala and Yaoundé, which are both French and English-speaking region (with a majority of French-speaking

Cameroonians). To gain the correct information, respondents were asked to answer all questions and understand what they were taking part in, hence, translation was necessary. Respondents had to choose the language suitable for them to understand. In doing so, one important problematic factor was that in the course of translating, the sense could be lost in the process. This could lead to inaccuracy.

It was, therefore, important to create questionnaires with great care to avoid misinterpretation of questions. If questionnaires were not constructed well and with care, a misinterpretation would lead to the collection of wrong data (World Vision International, 2011, pg. 13).

A pilot study was also conducted to ensure the questionnaire was appropriate and that the statements were understood. Questionnaires in this research were a replica of Lockett and Littler's study in 1997, which was later modified and used by Laukkanen and Lauronen in 2005 and Jimmy in 2011.

Reliability, on the other hand, deals with an examination of evidence and the conclusions drawn to ensure they are true. Reliability entails the consistency of a scale, which assesses the degree to which the items are homogeneous. When considering reliability, the following questions are important: will the measures yield the same results on other occasions? Will other observers reach similar observations? And is there transparency in how sense was made from raw data? For reflective measures, all items are viewed as parallel measures capturing the same construct of interests. Thus, the standard approach for evaluation is expected to be strong (e.g., 0.07 or higher)., Using reliability, therefore, means an assessment of internal consistency scores, calculated by the composite reliability scores (Kim et al., 2012).

Reliability of data can be ascertained through the use of Cronbach's Alpha correlation coefficients. This method of measurement ensures that all instruments are measuring the same characteristics and the set of variables are stable and consistent throughout the measuring process in measuring what it is set out to measure. There have been some debates relating to reliability values, but most marketing researches have listed 0.70 and 0.80 as good reliability (Malhotra et al., 2010). In this research, the researcher conducted a reliability analysis on eleven items by measuring the reliability of each

construct. All Cronbach's alpha values are over 0.70, this is an indication of a good reliability as all constructs are internally consistent in their measurement.
In order to establish the validity of the instruments, the values were analysed using an exploratory factor analysis. By using a varimax rotation to analyse the principal component, the outcome showed three eigenvalues were above one (1). The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO = 0.749) showed that the sample fits the factor analysis. All factors loaded with an acceptable threshold of 0.5 and over. According to Field (2013), any value of 0.5 and over has a satisfactory factor loading.

Questionnaires were distributed to the required number of respondents and data collected was verified for its reliability. Making use of quantitative methods of data analysis and the use of SPSS helped produce reliable results.

4.9.2 Missing data

It is very common to have missing data in research especially when dealing with a large sample size (Bryman & Cramer, 2005). In a situation that involves missing data, testing data statistically is affected and there is a chance of bias. If data goes missing on purpose, no matter what method is used, bias will play a part (Hair et al., 2006). On the other hand, if data goes missing simply because it has been placed in a scattered pattern yet available, results can still be acceptable (Hair et al., 2006).

There are no set rules or guidelines when it comes to missing data. However, Kline (1998, p. 75) said if data was missing, it should be less than, and in no case. more than 10% of the overall data, even though this percentage is considered large enough (Cohen et al., 1983). In a situation where the missing data was not more than 5%, an acceptable result could still be achieved (Olinsky et al., 2013). To avoid a situation of missing data, it is advisable to investigate when all data is collected if any is missing, to find out the patterns that led to the missing data, and to find a way of resolving missing data by use of techniques that would not affect the final results.

4.9.3 Assessing non-response bias

Non-response bias is very important in research and is explained more in the next chapter. When respondents refuse to participate in a survey for one reason or the other, non-response bias occurs. Non-response bias plays a huge part in the final results of a study and in cases where non-response bias is detected in a sample, the findings, quality and validity of that research can be affected (Ygge et al., 2004). To get an accurate non-response bias in a sample, it is advisable to compare the results of the early respondents and those of late respondents. In quantitative research, comparing early respondents and late respondents is commonly used to get non-response bias, but there are no significant disparities as results can be used to relate to the general population (Lindner et al., 2001). In this research, the first 40 respondents were considered as early respondents while the last 40 respondents were considered late respondents because the researcher had to do extra follow ups to get their responses. Early respondents do not get chased to complete their surveys like late respondents. Chi-square was used to compare the results. This result showed that ($p>0.05$) in all variables, which indicates that there is no significant difference between early and late respondents.

4.9.4 Outliers

Outliers can be defined as allocation of scores that are different in their own way from the rest of what was observed from a set of data (Kline, 2005; Hair et al., 2006). If outliers are not properly carried out, they can drastically impact statistics from analysing data collected such as models, parameters that were estimated, or these problems could even create a negative variance (Finney & DiStefano, 2006). The two main types of outliers are univariates and multivariate . Univariates are cases that have an extreme value and can be easily identified by use of frequency distribution of Z-score diagnosis, but multivariate outliers involve the combination of more than one value to more combinations (Tabachnick & Fidell, 2001; Kline 2005). Because this paper made use of a Likert scale, univariates were not identified. A Likert scale involves 5-category response options with 1 being ‘strongly disagree’ and 5 being ‘strongly agree’. Extreme outliers in a Likert scale might be obtained in cases whereby respondents’ select 5 for strongly agree or 1 for strongly disagree.

Uncovering a multivariate can be done by use of Mahalanobis distance (D2) test. This test is used to measure standard deviation distance between the observations obtained and then comparing it to the mean of all the observations (Hair et al., 2006). When D2 is large, it means one or more of the variables involved is extreme. When measuring D2, it is recommended to use $p < 0.001$ as a statistical significance test (Kline, 2005; Hair et al., 2006). In this paper, the researcher's SPSS version 16.0 was used to measure the Mahalanobis distance, which was compared to the critical $\chi 2$ value with the degree of freedom (df) equivalent a $p < 0.001$ probability and the independent variables.

4.9.5 Normality

"The shape of a data or its individual metric variables and its correspondence to normal distribution is the benchmark for statistical methods" (Hair et al., 2006; pg. 79). If normality is not done correctly, the process can be affected, leading to a misinterpretation of results especially in SEM analysis. This may also lead to errors in estimates and may increase values (like in chi-square). By using a graphic method of analysis, normality can be avoided. It can also be avoided simply by reviewing the data collected manually. Graphic analysis methods include holograms or normal probability plots. Data is considered normal if the diagonal line matches the observed values (Hair et al., 2006).

Using multivariate indexes helps regulate normality. These are skewness, which describes the symmetry of distribution and Kurtosis, which measures the tails in distribution. Distribution is normal when skewness and Kurtosis are both zero. A result between -1 and +1 in skewness is a skewed distribution. An extremely skewed value will be greater than 3 and for Kurtosis the value will be between 8.0 and more than 20.0. The value that was acceptable for this research was set skewness (±1) and ±3 Kurtosis. In this case, factor analysis was used to statistically analyse.

4.10 Limitations of the study

Procuring information from establishments was easier than getting them from financial institutions in Cameroon because banks were very protective of their information. Even ATMs were designed so that all information stayed secure because a leak could create many security issues for both banks and individuals. All information provided to a bank was kept confidential, which was hard for the researcher to access or collect information regarding banking from banks themselves. It was impossible to ask in-depth questions to banks regarding customers, like their ages, or profits that banks made, or total deposits banks got from people because these questions could pose massive threats to banks and maybe trigger security concerns. Convincing respondents to provide information would be difficult, as most of them feared their details might be used in-house to their disadvantage. It was, therefore, very important to convince all participants that the information they provided would be protected and that the knowledge produced in this research could be used by them in their banking experiences.

Questionnaire distributions were done in only two regions of Cameroon (Douala and Yaoundé). This was because there was not enough time to travel all regions in Cameroon to distribute questionnaires in time to receive a required number back. Bamenda, a region in the North west part of Cameroon was not safe for distribution due to an ongoing civil war. For that reason, this researcher focused only on Yaoundé and Douala.

4.11 Conclusion

The research instrument in this research is a questionnaire. The researcher also accessed data made available from information that was published and even some that were unpublished at the secondary data collection stage. The factors that were considered while choosing a methodology included time, reliability, and cost. The approaches used included a quantitative approach. A deductive approach was used to derive conclusions from unknown premises to help draw an appropriate conclusion. The main area of study included 10 selected banks in Cameroon that used electronic banking services. A purposive method was used to select participants for this

research. To get the right participants, it was important to select customers of banks from the general population who might or might not use the internet.

From the literature, it appears that quantitative research is ideal for this study. This involved the experiences of bank employees as well as customers of Cameroonian banks. One of the main concerns was to discover the main factor that drew people to take up electronic banking in Cameroon as well as discovering people's experiences with this system of banking. This research and theories were drawn from the theory of diffusion of innovation. All this aided the researcher in concluding the factors that enable customers to take up electronic banking in Cameroon. This leads to the next chapter, describing the findings and analysis.

Chapter 5. FINDINGS AND ANALYSIS

5.1 Introduction

In this chapter, the researcher focuses on the data analysis and provides an in-depth explanation regarding the findings. *"The statistical techniques are to assist in establishing the plausibility of the theoretical model and to estimate the extent to which the various explanatory factors seem to be influencing the dependent variable"* (Coorley, 1978, p.13). The primary purpose of this research study is to identify and investigate the factors that enable people to accept electronic banking information systems and provide the implications of e-banking in the Cameroonian context. The Statistical Package for Social Sciences (SPSS) was used in the data analysis by the researcher in order to achieve the objectives and aims set at the beginning of this study.

SPSS is a quantitative data analysis method and was the best to use in this research. Data collected from questionnaires was, therefore, analysed quantitatively using SPSS. SPSS is commonly used in all fields of social sciences, in studies relating to business, and in studies relating to technology (Zikmund, 2003). The SPSS software is used in this research for date coding, missing data treatment, testing, and identification of data normality. In addition, SPSS is used when finding values for mean, standard deviation, percentages, or frequency. By using SPSS, only important information has been made available such as the data, missing data (i.e., ANOVA), outlier identification (D2 test), and data normality, e.g. skewness and Kurtosis methods.

By using SPSS, data can be explained descriptively when considering frequencies, percentages, mean, and standard deviation. For each variable, these statistical descriptive methods were used independently to provide a detailed explanation of each variable, which was summarised to provide a better understanding of the data (Sekaran, 2000). Nominal and ordinal scales were used for data collection in the quantitative survey method; this method of collection showed more appreciation for the technique used.

5.2 Factor analysis

When addressing problems relating to correlation in a situation involving large numbers, there is a need to use a factor analysis (FA) technique. In a study, there is a set of variables and the need to explain them, which is where factor analysis comes in. This is important to estimate a model that explains the variance between a set of observed variables by a set of unobserved factors.

Factor analysis helps to make large variables smaller. Factor analysis is important in variable structure understanding and questionnaire construction that includes all important variables and creating data at a convenient level (Field, 2006, p. 619). The first thing to do in factor analysis is to identify the latent dimensions relating to the data before establishing an explanation for each factor based on the test item.

In conclusion, factor analysis involves first summarizing then compressing (Hair, 1995). Factor analysis is used to determine the factors that influence e-banking acceptance in Cameroon.

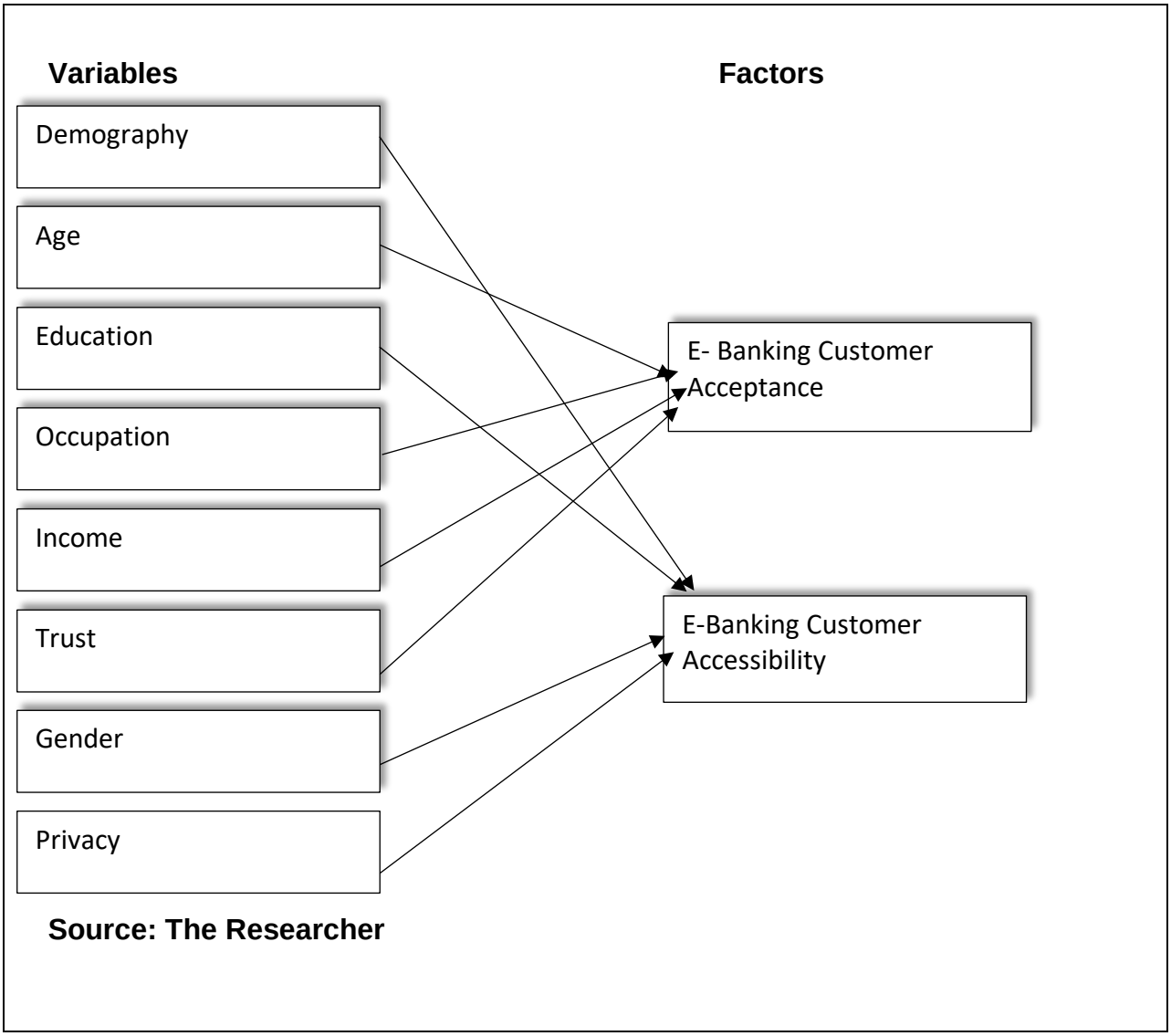


Figure 5.1 Diagram Showing Variables and Factors that influence e-banking in Cameroon

Figure 5.1 above illustrates the values of the observed data which are expressed as functions of a number of possible causes in order to find which variables influence which factors in E-Banking in Cameroon. Here, variations in eight observed variables mainly reflect the variations in two unobserved (underlying) variables (factors).
(See Appendices A-H).

