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E-Business in Nigeria:
A Study of the Challenges Confronting Customers

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ABSTRACT

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E-business is changing many traditional ways of doing business and there are abundant of success stories about e-business in the developed countries. These successes are propelling governments and businesses in the developing countries including Nigeria, to put in effort and work in the ways that will increase the deployment and use of e-business in their respective countries. The Nigerian government is also putting in effort to boost the economy and increase it integration into the global arena. However, the success and contribution of e-business as a whole to the economy does not preclude the challenges that come with new innovation and technology. One side of the challenges is the one faced by businesses but another less researched on it the challenges confronting the customers in the use of e-business platforms.

As the deployment of e-business and its use gain more ground in Africa, due to the rapid growth and penetration of Information and Communication Technologies, Nigeria remains one of the countries in the forefront of these technological revolution. The record of Nigeria in respect to ICT penetration and deployment of e-business since the 1999 liberalisation of the telecommunication sector is outstanding when compared with the other Sub-Saharan African countries. While the number of government agencies and businesses deploying e-business keep growing in the country, the customers that are expected to use it are being confronted with various challenges.

The aim of this research is studying the level of e-business in Nigeria and equally the major challenges confronting customers in its use. This explorative research uses a quantitative approach with slight application of qualitative approach. The study examines customers of Guaranty Trust Bank in Nigeria and the challenges confronting them in the use of the internet and other ICTs equipment in transacting with the bank. The main findings of the study is that these challenges includes low level of ICT infrastructure penetration, affordability of the ICTs equipment, quality and reliability of the e-business supporting social infrastructures, social-cultural and the legal environment of the deployed e-business models. The main conclusion of the research is that the deployment, adoption and growth of e-business in the country depends largely on how the government, businesses and other stakeholders manage these numerous challenges confronting the customers.

Keywords E-business, ICTs, Challenges, Customers and Nigeria

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Verkkoliiketoiminta on muuttanut perinteisiä liiketoiminnan toimintamalleja. Teollisuusmaissa on jo useita menestystarinoita Internetissä tapahtuvasta liiketoiminnasta. Nämä onnistumiset kannustavat valtioita ja yrityksiä kehittyvissä maissa, kuten Nigeriassa kehittämään verkkoliiketoimintaa ja sen käyttöä. Nigerian valtio pyrkii myös vahvistamaan talouttaan ja kansainvälistymään liiketoimissaan. Verkkoliiketoiminnan menestys ja myönteinen vaikutus valtion talouteen eivät kuitenkaan poissulje uusien innovaatioiden ja tekniikan mukanaan tuomia haasteita. Yksi verkkoliiketoiminnan haasteista on liiketoiminnan yhdenmukaisuus kaikilla saroilla. Toinen vähemmän tutkittu haaste on asiakkaita kohtaavat ongelmat verkon liiketoimintasovelluksissa.

Verkkoliiketoiminnan levitessä Afrikassa, informaatio- ja viestintäteknologian (ICT) nopean kasvun ja läpilyönnin myötä, on Nigeria yksi edistyksellisimmistä maista teknologisessa vallankumouksessa. ICT:n laajeneminen ja verkkoliiketoiminnan alkusysäys alkoi Nigeriassa telekommunikointisektorin vapauduttua 1999. Tästä alkanut kehitys oli uskomatonta verrattuna muihin Afrikan Ala-Saharan maihin. Samalla kun valtion virastojen ja yritysten tuottamat verkkoliiketoiminnan palvelut maassa lisääntyvät, kohtaavat niitä käyttävät asiakkaat useita haasteita.

Tämän tutkimuksen tarkoitus on selvittää verkkoliiketoiminnan tasoa Nigeriassa sekä asiakkaiden kohtaamia ongelmia niiden käytössä. Tässä tutkimuksessa käytetään kvantitatiivista tutkimusotetta hyödyntäen kvalitatiivisia tutkimusmahdollisuuksia. Tutkimuksessa selvitetään Nigerian Guaranty Trust Bank:in asiakkaiden kohtaamia haasteita asioidessaan joko Internet-pankkissa tai muissa pankin tarjoamissa ICT -palveluissa. Tuloksissa ilmenee, että suurimpia haasteita ja ongelmia asiakkaiden mielestä ovat informaatio- ja viestintäteknologian infrastruktuurin markkinaosuuden alhainen taso, ICT-välineiden hintataso, verkkoliiketoiminnan luotettavuus ja laatu yhteiskunnallisen infrastruktuurien tukemisessa sekä käyttöön otettujen verkkoliiketoimintamallien yhteisöllinen kulttuurillinen ja laillinen ympäristö. Tutkimuksen merkittävin päätelmä on, että verkkoliiketoiminnan laajeneminen, siihen mukautuminen ja sen kasvu riippuvat merkittävästi siitä, kuinka valtio, yritykset ja muut osakkaat käsittelevät ja hallitsevat asiakkaiden kokemia haasteita ja ongelmia.

Keywords E-business, ICTs, Challenges, Customers and Nigeria

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1 INTRODUCTION

This is the introductory part to the research work. The part of the research will furnish the reader with the back ground to the subject matter. It will also have in it the objective of this study, the research gap that necessitates this research work. It also includes the research problem, definition and limitation of study and closes with the structure of the entire research.

1.1 Background

The breakthrough in the information and communication technology (ICT) in the last two decades as a result of the spread of internet from the military to academia then to commercial entities to individuals (Ed McMahon, 2000) has greatly affected the way many things ranging from domestic activities to business and governance are being handled. The Internet; a computer-based network of multiple interconnected public and private networks which started in 1969 as a project of US department of Defence, for the original purpose of creating a collaborative platform for use in military and education evolved into a great agent of change in many facets of life among which is business and all its activities (Fellenstein & Wood 2000:9). The growth of ICT and the internet have also provided the world with series of platforms among which is the one that serves the purpose of electronic marketplace where electronic business takes place. Until very recently, most customers who entered a market had to be physical present to some degree. The markets keep transforming with ages and generations. But now the changes are faster than ever. There is no need for bricks and buildings to make a market. Anyone with the required ICT and it supporting facilities can make a market at will (Leebaert, 1998:1-7). The rate at which ICT diffused and kept spreading into all strata of the society ranging from the manufacturing to the service sector, has made it arguably the most pervasive technology ever developed in the last quarter of the twentieth century (Oyelaran-Oyeyinka and Lal 2004: 7). This study focuses on the application and

use of Information and Communication Technologies (ICTs) in business; which will be referred to as e-business throughout this study.

The emergence of electronic business (e-business) in the developed world has changed the way customers and business partners are being dealt with, it has also provided the developed countries with new stream of revenue, new ways of handling information, new manners of processing information, new organisational structure, new sets of skills, a more electronic supply chain, a new standard and legal framework and a dynamic alliance. It has also provided businesses with new ways of approaching and relating to customer and retaining them. ICT is also changing the face of competition and nature of organisational leadership. It is equally leading organisations to have second thought on the traditional definition of value, competition and service. It has not only revolutionized the relationships within the organisations and those between and among organisations and individuals but has also enhanced the productivity, encourage greater customer participation, enabled customization and reduced cost. (Andam 2003)

The growth of electronic business is reducing the distance barrier between business and their customers. And it is also encouraging a borderless marketplace. All these developments in electronic business could also provide the developing countries with great opportunities and could lead to more integration of these countries into the global economy. The use of e-Business has already come to stay in business and it is already becoming a way of life in the developed countries. The successes that have been recorded in these economies are serving as a propelling factor for the government and businesses in the developing countries. The developing countries including Nigeria and other Sub-Saharan African countries, are also adopting and are encouraging the deployment of ICT in business life (Kamel 2006:9).

The successes recorded by governments and businesses in the developed countries, has propelled the government of Nigeria; the second largest economy in Africa, to deem it fit to put in place structures and frameworks that will make the country to be more integrated into the global economy in order to equally enjoy

the opportunities which ICT driving economy could present. In a bid to achieve this and show readiness to work towards turning the country's economy into information and knowledge based economy that is efficient and technology-enabled through a globally competitive ICT industry, the federal government of the country set up a think tank on ICT. This effort is a part of overall plans and activities aimed at transforming the country's economy into one of the top 20 economies in the world by Year 2020. The government of the country established the National Technical Working Group for Information and Communication Technology (NTWG-ICT) to plan and monitor the framework for the implementation of the project (NTWG-ICT 2009).

Considering all the effort that the government has put in place and its claim of e-readiness, it is important to research into the challenges that will confront the rapid growth and development e-business in Nigeria, especially in the private sector of the economy.

1.2 Objective of the Study

The thrust of this study is to research into the challenges confronting consumers in using firms' e-business platform. This equally implies that, it will confirm the challenges that will confront the growth and development of e-business and which could also deter the opening up and integration of the country's economy into the global economy.

1.3 Research gap

There are many other researches that have been carried out by individual and research institutes, most of them focused on the developed world or the world as whole so that the details of individual country or its sectors are not critically studied. Empirical evidence on the factors that influence e-business deployment among the financial sector in Nigeria has been carried out (Eze 2008). Ifinedo (2005) has also assessed the integration of Africa in the world economy by computing the e-readiness of nine African countries. He has come up with empirical evidence on the factors that are affecting e-business adoption by Small and Medium Enterprises in Sub-Saharan African (Ifinedo 2009). Industry-specific

factors that influence the adoption of e-business technologies in developing countries with a focus on Nigeria, Uganda and India has been duly examined (Oyelanran-Oyeyinka and Lal, 2004). Also factors that drive or inhibit the adoption of e-commerce in the country banking sector have been discussed (Aghaunor, Fotoh, and Lindh, 2006). Those studies about the country focused on the business and the government (and their measurement criteria equally focus on them). Thus, the gap this research intends to fill is the consumers' side. This will be explored by assessing and surveying challenges faced by consumers of e-business deploying firms.

1.4 Research Problem

Sequel to the above outline objective of study and the research gap, the research problem is here coined as 'what is the level of e-business in Nigeria and the major challenges confronting customers in its use'. In studying the above question, it will be break down into the following research problem area and these areas will be analysed and answered in the studies.

1. What is the level of e-Business awareness of customers of e-business deploying firms in Nigeria?
2. What are the challenges confronting Nigerian customers in the use e-business platform?

1.5 Definitions and Limitation

The word e-business is viewed in the context of the research work as the all business activities that make use of information and communication technology. It is the application of ICTs facilities and tools into business and business processes with special consideration on Nigeria in relation with other developing countries, especially those in the Sub Saharan Africa. E-business platform in this context is seen as a ICTs environment, place, means or equipment such as a database, website or other specific IT equipment used in business and business processes. Since there are many aspects of e-business, it will not be out of place to state at

this early stage that the focus of this research, due to time and budget constraint, will be narrowed down to the customers of one bank in Nigeria. As such, it will be a research into the challenges that exist in the use of e-business platform between the Guaranty Trust Bank (GT Bank) and its customers.

1.6 Structure of Study

The research starts off with chapter one in which the background development of e-business and its rapid growth in the developed world is examined. It also explores the changes that e-business has made in the developed world which is making the developing world to adopt it. It goes further to analyse the adoption of ICT in the Sub-Saharan African countries and the effort of Nigerian government in encouraging deployment of e-business. The background is immediately followed by a research gap, research problem and then the research objective. The final part of this chapter focuses on specific limitations as well as some definition of the core component under discussion. These keywords are E-Business, ICTs, Challenges, Customers and Nigeria.

Chapter 2 focuses on the foundation issues that form the core basis for the theoretical framework, assumptions amongst others. The development of the theoretical framework is thus narrowed to take care of the core issues under discussion with special consideration to e-business and facilities (ICTs facilities) on which it operates. This chapter will make use of different literature to make analyze on the internet, traditional business and e-business, e-commerce and e-business, the trends that drive e-business adoption and deployment. The chapter also has in it the research model created and adapted for the research analysis.

In chapter 3, e-business deployment and the ICTs situation in the country in comparison with the other Sub-Saharan Africa countries are analyzed. This chapter was narrowed down to Nigeria and its economy because the researcher is more familiar with the country and the recent trend of ICT adoption in the country is quite impressive. Equally, the challenges of e-business in Nigeria as discussed

by different previous researchers will be looked into in order to develop a research model that will be used to analyse the challenges in the later chapters.

Chapter 4, is meant to describe the empirical approach of the study as to the methods used in reaching a viable conclusion of the whole research. This includes the research process, strategy and design. The objective of this chapter is to use case studies in other to find out the accuracy of the assumptions that would be developed in the theoretical framework. The chapter will further describe and analyze the case company in relation to the research framework. Here the answer will be sort to all research questions.

The last part, chapter 5, will be for the summary and conclusions. In this chapter the theoretical and empirical finding as well as recommendations on the challenges that have been analysed will be presented. It will also provide for expansion and possible future studies.

2 GENERAL OVERVIEW OF E-BUSINESS

This part of the research focuses on the foundation issues that form the core basis for the theoretical framework. Firstly the platform on which e-business operates on is discussed. This chapter will make use of different literature to make analysis of the internet and other backbone of e-business. It will discuss the relationship between e-commerce and e-business and also the trends that drive e-business adoption and deployment. The challenges and benefit of e-business globally will also be discussed.

2.1 ICT and the evolution of e-business

Some researchers have argued the popular notion that the internet is the precursor of e-business. They posited that e-business can be traced back to electronic data interchange (EDI) since the 1960s. EDI was said to have even marked the beginning of revolution in business and business processes in 1980 (Greenstein and Vasarhelyi 2002: 62 & 102; Charlesworth 2009: 3). However many other researchers believe that it was the emergence of the internet that turned e-business to become of core consideration in business and it was what made e-business available to the use of millions of customers (Melao, 2008). Discussion about the evolution of the internet and its entering into business will be looked into.

Communication can be described as the process of sending and receiving ideas, information, messages and feedback. There has been different type of modes of communication in the past in the various parts of the world. The modern days make use of complex and multiple applications which could be referred to as Information and Communication Technology. Information and Communication Technologies (ICTs) have been described from many perspectives. The World Bank defines ICTs as “the set of activities which facilitate by electronic means the processing, transmission and display of information”. ICTs is viewed as a general term covers any communication device or application such as radio, television, phones, computer and satellite systems among others and its coverage also

includes some services and applications associated with them. The major back bone to ICT will be briefly discussed.

Hargittai (1999) defines the Internet technically and functionally as follows: "the Internet is a worldwide network of computers, but sociologically it is also important to consider it as a network of people using computers that make vast amounts of information available. Given the two (basic) services of the system communication and information retrieval the multitude of services allowed…..is unprecedented." The internet is one of the platforms that e-business operates on and it is a strong backbone. Contrary to the common misconception that the internet was borne of academic; it was borne of military. Although many universities took up the use of the technology very early, research into what is today known as the internet was started a decade earlier when the fear during the cold-war made the American leaders assume that a limited nuclear attack on the country might disable the conventional communication system. Finding a solution to this is what led to the establishment of the Advanced Research Project Agency Network (ARPANet) project (Charlesworth 2009: 3). It was the establishment of ARPANet that led to the development of transmission control protocol (TCP). And eventually the fully connected internet took shape in the late 1970s and early 1980s as a result of the refined TCP/IP (transmission control protocol/ Internet Protocol). It was the continuous expansion of ARPANet during 1980s that became what is now known today as the internet.

Though the original purpose of the project was to link various computer systems in widely dispersed geographies, enabling the sharing of academic, scientific and military data, the idea of the internet becoming the backbone infrastructure of electronic commerce or business was not even part of the primary importance. (Fellenstein and Wood 2000:7). However, when the internet came to the general public's attention in 1993 with the advent of the mosaic web browser and the World Wide Web, many commercial websites sprang up. Though the business potential was discovered very early, due to some level of scepticism on the part of

some business leaders it was only in 1997 that businesses and governments started to pay more attention to the internet and its potential (Charlesworth 2009: 3-7).

The growth and expansion of the internet kept growing even when the military change the name of the project to Defence Advance Research Project Agency (DARPA). WMICS, WINS, MILNET and later DDN were outgrowths of the work at this stage. When the military discovered that they do not have any further need for the DARPANET, they handed it over to the National Science foundation (NSF) and the Internet became NSFNET. It was at the stage that universities started coming into the picture by making use of some of the NSF funding to support their Internet habit. The NSF funding continued from mid 1980s until 1992 when it was becoming obvious that the general public are not getting either direct or indirect access to what used to be previously reserved for the universities. The internet moved from the universities to the public through students that had access to internet why they were in the universities and were cut off immediately after their graduation. They naturally try to figure out way to hang onto their internet account (Bates 2002: 490-494).

It took a remarkably short period of time to move from APRANet to the stage of mass commercialisation- a period of twenty five years. It even took the World Wide Web lesser years to reach mass- market level (McMahon 2000). By 1990s the potentials of the internet become public knowledge and everyone started clamouring for access to it. According to Morgan Stanley U.S. investment research, the internet growth rate surpassed the growth rate of any of the previously discover means of transmitting information in the history of mankind. It took radio, television and personal computer 38, 13 and 16 years respectively to reach 50 million people while it only took internet only 4 years (Morgan Stanley 2010). This was the stage where it was adopted in business and it use has been expanding since then.

It cannot be said that the internet is the only backbone of e-business. Others include the media, telecommunication gadgets and other facilities. However, that

contribution of the internet and the convergence of other ICTs facilities are of great importance to the growth of e-business. Early adopters of internet technology in business were the ones that came up with the term e-commerce when they realised that they could substantially reduce and eliminate some costs while conducting commerce on the web. When it was obvious that the term cannot be used to describe all the business activities taking place on the web, they had to come up with a broader name. Thus the term e-business came in as a comprehensive replacement of e-commerce that fell short of describing wider range of activities taking place on the web (McMahon 2000).

2.2 Traditional Business and E-Business

E-business has not only come to stay but it is also competing with the traditional business model. Traditional business involves physical business process while e-business is based on a virtual (digital) business (Al-Otaibi and Al-Zahrani 2004). Simply put the major difference between these two forms of business is the extensive use of technology in e-business. Other differences are in the form of targeted audiences; traditional business audience are local while e-business can target anyone who is connected to internet or other ICT facilities. Starting e-business on the internet is relatively cheaper when one thinks of many structures that usually involve in traditional business. E-business offers some other services that traditional business model were unable to achieve (eHow Inc. 2010).

2.3 E-Commerce and E-Business

E-business is often confused with e-commerce. However, they are quite different as the former is broader than the later. In the emerging global economy, the importance of e-commerce and e-business in the business strategy and business processes is now moving from being ordinarily necessary component in the business strategy to a catalyst for business growth and profitability. Electronic Commerce (E-Commerce) which is usually associated with buying and selling over the internet could be described as a wide range of online business activities

for products and services. According to Andam (2003) E-Commerce could defined as the use of electronic communication and digital information processing technology in business transaction to create, transform and redefine relationships for value creation between or among organisations and individuals. Kalakota and Whinston (1997) defined E-commerce from four perspectives and Turban and Kings (2003) added another two other perspectives to it. The six perspectives are communication, business process; service, online, collaboration and community perspective. Turban and Kings (2003) posited that e-commerce and e-business could be used interchangeably, since they felt that e-commerce did not just involve buying and selling of goods and services, but also servicing customer, collaborating with business partners and conducting electronic transaction within an organisation.

However, Andam (2003) and Kamel (2006) insisted that despite that some use e-commerce and e-business interchangeably, they are distinct concepts. They argued that e-commerce is ICT used in inter-business and inter-organisational transaction and in business-to-customer transactions. While e-business on the other hand is ICT used to enhanced one's business, it includes any business organisation conducted over computer mediated network. That is it involves strategies, tactics, practices, activities and methodologies that companies apply to use Information technology to improve their business practice and processes. The term e-business unlike e-commerce which is restricted to exchange of information that is directly related to the actual buying and selling of goods includes the use of electronic mechanism to distribute and provide customer support. Thus one safely posits that e-business is broader than e-commerce because its activities cover more than 'commerce' but other aspects of business activities (Greenstein and Vasarhelyi 2002).

2.4 E-Business

There many definitions that are found in literature and some of them will be discussed here.

E-business use to describe a number of things. Principally, it is a management approach and a combination of technologies and infrastructures that allow organisations to make use of the internet and internet-related technologies to enable any number business processes (MCMahon 2000: 10). E-business involves exchange of information not directly related to the actual buying and selling of good, activities such as use of electronic mechanisms to distribute information and provide customer support (Greenstein and Vasarhelyi 2002: 2-4). According to Fletcher, Bell and McNaughton (2004) e-business refers to the application of ICT to processes within the firm and possibly to transactions with suppliers as well. He also moves to argue that the term can mean all uses of ICT within business context. He came up with a diagram reproduced in figure 1 and it says a lot about the definition of e-business.

