UTILISATION OF INFORMATION AND COMMUNICATION TECHNOLOGY FOR STAFF RECRUITMENT, SELECTION AND PLACEMENT AMONG HUMAN RESOURCE MANAGEMENT PRACTITIONERS IN SOUTH-WEST NIGERIA

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ABSTRACT

Innovations in Information and Communication Technology (ICT) have created a digital revolution that has changed the way Human Resource Management (HRM) functions are conducted. Previous studies on ICT utilisation in organizations focused largely on functions such as finance, marketing and production, with little attention on HRM functions. This study, therefore, investigated the utilisation of ICT for staff recruitment, selection and placement among HRM practitioners in South-West Nigeria.

World system, Business innovations and Rogers' Diffusion of innovation were used as the theoretical framework. Research design was a descriptive survey and the study was conducted on the 1,052 registered members of the Chartered Institute of Personnel Management of Nigeria. A structured questionnaire was used to elicit information on socio-demographic characteristics, level of ICT utilisation for staff recruitment, influence of ICT utilisation for staff recruitment on the quality of staff recruited, benefits derivable from ICT utilisation; challenges associated with ICT utilisation; and perceived factors affecting utilisation of ICT for staff recruitment, selection and placement. The level of ICT utilisation was measured using Barber and Reilly's 19-item, 2-point scale categorized as low (< 19), moderate (20-29) and high (≥30). Twenty In-Depth Interviews were conducted with HRM practitioners purposively selected to complement the questionnaire. Quantitative data were analysed using descriptive statistics, Chi-square tests and Spearman Rank correlation at $P<0.05$ while qualitative data were content analysed.

The respondents' mean age was 46.3±1.0 years, 61.4% were males, and 72.4% were in the private sector. Majority of the respondents (47%) reported low ICT utilisation for staff recruitment functions, while 41.5% reported moderate and 11.5% reported high levels of ICT utilisation for staff recruitment functions. Majority of the respondents reported that ICT utilisation leads to recruitment of staff with good computer knowledge (56.9%), staff with wider exposure and experience (54.9%), and staff with multi-functional capacities (54.3%). Majority of the respondents also revealed that benefits derivable from ICT utilisation for staff recruitment included speed (98.0%), cost savings (98.0%), effective communication with applicants (96.2%), and obtaining wider range of applicants (98.0%). Challenges associated with ICT utilisation for staff recruitment included low internet penetration (86.0%), and high costs of acquisition and upgrading of software and ICT tools (87.4%). Technology dependence (84.8%), frequency of recruitment in organizations (73.4%), financial capability (85.1%), size of organizations (67.4%), and location of organizations (77.4%) were perceived factors affecting utilisation of ICT for staff recruitment functions. There was a positive and significant relationship between respondents' business sector and ICT utilisation ($X^2 = 39.10$) $r=0.08$). The IDI revealed that utilisation of ICT enhanced staff recruitment functions by bridging recruitment cycle and building data bases for future recruitments. However, poor power supply and network failure were identified as challenges.

Utilisation of ICT for staff recruitment, selection and placement offers a number of benefits to Human Resource Management practitioners in South-West Nigeria. Human Resource Management practitioners should, therefore, invest more, in acquisition and utilisation of internet facilities and computer software for their recruitment exercises.

Keywords: e-recruitment, Human Resource Practitioners, Utilisation

Word Count: 483

DEDICATION

This work is dedicated to

God Almighty,

And

My Wife: Omolara

And

My Children: Ayomide, Olamide & Ifemide

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CERTIFICATION

I certify that this study was carried out by **Samuel Ayodeji OMOLAWAL**, (MATRIC NO 130410), in partial fulfillment of the requirements for the award of Doctor of Philosophy Degree under my supervision:

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LIST OF ABBREVIATIONS/ACRONYMNS

AI	Artificial Intelligence
ATS	Automatic Tracking System
CANi	Computers for All Nigerians Initiative
CBT	Computer Based Tests
CIPM	Chartered Institute of Personnel Management
CV	Curriculum Vitae
DML	Digital Mobile License
FDI	Foreign Direct Investment
FM	Frequency Modulation
FRCN	Federal Radio Corporation of Nigeria
FTP	File Transfer Protocol
GPRS	General Packet Radio Service
GSM	Global System of Mobile Telecommunications
HRIS	Human Resource Information Service
HRM	Human Resource Management
HTML	Hypertext Markup Language
HTTP	Hypertext Transfer Protocol
ICT	Information and Communication Technology
IDI	In-Depth-Interview
IP	Internet Protocol
ISP	Internet Service providers
IT	Information Technology
LAN	Local Area Network
MIME	Multipurpose Internet Mail Extensions

NCC	Nigerian Communication Commission
NEPA	National Electric Power Authority
NTA	Nigeria Television Authority
OS	Operating System
PC	Personal Computer
PDA	Personal Digital Assistance
PHCN	Power Holding Company of Nigeria
PTO	Private Telephone Operator
QOS	Quality Of Service
RJP	Realistic Job Preview
TCP	Transmission Control Protocol
URL	Uniform Resource Locator
VSAT	Very Small Aperture Terminal
WAN	Wide Area Network
WAP	Web Application Protocol
WWW	World Wide Web

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

The emerging Information and Communication Technology (ICT) is one of the major features of the increasing technological change in the society today and it constitutes a major driving factor in the process of globalization. ICT covers any product that can store, retrieve, manipulate, transmit or receive information electronically. For example, personal computers, digital television, e-mail, robots and so on. Therefore, ICT is concerned with the storage, retrieval, manipulation, transmission or reception of digital data. Importantly, it is also concerned with the way these different uses can work with each other. ICT refers to development of innovative techniques of communicating faster than before. Innovations in information technology have created a digital revolution that is changing the way the world works, learns, communicates and transacts business (Al-Gore 2000; Awodun & Otokiti, 2001). Improvements in the early 1990s in computer hardware, software, and telecommunications have caused widespread improvements in access to information and economic potential. These advances have facilitated efficiency gains in all sectors of the economy. Information Technology (IT) provides the communication network that facilitates the expansion of products, ideas, and resources among nations and among people regardless of geographical location.

Creating efficient and effective channels to exchange information, Information Technology has been the catalyst for global integration. Recent advances in people's ability to communicate and process information in digital form - a series of developments sometimes described as an "IT revolution" - are reshaping the economies and social lives of many countries around the world. The tools and connectivity of the digital age now give people a way to easily obtain, share and act on information in new and remarkable ways (Ajayi 1996; Gate 1999; Onimode 2000; Obilor 2004; Bamiro, Oluleye, & Tiamiyu, 2006).

The spread of IT and its applications have been extraordinarily rapid. According to Centre for Strategic and International Studies (2006), "just twenty years ago, the use of desktop personal computers was limited to a fairly small number of technologically advanced people. The overwhelming majority of people produced documents with typewriters, which permit no manipulation of text and offer no storage. Fifteen years ago, large and bulky mobile telephones were carried only by a small number of users in just a few U.S. cities. Today, half of all Americans use a mobile phone, and in some developing countries, mobile phones are used by more people than the fixed line telephone network. But perhaps most dramatically, just ten years ago, only scientists and a few highly placed individuals were using, or had even heard about, the Internet, the World Wide Web was not up and running and the browsers that help users navigate the web had not even been invented yet".

In the contemporary world, the Internet and the Web have transformed every facet of human economic and social endeavours. Websites, chat rooms, instant messaging systems, e-mail, electronic bulletin boards and other Internet-based communication systems have made it much easier for people with common interests to find each other, exchange information, and collaborate with each other. More specifically, they have revolutionised commerce, creating entirely new ways for retailers and their customers to make transactions, for businesses to manage the flow of production inputs and market products; the news industry has also been dramatically transformed by the emergence of numerous Internet-enabled news-gathering and dissemination outlets; Education at all levels is being transformed by communication, educational, and presentational software and by Websites and other sources of information and analysis on the Internet. Products based upon or enhanced by information technology are used in nearly every aspect of life in contemporary industrial societies (Al-Gore, 2000)

The Information Technology revolution has been driven by the extraordinarily rapid decline in the cost and rapid increase in the processing power of digital technologies. The digital device whose technological advance has perhaps been most crucial to the IT revolution is the microprocessor, the

collections of millions of tiny circuits that serve as the "brains" of personal computers and that are being embedded in an ever-expanding number of products, from video games to cars to refrigerators. Over the past two decades, the processing power of microprocessors has doubled roughly every six months. The spread of digital technologies has also been spurred by several unique attributes of information, the principal input and product of many IT industries. In contrast to more tangible products, like consumer goods, one person's "consumption" of a piece of information does not necessarily reduce or eliminate the possibility that another person might benefit from the same piece of information. Furthermore, networks built upon the exchange of information, like the Internet, tend to become more valuable to existing participants as new participants link up with them. Finally, the cost of using digital technologies, such as Internet service providers, decreases as the number of users increases. All of these factors have worked together to promote rapid growth in the demand for and supply of IT products and services (Gate, 1999; Al-Gore, 2000)

During the second half of the 1990s, as more people bought computers and went on-line, the average cost of the equipment and services necessary to access the Internet declined. The desire to record increased efficiency and productivity in terms of quantity and quality of goods and services to meet customers' needs often make scientists and engineers to engage in all these. There is no doubt that technology improves organisational performance and this accounts for the motive behind organisational decisions to invest in technology for their organisational processes and functions (Etomi, 2002)

Advances in IT are producing many changes in the modern society. These changes have produced many benefits and have also raised several concerns: On the positive side, innovations in ICT have led to creation of new jobs, promotion of growth of new markets, increase in international trade and investment and so on. On the negative side, they have led to loss of jobs as innovations in IT create a greater demand for high-technology workers and introduce efficiencies that make jobs obsolete. Another negative consequence of the IT revolution is the inequitable distribution of access to IT, called the digital

divide. If the new technologies are to fulfill their promise, these costs and concerns will need to be addressed. Experience with previous technologies suggests that prudent policies can help effectively manage the risks associated with new technologies without harm to their benefits. Experience also suggests that the required policies must be developed through close consultation between government and private sector experts and stakeholders (Gilder, 1999, 2000; Kaku, 1997).

The effects of technological change on the global economic structure are creating immense transformations in the way industrial organisations and nations organize production, trade goods, invest capital, and develop new products and processes. Sophisticated information technologies permit instantaneous communication among the far-flung operations of global enterprises. New materials are revolutionizing sectors as diverse as construction and communications. Advanced manufacturing technologies have altered long-standing patterns of productivity and employment. Improved air and sea transportation has greatly accelerated the worldwide flow of people and goods and they all point to enhanced changes, competition and turbulence in the global economy. At the level of organisational operations, most activities have been transformed by the utilisation of information and communication technology Galtung, (1997). One of such is the human resource management (HRM) function of recruitment, selection and placement.

Traditionally, organisations depended on fairly low technology, including newspaper advertisements and employee referrals to locate and attract qualified candidates. Other traditional tools used for recruitment include manual typewriters, hand delivery/dispatch riders, postal services, handbills, radio, television, newspapers, and courier services. But recently, the recruitment function has been undergoing dramatic changes as a result of technologies such as the computer, computer software, webcam, internet, websites, telephone/cell phone, e-mail, video-conference and so on, leading one observer to remark: “few markets have been hit as hard by the power of the web and e-commerce as the recruiting industry; while there are still changes underway, it is clear that the web

has quickly and dramatically changed the way recruiting industry works" (Kay 2000, cited in Sign & Finn, (2003). The process of using the more sophisticated aspects of modern information and communication tools for staff recruitment functions is referred to as e-recruitment, also referred to as online recruitment.