This research used factor analysis to determine the factors that influence e-banking acceptance in Cameroon. The statistical method used to describe variability among observed, correlated variables in terms of a potentially lower number of unobserved variables called factors is used in the discussion below.

The factor analysis consisted of 8 questions concerning the customers usage of e-banking. The eight questions were subjected to Principal Component Analysis (PCA) using SPSS 16.0. The correlation matrix was inspected, and it showed the presence of coefficients of 0.3 and above. A Kaiser-Meyer-Oklin value below 0.6 is unacceptable. In this research, the value reached 0.749 supporting the factorability of the correlation matrix. PCA revealed a total 3 components with a total of 64.9 percent of the variance. The scree plot showed a break in 3 components which was why the researcher decided to retain all 3 for further investigations. By using Varimax rotation, the researcher had the opportunity to better understand the 11 variables especially the 3 selected.

	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
1	4.021	36.551	36.551
2	1.733	15.753	52.304
3	1.393	12.663	64.967
4	.934	8.495	73.461
5	.860	7.816	81.278
6	.669	6.079	87.357
7	.564	5.124	92.481
8	.346	3.145	95.625
9	.264	2.396	98.022
10	.179	1.624	99.645
11	.039	.355	100.000

Table 5.1: Total Variance Explained

Barlett's rest Sphericity is used as it helps to identify whether a given correlation matrix is an identity matrix which would indicate that the said variables are unrelated. By identifying the significant level, the results of the test can be got. A value which is less than 0.05 shows a significant relationship among the given variables. The p-value is 0.000, this is clearly less than 0.05 hence, showing the variables are highly correlated. See Table 5.13.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.749**
Bartlett's Test of Sphericity	Approx. Chi-Square	1561.363
	df	55
	Sig.	**.000**

Table 5.1.1: KMO and Bartlett's Test

Because the Central Limit Theorem has been used for the sample size of 254, there are no issues relating to the normal data. Hence, all communalities of a perfectly sufficient sample above 0.5 are acceptable.

Communalities

	Initial	Extraction
ETU	1.000	.543
Accessibility	1.000	.936
Trust	1.000	.613
Satisfies	1.000	.919
Convenience	1.000	.535
Privacy	1.000	.646
Age	1.000	.791
Gender	1.000	.537
Education	1.000	.792
Occupation	1.000	.769
Income	1.000	.666

Table 5.1.2: Communalities

In other to consider a favourable outcome from the factor analysis, both the dependent and independent variables of the items were aggregated for factor loadings exceeding 0.5. These factor loadings were the selected factors and then a multiple regression was conducted to reveal how each factor affected the acceptance of electronic banking. The factor loading showed the various loading of different variables of which

all items were noted as satisfactory. The selected factors were grouped under personal information, online banking information (See appendix H).

Researchers such as Wang et al., (2003) and Lin et al., (2005) made the researcher to consider the use of this method. By aggregating research results, items can then be combined under one particular heading or label which makes analysis using regression analysis easier to do.

5.3 Findings from customers' questionnaires

Banks	**Responses**
Ecobank	39
Afriland First Bank	31
SGBC	22
Standard Chartered	21
UBA	35
UBC	14
Atlantic Bank	30
BICEC	34
CBC	15
CitiBank	19
Total	**260**

Table 5.1.3: Responses from the banks.

5.4 Response rate

This research aimed at collecting 30 responses from each of the 10 selected banks. However, only 260 out of 300 questionnaires, which represents 90% of the total distribution were returned. These responses can be seen on Table 5.2.

Variable	**Non-user**	174	69%				
	User	80	31%				
Variable				**Users Frequency**	**Percentage**	**Non-users Frequency**	**Percentage**
Gender	Male	133	52%	40	50%	93	53%
	Female	121	48%	40	50%	81	47%
Age	<20	19	7%	4	5%	15	9%
	21-30	58	23%	16	20%	42	24%
	31-40	85	33%	27	34%	58	33%
	41-50	70	28%	21	26%	49	28%
	>50	22	9%	12	15%	10	6%
Education	<High school	17	7%	0	0%	17	10%
	High school	13	5%	10	13%	3	2%
	Diploma	12	5%	8	10%	4	2%
	Bachelors	66	26%	17	21%	49	28%
	Postgraduate	146	57%	45	56%	101	58%
Occupation	Student	26	10%	8	10%	18	10%
	Gov't employer	12	5%	7	9%	5	3%
	Private sector	21	8%	13	16%	8	5%
	Businessperson	195	77%	52	65%	143	82%
Income	<100.000	19	7%	0	0%	19	11%
	100.001-200.000	30	12%	9	11%	21	12%
	200.001-300.000	40	16%	10	13%	30	17%
	300.001-400.000	51	20%	16	20%	35	20%
	400.001-500.000	54	21%	19	24%	35	20%
	>500.001	60	24%	26	33%	34	20%

Table 5.2: Participant responses (showing both users and non-users).

Table 5.2 shows that 31% of respondents (80 out of 254 respondents) use the internet to bank, while 69% of respondent do not use electronic banking.

We see respondents by gender (Appendix F). It shows that 52% of respondents were male while 48% were female. The number of Cameroonian males that use banking services in Cameroon is not very different from the number of females who use these services. Prior studies showed that the number of male users were almost double the number of female users (Talla, 2013).

The pie chart (Appendix F) shows that 33% of respondents were between the ages of 31 and 40 years old, while only 9% of respondents were aged above 50 years. This concludes that most individuals who bank are mature enough to make decisions for themselves. This is clear as the younger generation (23%) is beginning to accept and embrace these new methods of banking. Table 5.3 above shows that 57% of respondents are postgraduates of whom 56% are electronic banking users, while 26% of the respondents have a bachelor's degree with 21% of them being electronic banking users. The smallest number of respondents were holders of certificates lower than high school levels. Most of the users of electronic banking facilities, therefore, are holders of a university degree or its equivalent.

The higher the level of education of an individual, the higher the chances of them adopting internet banking services (Mohammed et al., 2009). 5% of respondents are government employees of which 9% are electronic banking users. Most e-banking users are business people (77%), with 65% of them using electronic banking. This is a large percentage and shows how important e-banking is to them. This correlates with Karjaluoto (2002), who observed that people with a higher level of education or a 'good' occupation mostly used online services, while the opposite was true for non-users. A higher percentage of users were well-educated and people with better occupations while non-users were people who did not achieve higher levels of education nor did they have 'good' jobs.

From the Table 5.3 above, 33% of respondents are earners of 500,001CFA FRS and above followed by earners of 400,001-500,000 CFA FRS (24%). The least number of respondents had monthly incomes lower than 100,000CFA FRS (2%). This supports

the manager's comment earlier stating how expensive it was to start up an online banking account in Cameroon. He explained:

"I sometimes have pity for these people who make use of our services. Some people come in because they have been informed on how secured banking online would be for them but then to start up an online banking account, they need to pay an upfront fee of 50.000FCFA. This is a lot of money and you will be surprised to learn some people do not make up to that amount a month and to others that is their monthly salary".

For people who earn 100,000CFAF, to start up this service means giving away half of their monthly earnings. This explains why acceptance for this group of people is low. Considering the differences in the incomes of both users and non-users, it can be concluded that income has a great influence on online banking acceptance. It clearly shows that the people who earn more, in the case above, 33% of users earn 500,001CFA FRS and above followed by earners of 400,001- 500,000 CFA FRS. Hence, respondents who earned less fell amongst the non-users of electronic banking., When an individual earns a high income there is, therefore, a high chance of them being able to afford a personal computer or an electric device to help them in e-banking usage (Mohammed et al., 2009). It was noted that 0% of respondents who earned less than 100,000FRS used online banking as compared to 11% of non-users; this meant that 11% of respondents who earned less than 100,000FRS CFA chose not to use online banking.

Generally, less people use online banking even though they earn more money except those who earn 500,001CFA FRS and above. This is understandable for this high earning group of people as online banking is a suitable way to save their earnings.

This is clearly shown on a pie chart in Appendix F of this research.

5.5 TESTING HYPOTHESIS H1

H1: Demographic characteristics have a positive influence on perceived usefulness (hence customer acceptance)

5.5.1 Chi-square tests – the relationship between gender and electronic banking users and non-users (H1a)

			Users		
			Users	Non-users	Total
Gender	Male	Count	56	118	174
		Expected Count	54.8	119.2	174.0
	Female	Count	24	56	80
		Expected Count	25.2	54.8	80.0
Total		Count	80	174	254
		Expected Count	80.0	174.0	254.0

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.121[a]	1	.728		
Continuity Correction[b]	.041	1	.839		
Likelihood Ratio	.122	1	.727		
Fisher's Exact Test				.773	.422
Linear-by-Linear Association	.121	1	.728		
N of Valid Cases	254				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 25.20.

b. Computed only for a 2x2 table users of electronic banking by gender.

Table 5.3: Chi-square tests – relationship between gender and e-banking users and non-users

From the cross-tabulation above (Table 5.3), observation shows the expected value at 25.20 meaning the assumption is not violated. A study by Okeke and Okpala (2014) confirmed this by concluding that males were more likely to embrace internet banking than females. For a complete result, the results should be interpreted with Fisher's Exact Test, which is 0.773. This value is greater than 0.05 and it can be concluded that there is a weak association between male and female in the use of electronic banking. This result is, therefore, not statistically significant. Electronic banking does not depend on gender. We can, therefore, say the findings from this research are different from prior research, which shows that more males use electronic banking services than females (Yuan et al., 2010 and Talla, 2013). Other researchers such as Abu - Assi et al., (2014) also found that females were less likely to use electronic banking than males. This is, however, not conclusive with the case in Cameroon.

5.5.2 Chi-square test – relationship between age and users and non-users of e-banking (H1b)

			Users		Total
			Users	Non-users	
Age	<20	Count	10	9	19
		Expected Count	6.0	13.0	19.0
	20-30	Count	19	39	58
		Expected Count	18.3	39.7	58.0
	31-40	Count	2	83	85
		Expected Count	26.8	58.2	85.0
	41-50	Count	46	24	70
		Expected Count	22.0	48.0	70.0
	>50	Count	3	19	22
		Expected Count	6.9	15.1	22.0
Total		Count	80	174	254
		Expected Count	80.0	174.0	254.0

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	78.676[a]	4	.000
Likelihood Ratio	90.355	4	.000
Linear-by-Linear Association	.853	1	.356
N of Valid Cases	254		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.98.

Table 5.4: Chi-square test – relationship between age and users and non-users of e-banking

The above cross-tabulation in Table 5.4 displays the age distribution from people who use the internet and people who do not use the internet to bank. A 0.000 value was achieved for the chi-square. This value is significant because it is less than 0.05, showing that the age of an individual affects his or her acceptance of internet banking. Less than 20% of the cells have an expected count greater than 5, which means that the assumption has not been violated. This result is an acceptable alternative hypothesis. It shows that electronic banking adoption in Cameroon is affected by age. In Cameroon, prior research had shown that as people aged, they were more likely to take up internet banking (Cletus, 2012). In this case, people aged 41-50 years used online banking. This, however, contradicts Talla's (2013) study in Cameroon, which claimed that younger people adopted new technology more than older people. The Table also shows that of all respondents under the ages of 20 years, 6 were expected to be users; however, there were 10 users. This shows that there are more users in this age group as per the participants. Of respondents who fell between the age group of 41 to 50 years, 22 were expected to be users but 46 were users and 24 of the expected 48 were non-users. The fault in Talla's research was that he based his conclusion on 'new technology' as a whole without specifying the difference in adoption regarding electronic banking and general technological development.

5.5.3 Chi-square: Cross-tabulation between education of users and non-users of electronic banking (H1c)

			Users		Total
			Users	Non-users	
Education	<High school	Count	10	8	18
		Expected Count	5.7	12.3	18.0
	High school	Count	6	7	13
		Expected Count	4.1	8.9	13.0
	Diploma	Count	6	6	12
		Expected Count	3.8	8.2	12.0
	Bachelors	Count	9	56	65
		Expected Count	20.5	44.5	65.0
	Postgraduate	Count	49	97	146
		Expected Count	46.0	100.0	146.0
Total		Count	80	174	254
		Expected Count	80.0	174.0	254.0

Chi-square tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.690[a]	3	.001
Likelihood Ratio	21.489	3	.000
Linear-by-Linear Association	2.850	1	.091
N of Valid Cases	254		

A.1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.78.