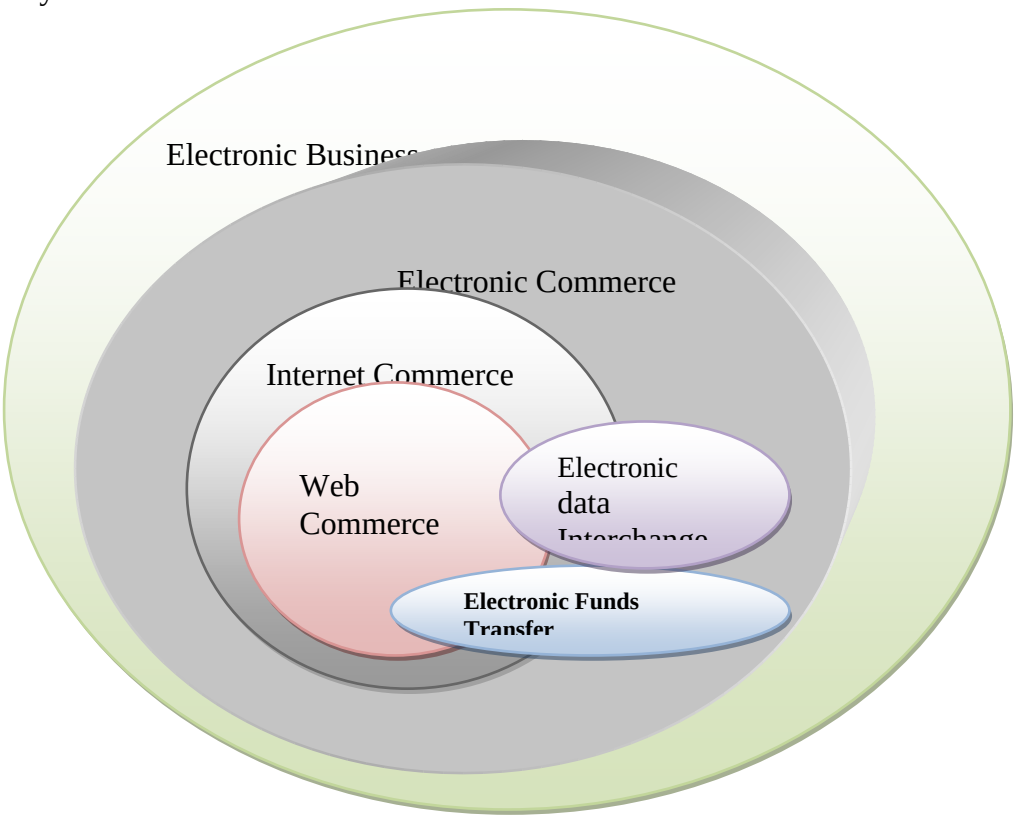

Figure 1: E-Business and previous business models

Source: Fletcher, Bell and McNaughton (2004: 6)

2.5 Trend driving E-Business

Different forms of businesses in the past always had either one or more trends that have led to their transformation processes. During the later part and early part of nineteenth and twentieth century respectively, the trend and event that had great effect on business is the technological revolution that leads to the use of new technologies like internal combustion engine and electrification. Equally in the 1970s and 1980s the most notable trends include greater demand for quality and process improvement, increase in global competition and shorter product life cycle. In the 1990s the internet was another great trend that did not only serve as a communication medium but it was also a channel for sale and distribution which facilitated the growth of e-commerce. In the recent years business has been moving from bricks to the clicks and the trends that are serving as the driving forces as discussed by Kalakota & Robinson (2001) will be analysed below.

Trend Category	Trend
Customer	1. Faster service 2. Self-service 3. More product choice 4. Integrated solution
e-Service	5. Integrated sales and service 6. Seamless Support 7. Flexible fulfilment and convenient service delivery 8. Increased process visibility
Organizational	9. Outsourcing 10. Contract manufacturing 11. Virtual distribution
Employee	12. Hiring the best and Brightest

	13. Keeping talented employees
Enterprise technology	14. Integrated enterprise application 15. Multichannel integration 16. Middleware
General technology	17. Wireless Web applications 18. Handheld computing and Information appliances 19. Infrastructure convergence 20. Application service providers

Table 1: Trends driving e-business
Source: Kalakota and Robinson (2001: 38)

2.5.1 Customer –Oriented Trend

Most customers now value their time more than ever so that some of them do not only feel that time is money but also that time is life itself. They now add the time they spend in getting a service into the cost of that product and that is what determines the value of that product to them. They tend to hate delay more than ever and they decide to go with companies that can offer them the service within a shorter period of time. This change in customers' view of time and trend that are associated with it, are forcing the businesses and organisation to come with integrated solution that will ensure that they are able to deliver the service in a faster manner. Companies in the bid to meet up with the need of their busy, time starved and even dissatisfied customers have to come up with e-business strategies and application.

Self service is another great trend among customers, because it does not only save their time but also empowers them. Customers are getting tired of middle men; they want to buy whatever they are interested in, at anytime and anywhere as long as they have access to the internet. Thus, this growing acceptance of self service among customers is also a motivating factor for companies to deploy e-business

facilities. Customers more than ever are now really behaving like king. They are not only asking for self-service to be delivered within the shorter period of time but there is also increase in their demand for more personalised products. They want to customise their cars, their beds and as small as their shoes. Obviously no traditional retailer or shop can offer them that array of products. Thus, it becomes essential for companies to adopt e-business application that is of help for this purpose.

Another major trend among customers is that they are gradually moving away from piecemeal product towards integrated solutions. They now prefer to buy Microsoft office suit which is an integration of word processing, spreadsheet and presentation package rather than buy them in piecemeal. Since there are too many choices, products and stores, customers prefer to go for integrated solution to solve their choices and companies are further forced to supply them with integrated solution. To be able to do, these companies have to adopt and deploy e-business models and applications (Kalakota and Robinson 2001: 38-43).

2.5.2 E-Service trend

The main motive of business is said to be making of profit but many other things have to be taken care of too, if the company wish to make this profit. Prominent among these things is customer retention. This is also important in that it has direct relation with profit making. Since customer relationship has great implication for customer retention, businesses are not developing and managing customer relationship via better sales/service integration and new technology. Unlike the previous belief that sale and services are separate, companies are deploying e-business facilities to bridge the gap between sales and service. When the gap between sales and service are bridged, customers might not appreciate it, if it is not consistent and reliable. Customers want their goods and/or service to be delivered in a speedy manner and it must also come with quality customer services. In order to satisfy their customers, companies are moving away from the traditional departmental solution that can only address one part of the customer relationship with the company towards an integrated one that will make it easy for

the company to analyse the entire relationship of customer with the company (Kalakota and Robinson 2001: 44-45).

It is also becoming more obvious that customers also want the service and moment of truth experience to come with flexible fulfilment and convenient service delivery. Demand for home delivery and other unique fulfilment are gaining more prominence among customers. In other to meet up with this trend, companies need to come up with new business model where they will bring service to customers' doorstep while maintaining service reliability at unbeatable price. Companies also have to satisfy their business customers who are demanding for increased process visibility. They want to know that accurate information about their order; they want to have accurate information about the order status, product pricings and product availability. Companies that wish to catch up with all this can alone achieve that with use of e-business facilities and applications (Kalakota and Robinson 2001: 46-49).

2.5.3 Organisational trends

With the change in global business climate, companies that which to survive cannot do that without having some level of flexibility in its business processes. Some of this said flexibility is obvious in their business process outsourcing (BPO). Businesses now delegate one or more of their business processes to external provider in order to achieve business efficiency. The spread in networking technology is changing the face of outsourcing to virtual enterprise. Outsourcing business processes lead to new business model which being the importance of virtual enterprise to the forefront. To achieve and maintain a well managed virtual enterprise businesses need to make use of e-business application.

One other trend is that contract manufacturing is also increasing among businesses and companies nowadays. Some companies are turning to virtual manufacturers; they buy parts of their product and subcontracting other parts to another company before they assemble them into their final product. Equally new intermediate is fast replacing the tradition middle men. This new intermediary is

known as virtual distributors. These virtual distributors' aggregate marketing and product information content and establish efficient marketing place that would have been a fragmented place (Kalakota and Robinson 2001: 50-53).

2.5.4 Employee Megatrends

Companies now need to hire best and brightest employees more than ever. Modern business need to grow continuously and deliver better service with a price that will give them competitive advantages. So they need to hire and retain the brightest workers. Getting the best employees are not easy any longer with ordinary improved recruitment and selection process, thus companies are now using better technology to attract and select best candidates. Getting the brighter employee is not enough but retaining is even more demanding. As such companies are making use of technologies in a way that assist in recruiting and motivating. Sustaining and supporting culture that can succeed and innovate is one of the prerequisites of doing e-business (Kalakota and Robinson 2001: 53-54).

2.5.5 Enterprise technology trends

Gone are those days that companies see the separation of their business application and creation of functional areas as efficient. They previously separate accounting, finance, manufacturing, distribution and customer services and tries to achieve optimization in this specific area. But if all these areas are combined and linked properly, the company as a whole will be able to function optimally. So more than ever companies are adopting integrated enterprise software and application to link all these parts in other to support the running of the companies. Another important trend in enterprise technology trend is multichannel service integration. Companies need to provide standardised high quality customer service and other services across the firm. Multichannel integration implies that the company will be able to unlock the information about its business and transaction and making accessible to all authorised persons and users, anywhere and anytime. The middleware problem in organisational integration is also affecting the decision of management and gaining more attention. It is

significance in integral role in creating customer-centric distribution and virtual organisation. The entire above have great implication for business and business leaders and the key here is use of e-business application (Kalakota and Robinson 2001: 54-58).

2.5.6 General Technology Trend

The increase in the number of wireless infrastructure role out and rapid growing number of the users and subscribers is a trend that shows that the future of business is mobile, integrated and personal. Another thing is that handheld computing and information appliances are also growing rapidly and expanding into all appliances. This recent technological innovation has been and will continue to enable the e-business revolution. There are increases in demand for mobile society; mobile internet and internet access, improvement in wireless communication and growing developer community are factors facilitating e-business. The fact that most of e-business infrastructure are converging is another driving trend. Worldwide telephone, cable TV, wireless, computer data network are converging into strong unified network base on the internet protocol. Finally the recent growth of Application service provider (ASPs) is also endearing to companies that find it difficult to go into. The ASPs are firm that help company of any size to host and manage their business application, thus Business leaders do not need to worry about this and it makes it possible for them to implement what they want within a predictable frame of time and cost.

2.6 Categories of E-Business

E-Business is a superset of business case which has been digitized and work on the internet. The categories that will be discussed in this study will be based on the business model and not necessarily on the technology involve. It is wise to say that many business models will later join these categories in future as many business types are adopting and converting into a digitalised one. The categories are many and evolving but the following will be considered because of their proven success on the internet.

2.6.1 E-Auctioning

Auctioning on the internet has become a new business model that is powered by the internet. Gone are those days where many people have to turn up when there is auction of house or other things. With few exceptions like bidding on the phone people will not have the opportunity to bid when they are not at the spot. But with the development of e-auction, everyone that has access to the internet can bid. This method is even faster than the traditional auctioning because it takes few seconds to minutes in e-auctioning unlike the formal that can take a while. There are many larger sites like e-bay, QXL and Ricardo that give everyone the opportunity of becoming either a bidder or an auctioneer or both for the same time for two different products (Amor 2000: 24-25).

2.6.2 E-Banking

E-banking without any gainsaying is one of the most successful online businesses. E-banking allows customers to access their accounts and execute order through a simple-to-use site or order platform. E-banking saves the time of the individual customers and companies' time and money. The customers have been empowered in such a way that they can make all their banking needs by themselves. Instead of even walking up to cash desk of banks, customers are getting used to getting money for automated teller machine (ATM). Viewing of account details, reviewing accounts histories, fund transfer, cheque order, bills payment and contacting customer care department can be done from the corner of the room as long there is internet connection (Amor 2000: 25-26).

2.6.3 E-Directories

Directories can be described as small database from which information is read much more often than it is written to (businessdictionary.com 2010). Directories have always been important to businesses and individuals in finding particular service or product. Traditional directories usually come in form of book and telephone directories and they serve relatively different purposes. With the emergence of e-directories, these two categories are now available on the internet (Amor 2000: 27).

2.6.4 E-Marketing

Traditional marketing was focusing on target groups and creating a positive image for a particular group. Communication in advertising was not only one way but also receiving immediate reaction from customer side was practically impossible. This e-business model allows companies to react to individual customers. All customers can be treated in their preferred way. One-on-one marketing has become the standard way of dealing with the customers over the internet (Amor 2000: 27).

2.6.5 E-Supply

Many companies and customers form a supply chain. Manufacturers, logistics companies, senders, receivers and retailers all work together to coordinate the order generation and taking. The offer fulfilment and distribution of products, service or information are organised through the supply chain management. But with the emergence of e-supply business model and the introduction of digitalised products, communication and processing, the internet has started linking and managing these organisation and processes. Sophisticated logistic management and automated supply-chain management are now being use in many part of the world (Amor 2000: 31-32).

2.6.6 E-Trading

Buying and selling stocks was once restricted to people that have access to the financial networks. They are the only set of people that can order and sell stocks at the right moment. Others only get the information on stock quotes from less appropriate sources such as newspapers. But the internet has revolutionised the process and changed the way stocks are being traded. E-trading, also known as e-brokering, offers the real-time stock prices to every desk throughout the world. Everyone with internet bank account is able to trade on stock. It has creates more awareness about stock and it has increase opportunities for everyone to earn from investing in the stock market (Amor 2000: 32).

Other e-business categories include e-commerce which has been well discussed by many other researchers and at the early part of this study. Others are e-engineering, e-franchising, e-gambling, e-learning, e-mailing among others.

2.7 Challenges of E-Business

Aside from the challenges that confront businesses that are deploying and using e-business platforms, there are many others that confront and affect their customers directly. Some of these challenges are universal and it is not peculiar to a single country of region of the world. Some of them that are commonly discussed will be looked into briefly.

2.7.1 ICT Infrastructures

ICT Infrastructures are the physical infrastructures that e-business platform operate on. They are the physical hardware used to interconnect the e-business platform in question and the users. Infrastructure includes mobile phone, internet, computer and other ICT equipments. The challenge of the ICT Infrastructures is seen from the level of access and penetration of it in a particular region or country. Where customers do not have access to these infrastructures, the likelihood of not making use of e-business platform is high. Thus, low level of ICT infrastructures is a great challenge to use of e-business by customers especially in the developing country.

Whenever the issue of ICT infrastructure is the context, the issue of availability and affordability come with it. Availability means that user must have access to the products and services need for its functionality while affordability means that this said access to products and services must be reasonable both in term of cost and value. This broad challenge will be discussed further in the later chapter where it will be subdivided in Infrastructure availability and affordability.

2.7.2 Quality and Reliability in E-Business Environment

A recent research carried out shows that the number of customers that are now suspicious of online product is increasing yearly. The study showed that there is more pressure from European consumers for protection against fake goods. 36 percent of shoppers believed that the fear of counterfeiting has limited the amount of online transaction and 26 percent of them expect better protection against counterfeiting on the internet, if the will have to buy from online shops or make any other transactions (PRLog 2010).

The future of e-business is said to be very bright and there is possibility of it expanding into all facet of human life but this depend largely on the customers' trust and confidence. This trust and confidence did not just come like that, it took government intervention and protection of the customers before this was achieved in traditional business. Thus, there is dire need for laws that will protect all online customers and make online traders to be accountable and responsible to the consumers. This can only be achieving through the joint effort of all stakeholders. If this is not done the future of e-business is not that bright as many businessmen and planners thought because the customers are still the kings even in e-business models (Kaur 2005).

Security attention which was focused on nuclear power plant, shopping mall, banks, sport stadiums and airports and others in previous decades has now shifted to security threat in the cyberspace. The increase in the number of businesses and customers whose life depend on computer network and internet for most of the daily business dealings and ordinary activities demands for greater security. (National Research Council, US, 2002). The increase in the awareness in the threat in the cyberspace is also affecting the e-business activities which also operate in the part of the cyberspace (Goodman, Herbert et al. 2007: 15-77). Customers of a successful web store need to feel secure that their credit card, personal information and details of their transactions are secure from unauthorized use and this some of the e-business platform are yet to achieve permanently. Customers are not really secure when dealing online and this feeling is a great

challenge to the development of e-business. These threats include website defacement, DoS (Denial of Service) attacks, phishing and customer information theft.

This category of threat shall be divided into two types of challenges in the later part of this research. It will be subdivided to cover quality and reliability and ICT environment.

2.8 Benefit of e-business to Customers

The benefits of e-business to business and organizations have been well discussed by writers. Among discussed benefits are increases in sales, reduction in cost, global reach, supply chain improvement and extended time and service all through the year, and improved services among others. Though this research's focus is on the customers' side and the challenges they are facing, it will not be out of place to mention that they stand to gain many benefits. And among those they are enjoying at the moment includes ubiquity of product, increase in the choice of products and services they can pick from and products are relatively becoming cheaper. They also have quick access to information on the services and products. And opportunity for customization or 'having it your way' and self services are also increasing and expanding into different products (Parreiras 2010).

3 OVERVIEW OF E-BUSINESS IN NIGERIA

This part of the research work focuses on Nigeria and the level of e-business supporting ICTs. It also looked into the deployment of e-business. The chapter dealt with issues such as the historical development of ICT and e-business deployment in the country. The ended by creating an adapted research model of challenges confronting customers of e-business deploying firms in Nigeria.

3.1 Overview of Nigeria

Nigeria is an Africa Sub-Saharan country which is located at the south-western coast of West Africa. The country is subdivided into 36 states. According to CIA fact book (2010), it covers an area of about 923,768 sq km and it is slightly more than twice the size of California and hence it is very close to thrice of Finland (338,145 sq km). The country shares borders with Benin in the West, Cameroon and Chad in the East and with Niger in the North. The country is the most populous black nation with 151.32 million people and 2.2 percent annual growth rate (World Bank 2008 est.) making it the eighth most populated country in the world (CIA July 2009 est.). Its people comprises of about 250 recognized ethnic groups. The official language of the country is English which is unconnected with the fact that it was once colonised by Britain. Other major languages are Yoruba, Ibo and Hausa. The GDP of the country is 353.02 billion US dollars and GDP per capita is 2,400 US dollar (Central Intelligence Agency 2010).

The country is oil-rich which places it as one of the important OPEC member states. It is the 12 largest producer of oil in the world. The discovery of crude oil in commercial quantity in 1970s led to the partial neglect of other vibrant or would-be vibrant sector of the economy. Before the 1970s, agriculture contributed more than 70 percent of the gross domestic product (GDP) and served as source of foreign earning. The country is blessed with many underexploited resources ranging from natural gas to coal, and gold to zinc. All other sectors of the

economy had to go to the back ground for the crude oil (Palin 2008). For decades the other sectors of the economy did not gain much attention from the government and foreign investors. However the development in the telecommunication sector of the economy has proved another point about the viability of the country's economy. While the entire economy is growing at rate that ranges between of 3-7 percent in the last eight years (IndexMundi 2009), telecommunication sector of the economy is growth at rate of an annual minimum of 13.5% (Mbendi 2010). it contribution to the GDP also keep growing while that of crude Oil and Petroleum products keep declining

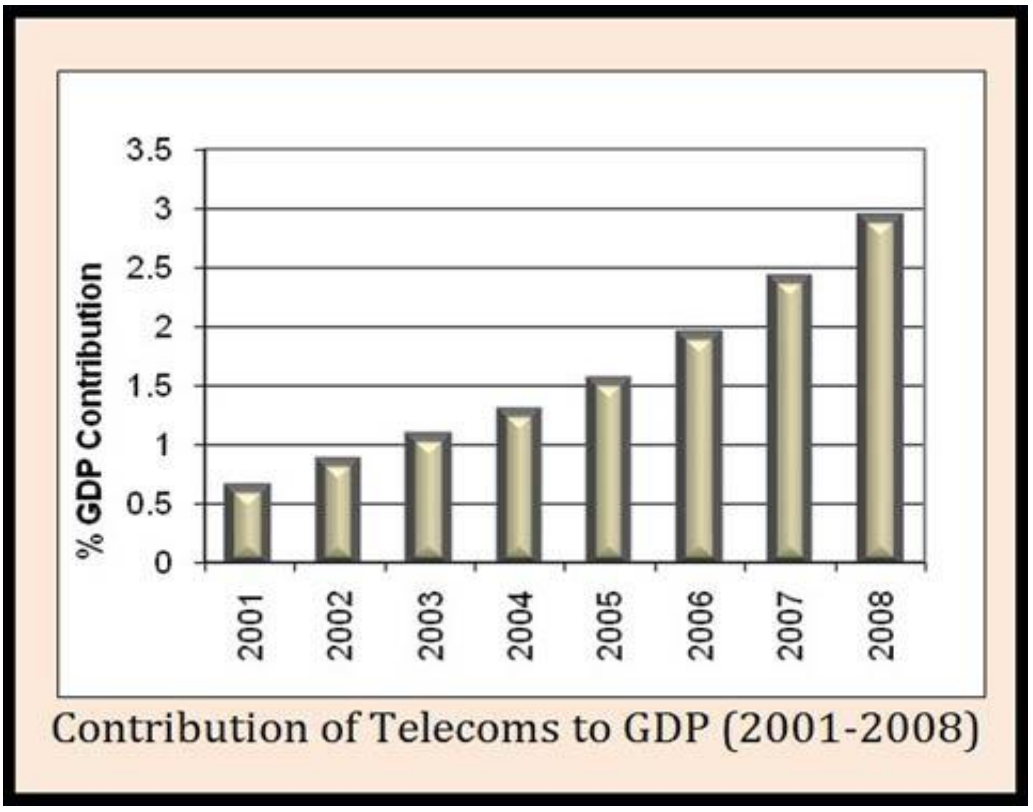

Figure 2: Contribution of Telecoms to Nigeria GDP

Source: National Communication Commission

3.2 ICT and E-Business in Nigeria

It was in 1950s that Nigeria took the first initiative of information communication technology (ICT) development, though it was focused on print and electronic media in the early days. During that period there was no major policy and no concrete development was achieved and this is due to strict governmental control. Aside from some private sectors that demonstrated some level of initiative towards ICT then, there was absence of full awareness of the importance of ICT. However, as the importance of Information and Communication technology to economic growth, development and sustainability became thing of government and public knowledge, the government started series of initiative over the decades. There were series of efforts that led to among other things the Workshop on ICT policy in March 2000 where all major ICT Stakeholders in the country such as Nigeria Computer Society (NCS), IT Association of Nigeria (ITAN), the computer professional of Nigeria (CPN) and other major stakeholders both in the private and public sector came together (Chieneke and Longe 2009).