The sophisticated aspects of information and communication technology (e-recruitment), allow human resources professionals to post open positions in detail so applicants can review this information at their own time, thus minimizing the time requirements by the recruiter on this phase of the recruitment process. Companies of all sizes typically have, at minimum, a website which allows them to conduct part of their business on-line. Some include a career section with on-line recruiting storing information on open positions, employee benefits to entice potential applicants and an application process. Job postings would be accessible to job seekers for 24 hours per day. By accepting letters of application and curriculum vitaes (CVs) sent via e-mail, applicants have the opportunity to respond right up until the closure date and time of the job advertisement (Stacey, 2010). Online employment recruitment provides a quick and easy way to sort out the qualified from those less qualified applicants and in whole, the recruiting process is greatly simplified (Day, 2010).

Furthermore, many companies are now taking the next steps in incorporating the Internet into the next steps of their recruitment process: Screening suitable candidates can take up a lot of time and resources, even more so when more applicants respond. On-line attitude and aptitude tests are becoming more popular as a means of selecting the right candidates (Yazdani, 2010). Video conference has also emerged thereby allowing interviews to be conducted on-line, while job offer and acceptance are being conducted online with e-signing allowing applicants to accept and confirm offer online. In many organisations, online processes have been added to the conduct of induction, a process which is called e-on-boarding. A later trend has been the creation of on-line databases, where job seekers could store their curriculum vitaes thereby giving employers the opportunity to search for candidates who fit the required profile. This can speed up the application process and give people who are interested in changing

their job the initiative to show their availability, without actively applying for jobs (Elkington, 2005; McCurry, 2005.**)**

In general, utilisation of the emerging ICT for staff recruitment, selection and placement offers a number of advantages which include simplicity of the recruitment process, speed, ease and comfort, cost saving, accuracy of processes, access to more applicants and so on, but they are not without some challenges which include screening and checking the skill mapping and authenticity of million of resumes being a problem and time consuming exercise for organisations, low Internet penetration and access, and lack of awareness of internet in many locations across the world (Stacey 2010). These challenges are more pronounced in the less developed societies of the world. In the light of this, this study investigated the utilisation of information and communication technology for staff recruitment, selection and placement among HR practitioners in South-West Nigeria.

1.2 Statement of the Problem

Traditionally, organisations depended on low technologies for staff recruitment, selection and placement but currently, modern Information and Communication Technologies have emerged and are being utilised for the staff acquisition function.

These technologies challenge the traditional process of human resources management, and the ways workers are recruited. High level of automation in organisations makes acquisition and management of technical and specialized knowledge of the new information technologies to have implications for staff recruitment and all other aspects of human resources management (Dauda 2007).

Empirical studies mostly in more industrialised societies (Gill, 2001; CIPD, 2003, 2005; Greenspan, 2003; Lee, 2005; McCurry, 2005; Aitchison, 2006; Reilly & Barber, 2006) show that the massive growth of information and communication technology has helped business organisations in more developed countries to enhance productivity and business growth through cost saving, simplification of organisational processes and increase in the speed at which

organisational functions such as staff recruitments are conducted, thereby enhancing their efficiencies. The benefits derivable and consequent high level of efficiency being recorded by human resource practitioners further encourage increasing level of utilisation for staff recruitment functions. This is because there is ready availability, access and capacity for adoption of the technological tools in those societies.

Despite the rise in the level of adoption and utilisation of the emerging information and communication technologies for staff recruitment especially in the more developed countries, same can not be said about Nigerian and African business organisations. This is so, because modern information and communication technologies are being diffused from more technologically developed countries to developing countries like Nigeria, which have limited capacity for adoption, and a cursory look at the global rating in terms of adoption and utilisation shows that Nigeria and other African countries are lagging behind. For example, Africa has 15.3% of the world population, but only 0.3% of broadband subscriptions, 10.9% of mobile subscriptions, 7.0% of internet connectivity measured in terms of number of Internet hosts and 16% Internet users in the world; Also, Nigeria has a fixed broadband subscription of 15,311 and ranked 136th in the world, mobile subscription of 17,339,012; mere 1234 internet hosts with ranking of 169th in the world; and a total internet users of 55,930,391 which represents 32.9% of the Nigerian population (internet Coaching Library, 2012; CIA World Fact book, 2012).

These statistics indicate low level of adoption and utilisation of ICT for various socio-economic activities in the country, and have negative implications for adoption of ICT for staff recruitment functions. Furthermore, most organisations in Nigeria are non- intensive ICT users, (that is, such organisations of course have some ICT facilities such as computers, Local Area Network (LAN), Wide Area Network (WAN), mobile and land phones), but there are no adequate terminals and other accessories required for effective connection to transform work process from the traditional to the modern day type. Consequently, Nigeria and most African countries are not being able to reap the

abundant benefits of the global information society and the information economy in areas such as e-recruitment, e-commerce, e-business, education, health, and so on (Ogunsola 2005; Kolawole, 2008). This situation may have been as a result of poor infrastructural facilities, unsafe business environment, low computer literacy level, cost of acquisition and limited investment to modernize and up-grade the information and communication technology, corruption and so on (Ukaegbu, 1987; Offiong, 2001; Etomi, 2002; Ajuwon, 2006; Nduka, 2006). Yet Nigerian human resource practitioners who desire to compete globally and gain higher efficiencies must find answers to the questions of how and which technology should be adopted for the conduct of their staff recruitment and selection functions as well as how to manage more efficiently issues arising from the global adoption of technology for other HR functions.

The utilisation and effects of ICT in different segments of human endeavours such as politics, media, education, banking, small scale businesses, health as well as organisational performance, and organisational activities have been documented (Awodun & Otokiti, 2001, Richard & Richard, 2001; Woherem, 2001; Jagboro, 2003; Adeoti, 2004; Adesope et al 2005, Ajuwon, 2006; Sesan, 2006; Imhonopi, 2010; Olanrewaju, 2011). Also, previous studies on utilisation of ICT for organisational functions have been focused largely on functions such as production, marketing, finance where statistics and figures are used as basis for measuring performances; with little or no attention on functions such as the human resource management which can not be statistically quantified and measured. Research gap therefore still exists on the study of the level and effects of utilisation of ICT on recruitment functions in Nigeria. This study was therefore undertaken to fill this gap by investigating the utilisation of ICT for staff recruitment, selection and placement among HR practitioners in South-west Nigeria.

1.3 Research Questions

Based on the above statement of the problems, this study was designed to answer the following research questions:

1. What is the level of utilisation of ICT for staff recruitment, selection and placement among HR practitioners in South-west Nigeria?
2. What is the influence of utilisation of ICT for staff recruitment, selection and placement on the quality of staff recruited?
3. What are the challenges associated with the utilisation of ICT for staff recruitment, selection and placement among HR practitioners in S/W Nigeria?
4. How do HR practitioners in S/W Nigeria perceive the factors that affect utilisation of ICT for staff recruitment, selection and placement in S/W Nigeria?

1.4 Research Objectives

The broad objective of this study was to investigate the utilisation of ICT for staff recruitment, selection and placement among Human Resource Practitioners in South-west Nigeria. The specific objectives were to:

1. assess the level of utilisation of ICT for staff recruitment, selection and placement among HR practitioners in S/W Nigeria;
2. examine the influence of utilisation of ICT for staff recruitment, selection and placement on the quality of staff recruited;
3. examine the benefits derivable by HR practitioners from utilisation of ICT for staff recruitment, selection and placement in S/W Nigeria;
4. investigate challenges associated with utilisation of ICT for staff recruitment, selection and placement in S/W Nigeria;
5. investigate the perception of HR practitioners regarding factors which affect the utilisation of ICT for staff recruitment, selection and placement in S/W Nigeria.

1.5 Study Hypotheses

Hypothesis 1:

There is no significant relationship between respondents' business sector and utilisation of ICT for staff recruitment functions.

Hypothesis 2:

There is no significant relationship between respondents' business sector and benefits derivable from utilisation of ICT for staff recruitment functions.

Hypothesis 3:

There is no significant relationship between location of organisations and adoption of e-recruitment

1.6 Justifications for the Study

The world system theory provides explanation on the inequalities that exist between and among nations in terms of level of development and the consequent dependence of some countries on others categorized as more technologically developed, for their technological and other needs. Technology is not merely a set of tools (hardware) and knowledge (software), neither does it work in vacuum; rather it is created and used by man within the context of certain social patterns (Galtung 1997) and it is capable of having social and economic effects on organisational activities and the social structure of Nigeria. The study was therefore justified on the ground that it contributed to the gathering of comprehensive empirical data on the diffusion of the new ICT into the human resource function of recruitment, selection and placement with a view to determining the level at which it is adopted and the influence of such adoption on the quality of the staff recruited into organisations especially in the South Western zone of Nigeria.

Secondly, the theory of business innovation provides explanation on the application of technology for a specific organisational function; in this case, ICT for human resource function of recruitment, selection and placement. E-

recruitment is seen as a business innovation capable of enhancing the conduct of staff recruitment. This study was therefore justified on the ground that it provided opportunity to investigate the benefits derivable from utilisation of ICT for staff recruitment, selection and placement in south west Nigeria.

Thirdly, for a country like Nigeria that relies on technologies diffused from the more developed nations and where the adoption of such technologies could be affected by certain local and environmental factors, the study provided opportunity to investigate the infrastructural, organisational, social and cultural factors that affect the process and level of adoption of ICT for staff recruitment in the study location.

Fourthly, apart from the contributions made to knowledge, it also provided a basis for decision makers, Chief Executive Officers and HR practitioners to evaluate their organisational efficiency as a result of the success of recruitment exercises done through the adoption of ICT. The expected outcomes of the study are useful for future research and development.

1.7 Scope and delimitation of the Study

The study was delimited to information and communication aspect of technology. Although attention was given to e-recruitment as a very important aspect of utilisation of ICT for staff recruitment, the scope of the study went beyond e-recruitment to cover the use of technologies such as the mobile phones, computer, electronic and print media and so on, since they are also used for the conduct of various aspects of staff recruitment, selection and placement.

Furthermore, the study was conducted among human resource practitioners who were involved in recruitment and selection functions and who were duly registered as members of the Chartered Institute of Personnel Management (CIPM), the only body licensed to develop, promote and regulate the human resource functions in the country. The study covered all human resource practitioners in the public sector, organized private sector as well as self employed practitioners such as human resource consultants, career agencies and recruitment agencies.

The study also delimited its respondents to human resource practitioners based in the South Western Geo-political Zone of the country, covering Lagos, Ogun, Oyo, Osun, Ondo and Ekiti States. This geo-political zone is home to many big manufacturing and service organisations regularly engaged in staff recruitment.

1.8 Operational Definition of Terms

This sub section provides operational definitions of some of the common terms used in the context of this research work. These include:

E-recruitment: The term e-recruitment means using information technology (IT) to speed up or enhance parts of the recruitment process. It ranges from the applicant interface for advertising vacancies and making job applications, to the back office processes, which allow a liaison between human resources (HR) and line managers to set up a talent pool or database of potential recruits. The term is used interchangeably with online recruiting and internet recruitment.