Table 5.5: Chi-square: Cross-tabulation between education of users and non-users of electronic banking

Table 5.5 above shows the relationship between users and non-users of e-banking based on their levels of education. A 0.001 P-value was achieved from chi-square. This value was a significant value because it was less than 0.05, indicating that the level of education of an individual would affect e-banking acceptance.

In summary, there is a relationship between a persons' level of education and electronic banking acceptance. The cell value is less than 20%, which means that the assumption has not been violated. The result is an acceptable alternative hypothesis. This confirms that there is a relationship between the demographic characteristics and e-banking acceptance in Cameroon, and shows that the higher the level of education, the more likely customers are to accept and adopt e-banking. In this study, we see that 58% of users are postgraduates (Appendix C). The level of education, therefore, affects internet acceptance. An increase in the level of education means that electronic banking acceptance will increase as well. This correlates with Yual et al. (2010) who stated that e-banking adoption increases with an increase in the level of education of customers.

5.5.4 Chi-square: Relationship between electronic banking and occupation of users and non-users (H1d)

			Users		Total
			Users	Non-users	
Occupation	Student	Count	13	13	26
		Expected Count	8.2	17.8	26.0
	Government employer	Count	6	6	12
		Expected Count	3.8	8.2	12.0
	Private sector	Count	0	21	21
		Expected Count	6.6	14.4	21.0
	Business person	Count	61	134	195
		Expected Count	61.4	133.6	195.0
Total		Count	80	174	254
		Expected Count	80.0	174.0	254.0

Chi-square tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.690[a]	3	.001
Likelihood Ratio	21.489	3	.000
Linear-by-Linear Association	2.850	1	.091
N of Valid Cases	254		

a.1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.78.

Table 5.6: Chi-square: Relationship between e-banking and occupation of users and non-users.

From Table 5.6 above, we see that the 0.001 is the P-value from chi-square. Because it is less than 0.05, it is significant meaning occupation has an impact on e-banking acceptance. This means that there is a relationship between occupation and electronic banking acceptance in Cameroon. With a less than 20% cell value, this means that the assumption has not been violated. The result, therefore, is an acceptance alternative hypothesis. The Table shows a relationship regarding e-banking and occupation of two groups: people who use internet banking (users) and people who do not use internet banking (non-users). This confirms previous research that implied that internet banking was affected by occupation (Abu-Assi et al., 2014 and Adesina et al., 2010). Users of e-banking are usually people with high levels of education with good jobs, not people who do not use the internet (Karjaluoto, 2008).

5.5.5 Chi-square: Relationship of income between users and non-users (Cross tabulation) (H1e)

			Users		
			Users	Non-users	Total
Income	<100.000	Count	17	2	19
		Expected Count	6.0	13.0	19.0
	100.001-200.000	Count	11	19	30
		Expected Count	9.4	20.6	30.0
	200.001-300.000	Count	15	25	40
		Expected Count	12.6	27.4	40.0
	300.001-400.000	Count	15	36	51
		Expected Count	16.1	34.9	51.0
	400.001-500.000	Count	6	48	54
		Expected Count	17.0	37.0	54.0
	>500.000	Count	16	44	60
		Expected Count	18.9	41.1	60.0
Total		Count	80	174	254
		Expected Count	80.0	174.0	254.0

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	41.792[a]	5	.000
Likelihood Ratio	42.294	5	.000
Linear-by-Linear Association	22.674	1	.000
N of Valid Cases	254		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.98.

Table 5.7: Chi-square: Relationship of income between users and non-users (Cross tabulation)

The cross-tabulation in Table 5.7 above shows the relationship of e-banking between users and non-users regarding their income levels. A 0.000 p-value was achieved from chi-square, which is lower than 0.05 and hence significant. This significance means there is a relationship between income and electronic banking acceptance. Less than 20% of the cells have an expected count greater than 5, which means that the assumption has not been violated. The result, therefore, is an acceptable alternative hypothesis.

The hypothesis that the demographic characteristic (income in this case) and e-banking have a relationship is true. Income, therefore, influences the acceptance and adoption of e-banking. We see that income earners of less than 500.000FCFA use e-banking (24%) followed by those who earn between 400,001FCFA-500,000FCFA (21%). Fewer people who earn less than 100,000FCFA use e-banking because of the high cost of opening an account (7% of income earners in this group use e-banking). This study is steady with previous studies which stated that, the higher the income of earners, the more acceptances these individuals would gain toward using e-banking (Talla, 2013).

Adesina (2010) stated that income had a significant impact on e-banking, as people who earned more were more likely to use e-banking to manage their money. E-banking acceptance and adoption is, therefore, common among middle and high-income groups. A person who earns well is more likely to purchase a personal computer and be more open-minded to new technologies (Choudrie et al., 2005).

5.6 TESTING HYPOTHESIS H2:

Perceived ease of use has a significant positive influence on customers' acceptance of electronic banking.

Chi-square tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	11.987[a]	1	.001		
Continuity Correction[b]	10.835	1	.001		
Likelihood Ratio	12.330	1	.000		
Fisher's Exact Test				.001	.000
Linear-by-Linear Association	11.940	1	.001		
N of Valid Cases	254				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 19.85.

b. Computed only for a 2x2 table

Table 5.8: Perceived ease of use will have a significant positive influence on customers' ability to accept electronic banking

Table 5.8 above shows the effect of perceived ease of use on electronic banking acceptance. Prior research had shown that the easier it was for people to understand electronic banking services, the easier it was for them to use these services (Gefen, 2008). The p-value in this case is less than 0.05, implying that the chi-square value is significant and, therefore, related. The expected count should be at least 19.85, which

in this case is over 19.85; this means that the assumption has not been violated. The easier it is for people to use the existing e-banking services, the more people will accept and use these services. This falls in line with Talla's (2013) study, which encouraged banks to make their services easy to use for their customers. When people find it easy to use these services, or think they can use the existing services, they will consider using e-banking.

5.7 TESTING HYPOTHESIS H3:

Perceived trust has a positive effect on customers' acceptance of e-banking.

Chi-square tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	54.029[a]	1	.000		
Continuity Correction[b]	51.489	1	.000		
Likelihood Ratio	56.528	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	53.816	1	.000		
N of Valid Cases	254				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 15.98.

b. Computed only for a 2x2 table

Table 5.9: Perceived trust has a positive effect on customers' acceptance of e-banking

From Table 5.9 above, we see that the p-values of the chi-square are 0.000. This value is less than 0.05, which means there is a significant difference between trust and customers' acceptance of electronic banking. The expected count should be at least 15.98, which means that the assumption has not been violated. This supports previous research which stated that, e-banking acceptance could be influenced by trust (Awung

et al., 2013). Hernandez et al. (2009) stated that trust activities on the web were limited due to the lack of trust by potential users when carrying out online transactions. The more customers trust a service, the more they will use the service. Trust, therefore, affects customers' acceptances of e-banking.

5.8 TESTING HYPOTHESIS H4:

Perceived security and privacy has a positive effect on customers' acceptance of electronic banking.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.915[a]	1	.048		
Continuity Correction[b]	3.261	1	.071		
Likelihood Ratio	3.865	1	.049		
Fisher's Exact Test				.058	.036
Linear-by-Linear Association	3.899	1	.048		
N of Valid Cases	254				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.27.

b. Computed only for a 2x2 table

Table 5.10: Perceived security and privacy has a positive effect on customers' acceptance of e-banking

Judging by the p-value of the chi-square presented in Table 5.10, we see that the p-value is 0.48. This value is less than 0.05 and, therefore, implies that there is a relationship between security and privacy and customers' acceptances of e-banking. Less than 20% (0.0%) of the cells have an expected count greater than 5, which means that the assumption has not been violated. The expected count should be at

least 17.27, which in this case is over 17.27 and this means that the assumption has not been violated This confirms previous studies that stated security and privacy as the number one factor being considered by customers before deciding to accept and adopt e-banking (Licker, 2009; Cletus 2012). It shows that many people consider security and their privacy very important when considering taking up e-banking in Cameroon. The fact that security and privacy enable personal identity to be kept confidential during transactions to enable protection makes this a very important factor to consider when choosing to use e-banking (Cletus, 2012). This can only be elucidated by the fact that many people place high emphasis on security and their privacy when banking online.

5.9 TESTING HYPOTHESIS H5:

Perceived accessibility has a positive effect on customers' acceptance of electronic banking.

Chi-square tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	254.000[a]	1	.000		
Continuity Correction[b]	246.666	1	.000		
Likelihood Ratio	224.542	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	253.000	1	.000		
N of Valid Cases	254				

a. 0 cells (0.0%) have an expected count less than 5. The minimum expected count is 6.62.

b. Computed only for a 2x2 table

Table 5.11: Perceived accessibility has a positive effect on customers' acceptance of e-banking

Table 5.11 above shows the result of how important accessibility is to electronic banking acceptance. The p-value of the chi-square test is 0.000. This value is less than 0.05 (we therefore reject the null hypothesis and accept the alternative hypothesis). Because the p-value is less than 0.05, it is significant, showing that there is a relationship between accessibility and internet banking. The more accessible electronic banking is, the more people will take up the services. According to Adesina (2010), customers can use electronic banking services if they can navigate the services available. People will give up trying if a service is difficult to understand and use (Blau, 2007). This is a major factor for e-banking acceptance and adoption. It involves accessibility to computers, the internet, and electronic banking services (Lee et al., 2011). According to Sana (2011), "*as the internet becomes more widely accessible, households will conduct their financial transactions over the internet".* This means that the more accessible the internet, the greater the possibility of using e-banking.

5.10 TESTING HYPOTHESIS H6:

Perceived convenience does not have a positive effect on customers' acceptance of electronic banking.

Chi-square tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.427[a]	1	.513		
Continuity Correction[b]	.231	1	.631		
Likelihood Ratio	.424	1	.515		
Fisher's Exact Test				.604	.314
Linear-by-Linear Association	.425	1	.514		
N of Valid Cases	254				

a. 0 cells (0.0%) have an expected count less than 5. The minimum expected count is 17.11.

b. Compute only for a 2x2 table

Ho: Perceived convenience does not have a positive effect on customers' acceptance of e-banking.

Table 5.12: Perceived convenience has a positive effect on customers' acceptance of e-banking.

From the cross-tabulation in Table 5.12 above, we observe a 0.513 p-value of the chi-square. Because this value is greater than 0.05, it is not significant and, therefore, suggests that there is no relationship between convenience and internet banking acceptance. Fisher's exact test is also greater than 0.05 (in this case 0.604), which shows that there is no assumption between convenience and electronic banking. We, therefore, accept the null hypothesis that there is no association between the two variables. There is a weak association between convenience and electronic banking. This means that a customers' decision to use e-banking is not affected by how

convenient it is to use e-banking services. This contradicts a prior study that stated convenience was a major factor why people accepted and adopted electronic banking. Talla (2013) stated that the more convenient e-banking was in Cameroon, the more they were likely to adopt these services. However, this study contradicts his previous findings on convenience. It is, therefore, clear from these findings that convenience is not the number one factor that enables Cameroonians to take up online banking. The researcher is interested in understanding why convenience is not considered before taking up e-banking.

5.11 TESTING HYPOTHESIS H7:

Perceived customer satisfaction has a positive effect on acceptance of electronic banking.

Chi-square tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	106.340[a]	1	.000		
Continuity Correction[b]	102.588	1	.000		
Likelihood Ratio	113.689	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	105.921	1	.000		
N of Valid Cases	254				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.91.

b. Computed only for a 2x2 table

Table 5.13: Perceived customer satisfaction has a positive effect on acceptance of e-banking.

In Table 5.13 above, the expected value should be at least 12.91. In this case it is over 12.91; this means that the assumption has not been violated and less than 20% of the cells have an expected count greater than 5, which means that the assumption has not been violated. The p-value of the chi-square is 0.000, which is less than 0.05, hence it is statistically significant. This shows that there is a significant relationship between customer satisfaction and internet banking acceptance. The more satisfied customers are with e-banking services, the more likely they are to accept and adopt the services provided. Successful e-banking strongly depends on customers' satisfaction and for this to be achieved, the bank must use different means to personalise their services and products to meet the needs of their customers (Mattila, 2013).

5.12 Data collected from respondents

5.12.1: Respondents' frequency of usage of internet banking services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Online banking	15	5.9	5.9	5.9
	Branch	193	76.0	76.0	81.9
	ATMs	20	7.9	7.9	89.8
	Telephone	26	10.2	10.2	100.0
	Total	254	100.0	100.0	

Table 5.14: Services used most

As seen in Table 5.14 above, from the 254 valid questionnaires collected, the researcher concludes that more respondents said they used their bank branches to carry out their transactions. 193 respondents (76%) used bank branches for their day-to-day banking. This was followed by 10.2% of telephone banking usage. Even though ATMs are one of the most popular internet banking services in Cameroon, only 20 of the 254 respondents confirmed using ATMs. This implies 7.9% ATM usage.

5.13: Future considerations for using internet banking by users and non-users

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Users	144	56.7	56.7	56.7
	Non-users	110	43.3	43.3	100.0
	Total	254	100.0	100.0	

Table 5.15: Future consideration by users and non-users

As seen in Table 5.15 above, 144 respondents (56.7%) said they liked using electronic banking services to carry out their day-to-day banking activities. 110 non-users said they felt positive about internet banking services and would consider taking it up soon. 43.3% of respondents who were non-users seemed interested in electronic banking services. This means, all things being equal, Cameroon should experience an increase in internet banking users. It shows an overall positive attitude towards internet banking by Cameroonian customers.

