

**Impact of the Telecommunication Industry on  
the Socio-Economic Life of Nigerians: Okata  
Area of Lagos as Case Study**

**E. E. ANOLIEFO**

20907656

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Supervisor: Prof PW Stoker

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## **Dedication**

I dedicate this work first and foremost, to God, who saw me through the period of study and to my loved ones whose encouragement and support were invaluable.

## **Acknowledgment**

I want to express my gratitude to my supervisor, Professor P. Stoker for his immense assistance and attention while I was carrying out the research study. I recognize the efforts of my colleagues in information exchange. I also want to thank my friends for their helpful contributions especially with the survey.

## **Abstract**

The research study investigates the impact of the telecommunication industry on the socio-economic lives of Nigerians. The Nigerians residing in Okata area of Lagos were taken as case study. 300 samples were selected at random from the residents. The study focused on the economic benefit and social benefit as well as adverse social and economic effect of telecommunication on the citizen of Okata. Two types of questionnaires were developed for the purpose of data acquisition. Questions in the questionnaire were designed to address the research hypothesis developed prior to the research. Apart from individual characteristics of respondents, there are two classes of respondents which are individual respondents and business respondents. The business respondents were further subdivided into two groups which are namely telecommunication-related business owner and non-telecommunication related business owners.

The study revealed that telecommunication brought about economic growth in the area in the form of job creation. However, quality of service lead to money being wasted on services, that is unsatisfactory to the users. Verbal interaction between individuals increased with telecommunication but physical interaction declined. The greatest concern of respondents, according to the survey, is the quality of service. The survey also revealed the need for improving the quality of the service delivered to the users. Though the service is essential, satisfaction of the user is paramount as such to encourage growth and development for both the provider and the user in their respective environments.

## Key Words and Terms

Telecommunication

Liberalization

Deregulation

Socio-economic

Impact Assessment

Network

Service Provider

Interconnectivity

Subscriber

Internet

Corporate Social Responsibility

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## Acronyms

NCC	Nigerian Communication Commission
NPC	Nigerian Population Commission
SIM	Subscriber Identification Module
GSM	Global System of Mobile communication
FDI	Foreign Direct Investment
NITEL	Nigerian Telecommunication Limited
MTN	Mobile Telecommunication Network
GDP	Gross Domestic Product
ICT	Information and Communication Technology
SME	Subject Matter Expert

# Chapter One

## Introduction

### 1.1 General

Since becoming an independent nation in 1960, Nigeria has gone through a great deal of political, social and economic instability; economic and social development of the country has been slow (Wikipedia).

This research was carried out to provide an appraisal for the telecommunication industry in Nigeria using the Okata area of Lagos as a case study. The goal of the research is to determine the impact of the industry in the area and to verify if the industry's activities have resulted in improvements in the economic growth and social welfare of the citizens.

The telecommunication industry took the country by surprise and the effect of the rapid growth is observable on the average Nigerian. This study is aimed at investigating and documenting the impact of the industry on the socio-economic life of Nigerians resident in the Okata area of Lagos state.

The telecommunication sector in Nigeria has been managed by the government till 2001 when the government decided to allow private sector participation in the sector ([www.ncc.gov.ng](http://www.ncc.gov.ng)). However the Ministry of Communications remains the Policy formulating body of the Federal Government. The Nigerian Communications Commission is the country's regulatory body charged with the responsibility of ensuring a proper conduct in all activities in the telecommunication sector of the national economy, as well as monitoring performance in the liberalized, de-regulated and multi operator competitive environment. The Nigerian Telecommunication Limited (NITEL) is the dominant national telecommunication carrier that other licensed operators interconnect with for intra Nigeria traffic routing (Ige, 2003).

Before 2001, according to NITEL, only about 38 percent of the Nigerian population had access to a telephone line ([www.ncc.gov.ng](http://www.ncc.gov.ng)). This 38 percent allegedly comprises of mainly government workers and other highly placed individuals in the society. Hence the telephone then was seen as a luxury. In addition, there was just one Telecommunication Company in existence, which was NITEL, and owned by the government

During the Abubakar government, policies were formulated which sparked considerable interest among foreign investors. This policies, on which included the Nigerian Privatization program, got off well, attracting numerous investors in the different sectors of the economy (Mbamalu, 2005).

In the telecommunication sector, while the privatization program was in progress, the policies also ushered in the deregulation process which provided the sector with more open and competitive opportunities (Mbamalu, 2005). This includes the ability to issue independent cellular and other wireless licenses

With this process, telecommunication companies, both foreign and national bought licences and making the sector the fastest growing sector of the Nigerian economy. The rate of growth was so rapid and enormous that the first wave of entrants such as MTN (Mobile telecommunication Networks) was breaking even in 3 months and declaring astronomical profits only after 6 months!. The questions that arose after the records were made public were numerous and most of the questions raised concerned the practices of these telecommunication companies.

## **1.2 Problem Statement**

**This research project is carried out to determine the impact of the telecommunication service on Nigerians living in the Okata area of Lagos. With the advent and rapid growth of the telecommunication industry in Nigeria, the impact of the industry needs to be profiled such that a trend, which represents the change in what was obtainable before the advent, can be established.**

Technology advancement brings about changes in the way people live and work. The changes are either productive or counter-productive. Though these changes exist, whether acceptable or not, it is required that measures are put in place to mitigate or minimise the adverse effects as much as encouraging and improving the favourable or desirable effects. These effects or impacts depend and differ with individuals according to different condition and status.

Hence it is imperative to know the level of satisfaction of the consumers of the telecommunication services. This would be possible if the expectation of the consumers, residing in the area being studied, Okata, in terms of the quality of the service provided by the companies is understood. The expectation will be determined from the study to be carried out. The shortcomings, which are

actually the difference between the expectations of the consumers and the actual service they receive will be determined. This would provide the telecommunication companies with the information required to improve their services, thereby closing that gap between the expected and the delivered. Though it is quite evident that more jobs were created directly and indirectly, helping out in one of the major socio-economic problems i.e. unemployment, there are other effects which should be investigated. Some of these impacts are not measurable but can be quantified by their intensity.

It is important to note that the goal of socioeconomic study is generally to bring about socio-economic development (Wikipedia). This improvement is usually in terms of changes in metrics such as GDP (Gross Domestic Product) life expectancy, literacy, levels of employment, etc (Wikipedia). Changes in less-tangible factors such as freedom of association and bridging ethnicity divide, personal safety, freedom from fear of physical harm, and the extent of participation in civil society, are also considered in some socioeconomic studies. However these less-tangible factors mentioned in this paragraph will not be considered in the research.

### **1.3 Research objectives**

The impact of the telecommunication industry, for the purpose of this research, is classified into social and economic impacts. In a nutshell, social impact is effect on people/individual, family and other societal setup while economic impact is concerned with jobs/businesses and money (Lee and Vivarelli, 2006). The effect to be determined could be both positive and negative. The recommendation and plan to address the negative impact will be evaluated.

In assessing the impact of the telecommunication sector in Okata, the following indicators, which are to form the baseline measurement for this research, are considered;

1. The economic impact is assessed on;
  - number of telecommunication-related business
  - unemployment rate
  - effect on other un-related business
  - income
  - cost of service
2. The social impact is assessed on;

- Degree of association/interaction of people
- Community relation

As the country stride into the industrialization era via liberalization and de-regulation processes, the government must deliberately and consistently avoid making the Nigerian citizens the victims of exploitation, by knowing and understanding the impact of the activities of companies on Nigerians.

#### **1.4 Overview of dissertation**

This research focuses on the economic and social impact of the activity of the telecommunication companies on the Nigerians residing in the Okata area of Lagos. The expectation of the people and the actual service they are getting form the basis for the research. The research identifies the shortcoming in the service delivery process and system put in place by the telecommunication companies. For the purpose of this study, the people that reside in Okata would mostly be referred to as the consumer or user. The information gathered would assist the companies to align their marketing and service delivery strategy to the expectation and desire of the consumer. This would make the companies develop better relationships with the consumer.

The research looks at the characteristics, social and economic, inherent in the consumer and the environment before the liberalization of the telecommunication sector and the change that occurred after the liberalization process. The rollout of services by the telecommunication companies was a welcomed development to the people and the companies benefit from the positive response from the people. The people's expectation was to get value for their patronage. The value would be quality service and positive influence on the lives by the telecommunication companies.

The research is carried out in which questions are developed and put across to the consumers, on their impressions and experiences on the service provided by the telecommunication companies.



Data collected from the survey is analysed. The result of the analysis which is the outcome of the research is used as the information required to achieve the main objective of the research; to improve on the quality of service by bridging the gap between the expectation of the consumer and the actual service quality delivered by the companies as well as meeting with the standard set by regulatory bodies both national and international.

The next chapter reviews the state on the telecommunication industry in Nigeria. A review on the social and economic status of the area under study would be carried out. Other studies on impacts assessment relating to socio-economic impacts would be reviewed and related to this research. A profile is created which matches the characteristics on the majority of the service consumers in the area under discussion.

## **CHAPTER TWO**

### **Literature Review**

#### **2.0 General**

The process in modernizing the telecommunication industry in Nigeria has going on since the last 8 years and considerable milestones have been achieved such as creating a second national carrier ([www.ncc.gov.ng](http://www.ncc.gov.ng), 2004). However more work is required to be done as to ensure that the industry serves the people favourably as described in the previous chapter. The previous chapter has identified the objectives of this research study as well as an overview of how the research work is to be done and expectations. There are other studies relating to impacts of different technological innovations as they affect the people and environments where the technology is being applied. This chapter looks critically at those studies with interest on how their outcomes are applicable to this research study.

#### **2.1 Overview of the Telecommunication Industry in Nigeria**

The deregulation of the telecommunication sector brought about companies from different part of the world, to join the indigenous companies, seeking licence to operate in Nigeria. By the year 2001, Nigeria now has more than 26 fixed Network Operators, 2 Gateway Operators and 4 Global Systems of Mobile (GSM) Communication Companies (Ige, 2003). Ige (2003) further stated that Nigerian Government licensed these operators for the provision of telecommunication services. The list of the services as stated by the author includes wireless services and value added services among others.

The granting of licences to foreign companies brought about an increase in foreign direct investment (FDI) in Nigeria. Previously, most of the FDIs in Nigeria were from the petroleum resources sector of the economy (Ndukwe,

2008). The foreign players brought their businesses to Nigeria to serve the Nigerian market. The NCC (Nigerian Communication Commission) provided the guidelines for operation to the foreign companies. One of the guidelines, contained in the Nigerian communication act of 2003, states that the NCC is responsible for the protection and promotion of the interests of consumers against unfair practices including but not limited to matters relating to tariffs and charges for and the availability and quality of communications services, equipment and facilities ([www.ncc.gov.ng](http://www.ncc.gov.ng)). The guidelines were made such that the companies should align their operation such that it becomes benefitting to both the companies and the Nigerian people.