Human Resource Management: This is a management function concerned with the attraction, motivation and retention of workers required for the attainment of organisational goals. It is a sub-field of management that is responsible for formulation of policies, plans and practices that promote effective attraction, retention and motivation of the workforce.

Human Resource Practitioners: This is the generic title applied to cover individuals who engage in human resource management in both private and public organisations. Variations exist in specific titles adopted by specific organisations. For example, in the public sector, titles such as Director of Personnel, Deputy Registrar (Establishment), Administrative Officer and so on are adopted while in the organized private sector, titles such as Personnel Manager, Human Resource Manager, Staff Manager, HR Director and so on are adopted. In the un-organized private sector, titles such as HR Consultant,

Recruitment Agent, Management Consultants and so on are adopted. All these individuals perform the same range of functions which include the attraction, motivation and retention of workers needed to achieve organisational objectives. The term used to cover all these individuals is Human Resource Practitioners.

Information and Communication Technology: This refers to modern technology that is used for information and communication. Information and communication go to every where today as a result of the use of various technological tools such as the computers, internet, and media gadgets and so on.

Internet host: This refers to a computer connected directly to the internet; normally an Internet Service Provider (ISP) computer is a host. Internet users may use either a hard-wired terminal, at an institution with a mainframe computer connected directly to the internet, or may connect remotely by way of a modem via telephone line, cable, or satellite to the Internet Service Provider's host computer.

Placement: This is a management function of fixing eligible candidates for specific positions in an organisation. Placement may also be seen as the actual posting of selected candidates where they are expected to carry out their functions and is usually followed up with induction into the organisation

Private Sector: This refers to privately owned part of a nation's economy, in other words, the part of a free market economy that is made up of companies and organisations that are not owned or controlled by the government.

Public Sector: This refers to government and its activities, in other words, the portion of a nation's affairs, especially economic affairs, that is owned and controlled by the government.

Recruitment: This is a management function of attracting a pool of applicants or prospective employees to apply for job in an organisation. It could also be seen as the army of organisational practices and decisions used to affect the number of types of individuals who are willing to apply for, or accept, employment in an organisation.

Selection: This is a management function of choosing the best candidates from those recruited for positions in an organisation. It may also be defined as the process through which those who are recruited to serve as candidates are winnowed down to the few who are hired.

Videoconferencing: Videoconferencing refers to the conduct of a videoconference (also known as a video conference or video teleconference) by a set of telecommunication technologies which allows two or more locations to interact via two-way video and audio transmissions simultaneously.

1.9 Synopsis of other Chapters

Chapter Two of this work covers the review of relevant literature. Literature was reviewed under different sub-headings covering issues relating to ICT and its utilisation as well as human resource management, laying emphasis on recruitment, selection and placement. The Chapter also covers the theoretical framework (World System Theory, Theory of Business Innovations and Rogers' Diffusion of Innovation Theory) adopted for the study. The Chapter also covers the Conceptual framework designed to synthesize the theories as well as relevant concepts used in the study. Chapter three presents the methodology adopted in carrying out this study. Chapter Four covers the presentation and analysis of both quantitative and qualitative data used for the study while Chapter Five covers the summary, conclusion, recommendations and contributions to knowledge.

CHAPTER TWO
LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This chapter presents a comprehensive and systematic review of relevant literature on the research topic. The chapter is divided into two parts: Part One focuses on the co-evolution of science, technology and capitalism, the definition of Information and Communication Technology (ICT), its origin, various tools, application and utilisation for staff recruitment and selection, benefits and disadvantages. It also focuses on ICT utilisation in Nigeria and factors affecting the level of utilisation. The second part of the chapter deals with the three theories that were used to guide the study, and, the conceptual framework developed for the study.

2.1: Co-evolution of Science, Technology and Capitalism

The world today is dominated by the forces of science and technology which permeate every aspect of life and human activities. Science refers to a systematic study of anything that can be examined, tested, and verified. The word *science* is derived from the Latin word *scire*, meaning "to know." From its early beginnings, science has developed into one of the greatest and most influential fields of human endeavor (Burnie, 2009). Today different branches of science investigate almost everything that can be observed or detected, and science as a whole shapes the way we understand the universe, our planet, ourselves, and other living things. For a large part of recorded history, science had little bearing on people's everyday lives. Scientific knowledge was gathered for its own sake, and it had few practical applications. However, with the dawn of the Industrial Revolution in the 18th century, this rapidly changed. Today, science has a profound effect on the way people live, largely through technology—the use of scientific knowledge for practical purposes (Kaku, 1997).

Technology usually refers to the various elements of productive knowledge which help to transform materials into goods, create new or improved products, provide better and efficient services, and generate further knowledge

which is more advanced and more potent than hitherto available. According to Ulrich, (1997), technology has made the world smaller, closer and faster. In an environment of burgeoning computer literacy, ideas, images and information spread quickly worldwide. The words designating new technologies – the internet, video conferencing, global paging, instant information and analysis- conjure entire new worlds of business action. On the other hand, Capitalism refers to an economic system in which private individuals and business firms carry on the production and exchange of goods and services through a complex network of prices and markets. Capitalism has been a further force for globalization. In the 1850s, Marx cited in Molley (1994) noted that "capital by its nature drives beyond every spatial barrier" to "conquer the whole Earth for its market". More specifically, global markets offer prospects of increased profits through higher sales volumes. Capitalists also pursue globalization since it allows production facilities to be sited wherever costs are lowest and earnings greatest. Furthermore, global accounting practices enable prices and taxes to be calculated in ways that raise profits. Finally, global connections themselves (telecommunications, electronic finance, and so on) create major opportunities for profit making.

However, technology does not operate independently, rather there is a transmutation of technology, economic liberalization and capital and this transmutation works together to create a new globalized and interconnected world. Castells, (1996, 1997, 1998) and Held, McGrew, Goldblatt & Percaton (1999) argue that a technological revolution involving the creation of computerized network of communication, transportation, production and exchange is the presupposition of a globalised economy, along with the extension of a world capitalist market system that is absorbing ever more areas of the world and spheres of production, exchange and consumption into its orbit. Globalization unleashes technology, which in turn drives firms to plan production and sales on a global basis. Anyemedu, (2000) and Kellner, (2002) posit that the processes of economic globalization have led to unfettered spread and less barriers which facilitate the movement of technology, cash and so on to all parts of the globe. The process involves both capitalist markets and sets of social relations and flows

of commodities, capital, technology, ideas, forms of culture, and people across national boundaries via a global networked society. There is therefore a co-evolution of science, technology and capitalism and the complex system of globalization that combines capitalism, technological mutations, and a turbulent mixture of costs and benefits, gains and losses.

As argued by Ajayi, (1996) and Held, (2003), the rapid changes taking place in the world economy and industrial development are driven by three technological waves: information and communication technology (ICT), biotechnology and materials. Of these three, the first has the greatest influence, affecting virtually every aspect of human activities. For example, the internet in particular has been said to have revolutionised the way people collaborate and communicate with the global services it offers.

2.2 Meaning of Information and Communication Technology (ICT)

ICT is an acronym that stands for Information and Communications Technology. ICT is understood as a complex of artifacts, techniques and knowledge for solving human problems involving information and its communication. A major feature is the employment of electronic rather than mechanical means for storing, processing and communicating information. Sometimes, it is simply termed as the use of technology to handle information and aid communication (Stephenson 1997). Blurton (1999) defines ICT as a diverse set of technological tools and resources used to communicate and create, disseminate, store and manage information. Also, Woherem (2001) defines ICT as a systematized body of tools, techniques and infrastructure for generating, collecting, storing, processing and transmitting data and information. Aluko (2004) sees ICT as an essential enabling technologies (both hardware and software) necessary for the delivery of voice/audio, data (high and low speed), video, fax and internet services from point A to B (or possibly to multipoint B, C and so on) using wired and wireless media and associated equipment that are connected via Internet Protocol (IP) and non-IP networks, where the option exists

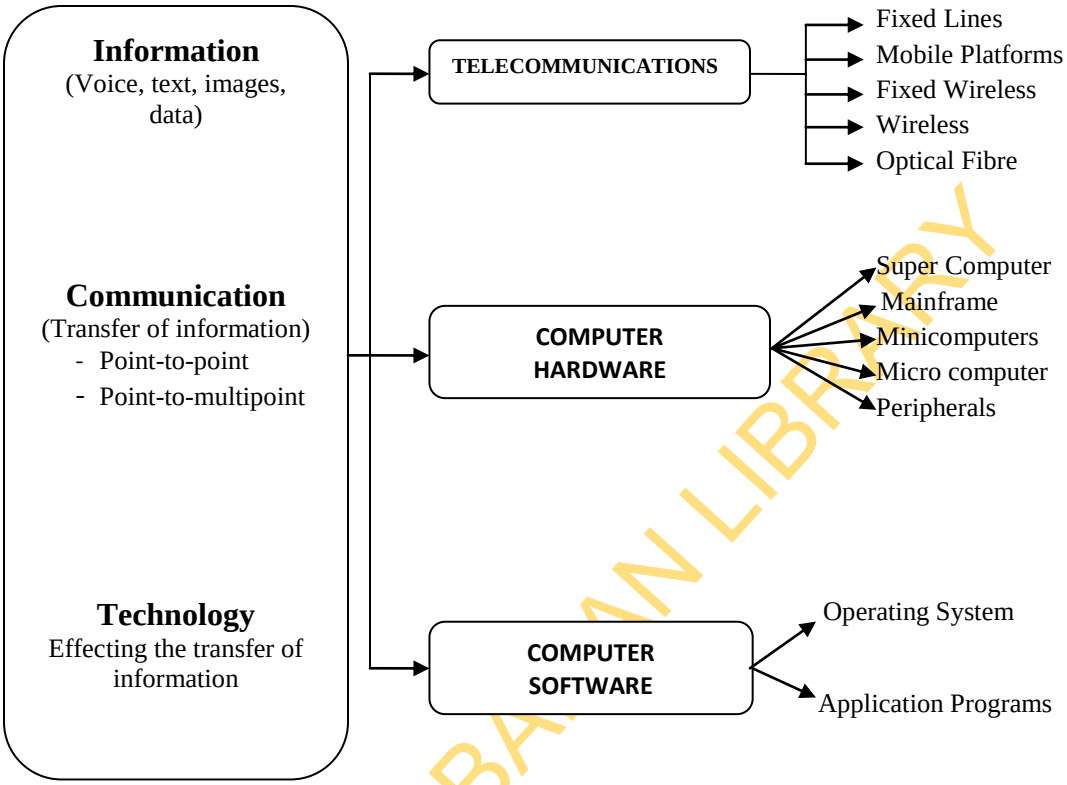
that any or all of the communicating points may be fixed or mobile during the communication process. Koontz and Weihrich (2005) define ICT as formal system of gathering, interacting, comparing, analyzing and dispersing of information internal and external to the enterprise in a timely, effective and efficient manner. According to Kolawole (2008), ICT is an umbrella term that includes any communication device or application, encompassing radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning.