3.2.1 Telecommunication and Mobile Communication

Telecommunication and Mobile Communication are the major supporting facilities of e-business that has gained more penetration in the country than any other and as such it will be discussed. Nigeria telecommunication system have witnessed different stages in the last century, moving from its primitive communication system of the 1880s in the colonial era to the recent continuous expansion and modernization that commenced in the late 1990s. In 1886, the development of telecommunication in the country started with the connection of cable between Lagos and the colonial office in London. By 1893 some government offices in Lagos had gained access to telephone service. This was later extended to Ilorin and Jebba in the hinterland. This process, despite being slow, gradually culminated into nucleus of telecommunication network. It took close to three decades before the commercial truck phone service was launched in the country. As at 1952 the colonial office in London had been connected to major

commercial centres in the country, thus it was possible to communicate between London and Lagos, Ibadan, Oshogbo, Kaduna, Kano, Benin and Enugu. The government made the first attempt at planning the development of telecommunication service in the 1955-62 development plans (Ndukwe, 2003).

When the country attained its independence in 1960, there were just less than 20,000 lines in the Country. The country had embarked on series of national development plans usually for every five years. All the first sets of national plans did not only featured telecommunication but also included plans on its expansion, so that it will be able to meet up with the growing need of the commercial and industrial sector. In the third national development plan between 1975-1980, the country planned to achieve one million lines at the plan period. However, the government had to revise it to 750,000 lines which were grossly unmet during the period in view. It was not met by 1987, there were only 400,000 lines and less than 250,000 installed capacity and connected lines respectively (Ndukwe 2003).

NITEL (Nigerian telecommunication Limited) was formed in 1985 by merging Nigeria External Telecommunication with telecommunication arm of the department of post and telecommunication. It must be mentioned that NITEL could not effectively achieve the purpose for which it was established and this failure is partly because of underfunding by the government (Ajayi, Salawu and Raji 1999: 163-175)

In a bid to foster an environment that will facilitate and encourage the participation of individuals and private sector in the effort to increase and expand the poor existing infrastructures, the government of the country established the Nigeria Communication Commission in 1992. This was when partial liberalization commenced, because the establishment of NCC lead to separation of the policy making body, from industry regulator and network operator. As at the radical reform of 1999, private investment was just mere USD50m and one telephone line to 250 inhabitants. There was also excess demand of estimated 4 million lines (Ndukwe 2003). Let me quickly add here that by 2008, almost ten

years after the reform the foreign investment had increased in manifold and it stood at about USD12000million. Figure 3 below say it better.

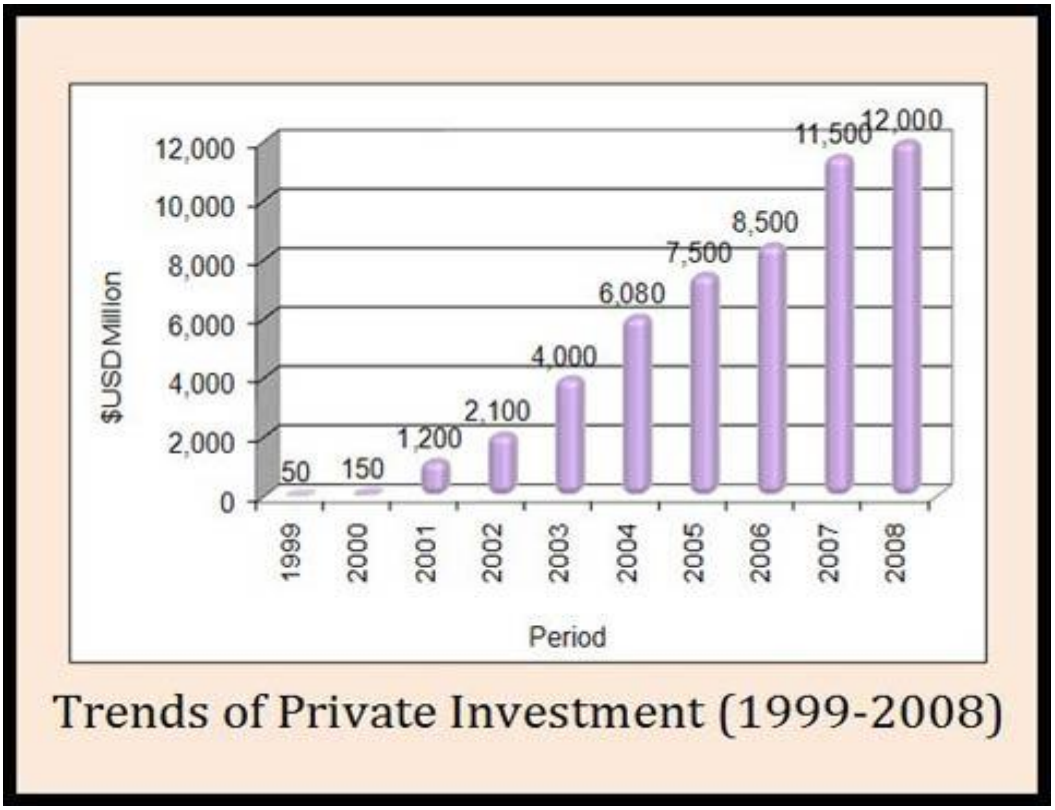

Figure 3: Trend of private investment in telecommunication sector (1999-2008)
Source: Nigeria Communication Commission (NCC) 2010

The revolution of telecommunication commenced fully in the country in 1999 after the return of democracy under the regime of former President Olusegun Obasanjo. Prolonged military dictatorship in the country prior to 1999 had created apathy to the platform on which Telecommunication or ICT development were expected to be built on. The apathy was as a result of misconception that ICT

might pose a security threat to the then sit tight government (Chieneke and Longe 2009).

It was in 2001 that the telephone system in Nigeria, which has been witnessing a lot of setback, changed for better. There was a great breakthrough in telephone infrastructure when the sector was totally liberalized and license were issue to MTN and ECONET (mobile phone companies). A year later Globacom also came into existence. Within few years of the emergence of the three mobile companies the country recorded the injection of more than a million of lines. From that time the Global System of Mobile Communication (GSM) is spreading in a highly competitive manner all over the country (Idowu, Ogunbodede and Idowu 2003).
In 2007, another telecommunication service provider known as Emerging Markets Telecommunication Services (EMTS) and with the trade name Etisalat entered the market. These four services providers share of the market keep growing since the potential of the market is yet to be reached. Figure 4 reveals how the market is currently being share by the services providers.

According to Nigerian Communication Commission (2005) "the total subscriber base for connected fixed and mobile lines rose by a factor of five to 10,201,728 at the end 2004, an average growth rate of 131% annually. Overall, 7,930,678 new telephone lines have been taken up since December 2002, a phenomenal increase of 249%. Nigeria's teledensity has also grown from near zero at the turn of the millennium to about 9% in just four years and the addressable market for telephone subscriptions is now in the region of 25 – 30 million". The market has kept growing and still has more potential as shown in figure 5 below.

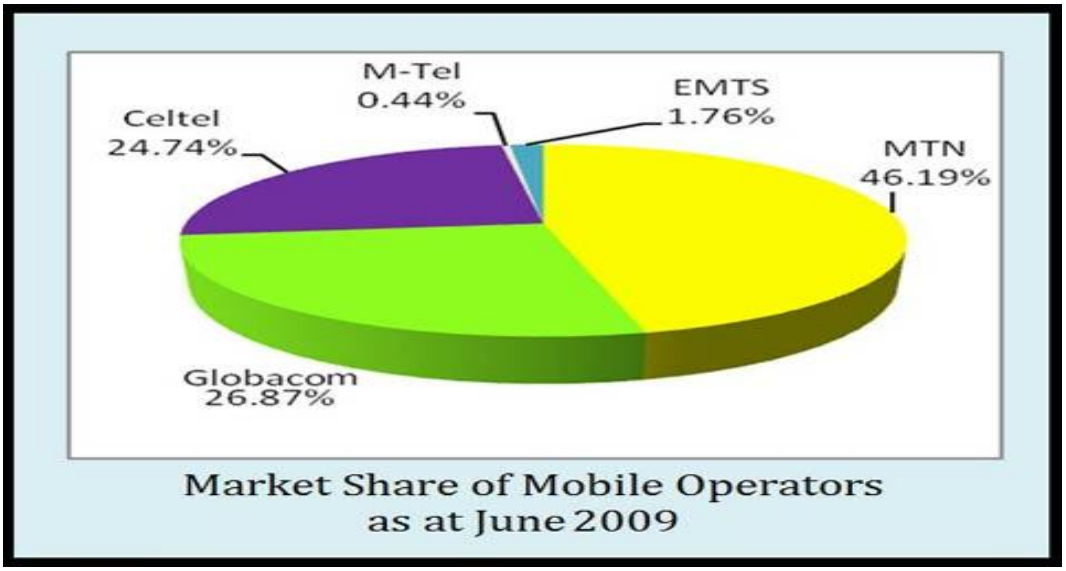

Figure 4: Nigeria Telecom Market share by operators

Source: Nigeria Communication Commission 2009

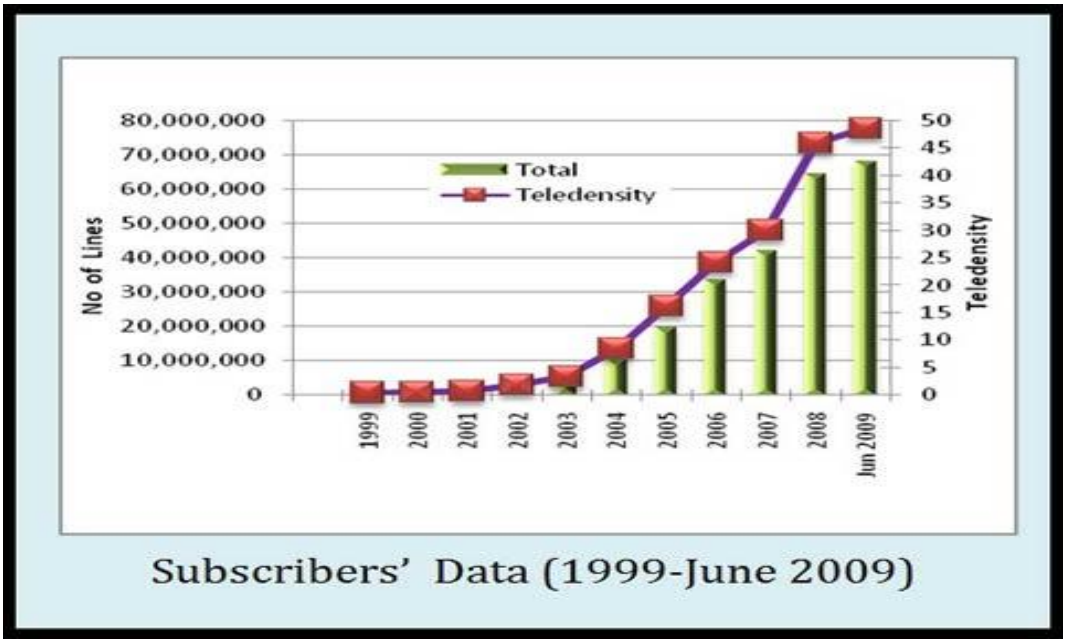

Figure 5: Nigeria Telephone Line Subscribers Data

Source: Nigeria Communication Commission 2009

The telecommunication sector of the country continues to rank among one of the fastest growing markets in the entire Africa with its triple-digit growth rates almost every single year since liberalization of 2001. In 2004, it ranked the

continent's second largest mobile market after South Africa. It is interesting to note that as at that 2004, the sector has only reached about one quarter of its estimated ultimate market potential (Miniwatts Marketing Group 2009).

According to Peter Lange (2009) of the largest global telecommunication research site on the web, as at 2009, Nigeria has also surpassed South Africa to become the continent's largest mobile market with over 65 million subscribers. The market still has a great potential since the market penetration stood at only around 45% in mid-2009. Far reaching regulatory reform has led to hundreds of companies providing virtually all kinds of telecom and value-added services in an independently regulated market. Billions of US$ are being invested into network infrastructure each year (Paul Budde Communication 2010). In 2000 South Africa alone accounted for 74 percent of total mobile cellular subscription in the continent. But as at 2008 it has become more evenly distributed with Nigeria taking the lead with 26 percent and South Africa with only 19 percent. There were growth of mobile subscription in other Africa countries but the case of Nigeria is unique as shown in Figure 6 below (International Telecommunication Union 2009).

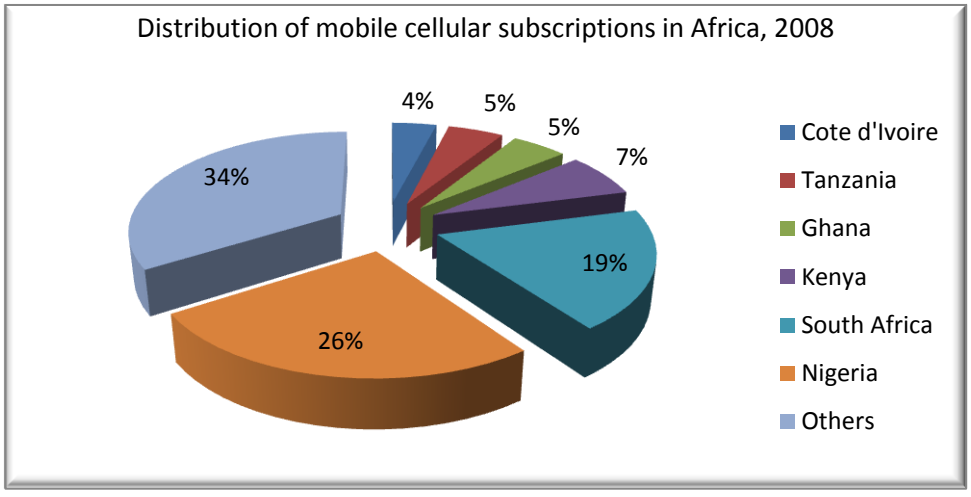

Figure 6: Distribution of Mobile cellular subscription in Africa 2008

Source: ITU World Telecommunication/ICT Indicators database.

3.2.2 Internet Penetration in Nigeria

Africa as at 1996 had only eleven countries that had access to the internet but it has grown fast and rapidly so that all the 54 countries on the continent achieved permanent connectivity by 2000 Jensen (2000). The rate of growth in the internet penetration has shown that Nigeria and the people of the country have discovered the benefit that is associated with the use of internet. Before 1998 the country had next to nothing when internet connectivity and penetration is in question. Even by 1998 the country had only a few dial-up e-mail providers and a few internet service providers (ISPs). These ISPs were operational on a very slow link. It is quite obvious that the internet is gaining more importance in the mind of Nigerians with the current rate at which internet/cyber cafes are spring up in the major cities, in educational institutions and big commercial/business centre across the country.

As at 2000, the reform and liberalization of all segments of Nigeria's telecommunications market made it to be open up to competition. The mobile telephone as discussed earlier quickly picked up such that it became the star of the sector not only in Nigeria but across Africa. On the other hand the internet segment of the market lagged behind. Internet services, especially broadband, were underdeveloped. There existed a range of Internet Service Providers (ISPs) at that period but most of them rent their service from NITEL, a state owned telecom operator which was widely known for its woeful shortage of capacity (British Broadcasting Corporation 2010).

The awareness and increase in the number of user of internet became obvious with the increase in the number of cyber cafés that sprang up in all part of the country. Lagos alone was reported by Economist Intelligence Unit to have more than 1000 in 2006. From 2006 Nigerian youths could be found in the cafe for different reasons. The growth and success achieve in the telecommunications sector of the country’s economy resulted in a great increase in the number of subscribers and users of GSM. This was what served as a motivating factor for the network operators/service provider to start offering their subscribers with fixed

wireless services, which offered data and voice transfer. Thus, the increase in internet usage was also recorded in the country and not only in the urban but also in the rural area (Economist Intelligence Unit 2009).

With the entrance of strong new players from fixed wireless and network operator into the market with their third generation mobile and advanced wireless broadband is also increasing the internet penetration in the country. The recent consolidation of about 400 ISPs to stronger 150 is also serving as an indication of success. The current roll out of IP-based next generation networks will enable convergence voice, data/Internet and video services. The country's international voice traffic is being carried by VoIP. There is expected close to a 90 percent reduction in the cost of bandwidth due to the arrival of two new international submarine fibre optic cables into the country in 2009 (Paul Budde Communication 2010)

Year	User (000s)	User per 100 inhabitants
1998	30	0.03
1999	50	0.04
2000	80	0.06
2001	115	0.09
2002	420	0.32
2003	750	0.56
2004	1769	1.29
2005	5000	3.55
2006	8000	5.55
2007	10000	6.77
2008	11000	7.4
2009	15570	9.7
2010f	18895	11.5
2011f	23048	13.8

2012f	27858	16.3
2013f	32356	18.6

Table 2: Nigeria Internet historical data and forecast

Source: International Telecommunication Union 2010 and Business Monitor International

f = BMI forecast.

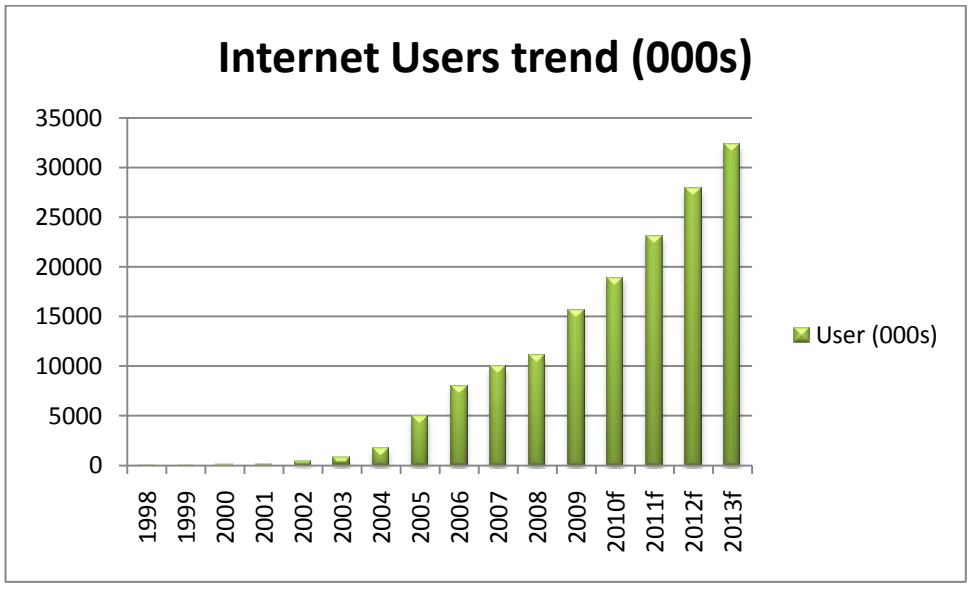

Figure 7: Nigeria Internet usage trend

Source: International Telecommunication Union 2010 and Business Monitor International

It is clearly obvious from the statistics that the market potential of Nigeria is still broad and that the percent of Nigerian that have access to the internet is still small compare to other developed countries.

3.3 Deployment of E-Business in Nigeria

It will not be surprising to start by stating that the growth of e-business in the country is still in its tender age and that is still slow. This is partially due to many

factors among which are low penetration of the internet and high cost of personal computer. Like other infrastructures in the telecommunication sector, the stock of personal computers (PCs) is also growing fast in the country. This growth is unconnected with the flood of cheap Asian technologies and falling microchip prices in the Nigerian market (Economist Intelligence Unit, 2009). Thus, the increase in the number of GSM subscribers, growth in the internet penetration and reduction in the cost of personal computers (PCs) are strong facilitating factors for the growth of e-business in the country. E-business in the country could be traced back to when Nigerians started making use of e-services such as electronic-cash-transfer services e.g Western Union and Moneygram. Another major impetus to the development of e-business was the conducting of online educational activities by major examination bodies in the country. This action of JAMB, WEAC; NECO and others forces and/or motivates many Nigerian youths entering into the cyber cafes because registration, notification of examination centres and checking of results are on the internet.