According to the NCC regulations act on consumer code of practice published in 2003 and amended in 2007, companies that have obtained licence to operate in the country shall provide information on the service quality level they are offering. This, according to the document, is provided when a consumer is subscribing initially for the service. However, the quality of service tends to change often. Therefore provisions should be made that subscribers are to be updated and compensated for poor service delivery. This research studies the current practices of the telecommunication companies, as experienced by service subscribers, as well as compliances to the laid down rules by NCC.

Wilkinson (2000), reported that a number of governments have started to recognize the strategic importance of ICT (Information and Communication Technology) and hence the development of ICT strategies has become the result of the privatization and liberalization of the telecommunications industry, as this can provide an opportunity to review the sector as a whole and assess the impact ICTs can have on the country's development aims and priorities. This study provides a good view from which the Nigerian government should consider impact assessment studies as such to foster a good relationship between the people and service providers.

Hudson (1995) reported on the social and economic benefits of telecommunication, for the World Bank. The author stated that in order to ensure that telecommunications technologies and services can be put to optimal use for rural development, the basic goal should be to provide in rural and remote areas affordable access to telecommunications and information services comparable to those available in urban areas. This research agrees with the Hudson since development goes together with the quality of service offered by the telecommunication companies.

Gasmi and Virto (2005) studied the telecommunication deployment in developing countries. The authors took into consideration the economic and institutional characteristics of the countries that under study. According to the authors, when it comes to developing countries, there is a strong need to account for specific characteristics of their market and institutions. This research works complies with this requirement by analyzing the economic and social structures existing in the Okata area

In a course presented by NELTEL@Africa, termed macro environment and telecommunication, the report tends to highlight the various cause and effect relationships that exist between telecommunication and social/economic environments. The report also stated the need for people to recognize the role of telecommunication in socio-economic development and implore the participation individual telecommunication networks and infrastructure. In line with the report's view, the people, who patronize the services rendered by the telecommunication firms, should evaluate the essence of the services and match the outcome with their expectations.

## 2.2 A Review on the Economic Impact of Telecommunication

Rasyid (2005), on his research on the impact of the telecommunication liberalization on the sector performance, tele-density and productivity in Indonesia, discovered that though it is almost a decade since the telecommunication sector in Indonesia was liberalized, tele-density growth and sector productivity remained low and as a result, the sector's contribution to economic growth has been minimal. Though the author did not blame the slow growth rate on telecommunication, he however, stated that the process employed in the liberalization contributed to this slow growth. He went further to ascertain that another contributor to the slow growth rate was the lack-lustre performance of the industry player in their service delivery methods and strategies. This dissertation concurs with the author's findings.

Ngwainmbi (1999) examines the role that information technology plays in the economic development in Africa. He supports the notion that a strong commitment to communication technology would help integrate the African communities into the international market and increase the earnings of its people. The author, in line with this research, communication technologies that are deployed should aligned with the requirements of the people using it

Ndukwe (2008)<sup>1</sup> noted that the telecommunication plays a major role in the development of the Nigerian Economy as it supports the 7-point agenda released by the Nigerian president, Musa Yar'Adua. He supports his statement by adding that companies that use ICTs grow faster and are more productive and profitable than those that do not. This is in line with the objective of this research. However this research focuses on the economic growth of individuals.

Anttalainen (2003) agreed that telecommunications services have an essential impact on the development of a community. The author reported that the telephone density of a country can be used to estimate its level of technical

and economic development. He also concluded that economic development of developing countries depends on the availability of efficient telecommunications services. This statement by the author buttresses the intent of this dissertation. The author made a comparison between tele-density, which reflects the number of service subscribers, and economic development. Developing countries need to evaluate the quality and types of services which the telecommunication firms provide for their citizens.

Economic impact of the telecommunication industry in Okata also revolves around provision of employment to the residents as well as reducing cost in transportation. Employment heralds income. This is evident by the number of phone booths, recharge card retail outlets and other types of businesses that provided gainful employment for the people. A report, on the economic impact of the Kennedy Space Centre (KSC) in Florida, USA, by NASA (National Aeronautics and Space Administration) showed a higher percentage of contracts being awarded to companies in Florida. According to the report, a higher percentage of employees of both the KSC and the contract firms are residents of Florida. This provides a good assessment of the economic impact of the telecommunication industry by comparing the number of business before and after the liberalization era.

Asthana, (2009) stated that cost is a major factor which affects the perception of the service user about the service provider. His conclusions indicate a high level of concern from service users on how much they pay for the services they receive. This study concurs with the author's findings by finding out the level of satisfaction of telecommunication services subscribers compared to the amount of money they pay for the services.

Obijiofor (2005) explained that ICT growth and development are being driven by the private sector. The author laid emphasis on the private businesses

contribution to the success of the telecommunication industry. This research study agrees with Obijiofor (2005) however will show the influence of the telecommunication industry on the private businesses. Obijiofor (2005) further iterated that developing countries need to address some of the concerns and immediate priority needs of the society so as to benefit fully from the telecommunication industry.

According to Jamil, (2008), higher mobile penetration increases and will increase employment opportunity, social cohesion, productivity in different sector which in turn increase GDP. The author reiterates the positive influence that telecommunication services have on other sectors of the economy. In order to confirm the author's view, this study will investigate the effect of the telecommunication industry on the non-telecommunication related businesses in Okota.

Vuong (2008) concluded that the real potential of telecommunication impact on economic growth is mostly indirect. Though he agreed that telecommunication enables communication, interaction and sharing of information around the world, which are essentials of conducting business activities, the various indirect impacts of telecommunications make the measuring of the importance of telecommunications elusive. However, quite contrary to the author's conclusions, this study will focus on the direct impacts which are based on the research objectives as stated in chapter 1.

Waverman et al (2005) predicted an unlikely full contribution of mobile phones on economic growth because of the enormous growth rate differences between mobile penetration and economic output. According to the authors, only a long run effect of mobile phones on economic growth could be estimated. However the results of the study carried out on the telecommunication industry's contribution to the Nigerian economy, by the

Central Bank of Nigeria in 2006, shows a significant marginal contribution to the growth of the economy. The telecommunication industry contributed an average of 26.8 percent to the gross GDP of the services industry (www.cenbank.org).The research will establish the industries contribution on the general income of the people in Okota area.

### **2.3 A Review on the Social Impact of Telecommunication**

Telecommunication has been viewed and analysed by many authors, as an essential tool for social wellbeing and economic development for any given community. Generally, telecommunication is seen as a step forward towards building a stable and more organised society by building and maintaining a good relationship between telecommunication service providers and telecommunication service users.

Ndukwe (2008)<sup>2</sup> presented a paper on telecommunication as a vehicle for socio-economic development. According to Ndukwe, development of the telecommunication infrastructure and industry deliver societal services which enhance education, health, agriculture, governmental expenditure on social services. However this research focuses on how the people, to which the service is provided, are affected by the telecommunication industry, according to their different characteristic such as age and occupation.

According to Plant (2005), this simple, accessible technology alters the way in which individuals conduct their everyday lives. It has extensive implications for the cultures and societies in which it is used; it changes the nature of communication, and affects identities and relationships. The author's findings showed how technologies affect social background of different societies. However the work did not identify the expectations of the societies in question and the level of acceptance of these changes. Impact studies help in creating platforms and forums where people can assess and understand the



changes in their behaviours and attitudes as well as the authorities consider and effect policies that will positively affect the citizens

Telecommunication has impacted the lives of different people irrespective of race, age, etc. According to a report released by Commission of the European Communities in 2005, accessible information and communication technologies (ICT) will improve the quality of life of people with disabilities significantly and at the same time, the lack of equal opportunities to access ICT can lead to exclusion. The report further stated that the potential impact of the availability of quality accessible ICT products and services on the citizens is greater employability, better social inclusion and giving the people ability to live independently.

Lesnard (2005) indicated that the increasing popularity or occurrence of Information and Communication Technologies (ICTs) has fuelled a major academic controversy about their social consequences. He further argued that arrival of these new technologies is supposed to change the previous forms of inequalities and social organization but also to remodel identities.

The study by Mpongole et al, 2008, on the use of mobile phones in Tanzania, revealed that the majority of the people own/use mobile phones for mainly maintaining relationships than being used for economic or business purposes. The author concluded that most individuals use the telecommunication services for social reasons. Interestingly, this dissertation looks at how the industry supports the social behaviors of the consumer, in support of the author's views.

Bello (2003), in his presentation to the NCC Consultative Stakeholders stated that using wireless telecommunication technology in Nigeria will reduce rural to urban migration as well as improve the quality of life. This is in line with the positive social benefit of telecommunication which this research study

focuses on. The author concluded that the ultimate goal of the telecommunication companies is to ensure that their services are utilized in all the areas in the country.

## **2.4 Reviews on Service Delivery System and Process**

The telecommunication industry is service –based and the users of the service are as important as the service provider. The providers' growth and successes depend mostly on their methods and systems of delivery of their services which also must be generally acceptable to the users. The acceptability level is a function on the users' perspective and experiences with services. For the purpose of this review and study, the users' social and economic perspectives and experiences are considered.

Kumar (2009) concluded that gaps exist in telecommunication industry between the service required and service provided. He further stated that consumers have a lot of expectations from their service provider that are not performed or deliver by their companies. This study also looks at these lapses suggested by the author and compare with what exists in Okata.

According to a report on the Pakistani telecommunication industry released in 2008 on their website, [www.telecompk.net](http://www.telecompk.net), liberalization has brought about growth in the industry. The report emphasized that the growth rate of more than 150 percent experienced in the industry is as a result of Value Added Service among other factors. This experience of the Pakistani telecommunication industry is applaud able since they have established that the quality of service goes a long way to determine the success of the industry and it is applicable here in Nigeria.

The research carried out on France telecom by Bansal et al (2008) identified the customer to be at the centre of the telecommunication service distribution network. The outcome of the research shows that the France

telecommunication company under study focused on developing business models that support real time services so as to improve the quality of the services the customers receives. In line with the author's perspective, this study expectation addressed the need to improve the services delivered by the telecommunication service providers in Nigeria. This can only be done if the service providers know and understand the impact and effects of the current state of the industry and also find out what the customers actually want. This forms the basis of this research study.

Since the telecommunication industry is service-based, subscription to the service can only be possible if this service is made available to the people. Hence this is buttressed by the conclusions from the research by Gupta (2007) that maximum numbers of respondents were attracted towards the coverage facility. According to the author, facilities for providing network services are essential requirements for quality service delivery.