From the plethora of the definitions stated above, it could be seen that ICT covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form. For example, personal computers, digital television, email, robots. So ICT is concerned with the storage, retrieval, manipulation, transmission or reception of digital data. Importantly, it is also concerned with the way these different uses can work with each other. In business, ICT is often categorized into two broad types of product: -

(1) The traditional computer-based technologies (things you can typically do on a personal computer or using computers at home or at work); and (2) The more recent and fast-growing range of digital communication technologies (which allow people and organisations to communicate and share information digitally)

To Elekwa, Bamiro, Oluyide, Ladoye, Nurudeen and Aturu (2009), ICT is an acronym that stands for Information and Communication Technology. It covers a broad spectrum of activities involving production, processing and distribution of information and knowledge. The basic element of ICT and the determinants of level of access to it are illustrated in the schematic diagram below:

ICT Access Level Determinants



Source: Adapted from Elekwa et al, (2009)

The 'I' part of ICT refers to information which can be in form of voice, text, images or data.

The 'C' part refers to communication which means transfer of information from either point-point or point-to-multipoint. The transfer is usually over some distance.

The 'T' part of ICT refers to technology with which the transfer of information is effected. The technology is by electronic means. The transfer of information is often achieved via networks of sending and receiving equipment, wires and satellite links.

To Elekwa and others, ICT can be categorized into three main interlocking sub-sectors:

Telecommunication

Computer Hardware

Computer software

Telecommunication is communication using fixed lines, mobile platforms, fixed wireless or optical fibre. Computer hardware is used for sending and receiving information. Supercomputers, mainframe computers, minicomputers, microcomputers are examples of types of computers. Examples of computer hardware include keyboard, monitor, system unit and so on while Computer software is the programme that instructs and directs the computer and other devices to it so that the computer will know what to do with the information or data to be sent or received. Operating system (OS) and application programmes are examples of computer software (Elekwa et al, 2009)

2.3 Origin, History and Development of ICT

Information and telecommunication have played an important role throughout the evolution of all species. It was known right from the start that information about people's surroundings gives them a better chance of survival. What is edible? What is dangerous? What do the changes in the weather signify? Who is the enemy? Each individual in the community would gather bits and pieces of data and information about these and other aspects of their environment. Clearly, information not passed on is information lost. Communication within each species therefore gradually developed, getting more and more advanced as the complexity of the information to be passed on increased. Families developed into communities, and communities covered increasingly large areas. For communities covering large areas, it was no longer viable to communicate verbally, through, for instance, shouting, especially in emergencies (translating normally to danger). The need for long distance communication, or telecommunication, was appreciated very early in human community development (tele – at a distance). Smoke signals, drums, runners, carrier pigeons, semaphores: all these played a crucial role at one stage in telecommunications, ensuring that vital information could be rapidly transmitted from one person or community to another. We are therefore not dealing with a new concept when we talk about information and telecommunications, even if in our modern conceit we often think so. We are just talking about new methods, ways and tools

(technology) of doing what we have always done (Tusubira & Kyeyune, 2001; Imhonopi, 2010)

Improvements in the early 1990s in computer hardware, software, and telecommunications have caused widespread improvements in access to information and economic potential. These advances have facilitated efficiency gains in all sectors of the economy. Information Technology (IT) provides the communication network that facilitates the expansion of products, ideas, and resources among nations and among people regardless of geographical location.

Creating efficient and effective channels to exchange information, Information Technology has been the catalyst for global integration. Recent advances in people's ability to communicate and process information in digital form - a series of developments sometimes described as an "IT revolution" - are reshaping the economies and social lives of many countries around the world. The tools and connectivity of the digital age now give people a way to easily obtain, share and act on information in new and remarkable ways (Ajayi 1996; Gate 1999; Onimode 2000; Obilor 2004; Bamiro, Oluleye, & Tiamiyu, 2006).

The spread of IT and its applications have been extraordinarily rapid. According to Centre for Strategic and International Studies (2006), "just twenty years ago, the use of desktop personal computers was limited to a fairly small number of technologically advanced people. The overwhelming majority of people produced documents with typewriters, which permit no manipulation of text and offer no storage. Fifteen years ago, large and bulky mobile telephones were carried only by a small number of users in just a few U.S. cities. Today, half of all Americans use a mobile phone, and in some developing countries, mobile phones are used by more people than the fixed line telephone network. But perhaps most dramatically, just ten years ago, only scientists and a few highly placed individuals were using, or had even heard about, the Internet, the World Wide Web was not up and running and the browsers that help users navigate the web had not even been invented yet".

In the contemporary world, the Internet and the Web have transformed every facet of human economic and social endeavours. Websites, chat rooms,

instant messaging systems, e-mail, electronic bulletin boards and other Internet-based communication systems have made it much easier for people with common interests to find each other, exchange information, and collaborate with each other. More specifically, they have revolutionised commerce, creating entirely new ways for retailers and their customers to make transactions, for businesses to manage the flow of production inputs and market products; the news industry has also been dramatically transformed by the emergence of numerous Internet-enabled news-gathering and dissemination outlets; Education at all levels is being transformed by communication, educational, and presentational software and by Websites and other sources of information and analysis on the Internet. Products based upon or enhanced by information technology are used in nearly every aspect of life in contemporary industrial societies (Al-Gore, 2000)

The Information Technology revolution has been driven by the extraordinarily rapid decline in the cost and rapid increase in the processing power of digital technologies. The digital device whose technological advance has perhaps been most crucial to the IT revolution is the microprocessor, the collections of millions of tiny circuits that serve as the "brains" of personal computers and that are being embedded in an ever-expanding number of products, from video games to cars to refrigerators. Over the past two decades, the processing power of microprocessors has doubled roughly every six months. The spread of digital technologies has also been spurred by several unique attributes of information, the principal input and product of many IT industries. In contrast to more tangible products, like consumer goods, one person's "consumption" of a piece of information does not necessarily reduce or eliminate the possibility that another person might benefit from the same piece of information. Furthermore, networks built upon the exchange of information, like the Internet, tend to become more valuable to existing participants as new participants link up with them.

Finally, the cost of using digital technologies, such as Internet service providers, decreases as the number of users increases. All of these factors have worked together to promote rapid growth in the demand for and supply of IT products and services (Gate, 1999; Al-Gore, 2000).

During the second half of the 1990s, as more people bought computers and went on-line, the average cost of the equipment and services necessary to access the Internet declined. The desire to record increased efficiency and productivity in terms of quantity and quality of goods and services to meet customers' needs often make scientists and engineers to engage in all these. There is no doubt that technology improves organisational performance and this accounts for the motive behind organisational decisions to invest in technology for their organisational processes and functions (Etomi, 2002).

Advances in IT are producing many changes in the modern society. These changes have produced many benefits and have also raised several concerns: On the positive side, innovations in ICT have led to creation of new jobs, promotion of growth of new markets, increase in international trade and investment and so on. On the negative side, they have led to loss of jobs as innovations in IT create a greater demand for high-technology workers and introduce efficiencies that make jobs obsolete. Another negative consequence of the IT revolution is the inequitable distribution of access to IT, called the digital divide. If the new technologies are to fulfill their promise, these costs and concerns will need to be addressed. Experience with previous technologies suggests that prudent policies can help effectively manage the risks associated with new technologies without harm to their benefits. Experience also suggests that the required policies must be developed through close consultation between government and private sector experts and stakeholders (Gilder, 1989; Kaku, 1997).

2.4 Characteristics of Information and Communication Technology

According to UNDP (2005) and Kolawole (2010), certain basic and unique characteristics distinguish ICT and these include:

- ICT is a powerful enabler of developmental goals because its unique characteristics dramatically improve communication and the exchange of information to strengthen and create new economic and social networks.

- ICT is pervasive and cross cutting: ICT can be applied to the full range of human activity from personal to business and government. It is multifunctional and flexible, allowing for tailored solutions-based on personalization and localization- to meet diverse needs.
- ICT is a key enabler in the creation of network and thus allows those with access to benefit from exponentially increasing returns as usage increases.
- ICT fosters the dissemination of information and knowledge by separating content from its physical location. This flow of information is largely impervious to geographic boundaries – allowing remote communities to become integrated into global networks and making information, knowledge and culture accessible, in theory to anyone.
- The 'digital' and 'virtual' nature of ICT products and services allows for zero or declining marginal costs. Replication of content is virtually free regardless of its volume and marginal costs for distribution and communication are near zero. As a result, ICT can radically reduce transaction costs.
- ICT's power to store, retrieve, sort, filter, distribute and share information seamlessly can lead to substantial efficiency gains in production, distribution and markets.
- The increase in efficiency and subsequent reduction of costs brought about by ICT is leading to the creation of new products, services and distribution channels within traditional industries, as well as innovative business models and whole new industries. With the required initial investment being just a fraction of what was required in the more physical-asset intensive industrial economy, barriers to entry are significantly lowered, and competition increased.
- ICT facilitates dis-intermediation, as it makes it possible for users to acquire products and services directly from the original provider, reducing the need for intermediaries.
- ICT is global. Through the creation and expansion of networks, ICT can transcend cultural and linguistic barriers by providing individuals and groups the ability to live and work anywhere, allowing local communities to become part of the global

network economy without regards to nationality and challenging policy, legal and regulatory structures within and between nations.

2.5 Components of ICT

According to Bamiro et al (2006), ICTs are defined by two very important and interconnected components: (i) the computer, including the different types of computer and telecommunications networks, among which are telephone networks, Local Areas Network of computers (LAN) and (ii) the Internet. The Internet is itself a network of different connected LAN and individual computers.

2.5.1 Computer

The computer is designed as general purpose equipment which can be used for different information collection, conversion, and analysis and transfer application depending on the software that is used with it. Computer is a machine that performs tasks, such as calculations or electronic communication, under the control of a set of instructions called a programme. In other words, computer equipment is necessary for computing applications, but the sufficient requirements are (i) software (or computer programmes) for processing information (ii) the users' knowledge of the different ways a computer can be used to facilitate operations, and (iii) the users' skill in using particular software to facilitate the collection of information, analysis of data. Both are essential aspects of Information and Communication Technology.

Programmes usually reside within the computer and are retrieved and processed by the computer's electronics. The programme results are stored or routed to output devices, such as video display monitors or printers. Computers perform a wide variety of activities reliably, accurately, and quickly (Syder, 2009).

People use computers in many ways. In business, computers track inventories with bar codes and scanners, check the credit status of customers, and transfer funds electronically. In homes, tiny computers embedded in the electronic circuitry of most appliances control the indoor temperature, operate home security systems, tell the time, and turn videocassette recorders (VCRs) on and off.