Another great development in the history of e-business in the Nigeria is the deployment of automated teller machine (ATM) by Nigeria banks. An automated teller machine which is also known as automatic banking machine (ABM), is a computerized telecommunications device that provides the customers of banks with access to financial transactions in a public space without direct contact with the bank. The history of ATM in the country is just a little bit above a decade, it previous started as an exclusive service for the elitist group. During this period ATM card were rare and the process of obtaining is tiresome. In 1998 only one bank had an ATM machine in the country but the number rose to fourteen by 2004. ATMs became a popular e-business platform in Nigeria after the bank consolidation of 2005. In 2006 there were more than 800 ATMs, in cities across the country and more than 23 million ATM cards had been issued by 23 banks (Olatokun and Igbinedion 2009).

According to a previous survey carried out by Intermarc Consulting Limited, automated teller machine services provided by banks and non-financial

institutions have emerged the most popular e-business platform in Nigeria. It was discovered that ATM awareness ranked higher than that of current account and slightly below savings account (The Nation 2010).

The use of point of sales (PoS) machine is gradually growing. In 2009, the country still has fewer than 10,000 PoS machines which far short of the United Nation's projection of 760,000 to service the population. The projection was based on the number of GSM subscribers in the country (The Punch 2009).

E-business activities in the country are yet to take strong hold between the government agencies and private entities with few exceptions. One of the government agencies that have been exploiting the platform is the Central Bank of Nigeria (CBN) in its relationship with commercial banks and some oil companies. E-business deployment and development in the country is being facilitated mainly by private sector of the economy. Private firms such as banks, oil companies and telecommunication players are the main actors in the e-business deployment and operation in the country. The support from the government comes inform of monitoring and regulation by quasi-governmental agencies such as National Communication Commission (NCC) and Nigeria Internet Group (Eze 2008).

3.4 Research Model on Challenges confronting e-business in Nigeria

In an attempt to provide solid basis on which the research question will be answered, a model on the challenges of e-business in Nigeria, as shown in Figure 8, was developed based on difference research models and previous researchers' view. These challenges have been broadly divided into four categories for this research purpose and will be discussed below. The four broad categories are infrastructure availability, infrastructure affordability, ICT environment and quality and reliability. The relationship between these challenges and the one discussed earlier in the study is that they are the subdivision of the two challenges. ICT Infrastructures is subdivided into infrastructure availability and affordability

while quality and reliability in e-business environment is subdivided into ICT environment and quality and reliability.

3.4.1 Infrastructures Availability

Infrastructures in this context are intended to capture the categories of variables that cover those infrastructures that must be available for customers before e-business can operate effectively. They are the platform on which e-business operates on. And three of them will be discussed.

Mobile Phone Penetration

This could be described as a term commonly uses to depict the extent to which phones are being used in a particular country or region. The study of Mobile penetration becomes necessary in e-business concept because it is one of the platform on which e-business operates and the success of e-business in Nigeria depend on it. Thus the research comes up with a hypothesis that the increase in number of phone subscribers will have positive effect on growth of e-business facilities.

Internet Access

According to McMahon (2000), the term internet refers to the physical infrastructure or backbone upon which many of the technologies that the e-business platform operates on. As such, internet access in this context means the ability of the customer to be able to connect to the internet either through dial up access or broadband access. A country with larger percent of its population having access to the internet is more attractive for an organisation with an e-business platform (Fletcher, Bell and McNaughton 2004:85-86). Another hypothesis of the research is that customers will transact online if they access to the internet.

Computer Penetration

This is meant to describe that extent to which people residing in a particular place have access to personal computer and this varies according to regions or countries in the world. Computer penetration is measured by counting all personal computers, laptops and notebooks in a country of region. Thus, there is another hypothesis that low number of customers with computer and computer knowledge will limits online transaction and business.

3.4.2 Infrastructures Affordability

Affordability is another indicator that shows the ability of the customers to be able to absorb the cost involved in operating or transacting on e-business platforms. According to the report international telecommunication report on Africa, it is crystal clear from its analysis of ICT price basket that cost of ICT facilities and services is one of the major barrier to penetration of ICT and e-business. Even in Africa's wealthier countries, the ICT Price Basket corresponds to 4 per cent of GNI per capita, compared to around 1 per cent in some developed countries of the world (International Telecommunication Union 2009)

Computer Cost

Whenever issue of computer penetration is to be discussed the cost of acomputer itself cannot be ignored. The cost of a computer has an inverse relationship with computer penetration. That means that the lower the price of computer the more likely the high penetration of computer especially in the developing countries where the per capita income is still very low. When a computer is costly to customers in a region it will affect the growth of e-business. Thus, the hypothesis is that the cost of a computer and some other ICTs equipment supporting e-business are too expensive for many customers.

Internet Access Cost

Internet access had being described early in this research as the ability of the customer to be able to connect to the internet either through dial up access or

broadband access. Hence internet access cost is what the customers need to pay before they can gain this access. The cost of Internet access varies from countries to another. According to International Telecommunication Union internet access cost is calculated by comparing the internet access price as percentage of Gross National Income per capita (International Communication Union 2006). Most of the e-business model make use of internet, thus it is important that customers have access to it. The research come up with another hypothesis which is high cost of internet connection will make many customers to keep using the traditional rather than online transaction.

Broadband Cost

The frustration associated with the slow dial up connection is not only affecting the success of e-business but many users are now trying to shift to broadband. The Broadband allow data transmission rates of 1 Mbps or higher and subscribed are able to transact or do order things faster. Expectedly every good thing come with price and in most cases are not really cheap. The cost of broadband is also an indicator that follows under that categories of Cost that might affect the success or otherwise of e-business. This research work will make use of the indicator to find answer to it research question later in the work.

Weak Currency

Most of the ICT Infrastructures such as mobile phone, laptops, personal computer among other things are manufacture and produce in the country and unless the situation is reverse the fluctuation in the value of the country currency (Naira) will remain as challenge to the growth of e-business. The cost at which most of these ICT infrastructures are sold quite high in the country due to exchange rate and the price at which they are available at the local market (Ajayi 2006). Thus there is another hypothesis here; the value of Naira (Nigeria Currency) is also affecting the cost of ICTs tools

3.4.3 ICT environment

ICT environment is the environment in which e-business operates. This environment affects and influences its operational mode. The environment where it is being carried out is very crucial to its success and failure. The environment could be internal or external to the e-business platform. In the context of this research, the ICT environment will be viewed from social, cultural and legal environment surrounding the e-business and its customers willing to transact or related on e-business platform with one another (EIU 2009).

Social and Cultural Environment

Social environment could be described as people's living, income level, literacy level and working conditions. Socio-cultural environment refers to certain factors that affect the behaviour, decision, life style of particular set of people. Taking clue from the methodology of Economist Intelligence Unit, social and cultural environment of e-business will be considered in the research analysis. This includes internet literacy which is also dependent on basic education level, belief and attitude (EIU 2008). A hypothesis is also formulated to test this among customers and the hypothesis is; some customers do not make online transactions and other dealing due to some belief, norm, idea, habit or orientation

Legal Environment

E-business prospects or otherwise depend largely upon the country overall legal framework and also on specific laws governing the internet use and its users in the country. This indicator has effect directly on legal framework that has impact on the digital environment on which e-business activities take place. The parameter reviewed under this indicator includes level of censorship, digital identity card and electronic ID and the traditional business legal framework among others (EIU 2009). This also includes laws protecting intellectual property right in a country (Fletcher, Bell and McNaughton 2004:86). The research posit with another hypothesis that customers will avoid online transaction and dealing in the absence of legal protection for their transaction.

3.4.4 Quality and Reliability

The last of the four broad categories of challenges is quality and reliability. In the context of the research, quality and reliability is viewed as the attribute and characteristics of the ICT Infrastructures and other infrastructure that will serve as back up for the ICT infrastructures. Among those variables that will be considered as quality in this research are power supply, cyber security and internet bandwidth. They will be discussed as follows Chiemeke & Longe 2007.

Power Supply

For many of the ICT infrastructures to be able to function, they will make use of power supply. It must be mentioned that electricity is not an ICT facilities but many of ICT facilities depend on it. It is a common knowledge that most businesses need power supply for their daily activities but it needed to be noted that customer that will have to operate or transact with these businesses also need electricity (Ajayi 2006). The hypothesis here is that unstable power supply is also a challenge to making online transaction and business dealings.

Internet Bandwidth (bit)

Internet Bandwidth could be described as an electronic byway which serves as connection between the internet and any computer. It serves the purpose of allowing more traffic to flow and thereby increasing the speed of the internet. An internet with a high internet bandwidth will load even a graphic intensive page faster (Conjecture corporation 2010). The bandwidth will be use in the research as one of the indicators for analyzing the challenge confronting customers of e-business in Nigeria context too. The hypothesis here is; slow internet connection discourages the making of online transactions.

Cyber security

Security attention in previous decades was focused on nuclear power plant, shopping mall, banks, sport stadiums and airports among others. However with the increase in the number of people whose life is now dependent on computer network and internet for most of their daily activities, attention is now shifting

towards another security threat which is in the cyber space (National Research Council US 2002). The issue of cyber security had also featured in many national agenda but it, most of the time, focuses on specific threats like terrorism or specific sector like banking and finance. This said focus is now shifting to security of all legitimate users of the cyberspace. The increase in the awareness in the threat in the cyberspace is also affecting the e-business activities which also operate in the part of the cyberspace (Goodman, Herbert el at, 2007: 15-77). Cyber security will also be use by this research as one of the indicators.

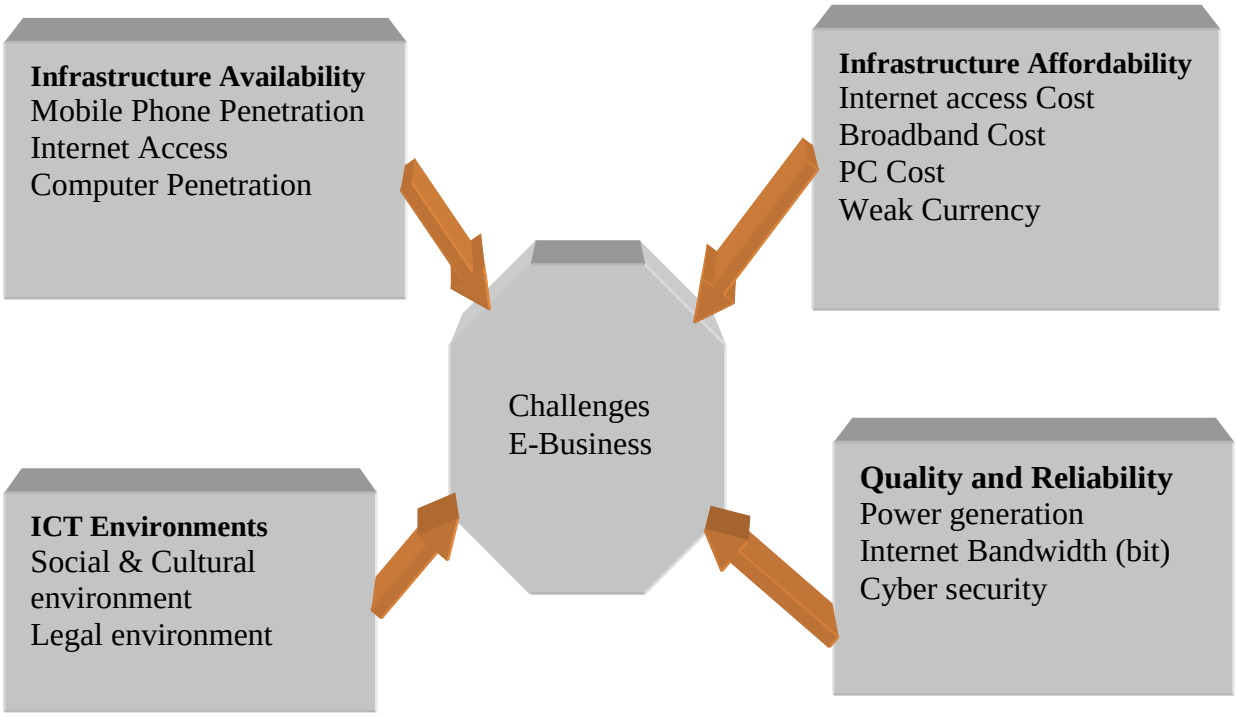

Figure 8: Research Model on challenges of e-business in Nigeria

Source: Adapted from International Telecommunication Union 2008, Economist Intelligence Unit 2009, Ifinedo 2006, Ajayi, 2006)

Table 3 below is the summary of all the sources used in developing the adapted research model used for this study. The table is to show clearly where the indictors included in the research model are gotten from and how they relate to each other components of the model. It is also to show that the model was based on the work of previous researcher and institution.

Indicators	Variables	Sources
Infrastructures	Mobile Phone Penetration	ITU 2009, Economist Intelligence Unit 2009
	Internet Access	ITU 2009, Economist Intelligence Unit 2009
	Broadband Access	ITU 2009, Economist Intelligence Unit 2009
	Computer Penetration	ITU 2009, Economist Intelligence Unit 2009
Affordability	Internet Access cost	ITU 2009, Chiemeke & Longe 2007,
	Broadband Cost	ITU 2009, Economist Intelligence Unit, 2009
	PC cost	Chiemeke & Longe 2007
	Weak Currency	Ajayi 2006
ICT Environment	Social& cultural	Economist Intelligent Unit 2009, Ifinedo 2006
	Legal	Economist Intelligent Unit 2009, Chiemeke & Longe 2007,
Quality	Power Supply	Ajayi 2006
	Internet Bandwidth	Economist Intelligent Unit 2009,
	Cyber security	Chiemeke & Longe 2007,Goodman, Herbert et el, 2007

Table 3: Adapted Research Model Indicators and Sources.

4 RESEARCH METHODOLOGY

Methodology refers to the philosophical basis on which a particular research is founded and it covers the approach the researcher uses to investigate the subject matter (White 2000: 20-21). Hence the focus of this chapter is to present, discuss and justify the methodology and research approach of this study. It will also justify the reason for the choice of the method to answer the research question. It will conclude with data analysis. As such this chapter will include the discussion of research purpose, research approach, strategy, method adopted in collecting data and data analysis.

4.1 Research Process

Research involves set of activities that usually unfold over a considerable time (White 2000: 23). Insight into it is also gained gradually and it may be modified or change over period of time. It involves distinct tasks at different stages. All these activities culminate in process know as research process (Ghuari and Gronhaug 2005: 29-31).

The research process of this study follows the stages depicted in the figure 9 below. The process this research went through is here by narrated. Initially, the choice of topic of research was ‘prospect and challenges of e-business in Nigeria’ but during the study process, it was discovered that it is better to narrow it down to what the nature of this research and the researcher considering the available resources will be able to handle better. Thus, the topic was changed to the current one and it limited its scope to customers of e-business deploying firm in Nigeria. In the analysis, the research focused directly on the challenges confronting customers in Nigeria.

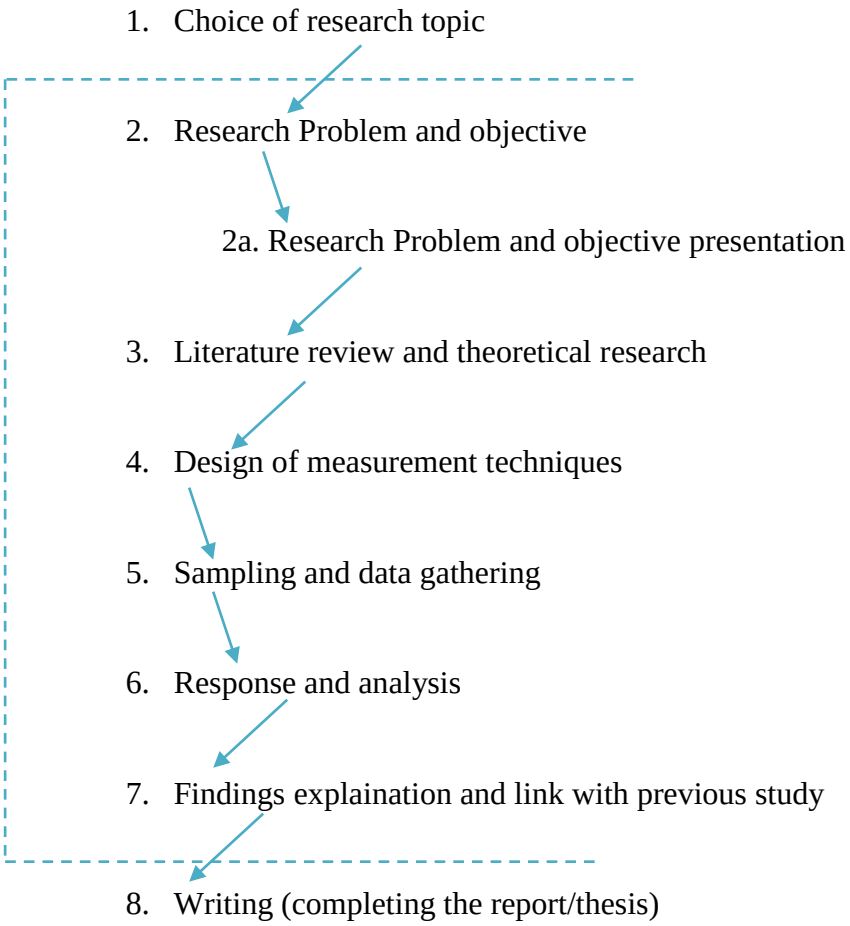

Figure 9: The research process of the study

The research problem and objective were arrived at and were review after the mid seminar presentation. The literature review and theoretical research was not totally easy as there is scanty literature and few journals that have dealt with the issue under study. Moreover getting information, data and statistics about Nigeria is also a huge task. Other stages were the design of measurement techniques, sampling, data gathering and analysis of responses. However, the more-than ordinary interest of the researcher in the field couple with the guidance of the supervisors and colleagues' analysis during the mid-seminar presentation and comments of the pilot test team really assisted in shaping the view and narrowing the thought to the core issues in the research objective.

4.2 Research Method

Research methods can be described as a systematic approach used for the orderly collection of data in order to obtain valuable and reliable information to arrive at a valid answer to the research questions (Ghauri, Gronhaug and Kristianslund: 1995: 83). The collection of data may range from simple observation at one particular location to large survey of a multinational corporation at site in the different locations around the world (Cooper & Schindler 1998: 77). In carrying out research, there are two major methods which are qualitative and quantitative methods. The use of qualitative, quantitative or other method is used by researchers based on the desired result that the study sets out to achieve (Burns and Bush 2000: 230). These two methods will be discussed and focus will be on their differences, uses in research and how it relates to this research.

4.2.1 Qualitative Research

Qualitative research seeks out the 'why', not the 'how' of its topic through the analysis of unstructured information – things like interview transcripts, emails, notes, feedback forms, photos and videos. Qualitative research involves studies use and collection of variety of empirical materials such as interview, case study, personal experience, among others. It also involves the asking of opened ended questions. Qualitative research involves collecting, analysing and interpreting data using unstructured questionnaires with small sample (Neelankavil 2007pg 107). Simply put, it is the collection, analysis and interpretation of data that cannot be quantified. Data is usually collected through interviews and observations in a qualitative research. It can take many forms and results forms and results from the use of data gathering instruments such as observation, interview, questionnaires and document analysis. While, even today, qualitative research is often regarded in some quarter as less valid and reliable as its quantitative cousin, qualitative data can be a powerful source of analysis. This method has two form of interview namely direct and indirect. The direct involves asking question on the subject matter directly from the respondents either through group interview or in-depth interview. While indirect involve seeking answer to

the question with the knowledge of the respondents. This can be done through observation and projective techniques (Gray 2004: 320).

4.2.2 Quantitative research

Quantitative research on the other hand is the logical investigation of quantitative properties and phenomena and their relationships. It results are given in numerical values and mathematical and statistical treatment are employed in evaluating its result (White 2002: 24-25; Cooper and Schindler 1998: 134). It is used to find out what people feel, think or the way they react, or will react when they are in a particular situation. Its survey usually includes large samples. In qualitative research, structured questionnaires are usual. Structured questionnaires mainly include closed ended questions. There are various vehicles used for collecting quantitative information but the most common are on-street or telephone interviews
(URL>http://www.marketresearchworld.net/index.php?option=com_content&task=view&id=11&Itemid=64, 26.02.10). This method primarily consists of survey carried out through formal questionnaire. This survey method includes telephone interview, personal interview and mail interview.

4.2.3 Qualitative versus Quantitative

It must be stated that the two methods differs in a lot of ways. It cannot be said that one of the two methods is superior to one another. It is sometimes argued that structured and quantitative method is more scientific and as such it is superior to qualitative method. However, a method cannot be judged to be superior only because it is structured and quantitative. The main difference in the two methods is not of quality or superiority but of procedure (Ghauri and Gronhaug 2005: 109). The major difference is in the overall form and in the emphasis and objectives of the study. The differences between the two methods are illustrated in table 4 below.