5.14 Conclusion

This chapter contained the statistical analysis relating to electronic banking based on the attitude of customers. It identified some factors that enabled customers' acceptances of e-banking. These factors included accessibility, security and privacy, ease of use, trust, customer satisfaction, demographic characteristics, and convenience.

Furthermore, this chapter presented the results of the data analysis. The data was taken from questionnaires distributed to respondents by the researcher. The responses were recorded in an SPSS program with the use of a chi-square test to help identify the relationships between the demographic factors like level of trust,

accessibility, security and privacy, convenience, satisfaction and the adoption of e-banking.

From the results, the researcher concluded that demographic characteristics such as age, gender, income, occupation and level of education, accessibility, trust, security and privacy, convenience, and satisfaction all had impacts on e-banking acceptance and adoption in one way or the other. The older users became, the more they found e-banking satisfactory to use. More high-income earners made use of e-banking services than lower income earners. People who were more educated made more use of electronic banking services than those who had a lower level of education. However, these results also showed that convenience was not a major factor when it came to customers' acceptance of electronic banking.

Based on these findings from this chapter, the next and final chapter sets out the implications, conclusions, contributions and some recommendations.

Chapter 6. CONCLUSION, CONTRIBUTIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter concludes the thesis drawing conclusions and discussing the relevant contributions made by the research, the implications and the recommendations made. The chapter also expresses the need for further research in this subject area.
This chapter discusses the results presented in the previous chapters. It analyses the hypotheses tested in the previous chapter and identifies the differences and similarities of prior studies. Some of the findings in this chapter support, while others contradict, prior findings and results.

6.1 Background information

This chapter provides a summary of the characteristics of participants in the samples as seen in previous chapters. The responses received from the sample show there were more male participants than female (52% males and 48% females). Male users had a slightly lower proportion than female users, which contradicts previous studies that stated more males tended to accept and adopt electronic banking, compared to female users (Singh, 2012).

Previous studies showed that younger age groups were more likely to use online banking (Talla, 2013). Talla's research showed that people between the ages of 20 and 30 made up the oldest group of online banking users. However, this study shows that people who fall between the ages of 31 and 40 (33%) make more use of electronic banking than 23% of younger users (aged 21 to 30). To the researcher's surprise, it was noted that users aged between 41 and 50 used electronic banking more than the younger population (by a percentage of 28%). This can be explained in two different ways.

Firstly, as people age, they are more likely to use electronic banking. Secondly, older people tend to have more savings and it is at this stage of their life that selecting a

safe way of banking would be advantageous. Online banking is much safer than carrying large amounts of cash around. This proves that older Cameroonians could easily handle and accept new technologies. Younger age groups will try new technologies and give up along the way for several reasons such as turning to newer technologies or giving up learning to use new technologies. In most cases, they find it hard to maintain usage. In Cameroon, very few youths can afford the cost of opening an electronic banking account.

The more educated people become the more they accept and adopt electronic banking as compared to the less educated people. 57% of users were postgraduates while 26% were bachelor's degree holders. This group of people will more likely learn and master new technologies quicker and easier. It was also discovered that the more experienced users were with a particular service, the more they made use of those services. This explains why the older age groups used online banking. They have had time to decide on a service, saved enough to afford an account, and had more experience using the internet and computers. As a result, they are confident in using electronic banking. Hence, the more familiar and confident a user is with a particular feature, the more likely he are she is to use it.

It would be worth noting that not only did online banking users continue to use the electronic banking service, but non-users also expressed their interests and intentions to accept and adopt electronic banking services and new technologies. 110 of the 254 participants who were non-users confirmed that they would consider online banking as a new banking system. This made up 43.3% while 56.7% of users expressed their support for electronic banking with hopes of continuous usage. It is notable that the younger age group who participated in this study and provided positive feedback expressed great interest in using internet banking. This age group is likely to accept and adopt new forms of technology with little regard to how well that technology functions. Another aspect to note is that respondents agreed to electronic banking based on customer satisfaction. What is interesting is that non-users expressed the willingness to accept e-banking based on customer satisfaction; however, they did not make use of e-banking, so it may be that other factors were more important than customer satisfaction.

H	Hypothesis	Result
H1	Demographic characteristics have a positive influence on customer acceptance.	Supported
H1a	Gender has a positive influence on customer acceptance of internet banking.	Not Supported
H1b	Age has a positive influence on customer acceptance	Supported
H1c	Education has a positive influence on customer acceptance.	Supported
H1d	Occupation has a positive influence on customer acceptance of internet banking.	Supported
H1e	Income has a positive influence on customer acceptance of internet banking.	Supported
H2	Perceived ease of use and service quality will have a significantly positive influence on customers' ability to accept e-banking.	Supported
H3	Perceived trust has a positive effect on customers' acceptance.	Supported
H4	Perceived security and privacy has a positive influence on customers' ability to accept e-banking.	Supported
H5	Perceived accessibility exerts a positive effect on customers' acceptance of e-banking.	Supported
H6	Convenience will **not** positively influence customers' acceptance of e-banking.	Supported
H7	Customers' satisfaction will positively influence customer acceptance.	Supported

Table 6.1: Summary of hypothesis testing with results

6.1.1 Research objectives explained from findings

The research hypotheses were formed from the objectives of this research and in this section, these objectives and their achievements are discussed. Thus the following conclusions are drawn on the objectives guiding the research.

Objective 1:

How users and non-users perceive electronic banking

From this research, a conclusion on how users and non-users perceive electronic banking can be drawn. Based on the facts, the research concluded that most people take up electronic banking and most will consider taking up e-banking due to factors such as trust for the services provided and the providers, accessibility, security and privacy, the satisfaction derived from these services, their providers, and convenience. The overall perception of e-banking in Cameroon by users and non-users is positive. The research showed that 43.3% of non-users would consider taking up e-banking in the future. It should be noted, however, that banks are improving e-banking and making it a positive experience for their customers. The researcher was overwhelmed by the interest shown by the respondents generally. A few non-users especially had little knowledge about electronic banking and the researcher was glad to answer their questions while providing insights into electronics banking and services available and offered by banks. This satisfied objective 1 that aimed at finding out how users and non-users perceive e-banking.

Cameroon is one of the largest countries in the CEMAC group in Africa. However, its banking system has been one of the slowest in terms of development in Central Africa. Before the 1960s, foreign banks dominated the banking system in Cameroon. This changed in 1987 when the government became involved in foreign banks and took partial ownership of others. After the financial crisis in Cameroon during the 1980s, many banks closed with the government taking ownership of others. This crisis did not last long because in the 1990s, Cameroon saw an increase in banks and financial institutions. Cameroon only offered services through the physical branches up until 1997 even though internet banking in Europe was already gaining ground. Today, due

to recent development, Cameroon banks offer electronic banking services such as ATMs, SMS banking, internet banking, and telephone banking.

Even though e-banking acceptance and usage in Cameroon cannot be compared to other Central African countries, there is an improvement in e-banking service provision and an increase in e-banking customers. This research showed that up to 7.9% of Cameroonian customers use ATMs while 10.2% use telephone banking. This shows the usage to be 2.9% higher for ATM users compared to figures released in the year 2013 by Talla in his research about the percentage of ATM usage in Cameroon. In the year 2009, there were only 46 ATMs in Cameroon (Djoumessi, 2009). Today, there are over 1,200 ATMs across Cameroon. This shows an increase in acceptance, use, and above all a change in the banking system in Cameroon.

Many people now carry out their financial transactions online rather than going into banks. Internet banking has also made it easier for the government to pay civil servants through their online accounts rather than in cash or checks. Business people in Cameroon have turned to electronic banking services to help manage their monies rather than using the traditional banking methods, which were unsafe and made money management more difficult and complicated.

Some people go to extreme levels to open bank accounts just to own bank cards. This trend is common amongst university students. This shows how e-banking services have changed the way people bank in Cameroon. However, even though electronic banking has its advantages, it also has its disadvantages. For example, business people are now taking up online banking even though they face challenges like ministerial grants approval, which takes ages to be granted before they can own business accounts. The government can intercede to help reduce long waiting times by approving business applications in less time. Even though a few services are provided online, banks are still lacking in online services compared to services offered in developed countries. By looking at these figures and trends, banks and the government can make better decisions. This satisfies objective 1 of this research which aimed at critically evaluating how customers' acceptance of e-banking is perceived by users and non-users.

Objective 2:

To develop a model/framework on the stages that leads to online banking acceptance and factors that influence electronic banking acceptance

From this research, it was discovered that many factors influence customers' acceptances of e-banking. Questionnaires were distributed and the data collected was analysed using SPSS; results from this together with the literature review (in the Cameroon context) suggest an extension of the TAM model on the part of the customers. Important factors that influenced customers' acceptances included trust, accessibility, convenience, security and privacy, demographic characteristics (age gender, income, occupation and level of education), and customer acceptance.

Customer satisfaction has a very important role to play in e-banking acceptance. This is because satisfied customers are more likely to approve and accept a service. Notably, respondents agreed to customer satisfaction as one of the reasons to take up e-banking, However, it appears that respondents are fascinated by the idea rather actually accepting and adopting e-banking. Respondents claimed they would adopt online banking if they were satisfied with the services. In summary, being satisfied with the idea does not result in adoption. To adopt, most will need to consider other factors, like income.

The results from the quantitative analysis of the survey responses confirmed the relationships in the traditional TAM. The results also highlighted the importance of other factors such as trust, accessibility, security and privacy, customer satisfaction, ease of use, and demographic characteristics (age, gender, income, occupation and education). The results showed that customers did not consider convenience to be important when deciding to take up e-banking. Convenience had been stated by other researchers (Cletus, 2012) as the number one factor that enabled people to use online banking. However, from this research, the hypothesis was not supported and although convenience is an important factor for online banking acceptance, it cannot be classified as the main factor. Customers considered other factors above convenience when it came to e-banking acceptance.

Even though one can see convenience as the number one reason to use electronic banking, in Cameroon, electronic banking is not as developed as compared to the rest of the world. Apart from using electronic banking because of convenient factors like being able access it from anywhere at any time at one's own comfort, in Cameroon and Bamenda which is less developed, an individual will need to consider those factors and more like internet cost, internet speed, security, literacy, account affordability, being able to afford a device needed to be able to access the internet, amongst others. With this in mind, although electronic banking is convenient in certain areas, in less developed areas in Cameroon, someone faced with one or more of these factors will rather stick to the old ways of banking including walking long distances to carry out transactions at their nearest bank branches.

From this research and prior studies, the researcher can boldly state that Cameroon has improved greatly and today, the country makes use of several different e-banking services. These services have been made available for Cameroonian customers to use and include ATMs, SMS banking, telephone banking, mail banking, and mobile banking (which increased globally from 9% in 2009 to 30% in 2015, Statista.com, 2018). The model at the centre of this research has been the TAM. This model simply shows that the perception of something changes not because that 'something' is different but because you and I are different., With the introduction of e-banking, therefore, Cameroonian customers (if aware) will find reasons to acquire and use these services. Linking models like the TAM to customers' acceptance addresses another objective.

Objective 3:

To develop a model linking e-banking acceptance to Cameroonian customers.

From the research, the factors that enable e-banking in Cameroon were uncovered. From the findings, the researcher was able to conclude that in Cameroon, e-banking was welcomed by Cameroonian. However, because of the country's very slow development, online banking was far from being considered a 'convenient' method of banking, and neither was reliability. This is more interesting considering that the hypothesis that convenience is a reason why people would take up e-banking was not

supported but many past researchers had claimed convenience was a reason for e-banking adoption. Cletus, in the year 2012, stated that reliability and convenience were two very important factors that enabled e-banking adoption in Cameroon but did not provide the implications of these factors. This achieves the objective of the implications of electronic banking on banks and Cameroonians. Further implications are provided in the next section.

Data was collected from 254 of 300 questionnaires distributed by the researcher to users and non-users from 10 well-known internet-banking providing banks. These 10 banks were selected from two regions in Cameroon (the commercial capital of Douala and the political capital of Yaoundé). From the results and being in the field and critically examining these factors, the researcher had doubts as to whether Cameroonians were ready for these banking changes (electronic banking).

A model was created as an extension from TAM, showing the factors that enabled Cameroonians to accept and adopt internet banking. These factors were focused on the Cameroonian people to avoid broad assumptions and conclusions that might not work in this contact but might apply to other countries. By using factor analysis, the variables for this research were narrowed to fit the context.

As set out above, all objectives of this research have, therefore, been achieved.

6.1.2 Research questions answered summarised:

<table>
<tr><th>Research objectives</th><th colspan="2">Research original contribution</th></tr>
<tr><td>How users and non-users perceive electronic banking</td><td colspan="2">Current non-users are worried about security. Some non-users have limited knowledge of online banking and what it entails, and some are willing to know more and plan on adopting in the future if it meets their needs.

Some users are worried about their security and privacy. For most of those who can afford and use electronic banking services, the reason is merely to show that they are in the league of elite by bankcard possession, while others have savings that needs to be kept in a safe place. Most users are high earners, educated, or wealthy.</td></tr>
<tr><td rowspan="3">To develop a model/framework on the stages that leads to online banking acceptance and factors that influence electronic banking acceptance</td><td>Influential Factor</td><td>How</td></tr>
<tr><td>Trust</td><td>The more customers trust a service, the more they will use the service. This affects customers’ acceptance of e-banking.</td></tr>
<tr><td>Security and privacy</td><td>Many people place great emphasis on security and privacy to bank online. More people are open to online banking when they know their finances are secure and their information is kept private.</td></tr>
</table>

	Accessibility	The more accessible the internet, the greater the possibility of using e-banking. People will give up using a service if it is difficult to navigate.
	Customer satisfaction	The more satisfied customers are with e-banking services, the more they are likely to accept and adopt the services provided. However, Cameroonians are more satisfied with the idea of online banking than the actual process. They are satisfied with the benefits but have yet to accept it.
	Convenience	This factor was not classified as an important reason for people to take up internet banking, contrary to previous research that stated people would use the services if they deemed it convenient. However, convenience is not one of the factors that enable people to take up online banking.
	Influential factor	***How***
	Demographic characteristics	• Gender does not affect internet banking acceptance.