Computers in automobiles regulate the flow of fuel, thereby increasing gas mileage, and are used in anti-theft systems. Computers also entertain, creating digitized sound on stereo systems or computer-animated features from a digitally encoded laser disc. Computer programmes, or applications, exist to aid every level of education, from programmes that teach simple addition or sentence construction to programmes that teach advanced calculus. Educators use computers to track grades and communicate with students; with computer-controlled projection units, they can add graphics, sound, and animation to their communication. Computers are used extensively in scientific research to solve mathematical problems, investigate complicated data, or model systems that are too costly or impractical to build, such as testing the air flow around the next generation of aircraft. The military employs computers in sophisticated communications to encode and unscramble messages, and to keep track of personnel and supplies (Snyder, 2009)

Computers, according to Bamiro et al (2006), continue to be employed mainly due to the advantages relating to:

Reduction of computational errors

More effective control procedures

Greater degree of system integration

Simplification of problem solution by use of software

Ready supply of information to impact decision making

The computer has become a vital ICT tool for the conduct of staff recruitment, selection and placement. Without internet facilities, the computer is used for storing applicants' data, sorting and analyzing applications for the purpose of short listing. The computer provides a means of conducting written tests for applicants as part of selection process, and with relevant software, the process of grading of tests are done on the computer. On the other hand, with internet facilities, the computer is useful in the process of accessing job portals on the websites, responding to job vacancies, downloading and storing applicants' data and so on. At a more sophisticated level, the computer is a vital component of videoconferencing (Etomi, 2002)

2.5.2 Internet

The Internet is simply a computer-based global information system, composed of interconnected networks of computers. The Internet can be seen as interconnection of millions of computer and telecommunications net-work of the different countries of the world. Some of these computers are actively connected to telephone lines twenty-four hours everyday waiting to attend to other computers, or send, receive, store or forward messages, computer files and other instructions between themselves on behalf of their users. The message, files and instructions are transferred between the computers in form of electronic signals through the inter-connecting telecommunications network. The signals are exchanged between the computers much in the same fashion as people exchange telephone calls among themselves (Comer, 2009).

The internet is an international network whose origin came from the federally- funded research that started in the Department of defense in the early 1960s and was nurtured by the National Science Foundation of the United States of America until the mid 1990s. Ever since then, the internet has grown in sophistication, resources and services, and is in fact, creating an 'information economy' in both developed and developing countries. The driving force for the feat is the provision and utilisation of the many internet services from simple ones like electronic mails, search engines, file transfer, remote login to advanced and newer functions such as broadband services, all driven by the Transmission Control Protocol (TCP) and Internet Protocol (IP). The TCP and IP define the rule by which packets of data are addressed and transmitted across physical fibers, satellite and wireless networks. The connection and provision of these internet services to consumers is usually done by the Internet Service Providers (ISP), and usually there is a mode of connectivity, a bandwidth for the services, types and levels of services (the height of which are broadband services). Simple services such as e-mail are guaranteed to consumers by telephone connections (offering at a rate of 9.6kbps) or at most, the digital subscriber line for improved service delivery. Broadband services require other more sophisticated modes of

connectivity such as the fiber optic cable, microwave and Very Small Aperture Terminal (VSAT) (Comer, 2009).

E-mail, and related facilities and services on the internet, such as teleconferencing, telecommuting, e-commerce, e-learning, e-recruitment and internet browsing or surfing, are all made possible between offices, organisations, regions and countries through the networking of computers by various types of telecommunications media and equipment, including ordinary telephone lines, fibre-optic cables, satellites, microwave channels, telephone switchboards, modems, and so on. Such networking of computers by communications media and equipment is referred to as *Internet* if the network spans the whole world; as *wide area network* (WAN) if it spans an area greater than about 5 kilometers; as an intranet if it connects only the computers of the same organisation irrespective of location; and as extranet if it links an organisation's computers to those of its client; and so on (Bamiro et al, 2006).

The Internet's success arises from its flexibility. Instead of restricting component networks to a particular manufacturer or particular type, internet technology allows interconnection of any kind of computer network. No network is too large or too small, too fast or too slow to be interconnected. Thus, the internet includes inexpensive networks that can only connect a few computers within a single room as well as expensive networks that can span a continent and connect thousands of computers.

Computers on the Internet are classified into two main types namely, server and clients. Servers are computers that have extensive data processing, storage and communications capabilities; that can receive and send signals to many other computers simultaneously, and are usually on twenty-four hours a day and seven days each week. Servers are usually perpetually actively connected to one another waiting to receive or send messages and data among themselves. Other computers that lack these capabilities are referred to as clients, and often must connect to nearby servers [usually owned by Internet Service Provider (ISP) organisations] in order to connect to other servers and client computers on the internet. Internet service providers (ISPs) provide Internet access to customers,

usually for a monthly fee. A customer who subscribes to an ISP's service uses the ISP's network to access the Internet. Because ISPs offer their services to the general public, the networks they operate are known as public access networks. In the United States, as in many countries, ISPs are private companies; in countries where telephone service is a government-regulated monopoly, the government often controls ISPs (Comer, 2009).

An organisation that has many computers usually owns and operates a private network, called an intranet, which connects all the computers within the organisation. To provide Internet service, the organisation connects its intranet to the Internet. Unlike public access networks, intranets are restricted to provide security. Only authorized computers at the organisation can connect to the intranet, and the organisation restricts communication between the intranet and the global Internet. The restrictions allow computers inside the organisation to exchange information but keep the information confidential and protected from outsiders.

The Internet has doubled in size every 9 to 14 months since it began in the late 1970s. In 1981 only 213 computers were connected to the Internet. By 2000 the number had grown to more than 400 million. The current number of people who use the Internet can only be estimated. Some analysts said that the number of users was expected to top 1 billion by the end of 2005. (Comer, 2009)

Before the Internet was created, the U.S. military had developed and deployed communications networks, including a network known as ARPANET. Uses of the networks were restricted to military personnel and the researchers who developed the technology. Many people regard the ARPANET as the precursor of the Internet. From the 1970s until the late 1980s the Internet was a U.S. government-funded communication and research tool restricted almost exclusively to academic and military uses. It was administered by the National Science Foundation (NSF). At universities, only a handful of researchers working on Internet research had access. In the 1980s the NSF developed an "acceptable use policy" that relaxed restrictions and allowed faculty at universities to use the

Internet for research and scholarly activities. However, the NSF policy prohibited all commercial uses of the Internet. Under this policy advertising did not appear on the Internet, and people could not charge for access to Internet content or sell products or services on the Internet.

By 1995, however, the NSF ceased its administration of the Internet. The Internet was privatized, and commercial use was permitted. This move coincided with the growth in popularity of the World Wide Web (WWW), which was developed by British physicist and computer scientist Timothy Berners-Lee. The Web replaced file transfer as the application used for most Internet traffic. The difference between the Internet and the Web is similar to the distinction between a highway system and a package delivery service that uses the highways to move cargo from one city to another: The Internet is the highway system over which Web traffic and traffic from other applications move. The Web consists of programmes running on many computers that allow a user to find and display multimedia documents (documents that contain a combination of text, photographs, graphics, audio, and video). Many analysts attribute the explosion in use and popularity of the Internet to the visual nature of Web documents. By the end of 2000, Web traffic dominated the Internet—more than 80 percent of all traffic on the Internet came from the Web (Comer, 2009).

The Internet has become very useful in all spheres of human activities and has made it possible for people all over the world to communicate with one another effectively and inexpensively. Unlike traditional broadcasting media, such as radio and television, the Internet does not have a centralized distribution system. Instead, an individual who has Internet access can communicate directly with anyone else on the Internet, post information for general consumption, retrieve information, use distant applications and services, or buy and sell products. The Internet has brought new opportunities to government, business, and education. Governments use the Internet for internal communication, distribution of information, and automated tax processing. In addition to offering goods and services online to customers, businesses use the Internet to interact

with other businesses. Many individuals use the Internet for communicating through electronic mail (e-mail), retrieving news, researching information, shopping, paying bills, banking, listening to music, watching movies, playing games, and even making telephone calls. It has brought information to the doorstep of both the rich and the poor. It is cheap to use and deploy within an organisation (Comer, 2009). Educational institutions use the Internet for research and to deliver online courses and course material to students.

Companies, individuals, and institutions use the Internet in many ways. Companies use the Internet for electronic commerce, also called e-commerce, including advertising, selling, buying, distributing products, and providing customer service. In addition, companies use the Internet for business-to-business transactions, such as exchanging financial information and accessing complex databases. Businesses and institutions use the Internet for voice and video conferencing, electronic recruitment and other forms of communication that enable people to telecommute (work away from the office using a computer). The use of e-mail speeds communication between companies, among co-workers, and among other individuals. Media and entertainment companies run online news and weather services over the Internet, distribute music and movies, and actually broadcast audio and video, including live radio and television programmes. File sharing services allow individuals swap music, movies, photos, and applications, provided they do not violate copyright protections. Online chat allows people to carry on discussions using written text. Instant messaging enables people to exchange text messages; share digital photo, video, and audio files; and play games in real time. Scientists and scholars use the Internet to communicate with colleagues, perform research, distribute lecture notes and course materials to students, and publish papers and articles. Individuals use the Internet for communication, entertainment, finding information, and buying and selling of goods and services (Holland & Westwood, 2001; Kolawole, 2008)

Services provided by the Internet

Service	**Description of Service**
EMAIL	Electronic mail. Permits the sending and receiving of messages to other users connected to the Internet.
FTP	File Transfer Protocol. A means of sending and receiving files from one computer to another.
Electronic Commerce	Commercial and financial transactions initiated and closed via one's communication terminal (computer, phone, etc)
USENET NEWS	A number of discussion groups that allow users to post questions and replies, sorted by topic. Also known as news.
WWW	World Wide Web. Accessed using a web browser such as Netscape Navigator or Internet Explorer, a means of locating and displaying Information located on the Internet.

Source: Adapted from Comer, 2009

Services: Internets support thousands of different kinds of operational and experimental services. A few of the most popular, according to Snyder, (2009) include the following:

i. E-mail (electronic mail) allows a message to be sent from one person to another, or to many others, via computer. Internet has its own e-mail standards that have also become the means of interconnecting most of the world's e-mail systems. Internet e-mail addresses usually have a form such as "editor@cable.com", where "editor" is the e-mail account name, and "cable.com" is the domain identity of the computer hosting the account. E-mail can also be used to create collaborative groups through the use of special e-mail accounts called "reflectors" or "exploders" that automatically redistribute mail sent to the address.

ii. The World Wide Web allows the seamless creation and use of elegant point-and-click hypermedia presentations, linked across the Internet in a way that creates a vast open knowledge repository, through which users can easily browse.

iii. Gopher is a system that allows the creation and use of directories of files held on computers on the Internet, and builds links across the Internet in a manner that allows users to browse through the files.

iv. FTP (File Transfer Protocol) is a set of conventions allowing easy transfer of files between host computers. This remains the biggest use of the Internet, especially for software distribution, and many public distribution sites now exist.

v. Usenet allows automatic global distribution of news messages among thousands of user groups, called newsgroups.

vi. Telnet is the system that allows a user to "log in" to a remote computer, and make use of it.

According to Onwubiko (2004), the internet demonstrates better advantages over and above the telephone, radio, television, postal services, the courier and other conventional technological facilities. It not only has succeeded in displacing them, it has also successfully incorporated their functions and capabilities to itself. Being the richest library of information along with such facilities as the web and e-mail, which help in sifting and surfing its information contents, the internet provides a strong economic platform and features the richest market place with the broadest of quality goods and services to potential buyers that can run into hundreds and several millions of people. Added to this strength is its ability to provide a publicity and promotional platform for business and events at such a cheap price than the television and other contemporary media platforms cannot match. Added to these benefits is the range of other emerging services such as e-commerce, e-banking, e-recruitment, e-business and so on, which have all transformed the way such businesses were traditionally conducted (Dauda, 2007). According to Imhonopi (2010), the internet combines better sound quality than the telephone when making calls, lends its advantages to the fax and making services at an unimaginable level of efficiency and speed of information

flow. It also allows for individuals at various locations on the globe to stay in touch via its e-mail, internet and its other uses.