The reviews of supporting literatures provide an insight on the objective of the dissertation. To achieve this objective, a series of investigation supporting the objectives will be carried out using Okata area as a case study. A method for this investigation is designed and analyzed in the next chapter.

## **Chapter Three**

### **Experimental Design**

#### **3.0 Overview 16**

The review on the research work done by various authors provided an insight on the expectations of this research work. Many authors agreed and concluded that telecommunication technology is a tool for economic growth and social development. However there is a need to determine if the people resident in Okata agree with what the literature has concluded. Assessing the impact of telecommunication in Okata gives an insight to the level of satisfaction of the people with telecommunication services. The literature reviewed also highlighted the benefits of assessing the impact of different technologies of which telecommunication is one of them. By carrying out impact assessment of telecommunication in Okata, the gap between the customers (people resident in Okata) expectation and the service rendered to the by the telecommunication firms can be identified.

The review also reiterated that more work is still required as impact assessment, which varies with time, is a tool required for continuous improvement. However, because of the diverse nature of the people, the survey take into cognizance the impact on the selected number of respondents, which represents the populace. In order to continue this research work, a format is required to standardize the work to be done. This format will also help in the presentation of the work. This chapter deals with the design of the format in which this research work will be carried out.

#### **3.1 Research Hypothesis**

The requirements of people differ due to different factors including location, orientation, need and other factors such as religious and educational.

Goods and services should be produced and rendered considering these factors which are peculiar to the people on the receiving end. The types of service the telecommunication renders to the people resident in Okata, should be as result of studies determining the preferences and choices of the people. Hence the success and acceptability of the quality of service should be reflected in the general satisfaction of the people.

From a general survey, the suppositions are put forward, which represents the general outlook or ideology of the people in the area as it affects economic and social structures, as follows;

- Telecommunication brought about increase in the small and medium scale business sector.
- Telecommunication reduced the number of unemployed individual.
- Quality of service reduces income while increasing the cost of services.
- Telecommunication reduces the degree of physical association and interaction between individuals while increasing the level of contact between individuals
- Telecommunication involvement in social events is minimal.

The impact of the telecommunication industry in Okata is carried out to show how quality of service rendered by the telecommunication industry affects the development of the area. The quality of service is measured in terms of cost (affordability) and availability. The level of development is determined by the rate at which income is generated due to telecommunication services and extent of corporate social responsibility of the telecommunication companies. According to Waheed (2005), Corporate Social Responsibility is the integration

by enterprises on a voluntary basis of the social and ecological concerns in their business transactions and their relations with the involved parties.

### **3.2 Empirical Work Breakdown**

A research design is a plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems (Titterud, 2007). It is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. The researcher designed this study in a descriptive manner. On the basis of the schedule and with the help of tables and figures the data has been presented in a descriptive way.

Telecommunication impact in Okata can be assessed by involving the residents in the area. It requires the use of participatory approach in determining how telecommunication has affected the lives of the residents who are the major stakeholders in this study. This approach offers the opportunity of involving the Okata residents in the research, learning and decision-making processes. The approach will allow a high degree of stakeholders' participation which is necessary in order to have a good understanding of the consumers' views and perception of the impacts. Hence this data-based research relies on experience and observation (Achar, 2008).

The work breakdown, which is used for this experimental research, is carried out and presented in a following manner;

- Sampling technique/sample size selection
- Data collection and Questionnaire design
- Data processing, analysis and presentation

### **3.3 Sampling Technique and Sample Size Selection**

For the purpose of this research work, the term ‘sample’ and its associated words are replaced with ‘subject’ since the research has to do with respondents since they are people. Major roads, streets, business premises and any other location, in Okata, where individual subscribers and business owners are found, were surveyed. So, random sampling procedure was applied for choosing the subject.

In this case the systematic random sampling was applied. In this study there were two groups of people being considered, one is an individual subscriber of telecommunication services and business owners or entrepreneurs.

This study considers 300 subjects (people) and divides it into two groups; individual subscriber and business owner. Again the subjects (people) were divided as 180 for individual subscriber and 120 for business-related subscriber.

However the business-related subscriber will be sub-divided into those whose business depend on telecommunication services and those whose business does not fully depend on telecommunication services

### **3.4 Respondent**

As mentioned in the above section, the three classes of respondents are to be sampled. The descriptions of the respondents are given as follows;

#### **3.4.1 Individual Subscriber**

Respondents that their subscriptions for telecommunication services are mostly based on personal use. Their use of telecommunication services does not affect their income. The target respondents in this category are students, employees of government parastatals and employees of the private sector.

### **3.4.2 Business-related Subscriber**

This relates to respondents who subscribe to telecommunication services and are involved in one business or the other. They are mostly self-employed. Their business could be telecommunication based or not. However those that are not telecommunication based will be assessed in terms of how telecommunication has influenced their business in terms of growth.

## **3.5 Data Collection**

Three hundred respondents in the study area have been considered for collecting data. Questionnaire has been used as an instrument of data collection. Necessary data has been collected through questionnaire survey details, self-observation on those samples and a little verbal discussions or interviews. Two types of data have been collected for this study and are discussed the following subsections.

### **3.5.1 Primary Data**

Primary data for this study has been collected using normal survey tools and methods described below;

#### **3.5.1.1 Use of Questionnaire**

In general, questionnaire is an instrument or a list of questions that are directly or indirectly related with the research. According to the objectives and requirements of the research, a questionnaire has been framed and validated to collect the required information regarding all indicators used and other relevant information. The questions were designed and validated to align with the research objectives and hypothesis as well as with other information that will aid the study. This is the main tool for information and data gathering for any participatory research as it tend to capture most of the relevant information the research requires. Most times theories and models are drawn up based on the



information gathered on the questionnaire. For this research, there are two kinds of questionnaires that were created. This is in line with objective of this research.

#### **3.5.1.1.1 Questionnaire for Individual Subscriber**

The questions were made as simple as possible such that respondents with very little education or very little ability to read and write can participate to an extent. In other words, the literacy rate was an important consideration during the design of the questionnaire. Most of the questions were simple and straightforward. The questionnaire consists of mainly close-ended questions however some questions were made open just to have a balanced questionnaire. The respondents were selected randomly without any prior knowledge of educational background or other aspects of the respondents' background. But there was a pre-meditated effort in gender selection just to strike a balance on the responses. There was also an effort to ensure that the lower limit for the age of respondents was 15 years. This is because even though adulthood is assumed to begin at the age of 21, it is pertinent to know how telecommunication have impacted on the lives of a age group who are mostly, as the case may be, dependant citizens.

#### **3.5.1.1.2 Questionnaire for Business Subscriber**

This questionnaire was designed to understand how telecommunication has created employment and improve or otherwise, the businesses of those who are already employed. The target respondents are small scale entrepreneurs who have businesses along the major axis roads in Okata. The respondents have been divided for this category already stated in section 2.2 and the questionnaire is also divided into two sections for the two different categories. They vary from small road side phone booth operators to bigger phones and accessories shops for the telecommunication related business and from a barbing and hair dressing

salon to a transporter for the non-telecommunication related businesses. The total number of respondents is 120 people. This number is divided equally among the 2 categories i.e. 60 for those whose business are telecommunication based and 60 for those whose business is non-telecommunication based. As with the individual subscribers, the questionnaire was designed to have both close-ended and open ended question to collect the different information required.

### **3.5.1.2 Formal Interview**

Interviews are carried out in the process of sharing out the questionnaires to the respondents. Interviews are conducted formally have an intrinsic idea of how the populace view the impact telecommunication have in their individual social and economic life. Oral or verbal interviews reveal information that may not be captured on the questionnaire but such information will assist the researcher develop new theories and come to an understanding of the human response to new technologies or services. However this form of acquiring information is time consuming and lots of irrelevant discussions are carried out in the process. The respondents tend to easily deviate from the actual subject matter and get to be redirected by the researcher.

### **3.5.1.3 Field Observation**

In some respect, the different questionnaires and oral interviews may not cover some of the important and relevant information. In this case, personal observation and judgement is employed hence conclusion on this observation is personal and according to what is observed in the subject area, at a particular period or time and prevailing conditions. As an example, information on the number of telecommunication masts and the telecommunication service provider they belong to, can only be acquired by conducting a field observation. This information can be acquired, if the town planning agency is efficient.

### **3.5.2 Secondary Data**

Secondary data are essential for this research project as it increases the knowledge base on the subject matter. It provides the basis of the research since it gives an insight on the general beliefs or conclusions. Hence one can zero in on the general conclusions and check their conformity to the subject matter. The conformity can be deduced with the empirical data that will be collected in the course of the research. Secondary data for this research project was collected from different sources including different published and unpublished documents, research reports, articles journals and the internet.

### **3.6 Questionnaire Design**

The questionnaire was aimed at finding out the changes telecommunication has brought to the lives of the residents in Okata. There were three types of questions in the questionnaire: closed ended questions, attitude/perception (Likert scale) questions and open ended questions. The questions are asked with simple and understandable English. The will help the respondents to give straightforward answers thereby saving time. The questions asked all have reasons why they were asked. Each question is backed up by a theory. However most of the questions are due to perception or idea. To understand the theories, perceptions or ideas behind each question, an analysis of the question are done in the next sections.

#### **3.6.1 Analysis of Individual Questionnaire**

This questionnaire captures the personal details of the respondent which includes age, gender, location and occupation. Apart from knowing the particular network an individual is subscribed to, it will be interesting and important to know why they chose those particular networks. However the choice of network may not be justified if the subscriber is not satisfied with the services of the provider. Some common reasons for dissatisfaction among

subscribers have been identified by the NCC, that is, Nigerian Communication Commission. The respondent is to choose from the options in the questionnaire. Therefore questions one to question four addresses the choice of network provider, the reason behind the choice of a particular network and the respondents view on the quality of service he/she receives from the provider.

It is quite obvious that different people have different reasons for having a phone. Therefore, their call rate or the rate at which they use their phone, the frequency at which they employ the services of the providers and the class of people they mostly call, will all differ and vary. Question five and six addressed the cost implication of using a phone and the influence of this cost on the subscriber.

Questions seven, eight and nine were included to find out if respondents are aware that there are other uses of the phone and other services provided by the telecommunication companies apart from voice calls and text messages. These questions will throw more light on how enlightened the populace is on the other benefits and services of the telecommunication industry.

Humans are social beings. Interaction between people helps in social development of individuals and the society at large. With the coming of telecommunication which provided easier and faster access to the internet, there was a noticeable boom in the number of online social network sites over the internet. Before 2003, there was no Nigerian-developed social network site ([www.naijamix.com](http://www.naijamix.com)). This information was gotten based on the dates which the current existing sites were developed. Hence from the internet survey of Nigerian-developed social network sites as at April 2009, there were eight sites counted on the Google search engine. This has allegedly contributed to the demise of social clubs in the country and has reduced the physical interaction between people. Questions ten and eleven will provide the level of participation

of respondents in either social clubs or online social networks. This will give an insight on some of the impact of telecommunication on the social life of Nigerians with regards to age, gender and occupation.