		• Internet banking in Cameroon is affected by age e.g., older people use internet banking more than the younger age groups. • E-banking adoption increases with an increase in the level of education of customers. • E-banking users have more significant occupations than those who do not have jobs. • Higher-income earners are more open to new technologies and acceptance of internet banking to coordinate their monies.
	Perceived ease of use	The easier it is for people to use existing banking services, the more people will accept and use these services.

To develop a model linking e-banking acceptance to Cameroonian customers.	Even though it is considered an important factor for online banking, the level which e-banking is in Cameroon cannot be considered convenient as it still lags. Online banking still faces many problems like system failures, security threats, limited services provided online and more, hence it is unreliable at this stage. There are still doubts as to whether Cameroon is ready for e-banking. However, when considered as one, there is hope for e-banking in Cameroon; however, as separate regions, much still needs to be done to create awareness and acceptance. Factors such as convenience shows a direct link to Cameroonians. E-banking is convenient in other countries around the world especially developed countries but when applied to the Cameroon context, it does not fit because many other factors need to be applied for this to be considered convenient. These include cost, electricity, the internet, affordability of devices for use to access such services, literacy and others. Gender is another factor that does not affect e-banking in Cameroon as previous researches like Talla's of 2013 claimed. Other factors which apply to why Cameroonians accept and adopt e-banking include trust, security and privacy, accessibility, demographic characteristics, ease of use and customer satisfaction.

Table 6.2: Summary of research questions findings

6.2 Research limitations

This research noted some limitations. The study focused on factors such as trust, security and privacy, accessibility, ease of use, convenience, customer satisfaction, and demographic characteristics (age, gender, income, occupation and level of education). The main objective of this research was to determine the factors that influenced customers to accept electronic banking in Cameroon. The results of this study were considered from a Cameroonian viewpoint. The model, however, uses information and literature reviews from past research to compare results with present studies conducted in other countries.

One significant limitation of this research was the number of banks selected as part of the survey. Cameroon has hundreds of banks but not all provide internet banking technologies. It was surprising to learn that some banks provide different services in different regions. Of the 10 selected banks, even though available in Yaoundé, Douala and Bamenda, only three of them provided online banking services in Bamenda at the time this research was conducted. Due to time and resource limitations, the researcher was not able to explore the general banking system of Cameroon. However, the participants were diverse and included males and females, different age groups, workers, both private and government, and high and low-income earners. To avoid bias and increase credibility, these participants were randomly selected. These findings may, therefore, be considered representative for a general-random aged population of high- and low-income earners of varied occupational backgrounds and diverse levels of education.

However, it would have been advantageous for this research to expand the study to banks that do not yet use these internet banking services to further understand customers' thinking of internet banking.

Many Cameroonians still prefer using credit unions to fulfil their financial needs and requirements. Most credit unions still use out-dated banking methods, hence a limitation to this research. Credit unions have existed for a long time in Cameroon and Cameroonians still trust them which is why some customers have no interest in new banking technologies.

It is important to conceptualise and operationalise the construct of the research, according to Straub et al. (2010), because the multiple involvement of items is necessary to gather knowledge concerning one concept. Those items may be repeated or cloned as a way of collecting and recording data in situations where no other alternatives exist. In some cases, concepts to each construct may not have been explained clearly while language used may be hard to understand by the participants (Straub, 2010).

According to Mathieson et al. (2012), when users acquire more knowledge and experience, their perceptions with time is bound to change. It is important, therefore, to redo or re-carry out and re-evaluate this study in the future as this may affect the result. This can be exemplified by the fact that six years later, most of Talla's findings from the year 2013 can be disputed. For example, his findings showed that males were more likely to adopt internet banking compared to females. However, this research found that the chances of males accepting internet banking are the same as females. Regarding Cletus (2012), six years later most of his factors can be unsupported.

Another significant limitation to this research is the fact that changes had to be made to the original plan of when data had to be collected. The main areas for research were Yaoundé (the capital of Cameroon), Bamenda (which is situated in the North West region of Cameroon) and Douala, the commercial capital of Cameroon. Bamenda is very different to the other two regions and could provide more knowledge about the country's development of internet banking. The Northwest region is very slow with development and technology while Yaoundé and Douala are the complete opposite. However, at the time of the data collection, Bamenda was experiencing a political strike from July of 2016, which continued into the year 2019. Due to this, mobility was limited for security reasons, and the internet had been disconnected throughout the region for more than a year, so banks could not provide or process transactions. Some banks had to assist their customers by reverting to the traditional banking method like withdrawals, bills payments, deposits and more being conducted over the counter rather than online and by the customers themselves.

This also led to many banks being shut down temporarily. Residents in the North West region and southwest regions of Cameroon could not use the internet in general whether for social reasons or banking purposes. Credit unions at this time were more useful because they used traditional banking methods and could still provide basic services to their customers. Some banks that provided electronic banking services decided to save on the cost of online banking by shutting down these services for the residents in Bamenda. A decision was made to change the original regions where data was to be collected to the regions in Cameroon where there was no political instability – Yaoundé and Douala. However, when the strike became more peaceful, banks slowly re-opened and continued serving the general population of Bamenda and its environs; and it was then that the researcher organised interviews for a better understanding of e-banking. These interviews did not affect the original findings of this research, but only assisted the researcher understand more about e-banking acceptance in Cameroon (Appendix D).

6.3 Contributions

Contribution	Explanation
Benefits to financial institutions	Quantitative analysis was used to process data with SPSS and the results were discussed in terms of their academic contributions. Challenges and barriers that affected electronic banking acceptance were identified and included the cost of opening accounts, low income, lack of knowledge, procedures, and slow internet services. From this research, banks and financial institutions will gain more insight into factors that influence customers to accept online banking. They can then devise suitable services to help attract new customers and retain old ones.
Extended TAM focused on Cameroon	This study also makes significant contributions across all the banking sectors in Cameroon. Data was collected from customers through questionnaires, which led to the decision to base the study on the well-known TAM with extensions to make it more relevant for a developing country like Cameroon. The Cameroonian environment is significantly different from that of the developed Western countries from where the technology originated. More extensive research has been conducted in other African countries such as Nigeria and Ghana but not Cameroon. This research contributes to the general literature on the TAM, with respect to Cameroon. From this, banks can work on developing new products and services to meet the needs of all Cameroonians who use or wish to use e-banking. This is because the products offered by banks do not currently fit the diverse multi-cultural institution of Cameroon. Taking an example of the North West and South West regions of Cameroon made up of farmers and traders, a proper and well-structured product will result in these Cameroonians adopting banking practices and consequently adopting internet banking in the future. These groups of Cameroonians have been known to carry around large sums of money in cash for fear of using the new banking method, hence sticking to their traditional methods of banking with credit unions or storing money in cash

	at home. With this research, banks can create products to help the diverse population of Cameroon.
Contribution to the general body of literature	This research makes a substantial contribution to the growing research areas of digital channels that are currently underreported in academic literature. Previous research did not provide insight based on Cameroon banks directly. This research studied the existing Cameroonians banks in general and especially those that provide e-banking. It also attempts to provide solutions to some implications noted during this research. This has never been done before in the Cameroonian context and the researcher aims at sharing this research with some Cameroonian banks to provide them with an overview of a few things they may have missed or overlooked regarding electronic banking. For instance, banks will gain more clients if they make their websites more accessible and more interactive or by providing enough information for clients to digest and decide.
Convenience does not apply to the Cameroon as a factor that enable e-banking acceptance	This research also contradicted the literature which stated that convenience was an important factor for electronic banking adoption in Cameroon. Although convenience was a factor that would enable e-banking acceptance in certain contexts, it was not in the Cameroonian context at the time this research was conducted.
New source of referencing	This study can be used as a source for referencing by other researchers. They will be able to acquire better and more updated insight into factors that enable e-banking specifically relating to Cameroon.

Table 6.3: Research contribution. Source: author

6.4 Implications

During this research, the researcher uncovered the factors that enable Cameroonians to accept electronic banking. Previous researches have stated factors such as demographic characteristics (age, gender, income, education, occupation), accessibility, trust, security and privacy, reliability, convenience, customer behaviour, and customer satisfaction enable people to accept and adopt online banking in the world, and in this case, Cameroon.

The implications are as follows:

Firstly, data for this research was collected by the use of multiple method approaches such as electronic mails, phone and face-to-face interviews, when administering questionnaires. The researcher spent time explaining the different factors to respondents in order to facilitate understanding. Interviews conducted provided insight into how banks operated. Data collected was analysed by the use of SPSS, which was one of the best statistical tools for data analysis. However, it was limited to previous research conducted in this field. This research, therefore, sets a new pattern in the research on electronic banking.

Secondly, demographic characteristics, especially income, emerged as an important factor in deciding to accept e-banking in Cameroon. As a result, some people might have been excluded from using online banking; for instance, people who earned income but had no proof would not be able to use these services as banks required proof of income. Also, people who lacked sufficient income to afford an online account due to the minimum amount required to open and maintain an account. In summary, the findings suggest that banks should relax their policies to welcome people who wish to use online services but have no proof of income or for those with low income.

Perceived convenience was an important factor for online banking acceptance. Although perceived convenience was not supported by the hypothesis drawn, it was still important when people considered taking up online banking. For online banking to be convenient, people would need to be able to open an online account from anywhere

in the world by going to the banks' websites, carry out all transactions, pay bills, view or print out their bank statements, transfer money, or pay people in the comfort of their own homes or any location in the world by use of their online banking system or app.

The findings from this research suggest that banks that provide online banking services in Cameroon have limited services, for instance people still need to go into banks to carry out services that could otherwise be done online such as opening an online banking account. Some banks stated the presence of online banking on their website; however, these services could not be accessed online.

For example, the picture below shows the online banking link of one of the banks in Cameroon. For people looking to learn more about online banking of this bank, the picture below is what they are transferred to view. Banks should work closely with website developers to carefully consider the requirements of their customers and make sure that their online services are convenient as this will increase acceptance of e-banking.

Figure 6.1: Error page on one of the bank's websites when 'online banking' link is clicked

Furthermore, reliability is an important factor that enables e-banking. This research did not research this factor in depth because previous studies had already done so. However, what previous researches like Cletus (2012) failed to do was state the level at which banking in Cameroon was to be considered reliable by Cameroonians and

making comparisons with other banks' online banking in countries such as Nigeria whose online banking services are similar to those of developed countries.

For instance, even though certain factors are beyond the banks' control like constant internet and electricity failures in Cameroon in general and Bamenda in particular. or an ATM breakdown, customers should be able to access their online accounts from anywhere in the world with no fear of page errors or power outages, transaction security, and promptness, amongst others. In summary, banks need to improve their services and provide alternative options to customers. This simply means although reliability is a factor that would enable e-banking acceptance in certain contexts, it is not in Cameroon.

6.5 Recommendations

The research makes the following recommendations to banks and online banking organisations that provide internet banking services:

1. Cameroon needs to improve its internet speed. Internet speed improvement will mean customers can choose to stick with internet banking rather than using other banking options. Internet speed in Cameroon has been known to be very slow. People pay high costs to receive fast internet fibres but still face many problems like slowness and constant internet disconnections. Internet service providers will need to increase their bandwidth infrastructure to better support fast and safe internet banking. The more people are convinced to accept internet banking, the more internet customers these companies will attract.

2. Banks should promote and advertise electronic banking. Advertising will create awareness. The more customers' interests and knowledge of online banking grow, the more customers will take up these services. It was noted by the researcher how little information was provided by banks about their online services, even on their websites. Banks have information regarding online banking on their websites, however, for non-users, it would be hard to decide just by viewing a banks' website. Some banks have broken links on their

websites (Figure 6.1 pg.187); little things like error display pages can cost a bank many clients.

The population of non-users of internet banking is double the number of users based on the survey conducted by the researcher. This survey showed that 69% of participants were non-users while 31% of participants were users of internet banking. However, 50% of current non-users expressed interest in the future. By banks enhancing online services and informing more Cameroonians, there may be a substantial increase in the number of users of internet banking services. For non-users who expressed future interest in e-banking, more information and advertisements may encourage acceptance and adopting new technologies for their daily banking and transactions.

This is where adverting comes in as it would provide people with exclusive and more understandable information on electronic banking. Banks should send out trained employees to carry out campaigns in the streets and create awareness of online banking and explain to people the benefits of this type of banking. The researcher did not see adverts by banks on television. Due to the cost of advertising on television, banks have decided to avoid using these platforms. However, millions of Cameroonians listen to the radio daily, and banks can use that platform to advertise at a lower cost or use billboards clearly stating the advantages of online banking to encourage the general public. An employee could be placed at each bank location with flyers to distribute and explain the services available and how to become part of it e.g. online banking.

3. Banks need to provide more in-depth information about their services. Acceptance and adoption in this case will be based on the advantages and disadvantages of internet banking. It is, therefore, important for banks to allocate information and knowledge to help explain how to use internet banking services and ease usage. An extra advantage for banks would be to continue innovating and investing in electronic banking services by adding functions that allow users more alternatives when using available electronic banking services. Banks could also add multiple services to the available electronic banking services to provide customers with more alternatives.