Applied to staff recruitment, selection and placement, the internet has enabled wide-spread adoption of computer based assessment. In addition, companies use the internet to advertise vacancies to attract applicants to apply for existing vacancies. Also, using the internet for automated reference checks has become the trend that replaces the time consuming manual process and is used for many other stages.

Other Components

2.5.3 Websites

A website, also written as Web site, web, or simply site, is a collection of related web pages containing images, videos or other digital assets. World Wide Web refers to library of resources available to computer users through the global Internet. It enables users to view a wide variety of information, including magazine archives, public and college library resources, and current world and business news. A website is hosted on at least one web server, accessible via a network such as the Internet or a private local area network through an Internet address known as a Uniform Resource Locator. All publicly accessible websites collectively constitute the World Wide Web. A web page is a document, typically written in plain text interspersed with formatting instructions of Hypertext Markup Language (HTML, XHTML). A web page may incorporate elements from other websites with suitable markup anchors (Cailliau, 2007; Snyder, 2009).

Web pages are accessed and transported with the Hypertext Transfer Protocol (HTTP), which may optionally employ encryption HTTP Secure, (HTTPS) to provide security and privacy for the user of the web page content. The user's application, often a web browser, renders the page content according to its HTML markup instructions onto display terminal.The pages of a website can usually be accessed from a simple Uniform Resource Locator (URL) called the homepage. The URLs of the pages organize them into a hierarchy, although hyper

linking between them conveys the reader's perceived site structure and guides the reader's navigation of the site (Cailliau, 2007; Snyder, 2009).

Some websites require a subscription to access some or all of their contents. Examples of subscription websites include many business sites, parts of news websites, academic journal websites, gaming websites, file-sharing websites, message boards, web-based email, social networking websites, websites providing real-time stock market data, and websites providing various other services (e.g., websites offering storing and/or sharing of images, files and so forth). World Wide Web (WWW) resources are organized so that users can easily move from one resource to another. The connections to different source computers, or servers, on the network are made automatically without being seen by the user. These connections are made with the use of hypertext and hypermedia.

Users generally navigate through information on the WWW with the aid of a programme known as a WWW browser, or client. The browser presents text, images, sound, or other information objects on the user's computer screen in the form of a page, which is obtained from a WWW server. The user can navigate through information by pointing to specially designated text or other objects on the screen. These objects link the user to other WWW pages on the same server or on any other accessible WWW server on the network. The WWW links exist across the global Internet, forming a large-scale, distributed, multimedia knowledge base through related words, phrases, and images. Smaller-scale implementations are present on the enterprise internets used by businesses. These implementations, known as “intranets” host private data and applications and can be protected from public access through a device known as a “firewall”.

The WWW was developed in 1989 by Timothy Berners-Lee, a British computer scientist at the CERN research facility near Geneva, Switzerland, to allow information-sharing among internationally dispersed teams of high-energy physics researchers. It subsequently became a platform for related software development, and the numbers of linked computers and users grew very rapidly to support a wide variety of endeavours, including a large business marketplace. Its

further development is guided by the WWW Consortium based at Massachusetts Institute of Technology. Current concerns include the efficiency of search engines, the security of transactions and privacy of users, as well as preventing Internet piracy. The main prospect for WWW is its development to form a basis for electronic business. Many applications have been developed to add payment, reservation, and other interactive facilities to WWW pages (Cailliau, 2007; Snyder, 2009). Before the introduction of HTML and HTTP, other protocols such as File Transfer Protocol and the gopher protocol were used to retrieve individual files from a server. These protocols offer a simple directory structure which the user navigates and chooses files to download. Documents were most often presented as plain text files without formatting, or were encoded in word processor formats.

Organized by function, a website may be:

a personal website

a commercial website

a government website

a nonprofit organisation website.

It could be the work of an individual, a business or other organisation, and is typically dedicated to some particular topic or purpose. Any website can contain a hyperlink to any other website, so the distinction between individual sites, as perceived by the user, may sometimes be blurred. Web pages can be viewed or otherwise accessed from a range of computer-based and Internet-enabled devices of various sizes, including desktop computers, laptops, PDAs and cell phones. A website is hosted on a computer system known as a web server, also called an HTTP server, and these terms can also refer to the software that runs on these systems and that retrieves and delivers the web pages in response to requests from the website users. Apache is the most commonly used web server software (according to Netcraft statistics) and Microsoft's Internet Information

Services (IIS) is also commonly used among others in the modern world (http://www.thefreedictionary.com/Website).

Websites, especially organisation-owned websites, have become very useful in the conduct of staff recruitment, selection and placement. They provide the means of communication between recruiters and job applicants. Websites are used for displaying vacancies that exist, and provide information for applicants on the procedures to follow. Applicants respond by sending their applications and other documents to the same websites. Recruiters may go further to display other information such as list of candidates shortlisted or invited for different stages or the list of final successful candidates. A major advantage, unlike television facilities, is that websites are accessible for 24 hours throughout the timeframe of the recruitment process, and are flexible to the extent that applicants can respond anywhere in the world. Thus websites generally have become a vital tool for staff recruitment.

2.5.4 E-mail

Electronic mail, or e-mail, is a widely used Internet application that enables individuals or groups of individuals to quickly exchange messages, even if they are separated by long distances. A user creates an e-mail message and specifies a recipient using an e-mail address, which is a string consisting of the recipient's login name followed by an @ (at) sign and then a domain name. E-mail software transfers the message across the Internet to the recipient's computer, where it is placed in the specified mailbox, a file on the hard drive. The recipient uses an e-mail application to view and reply to the message, as well as to save or delete it. Because e-mail is a convenient and inexpensive form of communication, it has dramatically improved personal and business communications (Comer, 2009).

In its original form, e-mail could only be sent to recipients named by the sender, and only text messages could be sent. E-mail has been extended in two ways, and is now a much more powerful tool. Software has been invented that can automatically propagate to multiple recipients a message sent to a single address. Known as a mail

gateway or list server, such software allows individuals to join or leave a mail list at any time. Such software can be used to create lists of individuals who will receive announcements about a product or service or to create online discussion groups.

E-mail software has also been extended to allow the transfer of non-text documents, such as photographs and other images, executable computer programmes, and prerecorded audio. Such documents, appended to an e-mail message, are called attachments. The standard used for encoding attachments is known as Multipurpose Internet Mail Extensions (MIME). Because the Internet e-mail system only transfers printable text, MIME software encodes each document using printable letters and digits before sending it and then decodes the item when e-mail arrives. Most significantly, MIME allows a single message to contain multiple items, enabling a sender to include a cover letter that explains each of the attachments (Comer, 2009).

E-mail facilities have enhanced effective communication between job applicants and recruiters. For instance, e-mail provides opportunities to invite applicants for any of the stages in the recruitment process. It is safe and fast; and job applicants can receive such invitation almost instantaneously especially using their Smartphone.

2.5.5 Telephone

Telephone is a communication instrument designed to transmit speech and other sounds to a distant point by means of electricity, and to reproduce them. The telephone contains a diaphragm, which vibrates when struck by sound waves. The vibrations (wave motion) are converted into electrical impulses and transmitted to a receiver, which converts the impulses back into sound. In common usage, the term "telephone" is also applied in a much broader sense to the entire system to which an individual telephone set is connected; a system which allows the sending of not only a user's voice but also data, pictures, or any other information which can somehow be encoded and converted into electrical energy. This information is exchanged between points connected to the network. The telephone network consists of all of the transmission paths between subscriber's sets and of the switching machinery used to

select a particular path or group of paths between subscribers (Antonoff, 2009; Rickert, 2001).

In terms of development, in 1854 the French inventor Charles Bourseul suggested that vibrations caused by speaking into a flexible disc or diaphragm might be used to connect and disconnect an electric circuit, thereby producing similar vibrations in a diaphragm at another location, where the original sound would be reproduced. A few years later, the German physicist Johann Philip Reis invented an instrument that transmitted musical tones but could not reproduce speech. A form of acoustic communication device had also been developed in the early 1870s by an Italian-American inventor, Antonio Meucci. However, in 1876, having discovered that only a steady electric current could be used to transmit speech, the American inventor Alexander Graham Bell produced the first telephone capable of transmitting and receiving human speech with its quality and timbre. His compatriot Elisha Gray had filed a claim for the invention just hours after Bell, but Bell's patent was upheld by the United States Supreme Court, and he has become widely recognized as the inventor of the telephone.

The basic unit of Bell's invention consisted of a transmitter, a receiver, and a single connecting wire. The transmitter and receiver were identical; each contained a flexible metallic diaphragm and a horseshoe magnet with a wire coil. Sound waves striking the diaphragm caused it to vibrate in the field of the magnet. This vibration generated an electric current in the coil that varied in proportion to the vibrations of the diaphragm. The current travelled through a wire to the receiving station, where it produced changes in the strength of the magnetic field of the receiver, causing its diaphragm to vibrate and reproducing the original sound. In the receiver of the telephone the magnet has been flattened into the form of a watch, and the magnetic field acting on the ferrotype iron diaphragm has been made more intense and uniform. The modern transmitter consists of a thin diaphragm mounted behind a perforated grill. At the centre of the diaphragm is a small dome forming an enclosure filled with carbon granules. Sound waves passing through the grill cause the dome to move in and out. When the diaphragm presses in, the granules become densely

packed, allowing an increase in the flow of current through the transmitter (Antonoff, 2009).

2.5.5.1 Cellular Mobile Telephone

Cellular, or mobile phones, originally used in cars, airliners, and passenger trains, but increasingly becoming ubiquitous, are basically low-power radio-telephones. Calls go through radio transmitters that are located within small geographical units called cells. Because each cell's signals are too weak to interfere with those of other cells operating on the same frequencies, more channels can be used than would be possible with high-power radio frequency transmission. Narrow-band frequency modulation (FM) is the most common mode of transmission, and each message is assigned a carrier unique to the cell from which it is transmitted (Frieden, 2009). Since the cellular phone was first tested in 1978, the cellular market in Britain alone had grown at a rapid rate to over 40 million users by 2001. In Japan, where by 2001 penetration was as high as 45 per cent (57 million users), the growing capabilities of cellular phones also meant that the number of people using mobiles with Internet access was set to reach 10 million.

Replacement of transoceanic coaxial cables by fibre-optic cables has continued through the 1990s. Advances in integrated-circuit technology and semiconductors have made it possible to design and market telephones that not only produce high-fidelity speech quality, but also offer a host of features such as pre-stored numbers, call forwarding, call waiting, and caller identification. Cellular telephony has grown dramatically, and cellular phones are now offered as standard equipment in many cars (Snyder, 2009).

2.5.5.2 Smartphone

Smartphone refers to the modern mobile technology that provides advanced capabilities beyond a typical mobile phone. They are further improvement of the initially manufactured cell phones designed primarily for receiving and making calls. According to Admin Technology (2011), smart phones are mobile phones that

incorporate a Personal Digital Assistant (PDA). A PDA is a miniature hand held device that replicates key features of a personal computer most notably document viewing task and contact management and internet access.