Questions twelve to sixteen are purely the respondents' opinions or experiences that are required. Question fifteen is a Likert scale based question which focuses on the respondents' general view of the telecommunication industry in Nigeria. The idea is to allow the respondents compare life as it was before and after the deregulation of the telecommunication industry.

### **3.6.2 Question for Business**

This questionnaire is divided into two sections

- a. For telecommunication related businesses
- b. Non-telecommunication related businesses

General information is obtained which includes age, nature or type of business, business location and number of years in business.

In the section for telecommunication related businesses, question one will give information on the respondents' status in terms of employment before the deregulation exercise. The intent or outcome will show the extent that the deregulation process has affected unemployment which is both a social and economic problem in Nigeria.

The outcome of question two will be compared to the average income of an individual in Nigeria to find out if telecommunication has helped to boost the income level of the people who depend on it for their livelihood thereby affected the average income in Nigeria.

Though telecommunication has been proven to creating jobs and employment for the people in this category or section, question three will

expose the setback they experience in their businesses. The imperfections in the industry will have an adverse effect on their businesses, however this will highlight whether each service provider has its own dominating peculiar problems.

For the respondents that belong to the category described in section b, that is, the non-telecommunication related businesses, the effect of telecommunication on their business is required to effectively determine the impact that telecommunication has brought on their businesses in economic terms.

The questions for the survey were designed to address the research hypothesis in order to establish concrete facts about the actual impacts of the telecommunication industry from the respondents' perspective. Table 3.1 below shows the relationship between the research hypothesis and some of the question addressing each research hypothesis.

Table 3.1: Research hypothesis with corresponding and validating question.

Research hypothesis	Survey question
1. Telecommunication brought about increase in the small and medium scale business sector	Number of years in business
2. Telecommunication reduced the number of unemployed individual	Before starting this telecommunication-related business, where you previously employed
3. Quality of service reduces income while increasing the cost of services	Are you satisfied the quality of services you are getting  How much, on the average, do you

	spend daily on calls
4. Telecommunication reduces the degree of physical association and interaction between individuals while increasing the level of contact between individuals	<p>Do you belong to any social club in your neighbourhood or any other place</p> <p>Do you belong to any online social network</p> <p>Which of the following people do you mostly call</p> <p>On the average, what is your phone mainly used for? For business/work purposes: <span style="float: right;">For</span> social/personal/recreational purposes</p>
5. Telecommunication involvement in social events is minimal.	How many events such as concerts, funfairs etc. sponsored by a telecom company have you attended

### 3.7 Data Processing, Analysis and Presentation

The methodology for this research project also involves the analysis of the data collected from the respondent, secondary sources and from the field. Before the data can be analysed, they have to be processed which is very significant to the ease of analysis and the end result or conclusions. This means that without proper processing of the data, it will be difficult analyse them. Presentation of the data is another step in the methodology as this will enable the interested parties to fully understand the outcomes of the research project.

Hence it is needed to present data analysed in an appropriate way. Also before the analysis of data, presentation of the data is important as it aids the analysis. There are different statistical computer programs that can analyse data to give an interpretation. When all the data collected from different sources, as mentioned earlier, have been processed and analysed, the outcomes can then be presented appropriately with the help of figures and tables as the case may be.

The data analysis will depend on the percentage of the respondents that concur to different hypothesis. The higher number of respondents represents the general perspective of the people in Okata. The sizes in the bar charts and the level in the graph depict higher number of respondents.

### **3.8 Expectation**

Establishments are keen on maintaining or increasing their customer base. The ability to measure customer satisfaction will provide a company the necessary data it requires to maintain as well as improve on its customer base. However customer satisfaction is an abstract concept and the manifestation varies between individuals, products and services. In this research, one of the expectations is to be able to measure the level of satisfaction with the quality of the telecommunication service received by the people by evaluating their expectations and comparing it with what they are actually receiving. Since there are more than one service provider in the telecommunication industry in Nigeria, quality of service will differ. Therefore, the level of satisfaction can also vary depending on other options the customer may have and other services against which the customer can compare a particular provider's services (Gani, 2002).

The next chapter provides the analysis of the different service providers, the area under study and the nature of telecommunication industry. The peculiar characteristics of the people living in Okata are determined. Data and



information collected from the surveys will be analysed and presented in tabular and graphical format. Graphical formats will consist of line graphs area charts pie charts and bar charts.

## **Chapter Four**

### **Results and Analysis**

#### **4.0 General**

The social and economic attributes towards the society at large are functions of the consumers' perspective on the industry. To say that the industry is beneficial to the society depends on the level of satisfaction experienced by the people on the services provided by the telecommunication industry. Therefore it is imperative to know how the consumers feel about the industry by getting information directly from the consumers themselves. This is done through surveys using questionnaires and other methods of data gathering such as interviews and reports especially on the Nigerian communication commission database. The data gathered will be analysed to decipher the actual impact of the industry on the people. This chapter will deal with information and data acquired while carrying out the empirical investigation.

#### **4.1 Nigerian Telecommunication Industry Profile**

An overview of the telecommunication industry in Nigeria is being described and the major players introduced. The overview will elaborate their current state or status as of when the research is carried out. This provides a basic understanding of telecommunication operations that support or affect the social life and economic status of the residents in Okata. With the deregulation of the telecommunication sector, several players entered into the market with their services. As at March 2009, there are eight telecommunication companies in Nigeria offering different types of telecommunication based services. However for the scope of this research, the focus will be on the four major players which include;

- MTN
- Globacom
- Zain
- Etisalat

This group was selected based on the following reasons

- a. They have large networks which cover most parts of the country
- b. They operate, using the GSM (Global System for Mobile communication) technology
- c. Their customer bases all together constitute approximately eighty five percent of the mobile phone users ([www.ncc.gov.ng](http://www.ncc.gov.ng)).

The services which they provide include voice, data and video. They also provide internet access for subscribers. The brief descriptions of these major players are culled from their respective internet home pages.

#### **4.1.1 MTN**

MTN Nigeria is part of the MTN Group, Africa's leading cellular telecommunications company. On May 16, 2001, MTN became the first GSM network to make a call following the globally lauded Nigerian GSM auction conducted by the Nigerian Communications Commission earlier in the year. MTN paid \$285m for one of four GSM licenses in Nigeria in January 2001. To date, in excess of US\$1.8 billion has been invested building mobile telecommunications infrastructure in Nigeria.

Since launch in August 2001, MTN has steadily deployed its services across Nigeria. It now provides services in 223 cities and towns, more than 10,000 villages and communities and a growing number of highways across the country, spanning the 36 states of the Nigeria and the Federal Capital Territory, Abuja. Many of these villages and communities are being connected to the

world of telecommunications for the first time ever. The company subsists on the core brand values of leadership, relationship, integrity, innovation and “can-do”. It prides itself on its ability to make the impossible possible, connecting people with friends, family and opportunities.

MTN’s overriding mission is to be a catalyst for Nigeria’s economic growth and development, helping to unleash Nigeria’s strong developmental potential not only through the provision of world class communications but also through innovative and sustainable corporate social responsibility initiatives. (Culled from [www.mtnonline.com](http://www.mtnonline.com))

#### **4.1.2 Globacom**

Since it launched its services on August 29, 2003, Globacom Mobile has been at the forefront of revolutionary changes in the GSM sector in Nigeria, offering both Prepaid and Contract packages along with a range of Value Added Services.

In its first year of operation, Globacom Mobile became the fastest growing GSM network in Africa, achieving a record one million subscribers and covering over 87 towns in just nine months. The subscriber figure at the moment stands at over 22 million with coverage extending to over 50,000 cities, towns, communities and major roads, thus making the company the 5th largest operator in Middle East and Africa (MEA) region as well as the fastest growing network in the region.

While vigorously pursuing its expansion strategy, the network has earned the identity of the Nigerian innovator. This is because it boasts a wide variety of innovative packages and tariff plans designed to fulfil the needs of a broad spectrum of market segments in Nigeria. While competition argued that Per Second Billing (PSB) was not possible until 2007 and that no network in the world has been able to launch with PSB, Globacom introduced the billing

platform at launch. This caused a stir in the industry and is regarded as the most innovative landmark in the communications industry since the introduction of GSM services in Nigeria in 2001. (Culled from [www.gloworld.com.ng](http://www.gloworld.com.ng))

#### **4.1.3 Zain**

Formerly known as Celtel Nigeria, the company was established in 2000, by a group of institutional and private investors as well as three state governments.

It made history on August 5, 2001 by becoming the first telecoms operator to launch commercial GSM services in Nigeria. In 2006, following Celtel International's acquisition of majority stake in the company, it was re-branded Celtel and became an important part of Celtel's Pan-African operations spanning 14 countries.

On August 1, 2008 Celtel Nigeria was rebranded Zain Nigeria following the global acquisition of Celtel International by MTC Group, which transformed to Zain Group, a leading emerging markets player in the field of telecommunications aiming to become one of the top ten mobile groups in the world by 2011.

Zain Nigeria, which currently covers over 1500 towns and 14000 communities across the six geopolitical zones of the country, scored a series of many other "firsts" in the highly competitive Nigerian telecommunications market including the first to introduce toll-free 24-hour customer care line-111; first to launch service in all the six geo-political zones in the country; first to introduce N500 recharge card; first to commence emergency service (Celtel 1999); first to introduce monthly free SMS and first to introduce monthly airtime bonus. . (Culled from [www.zain.com.ng](http://www.zain.com.ng))

#### **4.1.4 Etisalat**

Emerging Markets Telecommunication Services (EMTS), trading as Etisalat, is a Nigerian company duly incorporated under the laws of Nigeria in partnership with Mubadala Development Company and Etisalat of the United Arab Emirates. Incorporated in Nigeria as a private company, it acquired the Unified Access License from the Federal Government in January 2007.

Etisalat has been the telecommunications service provider in the United Arab Emirates since 1976. In its 32 years of operations, it has built up state-of-the-art telecom infrastructure and taken a leadership position of innovation and reliability among regional and international operators.

Etisalat has footprints in 17 countries traversing the Middle East, Asia and Africa. In Africa, Etisalat's operations span 10 African nations including Sudan and Zanzibar. It therefore begins operations in Nigeria with considerable experience in successfully rolling out networks in challenging terrains.