	Qualitative Research	Quantitative Research
Types of Question	Probing	Limited probing
Sample size	Small	Large
Amount of Information form respondents	substantial	Varies
Requirement for the Research	Special Skill Interviewer required	Fewer Special Skill Interviewer required
Type of Analysis	Subjective, interpretive	Statistical, summation
Degree of replicability	Low	High
Emphasis	Emphasis on understanding	Emphasis on testing and verification
Orientation	Process oriented	Result oriented
Generalisation	By comparison of properties	by Population membership
Perspective	Holistic	Particularistic and analytical

Table 4: Difference between qualitative and quantitative research
Source: Ghauri and Gronhaug 2005: 110, Mc Donald 2005

This research makes use of quantitative research method because the thrust of the research is to understand what customers feel, think or the way they react, or will react to the use of e-business models and platforms. Another reason is that customers of a business firm are usually large and it a quantitative study method that is appropriate for survey including large samples. Hence, structured questionnaires were used with closed ended questions based on the hypothesis.

4.3 Case Study

Case study can be described as an inquiry which makes use of multiple sources of evidence. It investigates a contemporary phenomenon within its real life context

when the boundaries between phenomenon and context are clearly evident. It is holistic in nature. It is an extensive study of single situation such as an individual, family or organisation. All case studies are inductive in that they report on the particular and specific, and then try to relate that to the general picture. There are different form of case study namely typical, atypical, precursor and multiple case studies. It is very useful in small scale research and it is beneficial. Some of this benefit is that it can be carried out by a single researcher and comparatively cheaper (White 2000: 39).

In a bid to make use of the limited resources and time within the reach of the researcher, a case study was used to investigate the core issues and open way for further research. The case company used is Guaranty Trust Bank PLC, popularly known as GTB by its numerous costumers. The bank was incorporated in 1990 as a limited liability company in Nigeria and it was issued licenses which permit it to provide banking and commercial services to the public. Its business operations commenced fully in of February 1999. Since then till now it remains one of the most respected banks in Nigeria and West Africa. In February 2002, the bank was granted a universal banking license. Aside from the fact that the bank became a publicly quoted company in September 1996, it has many awards in its record, among which is the Nigerian Stock Exchange Presidential Merit award in 1996 and subsequently in the years 2000, 2003, 2005, 2006, 2007 and 2008. The Bank was appointed as a settlement bank by the Central Bank of Nigeria (CBN) in 2003.

After the 2005 bank consolidation in Nigeria, the bank made a well calculated decision to actively pursue retail banking and this was followed by major rebranding exercise. Getting banking to the public doorstep was a unique thing in the country. In a bid to achieve this, the bank had to come up with innovative, cutting edge services which lead to its aggressive expansion strategies, intensive advertising policies. The bank provides a full range of commercial, investment and retail banking products/services to its customers across the country and some other countries in West Africa. The bank is a pace setter in the Nigeria financial

industry and this is evident from its introduction of online banking and its launching GT Connect (it allows customer to transact on phone from anywhere)
The bank's other innovative products and solutions include an e-branch; where customers can perform transactions electronically with no human interface. Other service is Drive Through banking, a service which enables customers to withdraw funds and make enquiries from the comfort of their cars; GT Mobile, others include GT Bank on wheel and GeNS. The bank is in the forefront of deploying many e-business facilities. The recent pace it just set in the country is the introduction of the GTBank Naira MasterCard in partnership with MasterCard Worldwide. It makes it possible for their customers to make international payment and acceptable at all MasterCard locations. GTB was selected as the case study of the research because it happened to be in the forefront of firms deploying e-business model and making customers to want to follow the trend.

4.4 Research Design

The research design constitutes the blueprint for the collection, measurement and analysis of data. It is the plan and structure of investigation so conceived as to obtain answer to the research question. Research design is firstly a plan for selecting the sources and types of information that will be used in answering the research question. Secondly, it is a framework for specifying the relationship among the variable in the study and finally, it is the blueprint that outlines each procedure from the hypotheses to the analysis of data. The research design can be exploratory, descriptive or causal depending on the nature of the research (Cooper and Schindler 1998: 130-134).

4.4.1 Explorative Research

An exploratory research is particularly beneficial in research in a situation when the problem has not been clearly defined. It is used when little is previously written about the subject matter or when the researcher lacks the clear idea of the problem. Explorative research is most appropriate when the primary objective is

to identify problems, to define problems more precisely, or to investigate the possibility of new alternative courses of action. It is characterised by the need for flexibility and versatility. It is more economical in terms of cost and time. It focuses on qualitative rather than quantitative data collection (Kumar 2000,:124). Nevertheless its objective may be accomplished with both qualitative and quantitative techniques (Cooper and Schindler 1998: 134).

4.4.2 Descriptive research

Descriptive research set out to find answer to who, what, when, where and how of a topic. In the descriptive research the research problem is structured and is well understood (Cooper & Schindler 1998: 134). This research purpose involves prior understanding of the subject matter before gathering of data commenced. The key characteristic of the research purpose are structure, precision, rules and procedures (Ghuari & Gronhaug 2005: 58-59). The research design in the approach needs to be carefully planned and structured. The intent of descriptive research is to maximize accuracy and minimize systematic error (Kumar 2000:124).

4.4.3 Causal Research

Causal research is usually used by researchers that are interested in verifying the 'cause and effect' of a problem. That means that it sets out to find the existence of relationship between a problem and its cause (Cooper & Schindler 1998: 142-149; Ghuari & Gronhaug 2005: 59-64). The level of precision is higher than that of other types of research because reasonably unambiguous conclusion regarding causality must be presented (Kumar 2000:125).

This research problem and question are largely exploratory research with some element of descriptive research. Though many researchers have done great work on e-business, most of them have concentrated on and have discussed the issue from the point of view of the business or Business to Business (B2B). Most of them give little or no attention to the views and opinion of the customers that also make use of the e-business platform of those businesses they studied. Thus, this

study aims at gaining insight to the customers view and by that it is exploratory. It is also partial descriptive because some secondary data were collected and were discussed.

The choice of this approach is because it is particularly beneficial in research when the problem has not been clearly defined and that is the case of the subject matter of this research. It is used when the researcher lacks prior clear idea of the problem. Another reason is that the primary objective of the research is to identify problems and to investigate the possibility of new alternative courses of action. Lastly, it is more economical in term of cost and time. Descriptive aspect of it was adopted in order to enrich the theoretical background of the studies

4.5 Sample selection

Sampling means saving work by examining the sample instead of the whole population (Ghauri, Gronhaug and Kristainslund 1995: 73).The main purpose of sampling is to draw a conclusion based on some elements that represents a particular population. Sampling is usually based on two premises which are firstly that the few samples adequately represent the population. The second premise is that though some elements in the sample may overestimate while other may underestimate. The result of these tendencies is that a sample statistics such as the arithmetic mean is generally a good estimate of the population. Researchers are usually compelled to make sample when the population is very large and some other major reasons includes time and cost consideration, accuracy of the result, precision and availability of the element of the population (Cooper & Schindler 1998: 215-224).

There are variety of sampling techniques which a researcher can make use of after considering many factors. The method that a researcher adopts will have to depend on some theoretical and practical considerations such as budget time, research objective among other things. These sampling techniques are broadly divided into probability and non-probability and it can quickly be presented in the table 6 below.

	Representation Basis	
Element Selection	**Probability**	**Non-probability**
Unrestricted	Simple random	Convenience
Restricted	Complex random	Purposive
	Systematic	Judgement
	Cluster	Quota
	Stratified	Snowball
	Double	

Table 5: Sampling Techniques
Source: Cooper and Schindler 1998: 248

Since the purpose of the research is to gain insight into the view of customers on the challenges that confront them in using the e-business application offered by some firm in the country, systematic probability sampling method was chosen. Systematic probability is a versatile form of probability sampling and the approach involve sampling every *k*th element in the population sample. The major advantage of the approach is that it is flexible and simple (Cooper & Schindler 1998: 237).

This study samples every third (3th) customers within the week of administering the questionnaires. It must also be mentioned that some sample were also selected in the later part of the work through convenience approach. The research also uses conveniences sampling means because its aim is to explore rather than predict. Some customers from the social network of the bank were contacted and there were some respondents from there too. Questionnaires were sent out to 150 customers of the banks. 50 among the questionnaires were sent through convenience method to some users of the bank online social media and the remaining was administered to customers entering a branch of the bank in Lagos.

There were 93 respondents from both sources which give a response rate of 62 percent.

4.6 Data Collection

Data fall into either primary or secondary depending on the source where they are sourced from. Secondary data are data collected by person or agencies for the purpose other than solving the problem at hand. Secondary data are more economical and easiest way of accessing information. It is obtained from internal record of company, government publication, trade journal, annual reports and many more. Primary data are data that were collected or observe from firsthand experience ((Kumar 2000: 84). Data that has not being generated by previous researcher is primary data; it is either collected by the researcher or the agent known to him as firsthand. Both sources of data have their strength and weakness

The main data for the purpose of answering the research question was collected through contact persons in Nigeria. These contact persons are Business development officer of Netvoize Solution Limited in Nigeria and a junior lecturer at Federal College of Education, Kabuga Kano, Nigeria. Therefore their experience in the data collection for this type of research is not in doubt. They were given instruction on what the sampling method of the research is and they follow it during the distribution. Data for this research were obtained from one in-depth interview and with the use of questionnaire sent to some selected sample. The interview with the bank was done through phone call.

4.7 Validity and reliability of the study

Firstly it must be stressed that validity and reliability have to do with the quality of the research and its results. Validity refers to the extent to which a test measures what a researcher intends to measure while reliability has to do with the accuracy, precision of a measurement procedure and dependability. The ability of a research to draw the same result like the original result and possibility of duplicating or replicating of research result is known as reliability. Reliability

means many things to different writers but most of them agreed that it has to do largely with the consistency of the research. It is a necessary but not sufficient contributor to validity of a research (Cooper & Schindler 1998).

In a bid to ensure the validity and reliability of the study, due considerations were given to the procedure for selecting the sample, research instrument (Questionnaire), design of research instrument and its administration. A week before the administration of the questionnaire, a pilot test was conducted on the questionnaire. A pilot test was conducted to detect the weaknesses in the design and instrumentation and provide proxy data for selection of a probability sample (Cooper & Schindler 1998: 77).

The subjects were drawn from the research target population and questionnaires were administered to them. They filled and made general comments on its design, tone, and language among other things. Their suggestion and observation were entered in to the final questionnaire that was send to the entire sample. The validity of the research is also supported by the fact that all the sources use in this study are relevant and reliable. Equally many sources from the different writers were used to form the bases of the theoretical background of this study and many books were consulted. However, the limit of the validity of the research relay on the number of sample compare to the entire population. Hence, these results cannot be generalized because there may be variation in the attitude of the customers when the population is increased. The research is only exploring and not setting generalised standards.

4.8 Analysis of result

Data analysis helps the researcher to quantify finding. Analysis data in any research depend largely on the researcher style of thinking and careful presentation of the evidence and interpretation (Yin 1994: 102-103). Data analysis is the researcher means of converting the information gathered into a defensible actionable set of conclusion and reports. Data analysis has to be preceded by data gathering and choosing of appropriate data analysis method and the choice of

analysis depended largely on the type of data gathered. This process mentioned above is less challenging to researchers when compared to processes such as data editing and coding (Kumar 2000: 244-247).

This research was carried out on a case study company's customers and workers at the customer relationship department of the company were contacted too. All effort was made to ensure that the questions contained in the questionnaire were really understandable to both the customers and the bank's worker and the responses to the final questionnaire show that it was understood. Below is the full discussion of the findings of the research.

4.8.1 Research Findings

The questionnaire was sent out to 150 customers of the banks. 50 among the questionnaires were sent through convenience method to some users of the bank online social media and the remaining was administered to customers entering a branch of the bank in Lagos. The research also uses conveniences sampling means because its aim is to explore rather than predict. There were 93 respondents from both sources which give a response rate of 62 percent.

The aim of the first five questions in part A is to answer the research question which 'What is the level of e-Business and awareness customers of e-business deploying firms in Nigeria?' The first question in this category is the numbers of years that respondents have being using the internet. 'Since when have you being using the internet' bring out the following responds, 31.2 percent and 36.6 percent were have 3-5 years and 5-10 years experience respectively. While the remaining 32.1 were shared equally between those respondents that have less than 3 years more than 10 years experience of using it. This shows that the majority of the respondents fall into the categories of people that start using the internet when it becomes public. This is shown in figure 10 below.

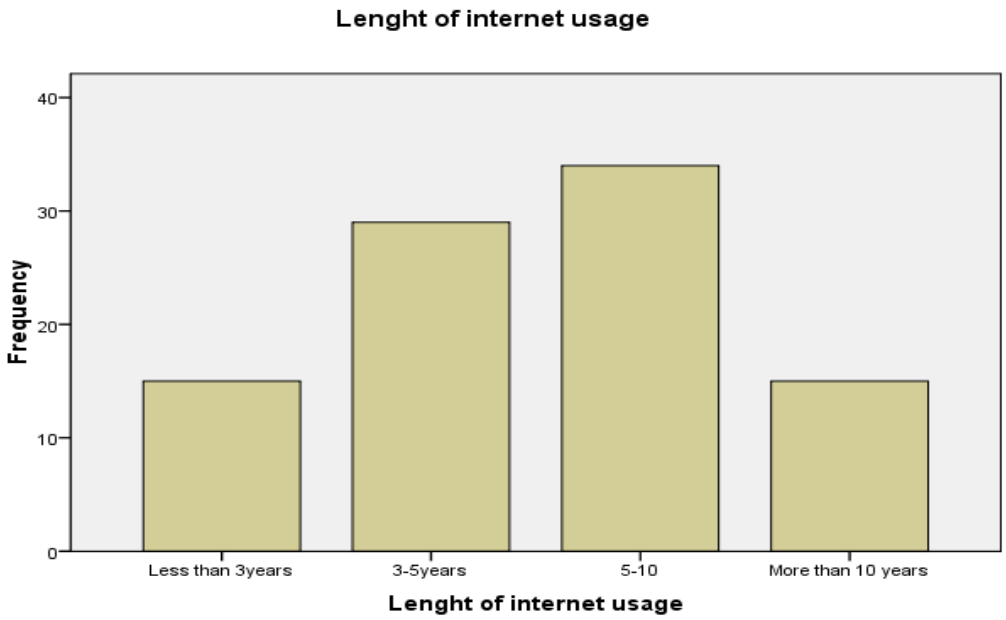

Figure 10: Length of Internet Usage

The second question is aimed at seeking to understand what the respondents do when they are on the internet. Thus, the response to question 2 ‘From where do you gain access to the internet’ as shown as in figure 11 below revealed that larger percent (34.4 percent) make use of more than one source in getting access to internet connect. It also shows that the numbers of respondents that still relay on the public cybercafé located in different places on the streets of Nigeria are still considerably higher. It is as high to the extent who those that get their connection from Home (10 percent), phone (8.6 percent) and schools (7.5 percent) all combined are still lesser than its 31.2 percent. Thus, it shows that a cybercafé is the most available source of internet connection for the customers. This finding is consistent with the research of Alcatel-Lucent and some previous researchers that majority of internet users get the access to connection from the public cyber cafes scattered across the country. It is also constituent with International Telecommunication Union research that claim that majority of Nigerians gain their access from public internet cafes.

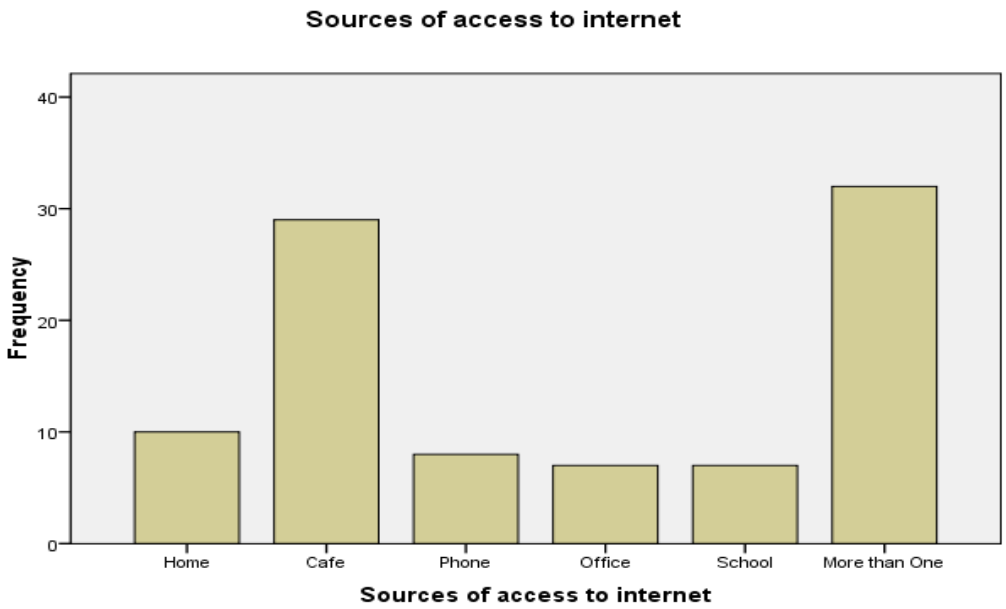

Figure 11: Source of access to Internet connection

The third question was aimed at gaining insight to what activities the respondent use the internet for. The question; ‘ for what activities do you use the internet’ shows that many of the respondent do more than one of the options on the internet and as such the option ‘Two or more’ have more clicks than the other options. It reveals that 41 percent of the respondents use the internet for more than one of the options given. But the interesting fact that the data analysis reveals is that a high percentage of the respondents use the internet for communication alone, that is they use it to send mail and receive mail some other activities in that category. The option search for information (Research, News, search Engines etc) have 7.5 percent of the respondents while entertainment (Social Network, Game or Chat rooms) option has 11 percent. It is quite surprising that it is only three percent that use the internet for banking activities and the more surprising is that none of the respondents shop online. The respond, as shown in figure 12 below, reveals that the awareness of use of the internet is moderately normal except that some of the activities that are possible online were not chosen by the respondents. This finding is consistent with the Economist Intelligence Unit report that shows that most of

the users of the internet in Nigeria still use it for the basic purpose of communication.