Contemporary Smartphone includes internet and e-mail access, PIM or scheduling software, contact management, and the ability to read and compose document. Many modern smartphones also include high-resolution touch screens and web browsers that display standard web pages as well as mobile-optimized sites. High-speed data access is provided by Wi-Fi and Mobile Broadband. Other features include audio, video, music playing facilities and so on. It also has large memory capacity as well as features for extra or additional memory to be connected, thus creating opportunity to store and retrieve large volume of data which any computer or laptop can store. Smartphone are available in a wide array of styles and capabilities in terms of functions. Blackberry is the most popular, and others include the Palm tree, Android, i-phone, window mobile 7, i-pad and so on. They are also very useful devices for effective connection to several social networking sites such as the face-book, twitter, MySpace, YouTube, LinkedIn, Blogs, e-buddy and so on. As a result, Smartphone have moved beyond being a mere technical device to becoming a key 'social object' present in every aspect of a user's life.

For several years, the demand for Smartphone has outpaced the rest of the mobile phone market. According to a 2012 survey, around half of the U.S. mobile consumers own Smartphone and could account around 70% of all U.S. mobile devices by 2013. In the 25–34 age range Smartphone ownership is reported to be at 62%. NPD Group reports that the share of handset sales that were Smartphone in 2011 reached 59% for consumers 18 and over in the U.S. The European mobile market, as measured by active subscribers of the top 50 networks is 860 million. According to an Olswang report in early 2011, the rate of Smartphone adoption is accelerating: as of March 2011 as 22% of UK consumers had a Smartphone, with this percentage rising to 31% amongst 24- to 35-year-olds. In China, Smartphone represented more than half (51%) of handset shipments in the second quarter of 2012. (telecomsmarketresearch.com)

Apart from usage in the ordinary life, Smartphone has become a vital tool in the conduct of recruitment, selection and placement of workers. The array of functions it is capable of providing has made it an indispensable tool among job recruiters and job seekers all over the world. The range of functions provided for job applicants includes accessing employers' job portals, sending curriculum vitae, scanned credentials and other required documents, communication through phone calls, text messaging or e-mails and so on. Thus it provides opportunity for effective communication between recruiters and applicants. Thus job applicants are saved from the traumas experienced through cybercafé operations, hardware and software problems, epileptic power supply and other challenges in developing countries like Nigeria.

2.5.6 Television

Television (TV) is a system of mass communication, involving the transmission of images and sounds to distant screens, by electronic means over electrical or fibre-optic transmission lines or by electromagnetic radiation (radio waves). Television is a vastly important medium, for a number of reasons: the amount of time that many people spend watching it (31 hours per week, for average United States adults, 25 for Britons); its ability to bring together diverse groups of people in a sense of shared national identity; and its powerful role as a source of information about experiences other than the viewer's own. It was the first medium to relay, via communication satellites, pictures across continents, and it is the prime route to the public for presenting news and current affairs, including the progress of wars and political campaigns. It is thus a powerful influence on public perception and opinion (Antonoff, 2009)

Television developed in Western Europe and North America, but has spread across the world. In 1992 there were roughly 16 television receivers for every 100 people. However, the distribution of television is very uneven: there are around 80 sets per 100 US citizens, but only 2.3 per 100 people in non-Arab Africa. Television has in general been a very centralized form of communication, which does not easily permit access and participation. This is partly because television transmission and

production have been so expensive that only a few companies could become involved, and also because governments have strictly regulated who could gain access to the relatively scarce parts of the electromagnetic spectrum allocated for television transmission. In the 1980s, many new forms of television-related technology, such as cable television and Direct Broadcast Satellite, began to allow other forms of transmission and reception, and many governments began to relax their regulations about who could broadcast.

These technological changes have helped bring about shifts in the cultural significance of television. For more than 40 years, many of the most important national events, in a number of countries, have been experienced as television events. Examples include the coronation of Queen Elizabeth II in 1953, the royal wedding of Prince Akihito in Japan in 1959, the annual Super Bowl football match in the United States, and the reporting of various international crises and political assassinations. However, some commentators have claimed that the era when television served as a source of national bonding is coming to an end, as television begins to appeal to smaller and more specific segments of the audience, rather than to entire societies. In spite of these changes, television remains probably the most important form of mass communication of the late 20th century (Cailliau, 2007; Snyder, 2009).

Tracing the history of invention of the television, there was no single moment when television was invented, and it is very difficult to pick out the contribution of any individual as of more significance than any other. Regular television broadcasting began in 1936 in Britain, but the development of television relied on the coming together of a number of developments in related fields, such as telegraphy and electronics, over the previous 60 years. This convergence of innovations happened only when organisations such as the Radio Corporation of America (RCA), Electrical and Musical Industries, Ltd. (EMI), and the British Broadcasting Corporation (BBC), institutions with sufficient capital to fund research and development—realized that television might be the basis of prestige, power, and profit.

Cable and satellite mark the end of the era when television took place on a mainly national basis. Increasingly, messages are transmitted across national borders. In

Europe, satellite has also been an important way in which migrant communities can keep in touch with the television systems of their country of origin, because satellite dishes can pick up much more distant signals. The new era of television has been called "narrowcasting" (rather than broadcasting) by some commentators, because the audiences for television channels are becoming smaller and more specific. Television stations increasingly aim at particular segments of the population, rather than at the mass audience. Some have argued that the proliferation of channels has not meant a new diversity, however, but rather a lowering of standards, and the replacement of public-service broadcasting by cartels of commercial owners, such as Murdoch's News International and the German company Bertelsmann. While the American system offers a new diversity to those who can afford the extra subscription costs, the low-cost programming on Italy's many cable channels suggests that overhasty deregulation can reduce the overall quality of a nation's broadcasting (Antonoff, 2009).

Many writers now use the term "convergence" to refer to an increasing overlap between telecommunications, computers, the Internet, and mass-media forms such as television. Television is, according to some forecasters, about to become the basis of new home information and entertainment systems. Great power may come to reside in the hands of the companies who control the distribution systems that determine the range and type of services reaching homes and businesses.

On the issues of social and cultural effects of the television, the debate about the power of television to influence people's behaviour and beliefs has been going on ever since the medium became widely popular in the West in the 1950s. There are three main strands of concern: the impact of television on social behaviour, particularly crimes of violence; its effects on the political process; and whether it causes deterioration in cultural standards. But whatever the line of argument, television has become a very powerful medium for dissemination of information for both private and official consumptions.

Television services provide opportunities for recruiters to advertise their job positions at a cost, and to pass relevant information to job applicants. A major

disadvantage associated with television facilities is that opportunity to document the information by job applicant is limited, while on the other hand, it is costly for recruiters.

2.5.7 Software

Computer software, or just software, is a collection of computer programmes and related data that provides the instructions for telling a computer what to do and how to do it. Software refers to one or more computer programmes and data held in the storage of the computer for some purposes. In other words, software is a set of *programmes*, *procedures*, *algorithms* and its *documentation* concerned with the operation of a data processing system. Software includes all the various forms and roles that digitally stored *data* may have and play in a computer (or similar system), regardless of whether the data is used as *code* for a CPU, or other interpreter, or whether it represents other kinds of information. Software thus encompasses a wide array of products that may be developed using different techniques such as ordinary programming languages, scripting languages, microcode, or an FPGA configuration. Programme software performs the function of the programme it implements, either by directly providing instructions to the computer hardware or by serving as input to another piece of software. The term was coined to contrast to the old term hardware (meaning physical devices) (Thorburg, 2012).

The two primary software categories are operating systems (system software), which control the workings of the computer, and application software, which addresses the multitude of tasks for which people use computers. System software thus handles such essential, but often invisible, chores as maintaining disk files and managing the screen, whereas application software performs word processing, database management, and the like. Two additional categories that are neither system nor application software, although they contain elements of both, are network software, which enables groups of computers to communicate; and language software, which provides programmers with the tools they need to write programmes. The types of software include web pages developed in languages

and frameworks like HTML, PHP, Perl, JSP, ASP.NET, XML, and desktop applications like OpenOffice.org, Microsoft Word developed in languages like C, C++, Objective-C, Java, C#, or Smalltalk. Application software usually runs on an underlying software operating systems such as Linux or Microsoft Windows. Software (or firmware) is also used in video games and for the configurable parts of the logic systems of automobiles, televisions, and other consumer electronics. Software is at the back of e-recruitment systems and software such as Artificial Intelligence (AI) has been developed for effective recruitment and selection and for various stages of the exercise (Snyder, 2009). According to Thorburg (2012), many firms are now using CV screening computer software as their first line of defense. It operates in a similar way to an internet search engine, in that it searches a document to find matching words and terms. By using the scanner, recruiters are able to narrow the field of candidates down quickly and effectively. The software automatically evaluates the match between the Curriculum Vitae's content and the requirements of the advertised positions, and then rates all the Curriculum Vitae in a percentage match. The higher the match percentage, the more likely the Curriculum Vitae will be processed.

2.5.8 Social Media

Social media like Facebook, Skype, Twitters, and LinkedIn are some of the revolutionary networking media used in job recruitment. For example, LinkedIn is a professional network which includes contacts and relationships developed over the years. LinkedIn provides its users with the means of establishing an authoritative resource on their experience and capabilities, thus making users more attractive to recruiters. LinkedIn from recruiters' perspective is a place that provides access to different kinds of reliable qualified talents. The main reason that companies are using LinkedIn is to find passive job applicants. How does LinkedIn work? A person creates a profile, uploads his picture and writes down his skills, capabilities and experiences. A company searching for an employee or a recruiting agency searches the databases available at LinkedIn,

finds the person who has the skills required for the job at hand and then contacts the person for further actions.

2.6 Utilisation of ICT in Nigeria

The whole concept of ICT encompasses all those technologies that enable the handling of information and facilitate different forms of communication among human actors, between human beings and electronic system and among electronic systems. In Nigeria, one of the fastest growing sectors of the economy is the area of computer and telecommunications, reinforced by the introduction of digital technology. In the recent times, the adoption of ICT in various sectors is on the rise compared with the past (Dauda 2007; Awe 2010)

Previously, a diversity of firms supplied, serviced, and maintained ICT equipment in Nigeria, the country imported 100 percent of all its IT equipment needs. However, Nigerian brands of IT equipment have found their way into ICT markets with Zinox Technologies and Omatek Computers leading the way. Despite the fact that these indigenous companies assemble their own brands of Desktop and Laptop computers for the local and international markets, local patronage is still largely foreign. However, a dearth of data still exists. Vendors representing all the major foreign, global brands in ICT dominate the industry. Since the advent of democracy, leading global brands – including Microsoft, Hewlett Packard, LG, and Samsung - have opened country offices along side their vendors/distributors in Nigeria (Awe, 2010).

Portable Computer access and availability have improved, with the advent of liberalization and the availability of cheap imports from Asia, falling prices of technological tools and the growth in the second-hand PC market. However access to computing facilities is still an issue. The average Nigerian still views the computer as a luxury. Without reasonable access how much can really be achieved? The ICT sector can't have significant impact without affordable computing facilities.

Nigerian government launched "Computer for All Nigerians Initiative" CANi a Public-Private-Partnership, in 2006 to close this gap. However, CANi has

not made the desired impact. And presently the scheme seems to have been abandoned. Beyond the lack of understanding and focus bedeviling the initiative, there are also project monitoring, evaluation and management issues that may be responsible for the disappointing outcomes associated with the project.