In Nigeria, Etisalat made the first official call on its network on the 13th of March 2008 in the presence of dignitaries from the Nigerian Communications Commission (NCC) and the Senate of the Federal Republic of Nigeria. Etisalat is set to demonstrate its core values of optimism, simplicity and caring, for which it has become known in other markets to the Nigerian people as it offers them world-class telecommunications services. It is investing heavily in the Nigerian economy as well as in its own human resources. From day-one of its operations in Nigeria, it has put in place various skills acquisition and training programs to enable its people offer outstanding quality and services to Nigerians.

Etisalat is also committed to taking its place amongst leading corporate citizens in Nigeria by making wide-impact and sustainable social investments. Etisalat believes that apart from offering a solid platform of technological

innovation, sustainable investment is the bedrock of stellar growth and economic stability. (Culled from [www.etisalat.com.ng](http://www.etisalat.com.ng))

From all written about each company, it is evident that each company in the telecommunication industry has pledged the unwavering support towards the development and growth of the economy by offering different quality services as well as having an existing corporate social responsibility framework.

## **4.2 Okata description**

Okata is a densely populated area of Lagos, located in the Isolo council area. It is a mainly a residential area with a considerable number of small scale and medium scale business, making it an ideal area for the scope of this research project.

According to the last census in 2006, Okata has a population of 321,786 in an area measuring 6.2 square kilometres, with an annual average growth rate of 1.2 percent ([www.population.gov.ng](http://www.population.gov.ng)). The area is built up around two main access roads which includes; Okata road, a 1.2 kilometre road and Ago palace way which measures 2.4 kilometres. Most of the commercial activities are centred along these roads. The focus of this research, in the aspect of data collection, will be along these major access roads.

There is no distinct demarcation between Okata and neighbouring areas whose influences are evident but for the purpose of this project, facts and figures, studies and data that will be used or generated in the course of this study will be limited to the area described in the paragraph above.

## **4.3 Empirical Study Data Presentation and Analysis**

The different companies offering services in the telecommunication industry have different features and methods of service delivery which make each of them unique. They have quoted on their websites, their vision and

mission statements, all tending towards satisfaction of service users, positive influence on the national economy and dedication to their corporate social responsibility policies. However it is the service user who has the final say in terms of the companies practicing what they preach. The survey carried out is to deduce how the companies have affected the social and economic lives of the Nigerian citizens, resident in Okata.

#### **4.3.1 Respondent Characteristics**

This section deals with the characteristics of the respondents, which have already been described in Chapter 3. The respondents are classified in two categories.

- a. Individual respondents consisting of public sector employees, students, private sector employees, self-employed and unemployed/retired
- b. Business respondents consisting of telecommunication-related and non-telecommunication related. For the telecommunication related businesses, the respondents include roadside phone kiosk operator, wholesalers of telecommunication products such as recharge cards and SIM (Subscriber Identification Module) cards and repairers/sellers of phone and accessories such as charging units and SIM replacement. For the non-telecommunication related businesses, the respondents include internet cybercafé operators, transport business operators, boutique owners and bar/restaurant owners.



**Table 4.1** below shows the distribution of the individual respondents according to occupation.

Distribution according to occupation	
occupation	Number of respondents
Public sector employees	50
Private sector employees	40
Students	40
Self employed individuals	30
Unemployed individuals	20
Total	180

Table 4.1

**Table 4.2** below shows the distribution of the individual respondents according to gender

Distribution according to gender	
Gender	Number of respondents
Male	100
Female	80
Total	180

Table 4.2

**Table 4.3** below shows the distribution of the individual respondents according to age group

Distribution according to age group	
Age group	Number of respondents
15-24	30
25-44	90
45-60	50
61 and above	10
Total	180

Table 4.3

**Table 4.4** below shows the distribution of respondents under the telecommunication-related business category.

Type of business	Number of respondents
Roadside kiosk operator	40
Wholesalers of recharge cards and SIM cards	30
Sellers of phone accessories	10
Total	80

Table 4.4

**Table 4.5** below shows the distribution of respondents under the non-telecommunication-related business category.

Type of business	Number of respondents
Internet cybercafé	15
Transport service operator	10
Boutique owners	10
Bar/Restaurant owners	5
Total	40

Table 4.5

### **4.3.2 Economic Impacts Result and Analysis**

According to most of the literatures cited in Chapter Two, telecommunication is seen as a tool or vehicle to drive economic growth in the area where it operates. In line with the research hypothesis, the result gathered are analysed and compared with the economic indicators, listed below and as mentioned in Chapter One for the purpose of this research work

- number of telecommunication-related businesses
- unemployment rate
- effect on non-telecommunication-related businesses
- income
- cost of services

#### **4.3.2.1 Number of Telecommunication-related Business**

The effect of the telecommunication industry is assessed based on the number of small and medium scale businesses that started as a result of the

industry. The approximate number of the businesses can only be ascertained by counting, along the major roads in Okata. However there are some that are located along the numerous streets that link the major road. The concentration of these business are along Okata road and Ago palace way. During the survey exercise using the questionnaires, the respondents were asked to confirm the year their businesses came into existence.

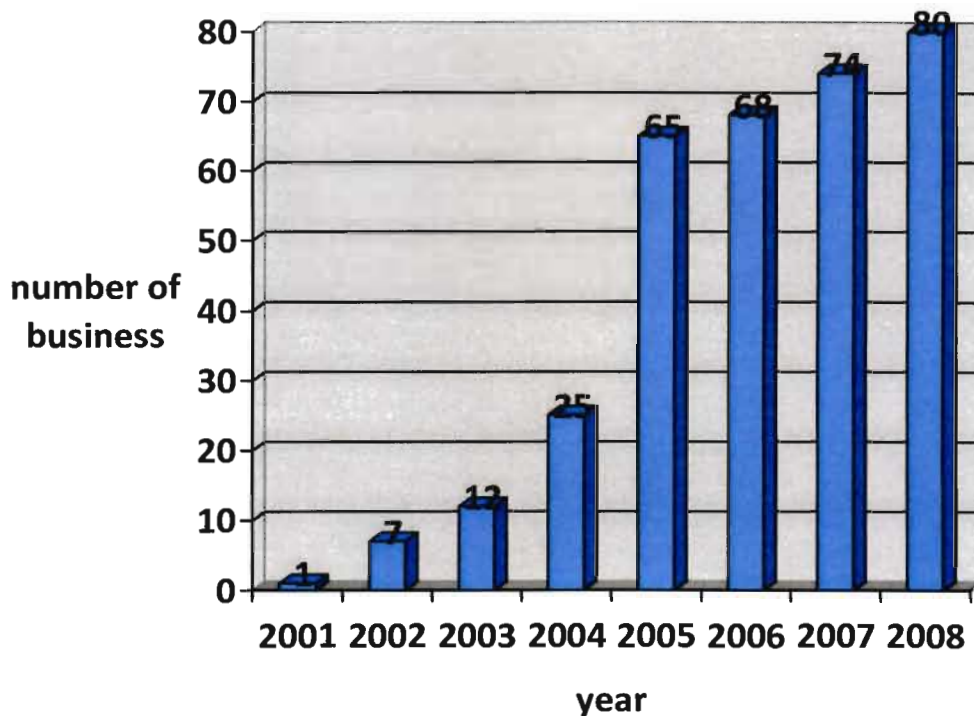
**Table 4.6** below shows the details of the types and number of telecommunication-related businesses located along the major roads in Okota. The figures represented below were determined by counting though not all the counted businesses were given the questionnaires to fill up.

Type of business	Location	Number of business
Roadside kiosks operator	Okata road	35
	Ago palace way	125
Wholesalers of recharge cards and SIM cards	Okata road	5
	Ago palace way	28
Sellers of phone accessories	Okata road	2
	Ago palace way	14
Total		209

Table 4.6

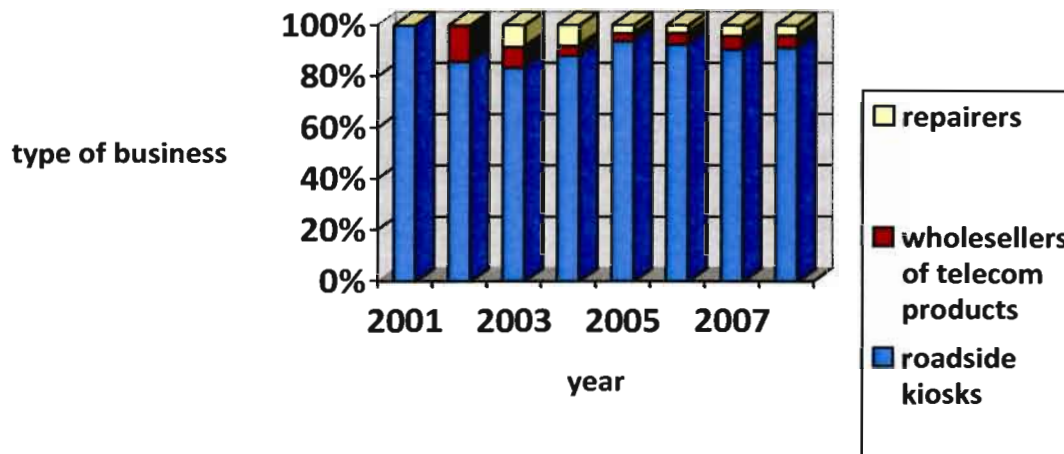
**Figure 4.1** represents the growth in number of telecommunication-related businesses in Okata over the last eight years based on the 80 subjects that completed the questionnaire.

Fig.4.1: growth in the number of businesses



**Figure 4.2** below shows the distribution of the different types of telecommunication related businesses based on the 80 respondents.

Fig.4.2: distribution of different types of business



From figure 4.1, it can be seen the prior to 2002, none of the businesses mentioned in table 4.6, were in existence. The growth was slow between 2002 and 2005 before it became astronomical in 2006. The slow growth period was as a result of uncertainty since the people were still unsure what the industry is all about. Nigeria was still reeling from the era of military dictatorship during which people lost so much to different schemes purported by the government. When it became clear that the industry has come to stay and offer services, people started buying and using the services. Also at the incipient stage of the industry, the cost of acquiring a phone service was very high and few individuals could afford it. The commercial service package was not available for people who wanted to use it in or as their business. The tariff was high which also discourage most of the people from using the services.

#### 4.3.2.2 Effect on the Unemployment Rate

According to a report released by NCC in 2008, over 12,000 people are directly employed by the GSM operators alone and an additional 3,000,000

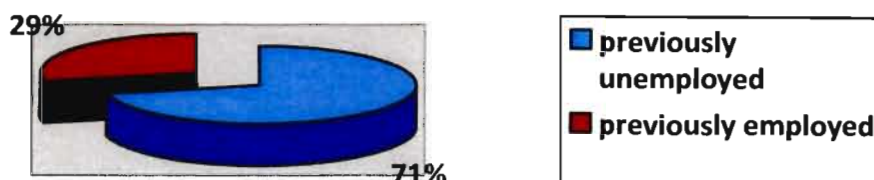
indirect employment opportunities have been created through the operation of franchise and retail outlets for access, SIM & recharge cards, and mobile phone shops([www.ncc.gov.ng](http://www.ncc.gov.ng)).