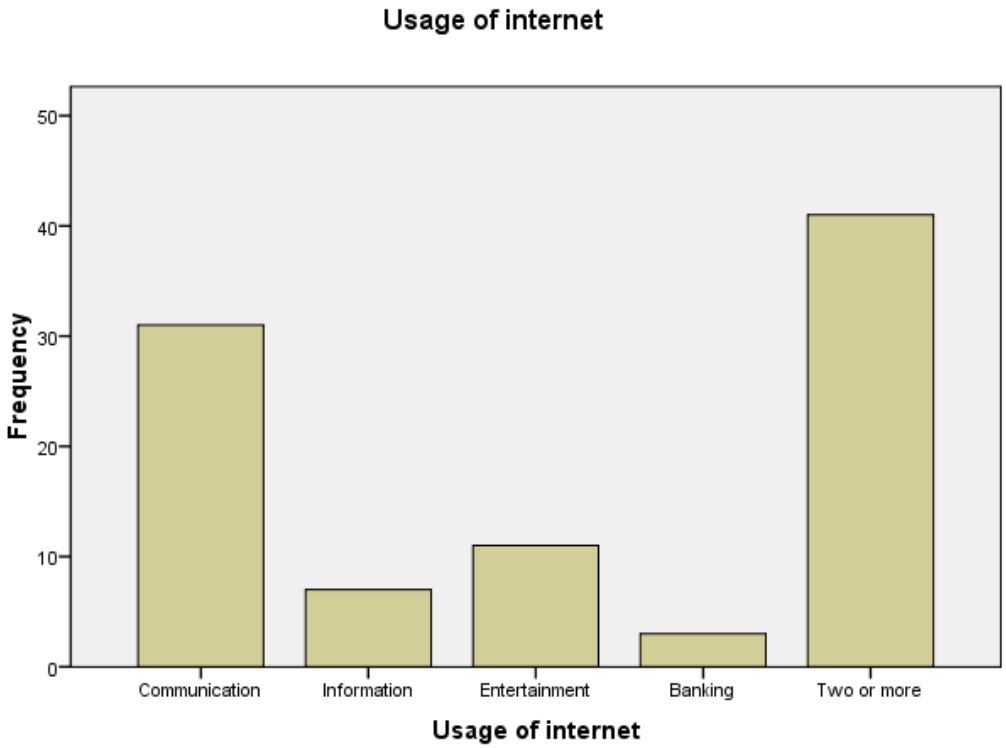

Figure 12: Usages of the Internet by Customers

Having surveyed the use of the internet, question four; 'Do you use the ICT tool (Computer, GSM, Internet, ATMs etc) in transacting with the bank?' was asked in order to further understand if the customers use some other ICT tools other than the internet for online transaction especially with the bank in the case study. The response reveals that the use of other ICT tools is very high, 67.7 percent of the respondents confirmed that they make use of other platforms. 32.3 percent, which is significantly high, still do not use the ICT tool for transacting with their bank. The respondents as shown in figure 13 below, when analysed in relationship with the responds from question 3 above, it shows that many customers still depend largely on other ICT tools like ATMs more than the use of the Internet for the transaction. Hence, this finding also supports the survey carried out by Intermarc Consulting Limited, that automated teller machine (ATM) services and others

provided by banks popular e-business platform in Nigeria. It was discovered that ATM awareness ranked higher than that of current account and slightly below savings account

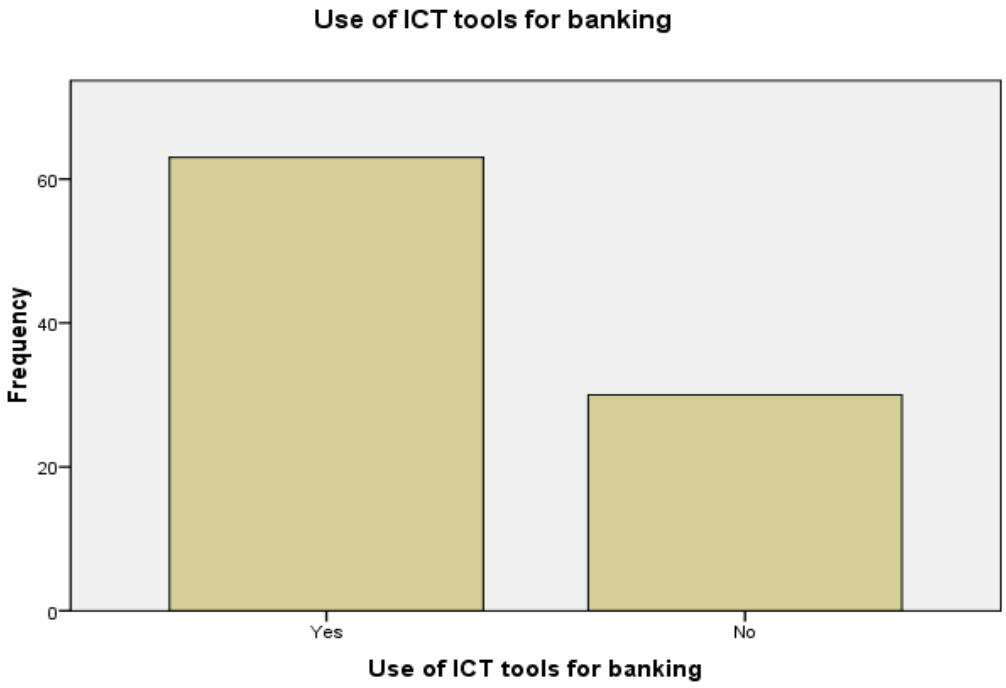

Figure 13: Use of ICT tools for banking

The last question in the part A of the questionnaire was to survey the length for which they have been using the internet and other ICT for transaction with the bank. The response received on question 5 which is 'if you answer is 'Yes' above, since when have you being using it' shows that only the 63 out of the 93 were qualified to answer this question based on its relationship with the previous question. The usage length of less than 3 years has 38.7 and that represents the largest category. Both respondents that have been using it for 3-5 years (24.7 percent) and 5-10 years (4 percent) combined together were lesser than those that fall within the less than 3 years category. None of the respondents to this question have being using those ICT tool for more than ten years. Figure 14 represents the analysis of the response to this question. Since it has been said in the earlier part

of this research that popularity of ATMs only gained its popularity after the bank consolidation of 2005 and point of sale machine is just gradually growing. Thus, the introductory year of the ICT equipment in banking and the experience of the respondents to the research are strongly related.

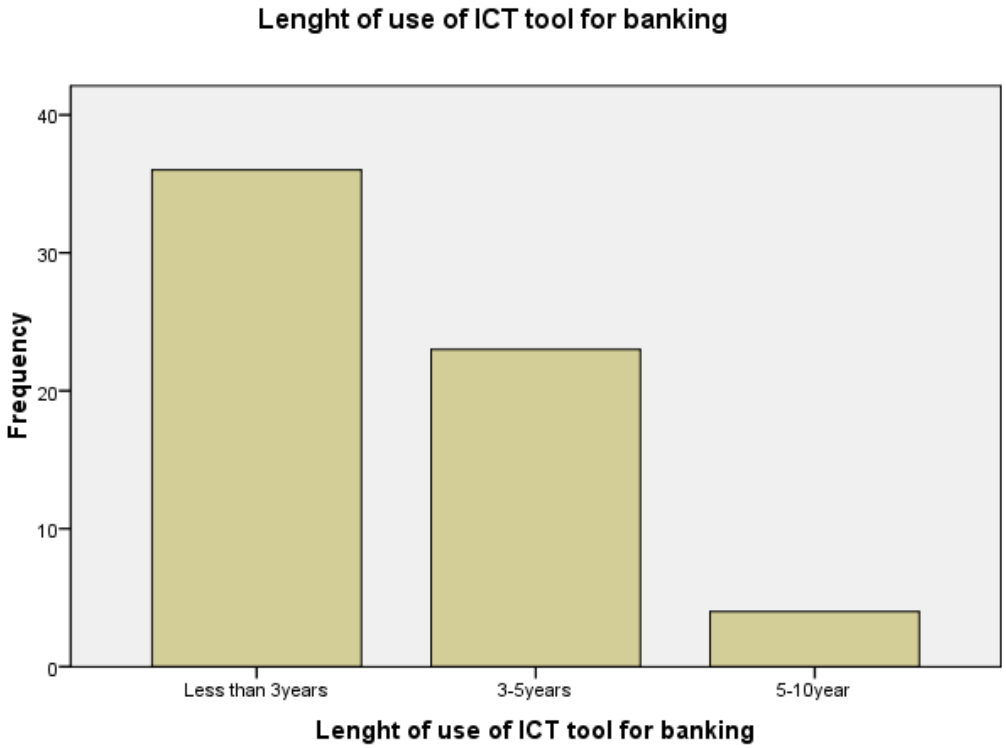

Figure 14: Length of use of ICT tools for banking

Question 6-18 were categorized into a part named part B and it was designed to survey the opinion of the customers on the challenges confronting then in transacting online with their banks or other online transaction activities. The questions were used in arriving at answer to the second research question which is 'what are the challenges confronting Nigeria customers in the use e-business platform?' This part of the questionnaire make use of Likert scale which is a psychometric scale used in questionnaires, and is the most widely used scale in survey research. In this part the respondents have the option of picking what best represent their own opinion. The scales are; strongly disagree, disagree, undecided, agree and strongly agree and 1-5 are assigned to them respectively.

The style used in the part of the questionnaire is to make a statement based on the research model and allow the respondents to pick from the range of strongly disagree to strongly agree.

Question 6 which is 'the increase in number of phone subscribers has positive effect on growth of e-business facilities' was to confirm if the customers also agree with that view as discussed in the research model. The responses received revealed as shown in figure 15 below, that 81 percent of the respondent agreed that the increase in number of phone subscribers have a strong positive effect on making online transaction and business activities. It was only 8.6 percent that strongly disagreed while 1.1 percent was undecided. If the number of respondents that also strongly agree (8.6 percent) are added to the 81 percent that agree it will show that more 89 percent of the respondent agreed with the proposition. The further findings of the research on this response show that most of the GSM services providers in the country give the customers opportunities of connecting to the internet. This finding is consistent with the research of Economist Intelligence Unit that the growth of telephone subscribers is the major factor for growth of e-business usage.

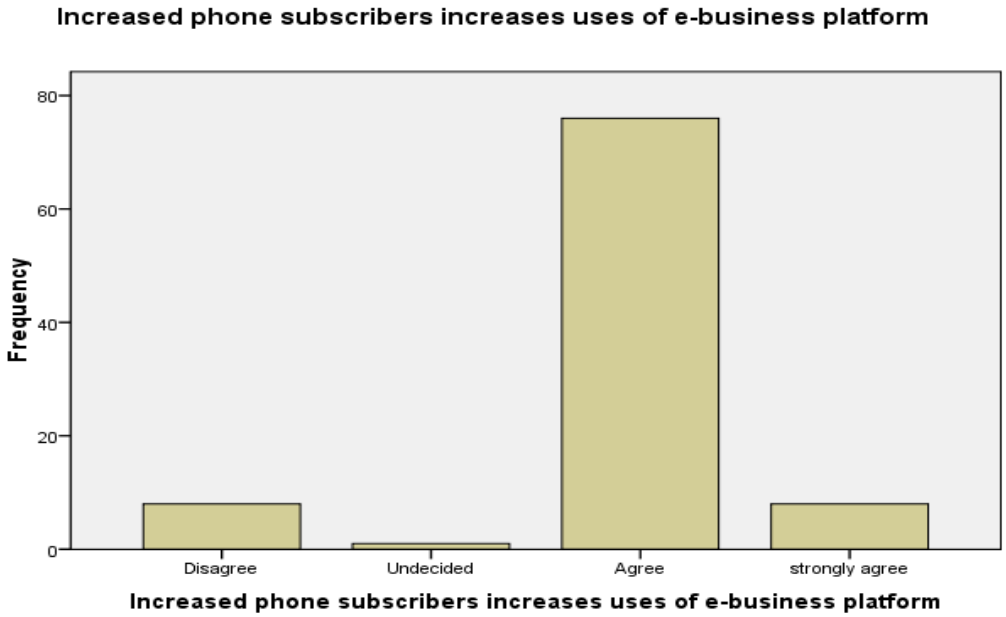

Figure 15: Relationship between phone subscribers and e-business use

The seventh question which is ‘customers will transact online with the bank, if they have access to the internet’ got the response as shown in figure 16. The response to the statement reveals that 71 percent of the responses agree with the statement. 36.6 out of the 71 percent above were for strongly agreed. It must be mentioned that 15.1 percent undecided respondents show that access to internet will not be the only factors that will be considered by customers in using e-business platforms. 14 percent (1.1 strongly disagree and 12.9 disagree) respondent disagreed with the statement and this might suggest that even with access to internet some people might not make use e-business platform for transaction. The submission of the research is that 29.1 percent that did not either agree or strongly agree is a significant number to show that there are other determinants of online transaction than access to the internet connection. This is consistent the survey of Chimeke and Longe 2007, which posited that access to the internet is important for online transaction and dealings.

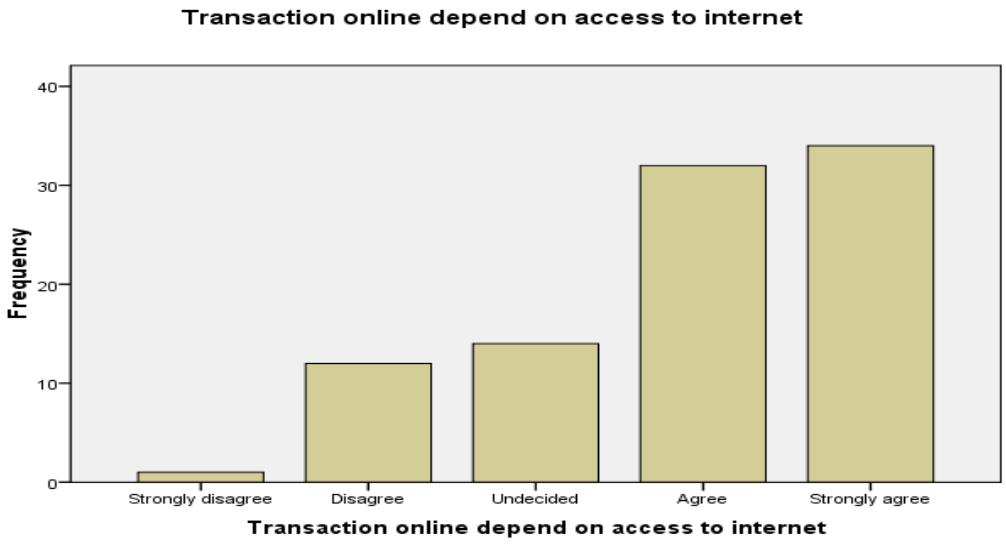

Figure 16: Relationship between transaction online and access to internet

Question 8 is ‘low number of customers with computer and computer knowledge limits online transaction and businesses’. The 28 percent of the respondents strongly agreed and 37.6 percent agreed too. The fact that more than 65 percent of the respondents agreed shows that low level of computer penetration challenge to

the increase use of e-business platforms in the country. 5.4 percent and 18.3 of the respondents strongly disagree and disagree respectively. This might implies that, without access to computer or knowledge of its use there are possibilities of those people making online transaction. It is not surprising that 10 percent of the respondents were still not falling in either the agreed or disagreed side. But the surprising thing is that 10 percent is significant enough not to be ignored. The finding of the research is however a little bit in variance with the previous research of International Telecommunication Union and Economist Intelligence Unit that stated that computer penetration affect e-business strongly.

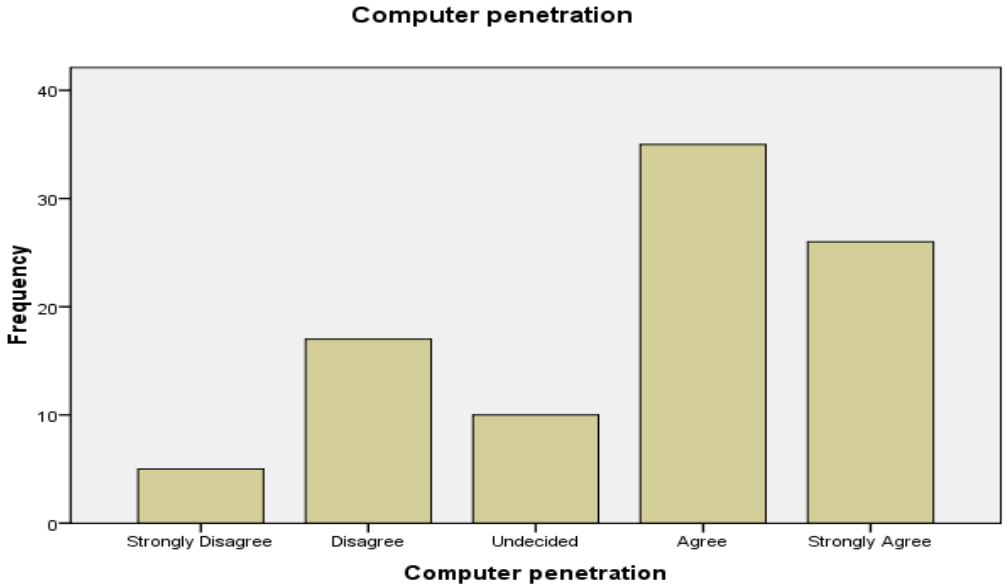

Figure 17: Relationship between transaction online and computer Penetration

The ninth question was ‘cost of computer and some other ICTs equipment are too expensive for some customers’. The intention of the researcher here is to know if the customers feel that the cost of computer and other ICTs equipment that are the facilities that e-business relay greatly on is expensive. Their response shows that only 42 percent of the respondents agreed (33 percent agree and 19.4 strongly agree) with the statement. This reveals that, compared to those respondents that

falls on the disagreed part, 42 percent is small to think that computer and other ICT equipments are expensive in the country. 3.2 percent and 37.6 percent of the respondent strongly disagreed and disagreed respectively. 6.5 percent were undecided. More than 47 percent tick some other than agree or strongly agreed. This is quite different from the findings of the research of Ajayi (2006) and Chimeke and Longe (2007), which posited that high cost of computer, debar the growth of e-business in the country. Further examination of reason behind the nature of the variance in the result shows that the computer and other ICT market of the country is flooded with cheap Asian products, thus there are alternatives to expensive ones. Figure 18 below is the bar chart representation of the above analysis.

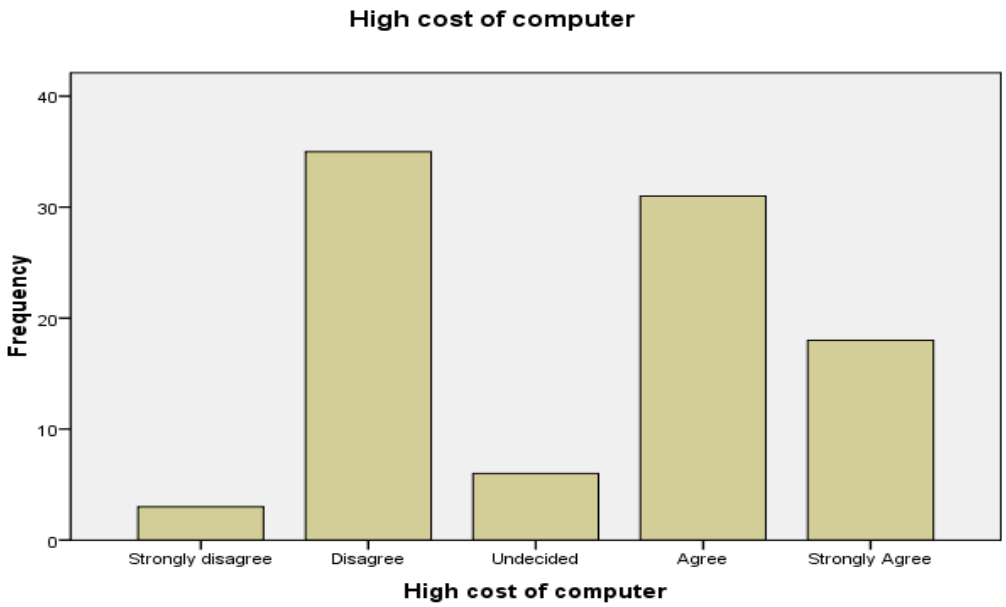

Figure 18: High cost of computer and e-business

The tenth question is ‘High cost of internet connection will make many customers to keep using the traditional rather than online banking’. The purpose of this question is to know what the customers feel about the relationship between the online business transactions and high cost of internet cost. The response the question generated is as show in figure 19.

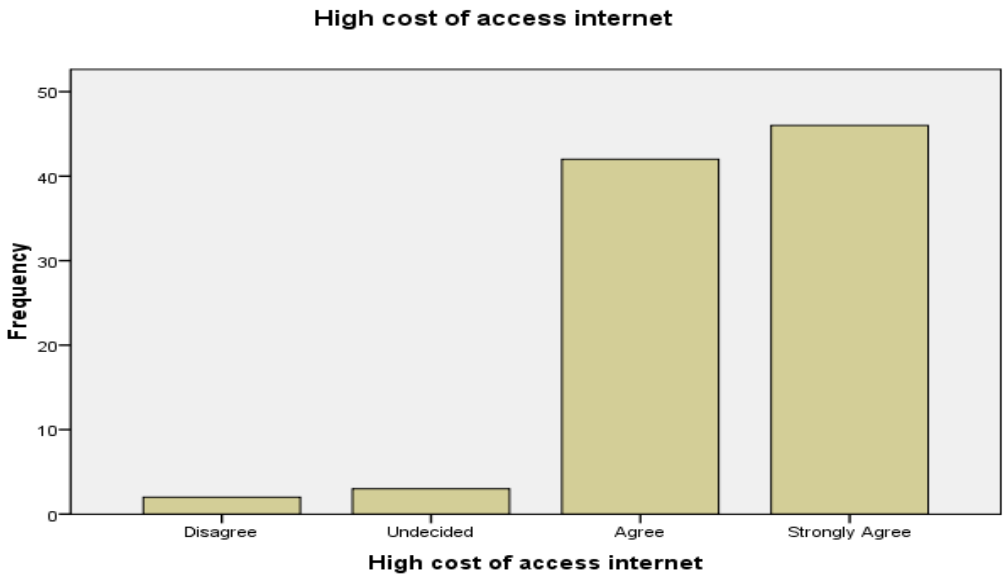

Figure 19: High cost of Internet connection and e-business

94.7 percent (45.2 agree and 49.5 strongly agree) of the respondents to the question agreed. This shows that most of the respondents still believe that the internet cost is still expensive in the country. It was only 2.2 and 3.2 percent of the respondents that disagreed and undecided respectively. None of the respondents strongly disagrees. Thus, this finding shows that the cost of access to internet connection in the country is really high such that most customers will have to depend largely on the public cybercafé where the charges are high too. This finding is consistent with the survey of ITU on all African countries in 2009. It argued that the cost of access to internet is expensive when compare with the per capital income of individuals.

Question 11 was 'if value of Naira is also affecting the cost of ICTs tools'. The question was asked in order to confirm from the customers if they also feels that the exchange rate price of most of these ICTs tools, which are mostly imported into the country is making some of the products to be expensive and thereby having consequential effect on e-business. The responses show great diverse opinion among the customers. The response is as shown the figure 20 below.