In most cases, customers would rather carry out multiple services than simple tasks or transactions (Chau et al., 2009). Banks could, therefore, build a strategic relationship to facilitate superior services through ease of use and speed by linking their services with other related financial services. More information can be placed on their websites with information and steps of obtaining online banking; providing an option for people to be able to open an online account simply by heading to the banks' websites and clearly stating the message of the benefits of online banking. This could motivate customers to accept and adopt internet banking services. The picture in Figure 6.2 below shows what one of Cameroon's bank's provision of e-banking looks like (the picture in Figure 6.2) and the second picture in Figure 6.3 are banks in a developed country and their online banking pages.

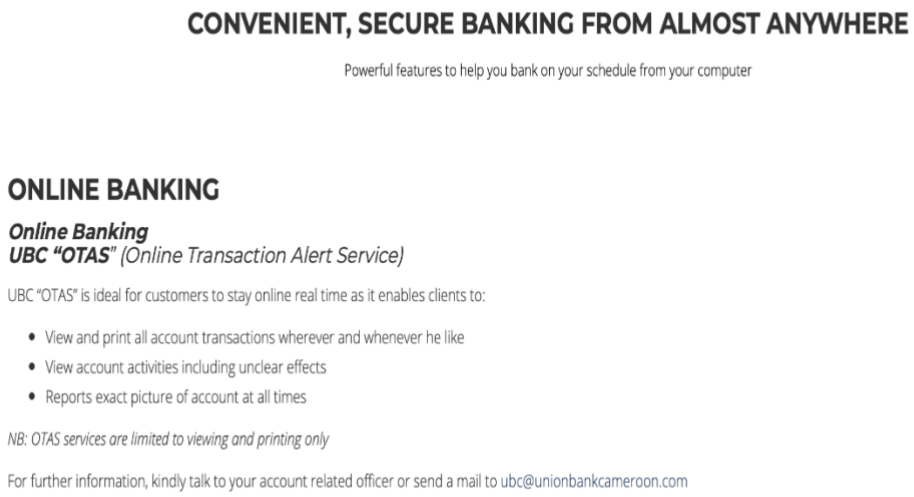


Figure 6.1: Online banking page information for UBC (Union Bank of Cameroon).

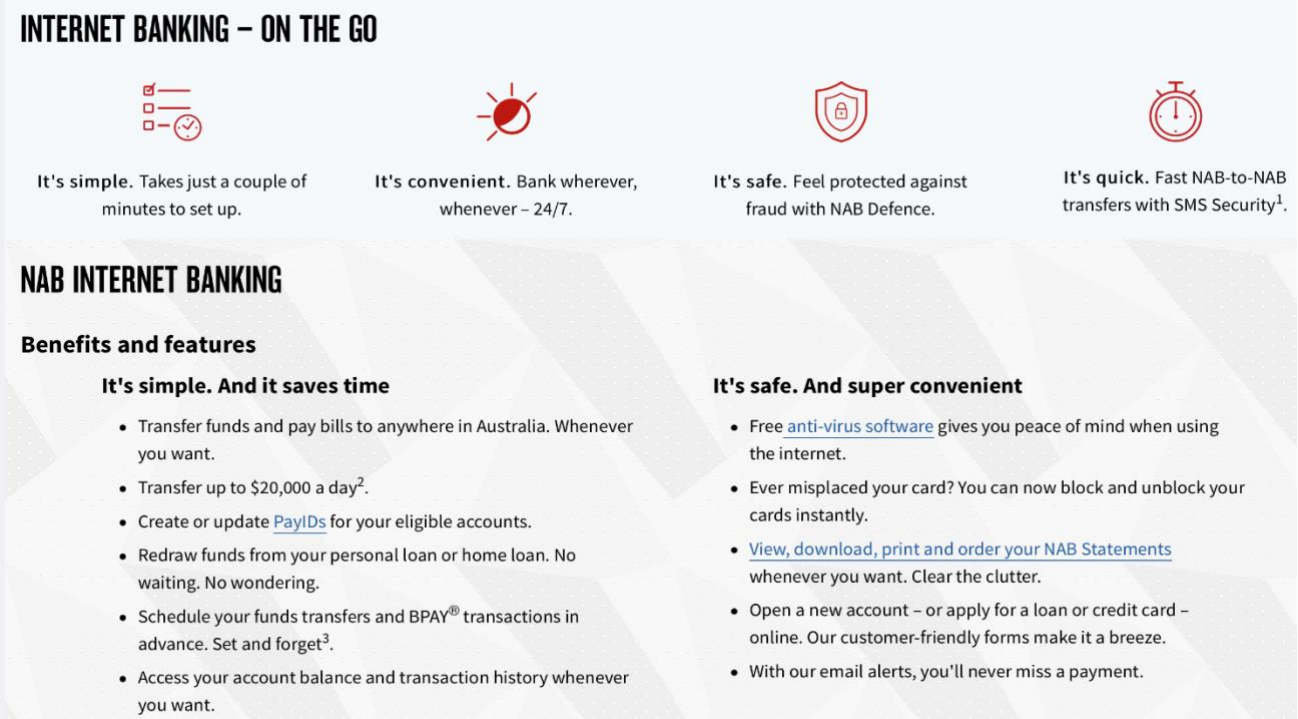


Figure 6.3: NAB bank website

A person looking to adopt e-banking will not hesitate to register by looking at the second picture in Figure 6.3

4. Banks should organise training sessions and presentations where they can demonstrate how to use their electronic banking services. This is another way of enhancing customer' self-efficiency in internet banking. These sessions and presentations would explain internet banking system usage benefits. By this, customers will be able to acquire a more positive opinion on the ease of use of electronic banking. Holding sessions like these at least once a month will help provide people with a good knowledge on e-banking

5. From the results, trust is an important factor when considering the adoption of electronic banking. Designing and building functions in a way that protects customers' information by banks to fit customers' experiences and lifestyles would mean gaining the trust of more people, thereby encouraging them to accept and adopt electronic banking (Chau et al., 2009). To do this more effectively, banks could send customer surveys and collect feedback to further develop the services, understand future demands, and gain customer trust. By increasing their ease of use, the above factors can be better generated.

6. Banks need to focus on retaining existing customers. Electronic banking acceptance and adoption can be increased if banks focus on keeping existing customers while encouraging non-users to use electronic banking services. Banks would be able to encourage internet banking adoption from up to 89.6% of non-users (as per this research) who may have previous experiences using the internet as a whole. By providing training to their employees, banks can encourage non-users to adopt electronic banking services. Banks could also collaborate with internet service providers to provide not only a faster connection but also a more affordable internet service. This will enable bank customers to afford internet connections at home, work, or at their businesses rather than using internet cafes to access their accounts. Banks also need to constantly update their websites.

7. Banks can provide free internet access at their bank locations and computer stations so that customers who cannot afford them can still use these services at bank branches and even do so with assistance from bank employees.

8. The government of Cameroon needs to get involved to make the process of internet banking easier. Another factor is the process that people must go through to be able to gain access to online banking. It was noted that businesses needed a ministerial grant to be able to register for online banking and obtain a business bank card. One bank employee, when asked how long this process took, stated it could take three months and up to a year to get a grant. This is not an encouraging factor for businesses that are looking for an easy way to manage their businesses and access their accounts. With the help of the government, banks should devise a way of making it easy and quicker for businesses.

9. Banks need to reduce their charges to suit the diverse population. One of the most common reasons why Cameroonians do not use online banking is the cost of obtaining online banking access. This research supports Talla's (2013) research on cost because banks charge very high fees to customers who want

to obtain an online account and a bank card. For this reason, many Cameroonians prefer to attend physical bank branches for basic transactions.

This explains why the queues in banks are still long especially at the end of the month when people come in to collect their salaries and wages. From the interviews conducted, the researcher was informed that queues could last up to three working days. People could simply view their accounts from home or anywhere, but they did not have online banking accounts even though they already owned accounts with banks; and hence many go into banks to withdraw or transfer money. Banks should review this to encourage and attract more people to take up electronic banking; this would decrease the time taken by customers to perform transactions or withdraw money at the bank.

Banks can reduce the minimum amount needed to be able to open an account (in this research an average of CFA 50.000FRS). This is to some people a monthly salary; to those who can afford this, they must pay an extra fee to obtain a bank card for use in online shopping, ATMs or in stores. Banks should be able to provide people with bankcards for free when they register to use electronic banking and only charge for replacement cards afterwards.

6.6 Final thoughts

Electronic banking has been in existence for some time now and it is insufficient for banks to only have an internet presence. Banks can improve their services by developing and making available other e-banking features such as bill payments and credit card applications that suit not only the high-end earners but also the low-and middle-income earners.

From this and prior research, it is predicted that banks will continue to improve their services, websites, and extend their services, not only for transactions but for more personal customer needs and sales. Banks in more developed regions of Cameroon, like Yaoundé and Douala, showed positive signs for the future of e-banking, but less so for the Northwest regions. As customers become more intimate and comfortable

with e-banking, acceptance will continue to increase. As internet banking technologies improve and acceptance grows, banks will need to make changes such as introducing quarterly or semi-quarterly web development cycles rather than annually. Banks should upgrade their marketing programmes and products. Most banks only accept the physical presence of customers before allowing them to accept certain programmes or products. However, it would be far better if the website were set up to allow customers to compare all products and sign up irrespective of location.

Lastly, to increase acceptance, more frequent media publicity should be used to attract customers. Internet banking, security, and privacy should be made clear to customers. Customer and employee education on e-banking services need to be constant and readily available. Internet banking is one important aspect of new technology application. By exploring factors that influence the acceptance and adoption of internet banking, banks and service providers must develop and validate the services they use to satisfy their customers and increase their profits.

The research questions and objectives were achieved by adopting the TAM and extended TAM in the Cameroonian context. Data was collected from 254 of 300 questionnaires distributed by the researcher to users and non-users from 10 well-known internet bank providing banks. These 10 banks were selected from two regions in Cameroon (the commercial capital of Douala, the political capital of Yaoundé, Cameroon).

The researcher doubts whether Cameroonians are ready for electronic banking. More doubts exist for Bamenda – so many factors work against the Abakwa people (people from Bamenda) when it comes to electronic banking. The economy in Bamenda is low, employment at this stage is at its lowest and made worse with an on-going three-year political strike, illiteracy is high, and as a result, few people can afford a bank account, let alone online banking or a bank card. There are constant internet and electricity failures, poor networks, some areas have no services for radio transmission or mobile network, and people still conduct *“njangie”* which is a meeting where people put in money weekly and the sum is collected by an individual until all members have contributed.

Coupled with the lack of interest in online banking in Bamenda, we can begin to question if the population is ready for modern technologies like these.

Despite the limitations discussed above, practical recommendations to banking institutions in Cameroon are useful and the research approach used can also be applied to other internet banking services regardless of the context or the environment.

6.7 The need for future research

From the limitations and implications, some areas require further study and research.

1. Firstly, further research is necessary to better understand the phenomenon of internet banking. This research was focused entirely on Cameroon bank customers. However, due to time constraints, the researcher was only able to carry out research on 10 banks in three regions within Cameroon. Two of the regions in the last couple of years have seen some development with respect to modern technology, while Bamenda is very slow when it comes to development and has recently had some set back due to an on-going strike. It is advisable to conduct more in-depth research based on more regions in Cameroon especially regions with slower development rates such as the North-western region, South-western region, and the far north region.

2. This research proved that factors such as accessibility, trust, security and privacy, customer satisfaction, and demographic characteristics are significant factors when it comes to enabling people to accept and adopt internet banking. Perceived risk and perceived cost have been strongly supported in previous research (Hussain, 2011) as important factors that influence internet banking acceptance and adoption. Cost is a very important factor that affects e-banking in Cameroon. It is necessary to carry out in-depth research to further study these factors and to re-test and investigate their effects on future electronic banking acceptance.

3 The data collection method applied at different stages in this research was the use of survey questionnaires. Quantitative questions were asked, and options

were provided for participants to choose from according to the levels with which they agreed or disagreed to the questions and statements. It is advisable to conduct qualitative interviews to obtain additional insightful feedback that could be used to further design and improve survey questionnaires. It is also important to use more open-ended qualitative questions to gather more insight into what customers actually think of internet banking.

4 To extend the research model, more concepts could be added to future works. For instance, even though reliability was one of the most outstanding factors for adoption in previous researches, it was not considered in this research because much needed to be known by customers about online banking at this stage and banks still face problems like page failures, internet problems, electricity, few online banking services provided, security and more; internet banking, therefore, can hardly be considered reliable in the Cameroonian context. The research adopted an extended TAM (Lin et al., 2004) and TAM (Davies, 1989) models. More external constructs could be used to improve these theories. Another option is to extend the statistical analysis to consider more difficult relationships developing from the model instead of being limited to a staged approach.

5 Due to an on-going strike in one of the regions (Bamenda), the researcher was unable to collect enough data for safety reasons but was lucky enough to organise appointments with bank employees of a few banks for interviews. Bamenda is underdeveloped compared to other regions in Cameroon and the presence of a political strike has caused several setbacks in the region. Some banks in Cameroon provide online banking to their customers in regions like Yaoundé and Douala but the same banks do not provide these services in Bamenda. This shows that perhaps e-banking is not as welcome in Bamenda as it is in the other regions.

There is a need for research that will cover Bamenda which will investigate the level of development as well as the internet and banking facilities in the area; and also whether Cameroonians in general and the people of Bamenda in particular are ready for electronic banking.

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APPENDIX A: Questionnaire for Customers (English)

Dear Respondent,

This survey is being conducted as a part of my PhD dissertation to understand online banking information system acceptance. Please be comfortable answering the questions below. Participation is voluntary and all information provided will be kept confidential.