There have also been opportunities for Nigeria workers to serve as expatriates to other countries resulting in foreign input to GDP. Based on the information above, it can be deduced that the industry has employed 2.15 percent of the Nigerian population (based on the last census result of 140 million as published by the Nigerian Population Commission on [www.population.gov.ng](http://www.population.gov.ng)). The focus of this research work is on those who are indirectly employed by the industry, that is, people who have telecommunication-related businesses.

According data collected from the survey, out of the 80 respondents (subjects with telecommunication related businesses), 23 respondents were previously employed and 57 respondents were previously unemployed representing a whopping 71 percent. Also the unemployed group under individual subscribers have attested to the benefits of telecommunication. Even though they are still unemployed, it is easier for them to be contact or be informed of job positions. Hence telecommunication to them is an essential tool during their periods of being unemployed.

**Figure 4.3** shows a pictorial representation of the telecommunication effect on unemployment.

Fig.4.3 effect on unemployment



Also the average cost of starting telecommunication businesses was surveyed and tabulated below

**Table 4.7:** the average cost of starting the different types of telecommunication-related business

Type of business	Cost of Start-up(in Naira)
Roadside kiosks operator	25,000
Wholesalers of recharge cards and SIM cards	100,000
Sellers of phone accessories and repairers	76,000

Table 4.7

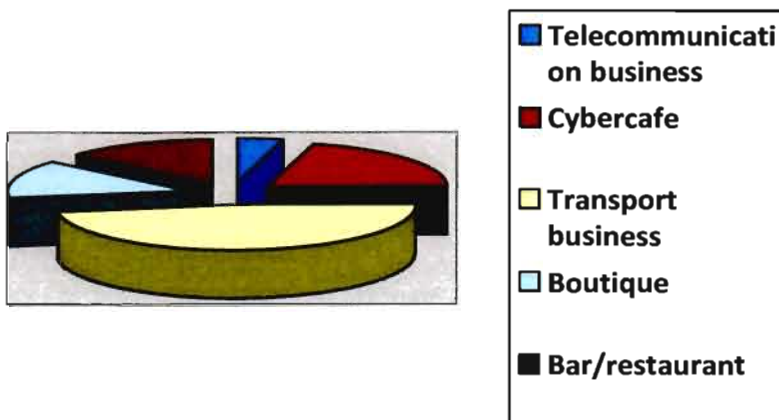
These figures on cost are average values excluding government or other institutionalized levies. It should also be noted that location of the business affects the start-up cost but was not considered for this research study.



When compared to the other types of business in Okata, the figure below depicts the average start-up costs of all the different businesses in Okata.

Figure 4.4: Average cost of starting a business in Okata.

Fig. 4.4: Average start-up cost for businesses in okota (in '000 Naira)



#### 4.3.2.3 Effect on Non-Telecommunication-related Business

The choice for non-telecommunication-related businesses for this research work were restricted to the following types of business

- Internet cybercafé
- Transport business
- Boutiques
- Bar/Restaurant

The choice was based on the types of businesses that were dominant in Okata area. There are 40 respondents in this category as represented in the table below

**Table 4.8:** Number of non-telecommunication related businesses surveyed.

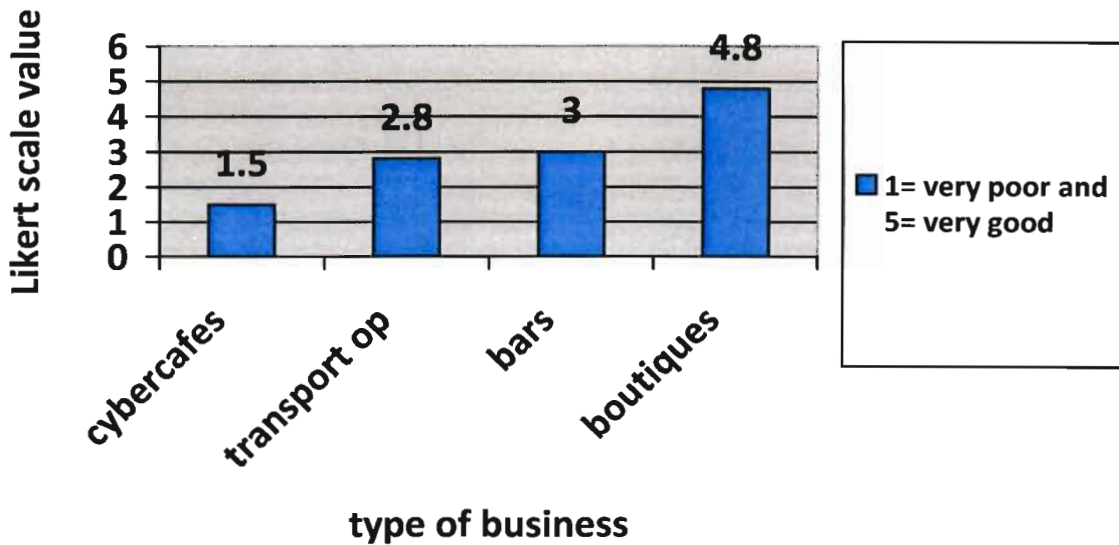
Type of business	Location		Number of respondents
	Okata Road	Ago palace	
Internet cybercafé	9	6	15
Transport service op	2	8	10
Boutique owners	3	7	10
Bar/Restaurant owners	1	4	5

Based on the questionnaire, the intent is to find out how whether telecommunication has improved or caused decline to their businesses. These businesses were in existence before the deregulation of the telecommunication industry. Though subsequent section will study how their income generation is affected, this section only covers effect on the number of customers that patronize their businesses between the periods of 2001 to 2008. This period was chosen to cover from the time the telecommunication companies rolled out their services to the recent times.

From the survey, the internet cybercafés were mostly negatively impacted and the bar/restaurants did not experience any significant influence on their businesses. The transport operators generally experienced both positive and negative impacts but the negative impact outweighed the positive impact. The boutique owners generally believed that telecommunication reduced their operating cost while helping them maintain good relationship with their customers

**Figure 4.5** shows the degree of positive or negative influences telecommunication has on the non-telecommunication related businesses.

Fig.4.5: level of impact



From the diagram above, the boutique owners believe telecommunication has greatly contributed to the success of their business. Respondents stated that telecommunication enabled them track their stocks, inform customers of new arrivals and reduce their transportation cost. The transport operator believes telecommunication has reduced the number of passengers cumulatively. According to the transporters, people tend to travel less as compared to the era before the deregulation. Most people would rather use phones to discuss or pass across messages than travel. The use of telecommunication is easier and available nowadays. Moreover there is reduced exposure to risks associated with travelling. However some of the transporters admitted that having cell phones and phone numbers keeps them close to people who patronize them. Taxis are seen these days with phone numbers written on their bodies. This helps the operators to receive service requests wherever they are.

The internet cybercafé owners believe that their businesses are on the decline since the deregulation era. With the advancement in phone designs and sophistication, subscribers can actually surf through the World Wide Web on the palm of their hands, without stepping into a cybercafé. This is possible because the telecommunication companies also offer internet services. From the survey, more people are aware of using their internet-enabled phones to access the internet hence the internet cybercafé owners experience drop in the number of customers. The Bar/restaurant owners did not observe any significant impact on their businesses by the telecommunication industry.

#### **4.3.2.4 Impact on Income**

The income of the respondents is a very indispensable part of the study to get the real economic scenario of the study area. The group of respondents considered for this particular study was the telecommunication-related businesses since they depend on the services of the industry for their income. All of the 23 respondents out of 80, who were previously employed, reported that their income has increased since they partook in the industry's activities. However the all of the respondents agreed that the rate of income generated has decreased over the 8-year period as more people join the businesses.

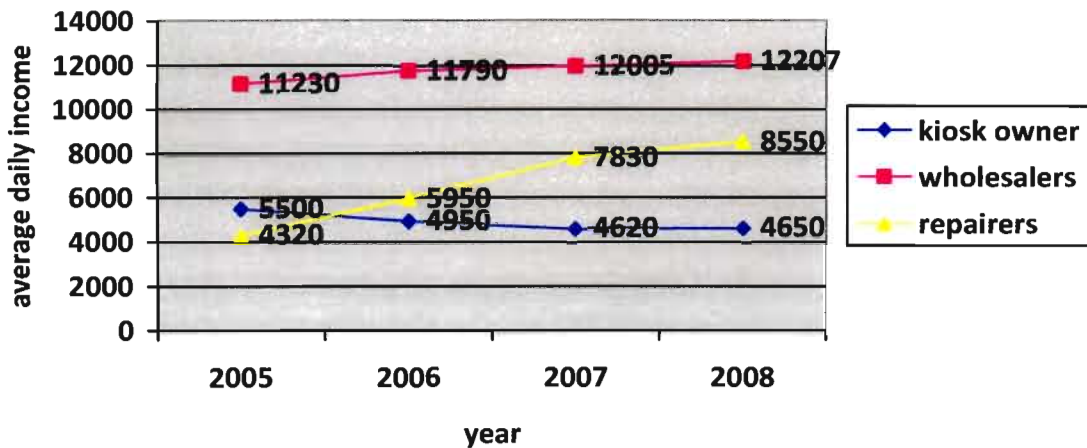
The **table 4.9** below shows the average daily income (in Naira which is the Nigerian currency unit) of business owners between 2005 and 2008. This is the period when majority of the businesses came into existence. Locations of businesses have its own impact on income generated but not included in the scope of this research study.