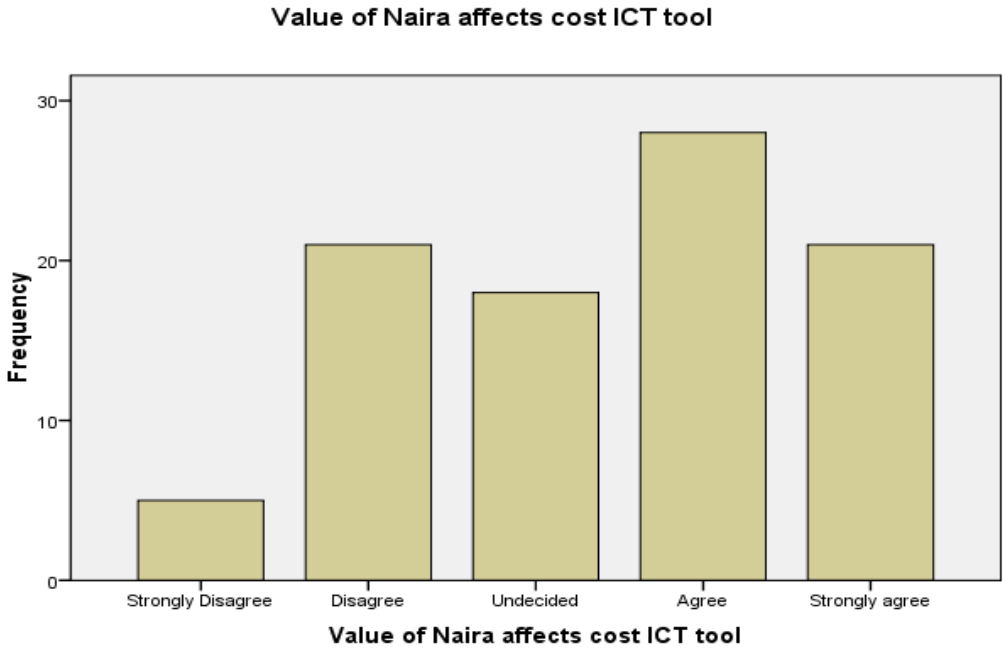

Figure 20: Value of Naira on cost of ICTs equipments

Except for strongly disagreed that have 5.4 percent; every other opinions have very closer percent. 52.7 respondents agree (22.6 strongly agree and 30.1 agree) and this will give the impression that many customers feel that the value of Naira (Nigeria currency) has every on the price they buy the ICT equipment in the country. But the number of respondents that did not agree with this statement in any form is also significantly high too. 47.3 percent shares among the three other-than agree options (5.4 strongly disagreed, 22.6 disagreed and 19.4 undecided) is also really high to conclude that customers view over this statement greatly differs. This is not consistent with the position of Ajayi (2006) that insisted that the weak nature of the currency is another challenge to the use of e-business in Nigeria.

Question number twelve was ‘Unstable power supply is also a challenge to making online transaction and businesses’. This particular question is to confirm if the customers also subscribe to the proposition that unstable power supply in

the country is also a challenge to their making of online transaction and other e-business platform. The response as shown in figure 21 has many of the respondents agreeing with the proposition. It is only just 1.1 percent that disagree with the proposition and 1.1 did not answer this question. The fact that more than 90 percent of respondents (53.8 agreed and 37.6 strongly agreed) agreed to the proposition shows that customers are really confronted with the unstable power challenge. 6.5 respondents did not agree nor disagree and none of the strongly disagree with the statement. Thus it will not be out of place to posit that unstable power supply is a great challenge to the use of e-business models and platform in Nigeria. The result of this research is consistent with the finding of ITU 2009 and Ajayi 2006.

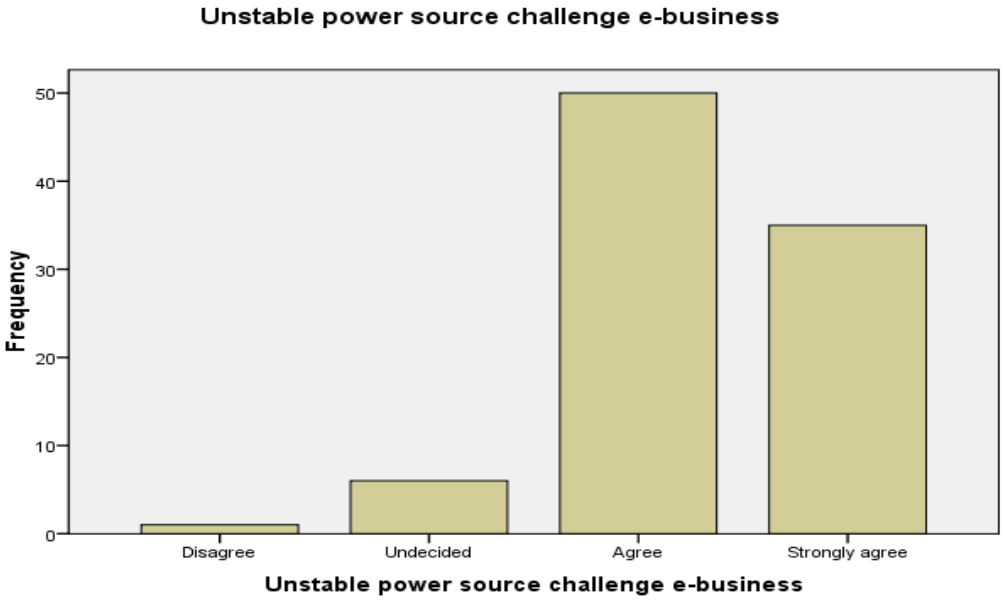

Figure 21: Unstable power supply challenges e-business

The next question which is the thirteenth was ‘slow internet connection discourages the making of online banking and other transactions’. 62.4 percent and 16.1 percent respondents agreed and strongly agreed respectively. This implies that more than 78 percent of the respondent also feels that slow internet has to do with the internet bandwidth is another challenge. Further clarification

shows that broadband penetration is very low in the country. And this may be the major reason behind the strong support for the proposition. Nevertheless, 7.5 percent of the respondents were undecided and 3.2 did not respond at all. Those respondents that disagreed were just 10.8 percent and this is also significant enough to show that even when the internet is slow, some customers may not be discouraged from making use of e-business platform or other online transactions. Figure 22 below is the graphical representation of the view of the respondent with respect to the proposition. This result is consistent with the postulation of Economist Intelligence Unit 2009. EIU started that internet bandwidth is a factor that affect e-readiness of any country.

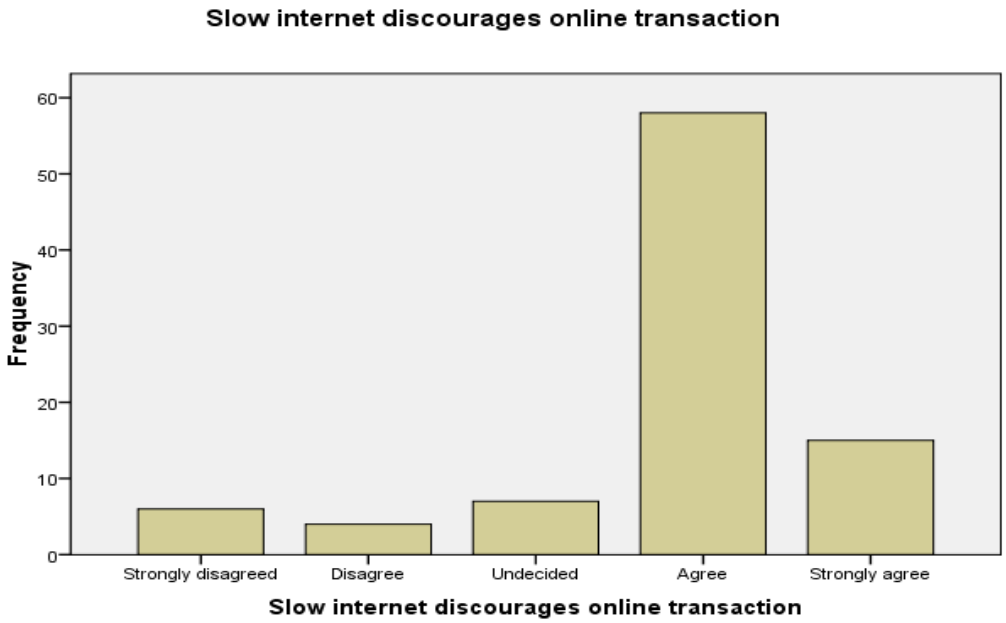

Figure 22: Slow internet connection discourage online transactions

The next question being the fourteenth was ‘security threat (hacking, Phishing, fraud and privacy) is of great worry to customers while making online transaction and dealing’. This question is to confirm from the customers if they also feel insecure while transacting online with the bank. And their response is as shown in figure 23.

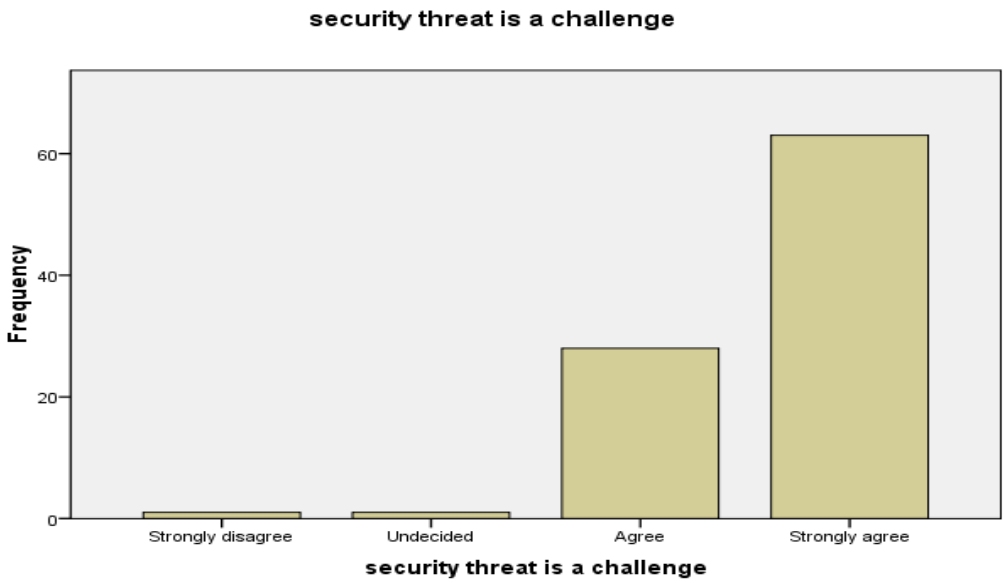

Figure 23: Security threat is a challenge to e-business

97.8 percent of the respondents agree with the proposition. It is worthy of mention that even out of the 97.8 percent that agreed, 67.7 percent strongly agreed. This shows that insecurity in the cyberspace for legitimate user is a global problem that is also of worry to the bank's customers too. It is only 1.1percent respondents that strongly disagree and another 1.1 percent of them were undecided. Thus, the research posits that security threat is also a challenge that confronts the banks' consumers. All previous researchers used in the study agreed that security threat is a challenge to e-business.

Question 15 and 16 were asked in order to better understand one proposition of the research model. Question 15 was 'customers will avoid online transaction and dealing in the absence of legal protection for their transaction'. And question 16 went further to asked about what the reaction of the customers will be if there are legal frameworks that protect their transaction. The question 16 was 'customers will be ready to transact or increase their online transaction if they are legally protected'. The response generated by the question 15 shows that 77.4 percent of the respondents agree that they will avoid as much as possible online transaction in the absent of legal framework protect them online transaction.

However in the response to question 16, 94.7 percent respondents posited that if there is a standard legal framework in place transaction will increase because many customers will be ready to transact or/and deal online. It is worthy of mention that more than 11 percent of respondents to question 15 still disagree with the proposition and 10.8 percent respondents were undecided. This still implies that significant number among the respondents did not see much relationship between the use of e-business platform and legal protection. But the fact that 94.7 will be ready to increase their online transaction is also impressive and show that legal framework is quite important and its absence is also a challenge that confronts customers willing to use it. These analyses are shown in figure 24 and 25 below. The finding here is also consistent with the findings of Economist Intelligence Unit which state that legal environment is necessary for the determination of e-readiness of any country.

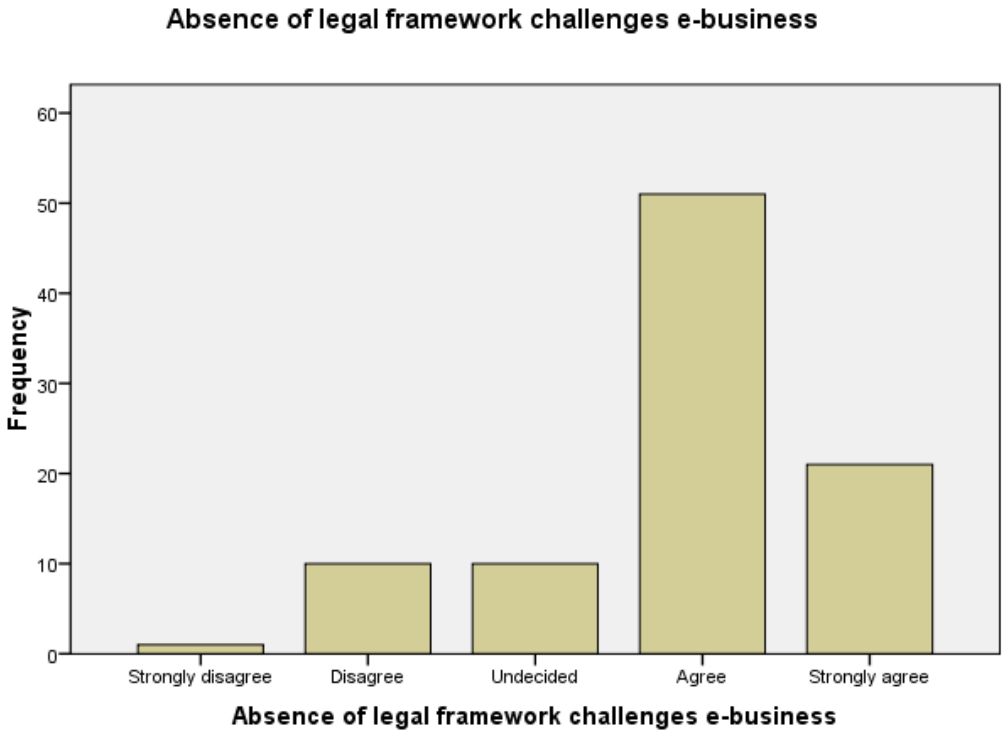

Figure 24: Absence of legal framework challenges e-business

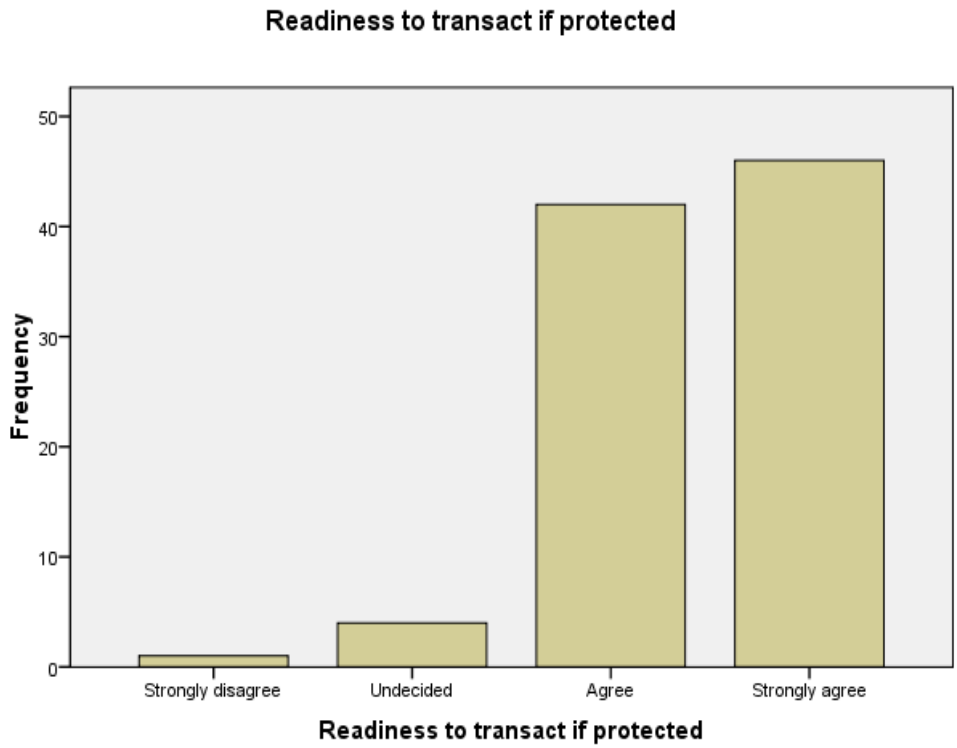

Figure 25: Presence of legal framework favours e-business

The next question was ‘many customers are not making online transaction because they are not literate especially in the use of internet and other ICT tools’. The response shows that none of the respondent strongly disagreed and just only 1.1 percent of the respondents disagreed. On the other, more than 97 percent of the respondent agreed (31.2 agreed and 66.7 strongly agreed). This shows that e-illiteracy is also a challenge that the customers strongly believed is also a challenge that will confront many customers. Figure 26 is the graphical representation of the response to this question. This finding is related to the previous finding of the researchers used in the building the adapted research model.

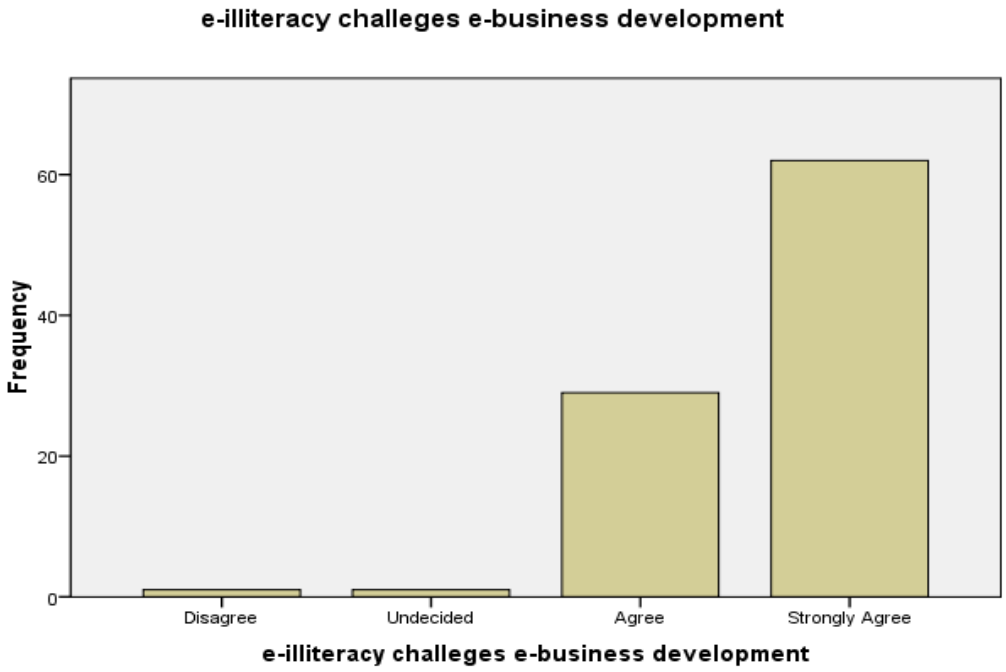

Figure 26: e-illiteracy challenges e-business

The last question in this part of the questionnaire was ‘some customers do not make online transactions and other dealing due to some belief, norm, idea, habit or orientation’. The reason for asking this question is to know if the customers will still be debarred from making online transaction when they are connected to the internet, may be because of some cultural reasons. Among the entire propositions in the research model, this is the one that most of the respondents strongly disagree with. 65.6 percent of them strongly disagree with the proposition, and this implies that there is a strong feeling that there are no major cultural reasons why the customer will not transact online. It is surprising that 18.3 percent of the respondents were undecided. Nevertheless, 6.5 percent and 9.7 percent of the respondents agree and strongly agreed with the proposition. Though 16.2 percent of the respondents agreed there is great indication that there is no major cultural reason why customers will not transact online. Figure 27 shows the way the respondents feel about the proposition. The result of this research

strongly differ from the position of the Ifinedo (2006) and Economist Intelligence Unit (2009) that claim that social and cultural barrier affect e-business growth.