This questionnaire will take 7-12 minutes to complete. Please answer the questions in the spaces provided. Please avoid spending much time on a question, as every first thought is always the best. Some questions may not apply to you, however, please do not ignore them. Choosing the closest related answers will be very much appreciated and will help build a better conclusion for this research.

I hope you will have a great time answering this question. If you do have any questions, please do not hesitate to email me on: cycyjons@gmail.com.

Consent:

I wish to not be identified in this report (please tick one)

I have read the above information and I agree to participate in this study.

Please Tick the box

Signature_____

Date _____

THANKS FOR YOUR CO-OPERATION

Part 1: Personal Information (Please tick the relevant box)

1. Gender: Female Male

2. Age less than

<20

21-30

31-40

41-50

>50

3. Income per month (in Francs):

Less than 100.000

100.000-200.000

200.001-300.000

300.001-400.000

400.001-500.000

More than 500.000

4. Education:

Less than high school

High school

Diploma

Bachelor

Post-Graduate

5. Occupation:

Student

Government employee

Private sector

Business

Part 2: Section A: <u>Please indicate your level of disagreement/agreement with the following using a rating scale of 1 to 5</u> (1=strongly Disagree; 5=Strongly Agree)

1. Online banking information system is

Variables	**1. Strongly disagree**	**2. Disagree**	**3. Somewhat Agree**	**4. Agree**	**5. Strongly Agree**
Trustworthy					
Easy to access					
Enables me to complete all my banking activities					
Offers secure personal privacy					
I find it easy to understand the term used throughout the online banking information system (ETU=EASY TO UNDERSTAND)					
How convenient is online banking to you?					
In general, how satisfied are you to using online banking? (Satisfied)					

1. Which of the following services do you use the most? **(Please tick one)**

Online banking

Branch

ATMs

Telephone

FOR NON-USERS ONLY

Do you think you will ever consider using online banking services in the future?

YES NO

Thank You

APPENDIX B: Questionnaire for Customers (French)

Madame, Monsieur,

Cette enquête est menée dans le cadre de ma thèse de doctorat pour comprendre la banque en ligne système d'information acceptation. S'il vous plaît être à l'aise de répondre aux questions ci-dessous. La participation est volontaire et toutes les informations fournies seront gardées confidentielles.

Ce questionnaire prendra 7-12 minutes à remplir. S'il vous plaît répondre aux questions dans les espaces prévus. S'il vous plaît éviter de dépenser beaucoup de temps sur une question, comme chaque première pensée est toujours la meilleure. Certaines questions peuvent ne pas vous concerner, cependant, s'il vous plaît ne pas les ignorer. Choisir les réponses connexes les plus proches sera très apprécié et contribuera à bâtir une meilleure conclusion pour cette recherche.

Je l'espère, vous aurez un grand temps de répondre à cette question. Si vous avez des questions, s'il vous plaît ne pas hésiter à me contacter sur: cycyjons@gmail.com.

Consentement:

Je tiens à ne pas être identifié dans le présent rapport (s'il vous plaît cocher une case)

Je l'ai lu et je informations ci-dessus accepter de participer Je cette étude.

S'il vous plaît Cochez la case

Date de la signature _____

MERCI

Partie 1: Renseignements personnels (S'il vous plaît cocher la case correspondante)

1. Sexe: Femme Homme

1. Âge moins de
< 20
21-30
31-40
41-50
> 50
2. Revenu par mois (en francs):
Moins de 100,000
100,000 à 200,000
200,001 à 300,000
300,001 à 400,000
400,001 à 500,000
Plus de 500.000
3. Éducation:
Moins que le secondaire
École secondaire
Diplôme
Bachelier
De troisième cycle
4. Occupation:
Élève
Fonctionnaire
Secteur privé
Entreprise

Partie 2: Section A: S'il vous plaît indiquer votre niveau de désaccord / accord avec le suivant en utilisant une échelle de notation de 1 à 5 (1 = fortement en désaccord, 5 = entièrement d'accord)

1. Système d'information bancaire en ligne est

Variables	**1. désaccord**	**2. Pas d'accord**	**3. Plutôt d'accord**	**4. D'accord**	**5. Tout à fait d'accord**
Digne de confiance					
Facile d'accès					
Me permet remplir toutes mes activités bancaires					
Offre de l'intimité personnelle sécurisée					
Je trouve qu'il est facile de comprendre le terme utilisé dans le système de la banque en ligne de l'information					
Comment pratique est la banque en ligne pour vous?					
En général, êtes-vous satisfait de l'aide de la banque en ligne?					

1. Lequel des services suivants utilisez-vous le plus? (S'il vous plaît cocher une case)

Services bancaires en ligne

Branche

distributeurs automatiques de billets

Téléphone

POUR LES NON- Seuls les utilisateurs

Pensez-vous que vous aurez jamais envisager d'utiliser les services bancaires en ligne dans le future. OUI NON

Merci

APPENDIX C: Interview questions for bank employees

Number	Question
1	What are your thoughts on Internet banking?
2	When recruiting workers does your bank recruit based on their knowledge of ICT (Information and Communication Technology)?
3	Which of these factors do you think is the reason why people take up online banking? 1. Customer satisfaction 2.Reliability 3.Security & Privacy 4.Convenience 5. Trust 6. Accessibility 7.a. Gender b. age c. income d. occupation e. education WHY?
4	Do you think convenience is a major factor that determines electronic banking adoption? Why?
5	Based on the knowledge gained from working with your bank, how reliable do you think Internet banking is to Cameroonian?
6	What does your bank do in effect as a way of encouraging more people to use their e-banking services?

Bank	**Number of Employee Interviewed**
UBC	2
Afriland First Bank	2
BICEC	1

APPENDIX D: Frequencies from data collected.

Responses from users and non-users – Demographic characteristics

Variable	Non-user	174	69%				
	User	80	31%				
Variables				**Users**		**Non-users**	
Gender	Male	133	52%	40	50%	93	53%
	Female	121	48%	40	50%	81	47%
Age	<20	19	7%	4	5%	15	9%
	21-30	58	23%	16	20%	42	24%
	31-40	85	33%	27	34%	58	33%
	41-50	70	28%	21	26%	49	28%
	>50	22	9%	12	15%	10	6%
Education	<High school	17	7%	0	0%	17	10%
	High school	13	5%	10	13%	3	2%
	Diploma	12	5%	8	10%	4	2%
	Bachelors	66	26%	17	21%	49	28%
	Postgraduate	146	57%	45	56%	101	58%
Occupation	Student	26	10%	8	10%	18	10%
	Gov't employer	12	5%	7	9%	5	3%
	Private sector	21	8%	13	16%	8	5%
	Businessperson	195	77%	52	65%	143	82%
Income	<10.000	19	7%	0	0%	19	11%
	10.001-20.000	30	12%	9	11%	21	12%
	20.001-30.000	40	16%	10	13%	30	17%
	30.001-40.000	51	20%	16	20%	35	20%
	40.001-50.000	54	21%	19	24%	35	20%
	>50.001	60	24%	26	33%	34	20%

APPENDIX E: Data collected from Questionnaires

Gender	Age	Education	Occupation	POU	Likeness	ATMs	Telephone	Phone	Branch	Trust	Income	Privacy	ETU	Accessibility	Recommendation	Satisfies	Convenience	Importance	F-consideration
1	1	1	1	3	1	1	1	1	2	1	1	1	5	1	2	1	1	1	1
1	1	1	2	1	2	2	2	2	2	2	2	1	5	2	2	2	2	1	2
2	1	1	2	1	1	1	1	1	2	1	1	1	5	1	2	1	2	1	2
2	1	1	1	2	2	2	2	2	2	2	2	1	5	2	2	2	2	1	2
2	1	1	2	1	1	1	1	1	2	1	1	1	5	1	2	1	2	2	2
2	1	2	2	3	2	2	2	2	2	2	2	1	5	2	2	2	2	2	2
2	1	2	1	4	1	1	1	1	2	1	6	1	5	1	2	1	2	2	2
1	1	2	2	5	2	2	2	2	2	2	2	1	5	2	2	2	2	2	2
2	1	2	2	6	1	1	1	1	2	1	6	1	5	1	2	1	2	2	2
1	1	2	1	1	2	2	2	2	2	2	2	1	5	2	2	2	2	2	2
2	1	2	1	3	1	1	1	1	2	1	1	1	5	1	2	1	2	2	2
2	1	3	1	4	2	2	2	2	2	2	2	1	5	2	2	2	2	2	2
2	1	3	1	5	1	1	1	1	2	1	1	1	5	1	2	1	2	2	2
2	1	3	1	4	2	2	2	2	2	2	2	1	5	2	2	2	2	2	2
2	1	3	1	2	1	1	1	1	2	1	1	1	5	1	2	1	2	2	2
2	1	3	1	5	2	2	2	2	2	2	2	1	5	2	2	2	2	2	2
2	1	3	2	6	1	1	1	1	2	1	1	1	1	1	2	1	2	2	2
2	1	3	1	6	2	2	2	2	2	2	2	1	1	2	2	2	2	2	2
2	1	3	2	6	1	1	1	1	2	1	1	1	5	1	2	1	2	2	2
2	2	3	2	6	2	2	2	2	2	2	2	1	5	2	2	2	2	2	2
2	2	3	1	4	1	1	1	1	2	1	1	1	5	1	2	1	2	2	2
2	2	3	1	3	2	2	2	2	2	2	2	1	5	2	2	2	2	2	2
1	2	3	1	2	1	1	1	1	2	1	1	1	5	1	2	1	2	2	2
1	2	2	1	3	2	2	2	2	2	2	2	1	5	2	2	2	2	2	2
1	2	2	1	3	1	1	1	1	2	1	1	1	5	1	2	1	2	2	2
2	2	2	2	3	2	2	2	2	2	2	2	1	5	2	2	2	2	2	2
1	2	2	1	4	1	1	1	1	2	1	1	1	5	1	2	1	2	2	2
1	2	2	1	5	2	2	2	2	2	2	2	1	5	2	2	2	2	2	2
2	2	2	2	5	1	1	1	1	2	1	1	1	5	1	2	1	2	2	2
1	2	2	1	5	2	2	2	2	2	2	2	1	5	2	2	2	1	2	1
2	2	1	1	6	1	1	1	1	2	1	1	2	5	1	2	1	1	2	1
1	2	1	4	3	2	2	2	2	2	2	1	2	5	2	2	2	1	1	1
2	2	1	1	2	1	1	1	1	2	1	1	2	5	1	2	1	1	1	1
1	2	1	2	3	2	2	2	2	2	2	1	2	5	2	2	2	1	1	1

2	2	1	1	4	1	1	1	1	2	1	2	2	5	1	2	1	1	1	1
1	2	1	1	5	2	2	2	2	2	2	6	2	5	2	2	2	1	1	1
2	2	1	1	1	2	2	2	2	2	2	2	2	5	2	2	2	1	1	1
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2	2	1	4	1	2	2	2	2	2	2	2	2	5	2	2	2	1	1	1
1	2	1	4	3	1	1	1	1	2	1	1	2	5	1	2	1	2	1	2
2	2	1	4	3	1	1	1	1	2	1	3	2	5	1	2	1	2	1	2
1	2	1	4	4	1	1	1	1	2	1	4	2	5	1	2	1	1	1	1
2	2	4	4	4	1	1	1	1	2	1	3	2	5	1	2	1	1	1	1
1	2	4	4	4	1	1	1	1	2	1	4	2	5	1	2	1	1	1	1
2	2	4	4	4	1	1	1	1	2	1	3	2	5	1	2	1	1	1	1
2	2	4	4	3	1	1	1	1	2	1	4	2	5	1	2	1	1	1	1
2	2	4	4	5	1	1	1	1	2	1	3	2	5	1	2	1	2	1	2
2	2	4	4	6	1	1	1	1	2	1	4	2	5	1	2	1	2	1	2
1	2	4	4	6	1	1	1	1	2	1	3	2	5	1	2	1	2	1	2
1	2	4	4	2	1	1	1	1	2	1	4	2	1	1	2	1	1	1	1
1	2	4	4	2	2	2	2	2	2	2	3	2	1	2	2	2	1	1	1
1	2	4	4	4	2	2	2	2	2	2	4	2	1	2	2	2	1	1	1
1	2	4	4	4	2	2	2	2	2	2	3	2	1	2	2	2	1	1	1
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1	2	4	3	6	2	2	2	2	2	2	3	2	1	2	2	2	1	2	1
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2	1	1	3	2	5	2	1	2	2	2	2
2	1	1	4	2	5	2	1	2	2	2	2
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2	1	1	4	2	5	2	2	2	2	2	2

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2	1	1	4	2	5	2	2	2	2	2	2
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1	5	1	1	1	1	1	2	1	1	2	1

Occupation * Users Cross tabulation

			Users		
			Users	Non-users	Total
Occupation	Student	Count	13	13	26
		Expected Count	8.2	17.8	26.0
	Government employer	Count	6	6	12
		Expected Count	3.8	8.2	12.0
	Private sector	Count	0	21	21
		Expected Count	6.6	14.4	21.0
	Businessperson	Count	61	134	195
		Expected Count	61.4	133.6	195.0
Total		Count	80	174	254
		Expected Count	80.0	174.0	254.0

APPENDIX F: Chi-Square and P-Values of variables

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.690[a]	3	.001
Likelihood Ratio	21.489	3	.000
Linear-by-Linear Association	2.850	1	.091
N of Valid Cases	254		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.78.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.249	.001
	Cramer's V	.249	.001
N of Valid Cases		254	