Type of business	Year			
	2005	2006	2007	2008
	Average daily income in Naira (nearest whole number)			
Roadside kiosks operator	5500	4950	4620	4650
Wholesalers of recharge cards and SIM cards	11230	11790	12005	12207
Sellers of phone accessories	4320	5950	7830	8550

Table 4.9

The **figure 4.6** below depicts the average rate of income generation for the business owners

Fig. 4.6: average daily income for business owners



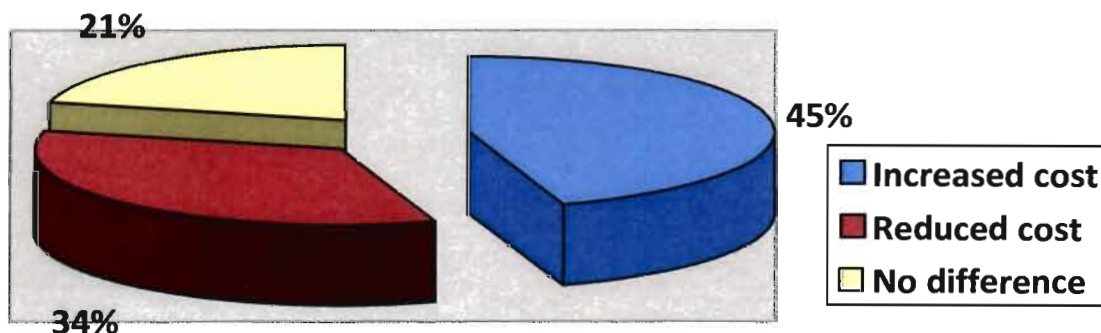
#### 4.3.2.5 The Impact of Cost of Service

The cost incurred by customers for using the services provided the telecommunication firms is assessed in this section. This cost of service includes charges on voice calls, data services such as text messaging, multimedia services and the internet. However for the purpose of this study,

charges on voice calls and text messaging are considered because they are common to all respondents. According to NCC, cumulatively, the cost of service has decreased over the years ([www.ncc.gov.ng](http://www.ncc.gov.ng)). However some of the respondents think otherwise. Out of the 300 respondents, 135 respondents admitted that the amount of money they pay has increased though the charge rates decreased. 102 respondents did not observe any difference between how much they paid over the years. 63 respondents agreed that the cost of service has reduced.

**Figure 4.7** shows the respondent view on cost of service

Fig. 4.7: respondent view on cost of service



For the 135 respondents that reported increase in the cost of service, they also pointed out in the survey questionnaire that the main reason for their increased spending is having multiple subscriptions. They subscribed to using more than one service provider. They pointed out a number of factors which they feel, contributed to having multiple subscriptions which in turn increased their spending. These factors were on the survey questionnaire.

**Table 4.10** shows factors that affected the cost of service by increasing the total amount subscribers pay for the services in the long term.

Service factor	Number of respondents
Dropped calls	45
Loss of network	41
Poor network signal	85
Undelivered messages	9
Poor interconnectivity	78
Erroneous deductions	7

Table 4.10

The factors stated above affect the quality of service provided by the telecommunication firms. If the quality of service is poor, the cost in the long term is increased

### **4.3.3 Social Impact Result and Analysis**

Social activities are known to be aided by technology. The survey on the impact of telecommunication on the social life of the respondents was carried out on the individual subscriber category of the respondents. They represent more diverse characteristics in terms of age group, gender and occupation.

#### **4.3.3.1 Impact on Degree of Association/Interaction of People**

From the survey, the degree of interaction and association between individuals has increased. This is only in terms of verbal communications and interactions that make use of the information technologies; voice data and multimedia forms of communication. Out of 180 respondents, 107 respondents

belong to different internet-based social networks and the entire respondents chose the telephone/cell phone as the preferred means of keeping in touch with other people. The level of physical social interactions and associations have reduced according to the survey

**Table 4.11 to 4.13** below shows the social activities of respondents based on their characteristics

Table 4.11: social activities according to gender						
Gender	Physical	social	club	Web-based	social	network
	membership			membership		
Male	43			57		
Female	29			46		

Table 4.12: social activities according to age group						
Age group	Physical	social	club	Web-based	social	network
	membership			membership		
15-24	12			23		
25-44	36			42		
45-60	22			19		
61 and above	5			1		

Table 4.13: social activities according to occupation						
Occupation	Physical	social	club	Web-based	social	network
	membership			membership		
Public sector employee	18			24		
Private sector employee	34			32		
Student	4			9		



Self-employed individual	18	21
Un-employed individual	6	17

Though telecommunication provided means of keeping in touch with people and events, it is quite evident from the survey that people prefer making phone calls and sending text messages than visiting.

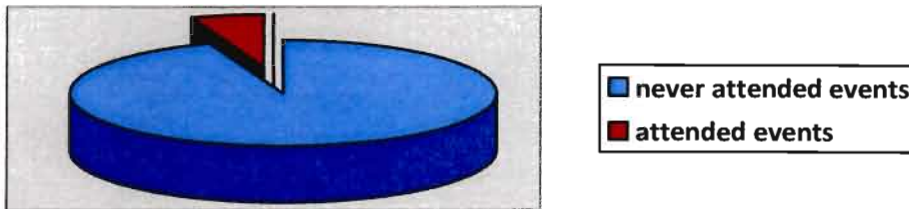
#### **4.3.3.2 Community Relation**

The telecommunication industry provides some form of support to events that brings people together. They provide sponsorship deals to people and group for different activities. Survey was carried out to find out how many people that have directly or indirectly benefited from any form of assistance from the telecommunication firms as part of the firm's corporate social responsibility.

The respondents were asked on the questionnaire if they have attended or witnessed any social gathering, forum, game show or funfair hosted and sponsored by any of the telecommunication service provider, in or outside Okata. Out of 180 respondents, only 10 subjects responded positively to the question. The 10 respondents who have attended any event did so outside Okata area.

The figure below shows the response on the involvement of telecommunication industry in social activities and recreation

Fig. 4.8: Number of People who have attended telecommunication-sponsored social event



The representation above shows that there are minimal social events that are hosted by the telecommunication companies in the area. According to respondents, they would have willingly attended these events if there were such events being staged.

The results of the study and the analysis of the data collected are presented in this chapter. The respondents' views on the telecommunication industry, as recorded on the questionnaire, are collated and represented in charts and tables. The discussion of the results in relation to the research objectives and research hypothesis will be carried out based on the interpretation of the data collected during the survey and interviews.

## **Chapter Five**

### **Discussion**

#### **5.0 General**

The results from the survey revealed how the activities of the telecommunication industry impact the lives of the residents in Okata. The data collected based on the responses of the subjects and other methods of data collection such as interviews have been analyzed. The analysis of the data will be discussed extensively in this chapter in order to portray, in explicit terms, the general impact of the industry in the study area. The analysis of the data represents the views and responses of the subjects who in turn, represent the people in the area. This statement is an assumption that the number of subject chosen represents the general populace of Okata.

The discussion on analysis, focus on the impact of the economy and the social status of the Okata area. The discussion reflects the findings of the study of the impact of the telecommunication industry on the socio-economic life of the people residing in the area. The study covers the period from the deregulation era to the present state of the industry.

#### **5.1 Impact on the Economy of Okata**

One of the expectations from the telecommunication industry in Nigeria is wealth creation. This transcends down to job creation as well as increasing the average earnings of the people in any particular area. Being an area which is mostly residential, though has a number of small scale businesses, the economy of Okata depends greatly on the individuals' income either as a salary earners or as a self-employed individuals.

### **5.1.1 Wealth Creation**

From the analysis of the data collected during the survey exercise, it is quite evident that the general economy of the area improved with the deregulation of the telecommunication industry. It is therefore imperative to state that the deregulation had a more positive impact than negative. The economy of the area depends on the amount of money or finance that is earned by the people living in the area. Looking at the figures of the respondents that their businesses improved or got employed due to telecommunication, they outnumbered that of those whose businesses decline or negatively impacted. Though there are no perfect systems, there is a need to identify ways of either mitigating the negative impacts on some of the businesses as determined in chapter 4 or managing the negative impact. Comparatively, telecommunication has a higher return in terms of the amount invested and the amount generated.

From the survey, when compared to the start-up of other businesses prominent in Okata, telecommunication businesses ranked highest among the businesses whose starting cost is minimal. The cost of running telecommunication businesses is also minimal thereby encouraging the business owners to have greater turnovers and higher savings.

### **5.1.2 Wealth Mis-use**

It is agreed that the telecommunication industry improved the economy of the area by increasing the amount of money coming into the area through employment and job creation. However it also created some problems of spending for people who utilize its services. Issues relating to increase in cost bears down on the positive influences the industry have on the residents of Okata. The survey uncovered the major reasons why the residents believe that the current state of telecommunication industry in Nigeria promotes wastage of money by the service subscribers. Most of these setbacks are very popular with

the service subscribers and it is applicable to all the service providers hence undermining the intent of the industry. Issues such as poor network signal, poor interconnectivity, loss of network service and dropped calls are quality issues which in the long term will pile up the bills for subscribers. These issues promote lack of confidence in the industry and the regulator on the part of the subscribers. Subscribers have multiple subscriptions for different networks which give the subscriber the opportunity to choose networks whose services are better at any point in time. The subscribers therefore tend to pay for multiple lines of which some are redundant. In most occasions, these lines are blocked due to redundancy hence the money paid to acquire the line becomes a waste.

### **5.1.3 Impact on the Time Factor in Business**

Delays can cause substantial damage to business deals and even increase costs. Delays in passing across information can affect outcomes of business deals. Telecommunication provides relief to issues relating to information dissemination. However the current state of the telecommunication industry in Nigeria creates uneasy business atmosphere. There are cases of loss of network during business hours. This could be as a result of equipment/system failure, substandard equipments, human error and most importantly and interestingly, inadequate expansion provisions. As the industry grows in terms of service subscribers, it is expected that the companies provided the room to accommodate this expansion. However this is not the case in Nigeria as constant network congestions plague the industry. This condition affects split-second decisions and makes prompt transmission of information debatable. This negative impact of telecommunication in Okata has adverse effect on the people and the business environment hence affect the economic stability of the area.

## 5.2 Impact on the Social Status of Okata

The telecommunication industry has provided the opportunity for people to relate with each other irrespective of distance. Though people communicate more as it is easy and efficient, the cohesive characteristics for which humans are known are practically dwindling. This is because individuals tend to take easy way out in terms of relating with one another. There are online chats via the phones; conference calls in which more than one person can carry out a conversation and membership of online social networks are on the increase since the deregulation process began.

Telecommunication has reduced the cost of travelling cumulatively as individual travel less number of times. This also has impacted on the risks involved in travelling. Less people are now exposed to accidents or highway attacks from robbers. In terms of safety of the people, this is a welcomed development however it adversely affects those whose livelihood depends on the transportation industry. As Okata residents are concerned, taxi/bus drivers, park attendants and ticketing agents confirms decline to their income.

Telecommunication has improved the efficiency of the domestic services industry in Okata area. There is an instant access to services just with a phone call. Many domestic service providers enjoy a more precise and defined methods of operations as they rely on communication to get information of services required and provide response to enquiries.

There is reduction in misdemeanour among the youth since a number of them are getting employed directly and indirectly by the telecommunication industry. This is buttressed by a survey by NCC which put the national figure of those who are employed in the excess of 3 million. Telecommunication has improved the standard of living of millions of people hence improving their

social life. These people can therefore provide for themselves and dependant some level of comfort and the basic needs of life.