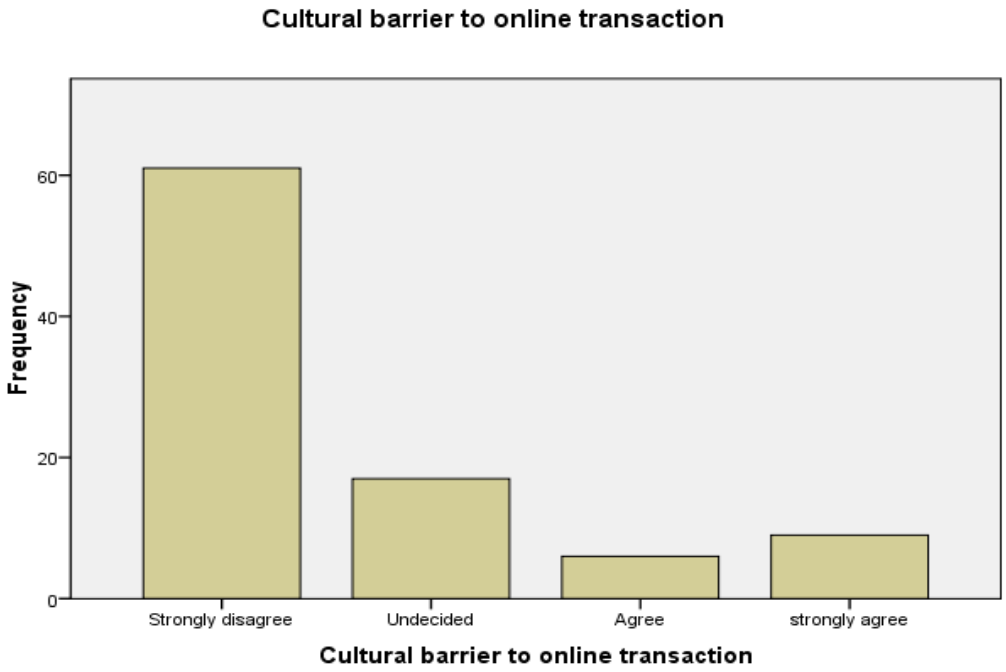

Figure 27: Cultural barrier effects on e-business

The last part which part 'C' of the questionnaire has only one question and it is intended to survey the opinion of the customers on which of challenges did they considered as the most challenging. The response receive to the question here show that majority of the respondents still feel that the greatest challenge is cyber security threat while transacting online. 74.2 percent of the respondents posited that threat to the security of customers online is the greatest challenges. But 24.7 percent of them feel that affordability is the greatest challenge to the use of e-business platform or making online transaction. 1.1 percent of the respondents think that greatest the challenge debarring customers from making online transaction is the low penetration of e-business and ICTs facilities in the country. It is quite surprising that none of the respondents considered social-cultural barrier and the absence of legal framework as a great challenge. This implies that the

customers are majorly confronted with the one they consider to the greatest challenge. This result is only to confirm which of the challenges that the previous researchers have come up with is the greatest in the opinion of the customers.

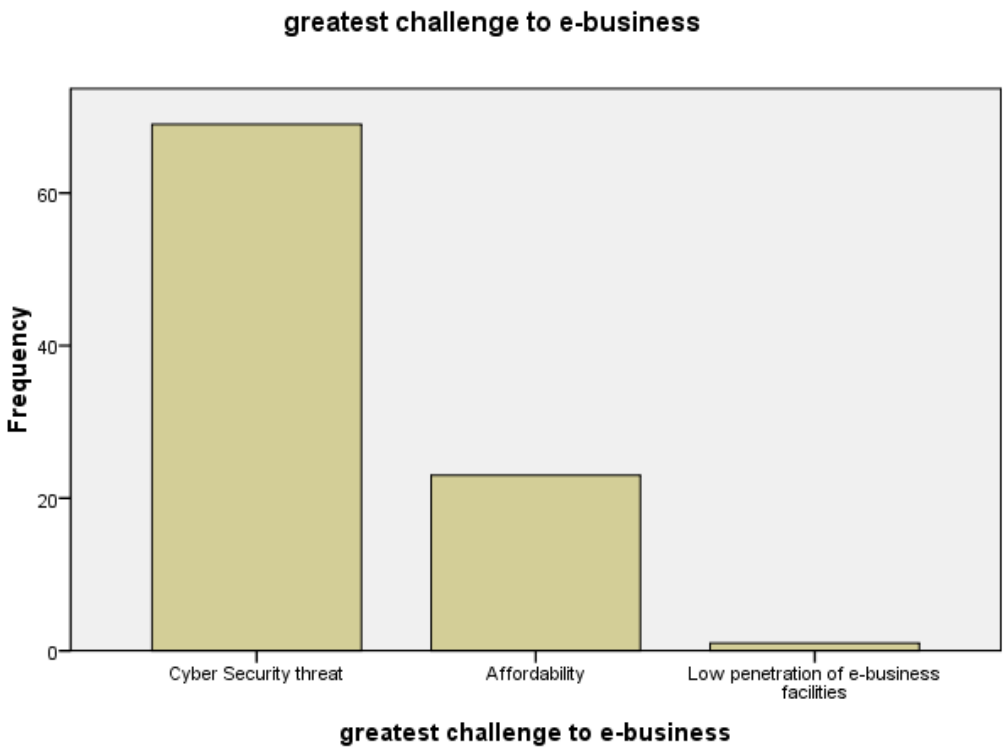

Figure 28: Greatest challenges to e-business

5 CONCLUSION AND RECOMMENDATION

This part of the research is the final part and it will have in it the summary of the principal findings of the entire study. The part will also include recommendation for future research and practical suggestions for the stakeholder in the firms and government agencies deploying e-business in the country.

5.1 Summary of Finding

The research commenced by giving an overview of how e-business is changing many traditional ways of doing business. It looked into the success stories about the e-business in the developed and it went further to analyze why developing countries, including Nigeria, are making effort to work in ways that will increase the deployment and use of e-business. The developing countries, and most especially Nigeria, are making all this effort in order to boost the economy and increase the country's integration into the global arena. Due to the fact that most researchers focus on firms and the government the analysis of growth or deployment of e-business model in Nigeria with little or no consideration for the customers, this research is based on the assumption that the side of the customers needed to be discussed. And it was thought that it will be of interest and relevance to both academics and government and firm deploying e-business. The research continued with in-depth analysis of e-business from many angles. When e-business was compared with traditional business model, it was clear that the major difference between the two is the extent of use of technology and Information and Communication Technologies in the business and business processes. The research aligns with the opinions of the researchers that argue that e-business is broader than e-commerce and cannot be seen as synonymous as some researchers have posited. It, however, admits that e-commerce is probably the precursor of e-business. The recent deployment of e-business model and encouragement of it by the government is due to some major trends. These trends that are increasing the deployment and use of e-business are firstly customer-oriented trend and others are e-services trends, organization trends, employee megatrend, enterprise technology trend and general technology trend. The research also made mention

of different categories of e-business among which are e-supply, e-trading, e-banking and others. It quickly ran through general challenges and the benefits of e-business model.

The study was narrowed down to Nigeria and the state of e-business supporting facilities like the internet and other ICTs were looked into. The research showed that the information and communication sector of Nigerian economy is growing rapidly with large potential yet to be covered. The growth is connected with the liberalization of the sector. The growth of ICTs and its convergence are the factors that determine the state of e-business adoption and usage in the country.

The research also came up with research model of the challenges confronting customers in the use of e-business in Nigeria. A research model that was adapted from work of previous research was grouped into major four categories. Thus, the model of challenges of e-business in Nigeria has infrastructures, affordability, ICT environment and quality and reliability as its indicators.

The empirical finding of this study shows that customers are aware of the internet and some other ICT tools but they are still using them for some of the basic use. They are yet to fully utilize it for online transactions, banking and other dealings. Their basic uses such as communication, entertainment and information search are still of great importance. Further study on the challenges show that the internet and ICTs infrastructure penetration in the country is a great challenge to use of e-business. Affordability is another challenge that was noticed. The customers are also interested in the reliability and quality of supporting facilities for e-business. However, it was seen in the survey that the ICT environment is of less importance when compared to the other three categories of the challenges. Finally the greatest challenges customers face are security threat and affordability.

5.2 Suggestion on challenges of e-business in Nigeria

Though this research is exploratory and partially descriptive yet it discovered the need for suggestions.

The government need to put in place a legal framework that will protect the customers and any other legal transaction on the internet. This legal framework used in other country includes digital ID, censorship and others. It is also important that the government should invest in ICT education as the sector is contributing to the GDP. Research should be encouraged in the manufacturing of ICT equipments, so that the additional cost of importation is eradicated.

Governmental policy is a significant driver of e-business. As such, the government of the country needs to focus more on policy of infrastructure development. Intellectual property protection and the rule of law must be enforced at the initial stage of development of e-business in the country

The issue of unstable power supply has being widely discussed yet the research find out that it is needed for ICT to function well in the country. Online fraud is one of the challenges to e-business growth, it is not enough to run after fraudster as the Economic Fraud and Crime Commission (EFCC) is doing in Nigeria, customers too needed enlightenment.

5.3 Recommendation for further research

E-business platform and its introduction into business and studies in academics is still in its evolving stage. And this development processes is still continuing. Thus, there are many areas that this research was unable to cover; they are equally important and need to be studied further.

Another important reason for further research is that this research needs to be further enhanced and validated with wide range of respondents.

Equally due to time and cost implication, the research focuses on a bank located in Lagos; the commercial center of the country, the research can further be extended to include customers of other banks in the country. Another way of extending it is to select banks branches across the country so that there will be a more through representation of the country.

Some of these important areas for future study are the study into the state of the national policy and legal regulation of e-business in the country

REFERENCES

Aghaunor, L. Fotoh, X. And Lindh, J. (2006) Factors Affecting E-Commerce Adoption in Nigerian Banks, Jönköping International Business School.

Ajayi, G.O. Salawu, R.I. and Raji, T.O (1999) Nigeria after a century of Telecommunication, pg 163-177 in Noam, E.M (ed) Telecommunication In Africa, Oxford University Press, Inc. New York.

Ajayi , L. (2005) ICT Business in Nigeria: Challenges and Opportunities.

Al-Otaibi, M.B and Al-Zahrani, R. (2004) Evaluating e-Business Adoption: Opportunities and Threats, King Faud University Riyadh Saudi Arabia. Available on the Internet :< URL: http://digital.library.ksu.edu.sa/paper1117.html>

Amor D. (2000). The E-Business (R)Evolution: Living and Working In An Interconnected World, Prentice hall PTR, New Jersey.

Andam, Z. R. (2003), E-Commerce and E-Business, The e-ASEAN Task Force and the UNDP Asia Pacific Development Information Programme (UNDP-APDIP).

Bates, R.J. (2002). Broadband Telecommunication Handbooks, McGraw-Hill Professional.

Burns, C. A. and Bush, F. R. (2000). Marketing Research. 3rd edition. Prentice – Hall, Inc

Charlesworth, A. (2009). Internet Marketing: A Practical Approach, Elsevier Limited, Oxford, UK.

Chibusho, Mr. (25.02.10) Interview and Discussions, Customer Contact Centre, Guaranty Trust Bank PLC, Nigeria.

Chiemeke, S.C and Longe, O.B. (2007). Information and Communication Technology Penetration in Nigeria: Prospects, Challenges and Metrics. Asian Journal of Information Technology, Vol 6. Pg 208-287

Cooper, R. D. and Schindler, S. P. (1998). Business Research Methods, 6th edition, The McGraw-Hill Higher Education. New York

Davydov, M. M. (2001). Corporate Portals and E-Business Integration, McGraw-Hill, New York.

Economists Intellegent Unit (2009) E-readiness rankings 2009: The usage imperative.

Eze U.C. (2008) E-Business Deployment in Nigerian Financial Firms: An Empirical Analysis of Key Factors, International Journal of E-Business Research, Vol. 4, Issue 2, Pg 30-47.

Fellenstein, C. And Wood, Ron (2000). Exploring E-Commerce, Global E-Business, and E-Societies, Prentice Hall, Inc. New Jersey.

Fletcher, R. Bell, J. and McNaughton, R. (2004). International E-Business Marketing, Thomson learning, London.

Ghauri, P and Gronhaug, K (2005). Research Methods in Business Studies: a Practical Guide, 3rd edition, Prentice Hall Europe.

Ghauri, P. Gronhaug, K. and Kristianslund, I. (1995). Research Methods in Business Studies: A Practical Guide, Prentice Hall Europe.

Gray, D. E. (2004). Doing Research In the Real World, Sage Publication Limited, London.

Greenstein, M. and Vasarhelyi (2002) Electronic Commerce: Security, Risk Management and Control, 2nd edition, The McGraw-Hill Higher Education, New York.

Hargittai, E. 1999. “Weaving the Western Web: Explaining Differences in Internet Connectivity among OECD Countries”. Telecommunications Policy, 23: 701-718.

Idowu, B. Ogunbodede, E. and Idowu, B. (2003). Information and Communication Technology in Nigeria: The Health Sector Experience, Journal of Information Technology Impact, Vol. 3, No. 2, pp. 69-76. (Referred 2nd Feb, 2010) Available on the Internet :< URL: http://jiti.com/v03/v3n2.069-076.pdf>

Ifinedo P. (2006). Towards e-government in a Sub-Saharan African Country: Impediments and Initiatives in Nigeria.

International Telecommunication Union (2009), Information society statistical profile Africa 2009 (Referred 19th Feb, 2010) Available on the Internet : <URL:http://www.itu.int/dms_pub/itu-d/opb/ind/D-IND-RPM.AF-2009-PDF-E.pdf>

International Telecommunication Union (2008), African Telecommunication/ICT Indicators 2008: At a Crossroads, (Referred 29th Jan, 2009) Available on the Internet :< URL: http://www.rfi.fr/actufr/images/102/rapport_UIT.pdf>

Kalakota, R. and Robinson M. (2001), E-Business 2.0: Roadmap For Success, Addison-Wesley Publishing Company, London.

Kamel, S (2006), E-Business in Developing Country: Opportunities and Challenges, Idea Group Publishing, UK and USA.

Kumar, V. (2000), International Marketing Research, USA. Prentice Hall

Kaur, K. (2005). Consumer Protection in E-Commerce in Malaysia: An Overview UNEAC Asia, Papers No. 10. (Referred 3rd March, 2009) Available on the Internet :<URL:http://www.une.edu.au/asiacentre/PDF/KKaur.pdf>

Leebaert, Derek (1998). The Future of the Electronic Marketplace, The MIIT Press, London.

McMahon, E. (2000) Bricks To Clicks, Stoddart Publishing Co. Limited, Canada.

Melao N. (2002).E-business processes and e-Business Process Modelling: a state-of-the-art overview, International Journal of Services Technology and Management Issue: Vol. 11, No. 3 Pg 293 - 322

Ndukwe, N, (2003). An Overview of Evolution of the Telecommunication Industry in Nigeria and Challenges ahead (1999 – 2003), Nigerian Communications Commission Telecom Summit 2003, Lagos Nigeria

Neelankavi, J. P. (2007). International Business Research, M.E. sharpe, Inc, New York.

NTWG-ICT (2009). Report of the Vision 2020 National Technical Working Group on Information and Communication Technology (2009), Abuja Nigeria (Online) (Referred 20th Nov, 2009) Available on the Internet:URL:http://www.npc.gov.ng/downloads/Governance%20NTWG%20Report.pdf

Parasuraman, A. (1986). Marketing Research, Addison-Wesley Publishing Company, Inc

Salawu, R.O. and Salawu M.K. (2007). The Emergence of Internet banking in Nigeria: An Appriasal, Information Technology Journal, Vol. 6, Pg 490-496

Turban, E. and King, D. (2003). Introduction to E-Commerce, Pearson Education, New Jersey.

Walliman, N. (2001). Your Research Project: A Step By Step Guide For The First-Time Researcher, Sage Publication Limited, London.

White B. (2000). Dissertation Skill for Business and Management Students, Continuum, London and New York.

URL: http://www.budde.com.au/Research/Nigeria-Convergence-Broadband-and-Internet-Market.html (referenced 20.01.10)

URL:http://banners.noticiasdot.com/termometro/boletines/docs/consultoras/mike-jensen/2000/apc_jensen_africa_internet-2000_status.pdf (referenced 21.01.10)

URL:http://www.mbendi.com/indy/cotl/af/ng/p0005.htm (referenced 04.02.10).

URL: http://www.morganstanley.com/ (referenced 5.02.10).

URL:http://news.bbc.co.uk/2/hi/africa/629770.stm, (referenced 10.02.10)

URL:http://www.itu.int/osg/spu/publications/birthofbroadband/faq.html (referenced 15.02.10).

URL:http://www.punchng.com/Article2Print.aspx?theartic=Art2009112430160 (referenced 20.02.10)

URL: http://www.internetworldstats.com/af/ng.htm (referenced 21.02.10)

URL: http://www.budde.com.au/Research/Nigeria-Telecoms-Mobile-Broadband-and-Forecasts.html (referenced 21.02.10)

URL: http://www.wisegeek.com/what-is-internet-bandwidth.htm (referenced 22.02.10)

URL: http://www.fernando.parreiras.nom.br/palestras/ebus.pdf (referenced 24.02.10)

URL: https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html (referenced 24.01.10)

URL:http://www.marketresearchworld.net/index.php?option=com_content&task=view&id=11&Itemid=64 (referenced 26.02.10)

URL: http://www.businessdictionary.com/definition/directory.html (referenced 27.02.10)

URL:http://www.ehow.com/facts_5903880_traditional-business-vs_-e_business.html, (referenced 28.02.10).

URL:http://www.prlog.org/10524036-counterfeit-goods-on-the-web-priceminister-leads-the-way-in-europe.html (referenced 02.03.10).

URL:http://www.thenationonlineng.com/dynamicpage.asp?id=36290 (referenced 14.03.10).

APPENDICES

Appendix 1: Questionnaire

Appendix 2: Nigeria Map

Appendix 3: Logo of Guaranty Trust bank PLC

Appendix 1

Research on Challenges of e-Business in Nigeria Banks

Dear Respondent,

I am writing my thesis that seeks to survey the opinion of customers of Guaranty Trust Banks about the challenges they faced in using e-business applications for transaction and other dealings. All information provided will be treated as strictly confidential and answers will be released only as summaries in which no individual respondent can be identified. I am very grateful for your time and effort when answering this questionnaire.

PART A

1. Since when have you being using the Internet?

☐Less 3years ☐3-5years ☐5-10years ☐More than 10 years

2. From where do you gain access to internet?

☐Home ☐Café ☐Phone ☐Office
☐School ☐More than one of the above

3. For what activities do you use the Internet?

☐ Communication ☐Information (Research, News, Search Engine etc)
☐ Entertainment (Social Network, Game or Chat Rooms)
☐Shopping ☐Banking ☐Combination of two or more

4. Do you use the e-Business facilities (Computer, GSM, Internet, ATMs etc) in transacting with the bank?

☐Yes ☐No

5. If your answer is 'Yes' above, since when have you being using it.

☐Less 3years ☐3-5years ☐5-10years ☐More than 10years

PART B:

Please respond by ticking <u>one</u> number from 1 to 5 on the scale for each of the items below.

1	2	3	4	5
Strongly disagree	Slightly disagree	Un-decided	Slightly agree	Strongly agree

6. The increase in number of phone subscribers has positive effect on growth of e-business facilities. 1☐ 2☐ 3☐ 4☐ 5☐

7. Customers will transact online with the bank, if they access to the internet. 1☐ 2☐ 3☐ 4☐ 5☐

8. Low number of customers with computer and computer knowledge limits online transaction and business 1☐ 2☐ 3☐ 4☐ 5☐

9. Cost of computer and some other ICTs equipment are too expensive for some customers.

1☐ 2☐ 3☐ 4☐ 5☐

10. High cost of internet connection will make many customers to keep using the traditional rather than online banking. 1☐ 2☐ 3☐ 4☐ 5☐

11. The value of Naira is also affecting the cost of ICTs tools.

1☐ 2☐ 3☐ 4☐ 5☐

12. Unstable power supply is also a challenge to making online transaction and businesses.

1☐ 2☐ 3☐ 4☐ 5☐

13. Slow internet connection discourages the making of online banking and other transaction.

1☐ 2☐ 3☐ 4☐ 5☐

14. Security threat (hacking, Phishing, fraud and privacy) is of great worry to customers while making online transaction and dealing'

1☐ 2☐ 3☐ 4☐ 5☐

15. Customers will avoid online transaction and dealing in the absence of legal protection for their transaction.

1☐ 2☐ 3☐ 4☐ 5☐

16. Customers will be ready to transact or increase their online transaction if they are legally protected. 1☐ 2☐ 3☐ 4☐ 5☐

17. Many customers are not making online transaction because they are not literate especially in the use of internet and other ICT tools.

1☐ 2☐ 3☐ 4☐ 5☐

18. Some customers do not make online transactions and other dealing due to some belief, norm, idea, habit or orientation.

1☐ 2☐ 3 ☐ 4☐ 5☐

Part C

19. Which of the following will you refer to as the greatest challenge to e-Business development in the country?

☐Cyber Security threat (Hacking, Phishing, Fraud, Privacy)

☐Affordability (High cost of Access to Internet, PC, Broadband etc)

☐Socio-Cultural Barrier (Level of literacy, ICTs literacy, awareness etc)

☐Absence of Legal framework protecting users of Cyberspace for legitimate transaction

☐Low penetration of e-business supporting Facilities

Appendix 2


SOKOTO
KATSINA
JIGAWA
YOBE
BORNO
ZAMFARA
KEBBI
KANO
KADUNA
BAUCHI
GOMBE
NIGER
ADAMAWA
KWARA
PLATEAU
ABUJA (F.C.T)
OYO
NASSARAWA
TARABA
OSUN
KOGI
BENUE
ONDO
OGUN
EDO
EBONYI
ENUGU
LAGOS
EKITI
DELTA
IMO
CROSS RIVER
BAYELSA
RIVERS
AKWA IBOM
ANAMBRA
ABIA

Appendix 3

Guaranty Trust Bank plc

RC 152324