ATMs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Users	41	16.1	16.1	16.1
	Non-users	213	83.9	83.9	100.0
	Total	254	100.0	100.0	

Telephone

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Users	41	16.1	16.1	16.1
	non-users	213	83.9	83.9	100.0
	Total	254	100.0	100.0	

Phone

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	users	41	16.1	16.1	16.1
	non-users	213	83.9	83.9	100.0
	Total	254	100.0	100.0	

Branch

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	66	26.0	26.0	26.0
	Strongly agree	184	72.4	72.4	98.4
	5.00	3	1.2	1.2	99.6
	15.00	1	.4	.4	100.0
	Total	254	100.0	100.0	

Trust * Users Cross tabulation

Count

		Users		
		Users	Non-users	Total
Trustworthy	Users	47	52	99
	Non-users	33	122	155
Total		80	174	254

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.275	.000
	Cramer's V	.275	.000
N of Valid Cases		254	

PRIVACY * Users Cross tabulation

Count

		Users		
		Users	Non-users	Total
PRIVACY	Strongly disagree	47	60	107
	Strongly agree	33	114	147
Total		80	174	254

Accessibility * Users Cross tabulation

Count

		Users		
		Users	Non-users	Total
Accessibility	Disagree	41	0	41
	Agrees	39	174	213
Total		80	174	254

Convenient * Users Cross tabulation

Count

		Users		
		Users	Non-users	Total
Convenient	Strongly disagree	45	61	106
	Strongly agree	35	113	148
Total		80	174	254

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.200	.001
	Cramer's V	.200	.001
N of Valid Cases		254	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	174	68.5	68.5	68.5
	Female	80	31.5	31.5	100.0
	Total	254	100.0	100.0	

Statistics

Gender

N	Valid	254
	Missing	0
Sum		334.00
Percentiles	25	1.0000
	50	1.0000
	75	2.0000

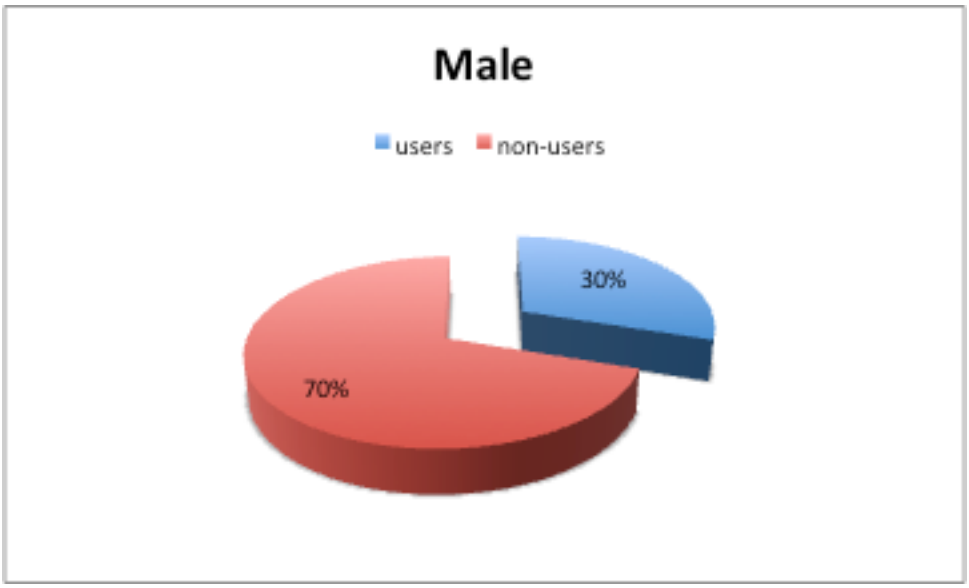
Descriptive Statistics: services used most and future consideration by users and non-users

	N	Minimum	Maximum	Mean	Std. Deviation
Services_used_most	254	1.00	4.00	2.2244	.70629
Future_consideration	254	1.00	2.00	1.4331	.49648
Users	254	1.00	2.00	1.6850	.46542
Valid N (list wise)	254				

APPENDIX G: Pie charts of demographic characteristics

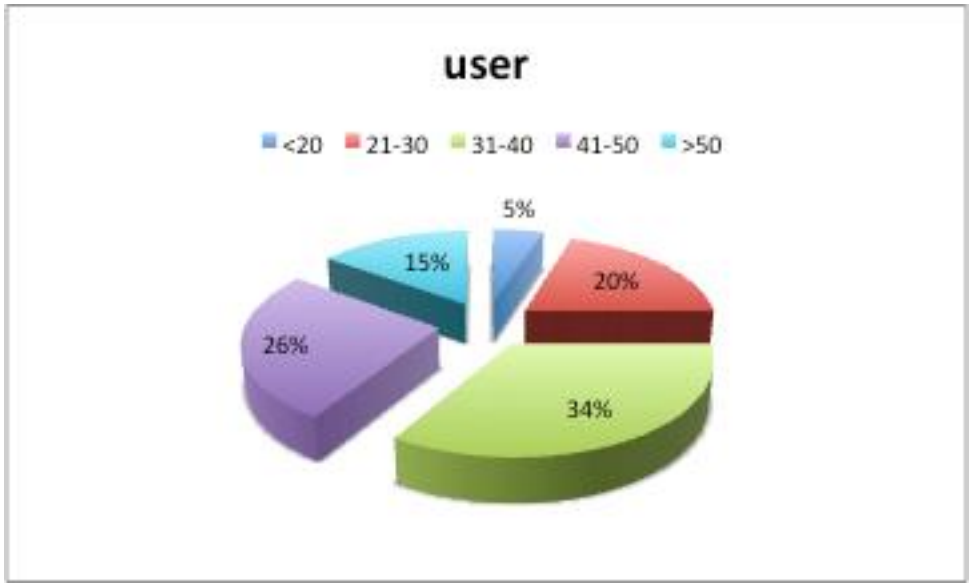
Gender of users and non-users

	Users	Non-users
Male	40	93
Female	40	81



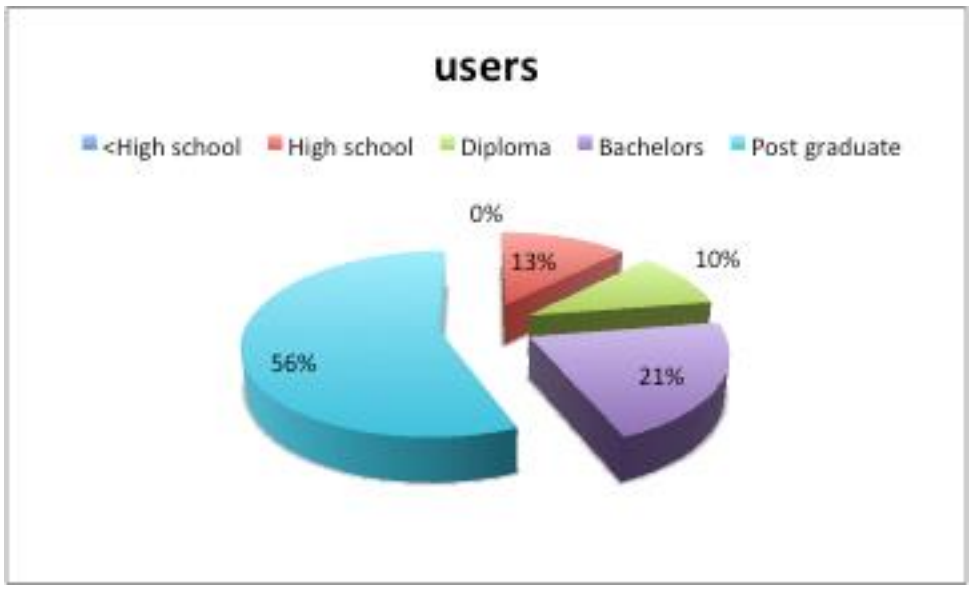
Age groups of users and non-users

	User	Non-users
<20	4	15
21-30	16	42
31-40	27	58
41-50	21	49
>50	12	10



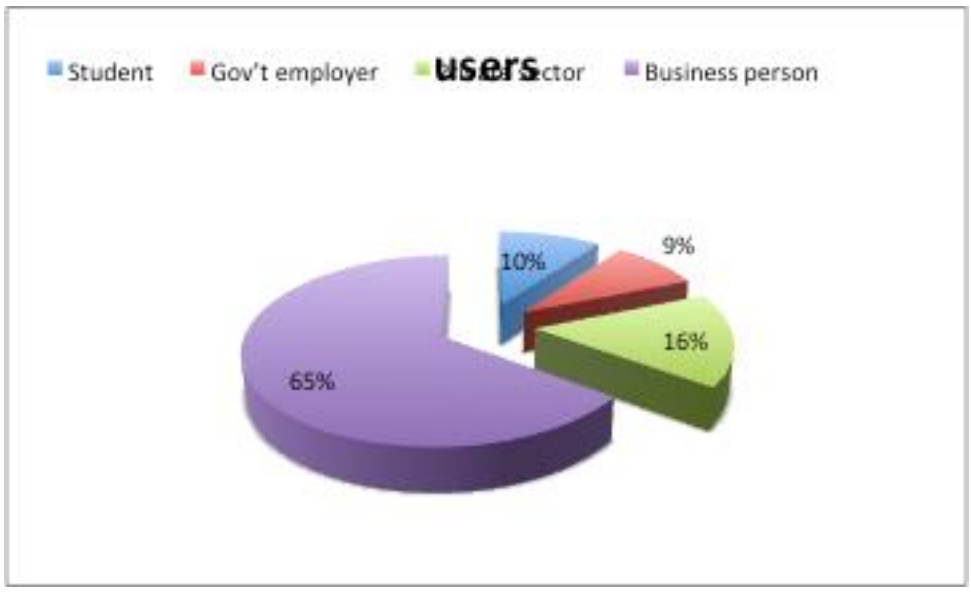
Level of education (users and non-users)

	Users	Non-users
<High school	0	17
High school	10	3
Diploma	8	4
Bachelors	17	49
Postgraduate	45	101



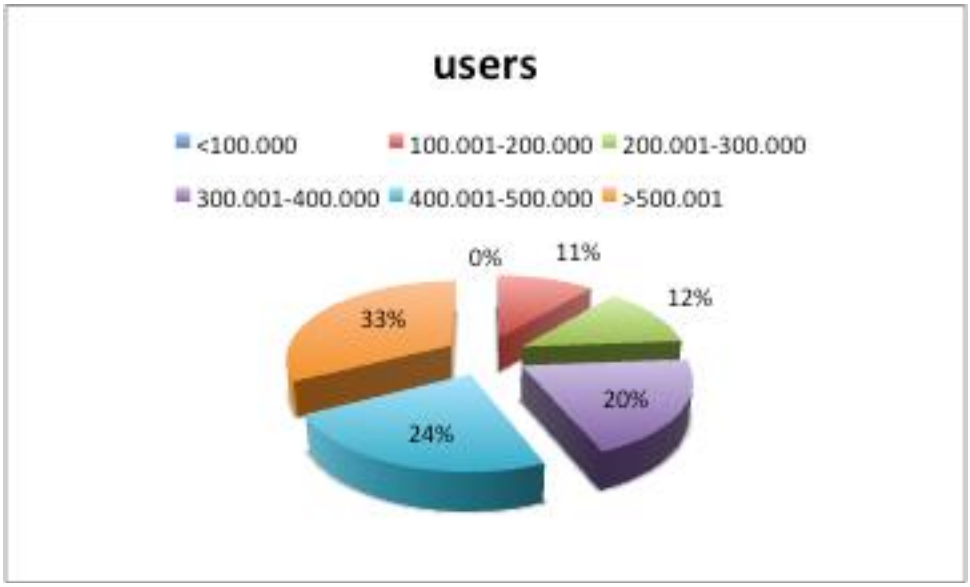
Occupations of users and non-users

	Users	Non-users
Student	8	10%
Gov't employer	7	9%
Private sector	13	16%
Businessperson	52	65%



Income of users and non-users

	Users	Non-users
<100.000	0	19
100.001-200.000	9	21
200.001-300.000	10	30
300.001-400.000	16	35
400.001-500.000	19	35
>500.001	26	34



APPENDIX H: Factor Analysis components

Rotated Component Matrix[a]

	Component		
	1	2	3
Age	.857		
Education	.836		
Occupation	.832		
Income	.807		
Gender	.513		
Satisfies		.938	
Accessibility		.933	
Trust		.659	-.375
Convenience			.653
Privacy			.581
ETU			.531

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.[a]

a. 3 components extracted.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Age	13.1102	10.454	.691	.687
Education	11.9685	9.106	.814	.631
Occupation	12.6654	10.563	.764	.670
Gender	14.8661	17.579	-.359	.878
Income	12.1142	7.698	.715	.683

Reliability Statistics

Cronbach's Alpha	N of Items
.795	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Satisfies	3.4488	.541	.768	.614
Accessibility	3.4606	.518	.788	.585
Trust	3.6890	.516	.453	.977

Reliability Statistics

Cronbach's Alpha	N of Items
.797	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Convenience	6.4488	.741	.868	.694
Privacy	5.4606	.518	.788	.605
ETU	4.6890	.416	.5653	.837

Reliability Statistics

Cronbach's Alpha	N of Items
.776	5

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.021	36.551	36.551	4.021	36.551	36.551	3.400
2	1.733	15.753	52.304	1.733	15.753	52.304	2.316
3	1.393	12.663	64.967	1.393	12.663	64.967	1.430
4	.934	8.495	73.461				
5	.860	7.816	81.278				
6	.669	6.079	87.357				
7	.564	5.124	92.481				
8	.346	3.145	95.625				
9	.264	2.396	98.022				
10	.179	1.624	99.645				
11	.039	.355	100.000				