### **5.3 Verification of Findings**

From the analysis of the data collected from the survey, it is evident that telecommunication introduction into Nigeria has some definite impacts on the way of life of Nigerians living in the Okata area of Lagos. The findings show that there is an average improvement in the social and economic life of the people with respect to individual characteristics as purported by Anttalainen (2003) and Ngwainmbi (1999). There is also enough evidence from the results that depict the impact of telecommunication on the different businesses in the area. While most businesses recorded considerable successes, others, the minority, recorded no change as well as decline in their businesses. In Okata area, the transportation industry did not experience growth however the industry became more effective as unnecessary travels are avoided.

These findings concur, with the general report from most literatures reviewed, that telecommunication is a tool or vehicle for development as the case may be (Waverman et al, 2005; Jamil, 2008; Obijiofor, 2005; Anttalainen, 2003). Development can also be seen as improvement in different ways such as improvement in the way people communicate and improvement in the way people transact businesses. This is in agreement with report by Ndukwe (2008)<sup>1</sup>. However, this research showed that telecommunication impact assessment is not universal or predictive as reported by Hudson (1995).

The results show that different groups of individual are affected in different ways which agrees with the study by Gasmi and Virto (2005). Hence there is the need to diversify the application and service delivery methods to suit these groups. The next chapter elaborates the recommendations that will

enhance and improve the positive impact as well as ways of mitigating the negative impact of telecommunication in the Okata society.



## Chapter Six

### Conclusion and Recommendation

#### 6.0 General

The liberalization of the telecommunication in Nigeria in 2001 has brought about substantial inflow of funds into the Nigerian economy. The \$285 Million paid by the first three operators to acquire operating license and several other investments brought large cash inflow into the Nigerian economy. The magnitude of these interests and investments has shown that the industry is a very viable one. It has created jobs both directly and indirectly as seen in the survey. For the benefit of the telecommunication industry, Nigeria provides the ideal market with the large and growing population.

Hence in a fully liberalised market such as in Nigeria today, the future of each and every service provider would be bright or bleak depending on how it manages its consumers and assures consumer satisfaction.

#### 6.1 Conclusion

From the research study conducted, generally there are more positive impacts than negative ones. However there is a need for improvement in service delivery system and social involvement. This is because the service delivery process conveys the actual benefits of the industry to the people. The service delivery system is a function of the quality of service to be delivered. An issue which borders on the service quality requires attention to ensure that the people get the total and actual benefits of the telecommunication industry. The telecommunication industry brings about exposure and access to areas that seem remote. It is imperative for the regulatory bodies to study these recommendations including those suggested by other authors and apply the necessary actions or legislations that will address the shortcomings align the

telecommunication companies to the visions and missions of the telecommunication sector.

### **6.1.1 Economic Impact**

#### **6.1.1.1 Number of Telecommunication-related Business**

In Okata, there are 209 businesses counted randomly along the two major roads in Okata. This number does not include business located within the streets that are off the major roads. As the years go by, more businesses open up in Okata and the since it had been determined that the cost of starting up a telecommunication-related business is relatively lower than other major types of business, this encourages more people to venture into telecommunication related business. These businesses are major sources of income for most families as well as creating employment for individuals.

#### **6.1.1.2 Unemployment Rate**

Unemployment, especially among the youth, had reduced since the advent of telecommunication. Telecommunication industry, according to NCC as stated in Chapter 4, provided over 3 million individuals in Nigeria with employment. The businesses that are in existence as the result of the advent of telecommunication industry can be seen as source of employment to people. The people who are directly employed are not determined by this study. From the study, 71 percent of the telecommunication-related businesses were previously unemployed. It can then be concluded that more jobs and employment were created with the advent of the telecommunication industry hence reducing the unemployment rate in Okata.

### **6.1.1.3 Non Telecommunication-related Business**

The study revealed that other businesses that are not telecommunication-related benefited gainfully from telecommunication except the internet cybercafés. The transport sector recorded some adverse effects as recorded in chapter 4 but the favourable impacts of telecommunication on the sector was also determined. It can be concluded that other types of businesses had more positive impacts.

### **6.1.1.4 Income**

With the provision of employment and positive effects on existing businesses, telecommunication has generally increased the income of the people in Okota, cumulatively. There are more people making money from businesses that are associated with telecommunication. The study also revealed that other types of businesses use telecommunication services to improve on the income they generate from their businesses.

### **6.1.1.5 Cost of Service**

As the telecommunication industry grows, the cost of service, which is the amount of money people pay for telecommunication services, increased due to some factors that were determined from the survey. These factors affect the quality of service thereby making people to spend more money on these services. Poor network quality causes people to use more time on calls. Discussions last longer due to a caller trying to repeat what was said and this translates to more money being spent cumulatively since the charges are time-based. This also affects the income of individuals especially the salary-earners as more money is budgeted for paying telecommunication bills.

## **6.1.2 Social Impact**

### **6.1.2.1 Degree of Association/Interaction of People**

Degree of interaction of people can be viewed from two perspectives. Verbal communication has improved. Messages can be received anywhere in the world within seconds. People keep in touch more as compared to the era before telecommunication liberalization in Nigeria. However there is a significant drop in physical social interactions in Okata. Memberships in social organizations and clubs have dropped as well as attendance to social functions and gatherings. On the contrary, there is increase in number of online social networks as well as their memberships. Visits to these social networks are on the increase since it is on the palm of an individual's hand and a few buttons away.

### **6.1.2.2 Community Relation**

The presence of the telecommunication industry in Okata is only in the form of services being provided. There has been no event such as carnivals or funfairs ever hosted by a telecommunication company in Okata. There are no monuments or parks built or maintained by any telecommunication company in Okata. As such it is only the infrastructure which allows the companies to provide their services that are seen around Okata. There are no structures donated by any telecommunication companies for other uses. Structures such as classroom blocks for schools, public toilets and the likes are ways of a company establishing its presence in areas where they operate. This shows a poor community relationship stance of the telecommunication companies.

## **6.2 Recommendations**

Developments in technologies are expected to make life easier for the people. Yet there are obstacles which negate these expectations. Here

recommendations are detailed, based on the findings of the study, which are to improve the telecommunication industry and ensure that the people are impacted more positively. It is expected that these recommendations contributes to the developmental efforts of the NCC in regulating the activities in the telecommunication sector.

### **6.2.1 Subscription Control**

Before activation of SIM cards, telecommunication service providers must ensure that the details of subscribers are captured such that profiles are created for each subscriber. This provides information about service user such that providers can easily relate with user in terms of choice. The companies can help users to select the best type of service that will suit the user based on the user characteristics. For example, business subscriber should have a special platform which encourages the use of the telecommunication services during business hours thereby saving cost in the long term. The individual subscriber can have a flexible platform such that using the services after work hours is beneficial and cost effective.

Subscription control will also reduce the misuse of telecommunication services and reduce related social problems. Some form of restrictions should be put in place for minors who utilize services such as the internet. These minor can have access to sites that they are not supposed to due to the content of the sites. Also internet is known to encourage “nerd” behaviours in children. According to a report on Wikipedia, use of online social sites reduces the self-confidence in children, limits physical interaction and increases obesity. These are social problems.

### **6.2.2 Upgrades of System Equipment**

The equipments used by the service providers must meet the requirements specified by the NCC. In addition, the equipments should be specific in design,

fabrication and construction, relating to the environment where it is to be used. There are issues bordering the use of sub-standard equipments in the Nigerian telecommunication industry. The deficiencies inherent in the systems are manifested in quality of service that is provided for the subscribers. Also, as the number of subscribers increase, the system's capacity and capability needs to improve or be improved to accommodate the rising number of subscribers.

The upgrades will enhance the quality of service provided by the telecommunication companies. It will result in fewer dropped calls and reduce the frequency at which signals and networks are lost. These will save cost for the user, increase income for business subscribers and improve network reliability from the users' perspective.

### **6.2.3 Interconnection**

This issue bothers on the ability to connect two subscribers on different networks. Interconnection of network should be properly defined by the NCC such that call rejections and drops will be minimized. It is evident from the survey that individuals are induced into subscribing to different network on which their contacts mostly belong because intra-network connection is easier and faster than inter-network connection. Though this is true, deliberate dropping or rejections of calls from other network should be seen as violation of operation ethics on the part of the service provider.

### **6.2.4 Corporate Social Support**

Telecommunication companies, as part of the corporate social responsibility, should encourage and sponsor forums where people come together and interact with each other. This promotes cohesion in multi-ethnic areas to which Okata is among. Events such as talk shows, carnivals, game shows and fairs attract people together and these companies can also use this opportunity to showcase their new products and services as the case may be.

This can also be used as an opportunity for the companies to endear themselves to the community. Hence telecommunication companies should help charity organizations, assist students by providing scholarship, cultural and sports festivals, maintaining the neighbourhood park.

As part of social responsibility, telecommunication companies can encourage and support unemployed individuals by giving out business start-up lifelines in form of customized tables and chairs. These are some of the basic requirements for starting a roadside kiosk and are not expensive (less than 3000 naira).

### **6.2.5 Subscriber Service System**

From the survey carried out, there is only one customer service centre in the whole of the Okata area and the environs, belonging to the Globacom network. Though most of the telecommunication service providers operate over-the-phone customer service (call centre), which is cost effective for the companies, it is inefficient as it takes a lot of time to connect or speak to an agent. As the number of subscribers grows and the expectations of the subscribers evolve, the companies need to make provision for attending to these needs such that subscribers, confidence in the system remains unabated. According to the survey, it takes an average time of 6 minutes to connect to an agent in a 4-out-of-10 attempts. This is very poor customer service culture. Globacom has built a service centre in Okata such that subscribers in and around Okata can physically go to the service centre and get their problems sorted out. This is recommended for other service provider to follow suit.

### **6.3 Areas for Further Research**

The scope of this study was limited to the economic and social impact of telecommunication companies in Okata area of Lagos. The same study can also be carried out in other areas of Lagos and Nigeria. However some key areas of

study which can also be related to this research work has been identified and will be interesting to know the outcome.

### **6.3.1 Compliance of Telecommunication Industry**

This is as a result of observations made during the course of this research project. There are guidelines on the NCC websites which outlined the standards and requirements for operating a telecommunication company in Nigeria. One of the observations made was in the case of telecommunication mast location and use. It was observed that masts are located very close to residential a building, which is contrary to the NCC regulations. Hence this calls to mind of other cases where the telecommunication companies go contrary to these regulations.

### **6.3.2 Health Effect of Telecommunication Infrastructure**

There are research studies being carried out on the health effect of telecommunication infrastructure. Since this research requires some medical examinations and Subject Matter Experts (SME), it will involve a lot of individuals. But it is important as there may be some health effects on people that are expose to these infrastructures, especially in Lagos.

Telecommunication has provided Nigerians the means of sharing information among other benefits. Though the services are essential, there is the need to determine and evaluate how the people are affected by the industry.



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