Deregulation of Nigeria's telecommunications sector led to the introduction of major Global System of Mobile Communications (GSM), mobile phone providers starting with MTN Nigeria, Airtel, Globacom, Mtel, Etisalat, Visaphone and a host of others (Obong, 2007; Awe, 2010; NCC, 2011).

Developments in telecommunications since the advent of GSM technology led to tremendous growth not only in the telecommunication/ICT sector but massive employment generation through telecommunication-enabled services in all facets of society thereby highlighting the linkage between ICT and social and economic development and how ICT enables growth in non-ICT sectors. Indeed, Nigeria has been described as the fastest growing telecommunications market by several internationally recognized market analysts who specialize in the telecommunication sector (Awe, 2010; NCC, 2011). Granting autonomy to the Telecommunications Regulator, the Nigerian Communications Commission (NCC) paved the way for the issuing of licenses to private telecoms companies. This essentially opened up the telecommunication sector through the provision of a variety of telecommunication services to the Nigerian populace. Since the GSM launch, mobile telephony has rapidly become the most popular method of voice communication in Nigeria.

According to Ndukwe, (2006), the telecommunication sector has also become the largest generator of Foreign Direct Investment (FDI) after the Oil and Gas industry in Nigeria, a situation which has been described as capable of launching the country to greatness in the modern world.

The GSM revolution changed the face of Information and Communications Technology in Nigeria. But the complete picture includes the Private Telephone Operators (PTOs) and other landmarks such as the licensing of telecommunication companies as Nigeria's national operators (SNO) as well as the licensing of fixed wireless operators all ensuring the availability of GSM,

CDMA, VSAT (Very Small Aperture Satellite), telephony, Internet, data and fixed wireless services at national and regional levels.

The use of the internet, which is one of the very popular tools for ICT, is on the rise in Nigeria, although the pace is still slow. Users such as students, applicants, academicians, journalists, recruiters, business organisations and so on are beginning to appreciate the impact of the internet thus enhancing the increasing level of adoption and utilisation for personal and official transactions and communication. Telecommunication availability has improved and Nigeria is one of the world's fastest growing mobile markets. But the cold, hard facts are that communications quality is poor, and ICT penetration is still insufficient considering Nigeria's size and population (Kolawole 2008, Awe 2010).

2.7 Information and Communication Technology Facilities in Nigeria

2.7.1 Telephone

The telephone system in Nigeria over the years was grossly inadequate and poorly managed and maintained. However recent deregulation of the mobile phone market has led to the introduction of Global System for Mobile communication (GSM) network providers operating on the 900/1800 MHz spectrum, MTN Nigeria, Airtel, Globacom and Etisalat, among others. The new cellular phone introduction has fixed the communication problem to a large part. Today, the telecommunication companies with the unified license provide fixed and mobile telephony, Internet access as well as other communications services. Uses of cell-phones have soared, and have mostly replaced the unreliable services of the Nigerian Telecommunications Limited (NITEL).

2.7.2 Cell phone as a multifunctional gadget in Nigeria

The award of the digital mobile licenses (DMLs) to three operators, and the subsequent roll-out in 2001 of cellular phone services on the GSM platform transformed the communication landscape in the country. Cellular phone lines increased dramatically from less than 1,000,000 in August 2001 to nearly 30 million at the end of 2006. This growth outstripped that of fixed telephone lines

which moved from less than 400,000 in 2001 to more than 1.5 million in August 2006 (Nigerian Communications Commission, 2006). By January 2011, the number of active lines has increased to 89.8 million with an impressive tele-density of 64.79 (NCC, 2011). The estimated number of mobile phones in Nigeria is 114,000,000 which represents 69% in terms of number of phones as percentage of the population. In this way, mobile telephony becomes the detour to the problem of low density and poor infrastructure. At the same time, it spurns off new functionalities such as e-mail access and illumination at night when there is no power supply.

The growth of both mobile telephony and fixed lines has, unsurprisingly surpassed that of Internet subscription in the country. Access to cell phones is relatively cheaper and easier; waiting period for a cell phone line moved from two years to ten minutes, and from the equivalent of US$1,000.00 to US$50.00. But more importantly, it is a standalone technology (even though it still requires electricity to charge the battery). The Internet, on the other hand, relies on electricity, computer, modem and telephone connectivity. While broadband wireless connection to the Internet bypasses the telephone infrastructure, it also depends on electricity and is mostly available in large business organisations and cyber cafés. Not many Nigerians can afford dial-up access to the Internet from home and fewer still can afford wireless Internet access or a computer (Obong, 2007).

Besides its relative affordability and accessibility, the cell phone does not depend on any level of literacy – a major hindering factor to wider diffusion of the Internet in the country. Indeed, some of the cell phones available in Nigeria have been customized such that even those who cannot read or dial numbers can use them. For instance, stored phone numbers have images that are linked to individuals so that when the phone rings, a user can recognize the image and know who the caller is even if s/he cannot read the numbers. Today, there are cell phones that allow actual photos of family members and friends to be linked to phone numbers. When a call comes in, the photo of the caller pops up on the

screen. Also, to dial, the user can press a button and a list of the photos comes up and s/he pushes another button that dials the selected person.

There are also voice-activated phones that again provide a detour for literacy constraints. The cell phone is further attractive because there are no charges on incoming calls. This has itself given rise to the phenomenon known as "flashing" where someone dials another person's number but quickly hangs up right after the first ring. That call is free but a user succeeds in alerting the other party who then can choose to call back – or not. This makes it possible for younger people, especially students, to have cell phones without paying for the cost of every communication. This is also why the most popular cellular service plans are the pay-as-you-go or prepaid packages. As much as 95% of cell phone subscriptions in the country are prepaid plans (ITU, 2006). Also, the networks enable automatic text messaging (unlike in the US where users have to subscribe to SMS or pay much higher costs to send and receive text messages). To make it more attractive, it is cheaper to send text messages than to make voice calls, and all incoming messages are free (Obong and Foster, 2007).

While much of the diffusion is occurring in the cities and among the fairly wealthy individuals, cellular phone usage has also spread to the rural areas for one important reason, besides PTOs' need to expand customer base. Indeed if they had the option, PTOs would not operate in the rural areas because of the added overhead costs. However, the digital mobile licenses (DMLs) were issued to PTOs on a condition of national and rural spread, failure of which would attract penalties. As a result, besides six northern states, cellular phone coverage has spread beyond the state capitals into other towns in each state (Nigerian Communications Commission, 2006).

While this geographical spread brings the technology to more people, the poor interconnectivity between the networks still constrains the level of penetration into the rural areas. Each network builds and operates its own base stations and facilities are not shared with other networks. Despite these problems, it is clear that the context – more Nigerians living in the rural areas, and policy

framework that deregulates while retaining much control – has led to the diffusion of this technology outside the cities (Obong, 2007).

2.7.2 Internet and Internet Service Providers (ISPs)

The number of internet users in Nigeria has increased to 55,930,391, representing 32.9% of the population but the increase is still not high enough for efficient private and corporate collaboration with other societies of the world. There is satellite access to European Satellite internet providers all over the countries. In most towns in Nigeria, there are many public internet Cafes, privately owned and operated, and often connected over European internet connections. A new dimension to internet connectivity has been introduced with hundreds of thousands of people now accessing the internet on their WAP-enabled mobile phones, smart phones and on their PCs using their phones as a modem. This is largely due to the introduction of GPRS (General Packet Radio Service) and EDGE (Enhanced Data Rates for GSM Evolution) connectivity by the GSM operators. All existing GSM networks presently offer GPRS services and have introduced 3G/UMTS.

However, according to Ben (2010), Nigeria's internet market remains extremely under-served with approximately 70% of the internet subscriber base reported by local Internet Service provider (ISPs) to account for corporate subscribers while the rest are home, small office and cyber café users. But more basically, according to him, the slow and exasperating access to the information superhighway as a result of the dearth of fixed line infrastructure and poor service quality on the part of the ISPs is further exacerbated by the fact that only a mere 30SPMs of bandwidth is available to the internet users in Nigeria.

Appendixes III and IV present the internet usage statistics in Africa (2010, 2012).

From the table, it could be seen that the total figure of internet users in Nigeria was about 55,930,391 (as against 43,982,200 in 2010, about 8 million in 2006, and about 200,000 in year 2000). This shows an increasing growth but at 32.9 % penetration of the population, there is still much to be done.

2.7.3 Electronic Media

The early introduction of electronic media in Nigeria as Imhonopi & Urim (2004) comment started with the British Broadcasting Corporation (BBC) which commenced radio broadcasting in the United Kingdom in 1927 and within five years had begun to broadcast into Africa. In 1932, a relay service was launched in Nigeria. The Service known as Radio Distribution Services (RDS) started in Lagos and extended to Ibadan in 1939. Furthermore, 14 years after Britain had commenced her first television service, Chief Obafemi Awolowo, then premier of Western Region of Nigeria, established a television service. In 1951, the RDS transformed as the Nigeria Broadcasting service, later incorporated as the Nigeria Broadcasting Corporation in 1957. This arrangement was a monopoly, until 1959 when the broadcasting law that allowed the establishment of regional broadcasting houses was passed. Owing to years of military rule in Nigeria, private broadcast media did not take off until 1992 when the then military government implemented constitutional provision that allowed private organisations and/or individuals to own broadcast outfits (Imhonopi, 2012).

Presently, there are about one hundred and thirteen (113) radio stations and about one hundred (100) television stations in Nigeria, owned by the federal and state governments as well as private individuals (Ameneghawon, 2010). The largest broadcasting companies are the government-owned Federal Radio Corporation of Nigeria (FRCN and the Nigerian Television Authority (NTA). The NTA has two television services. One is NTA 1, which is distributed among NTA's six television zones. The other is NTA 2, which is distributed nationwide and is funded mostly by advertising.

Each state also has a broadcasting corporation that broadcasts one or two locally operated terrestrial stations. One of the early independent players in the Nigerian television scene was a private company called Minaj Broadcast International (MBI). Most of their programming was aimed for the African and Caribbean television markets, but was broadcast globally from Lagos, Abuja, Obosi and Port Harcourt centers, with several affiliate television stations in some African countries. The African Independent Television (AIT) is also a high profile

satellite television station broadcasting globally from its Lagos and Abuja centers. Other direct satellite television stations with international reach operating in Nigeria are Channels Television, Murhi International Television, Silverbird Television, Galaxy television, Television Continental and so on, all in Lagos.

Today, the situation has greatly improved. For instance, there is general access to CNN, BBC, M-Net, a South African cable television station and a host of others, broadcast over satellite. Many cable stations operate in Nigeria among which are: DSTV, HiTV, Star-Times, Daarsat, Infinity TV and so on, and have further widened the Nigerian communication network.

Like the print media, television is largely confined to urban centres. But this is mainly because of technical and financial reasons. Moreover, very few people can afford television sets and antennas, and this has resulted in television becoming a status symbol. Television consumers are also mainly urban dwellers and include the professional, commercial and bureaucratic classes who constitute a reference group within which leadership operates. Therefore, for television to become effective in mobilising people, more money has to be pumped in for coverage to extend beyond the urban centres, and there must be more vigorous local programming (Nweke, 1984). Recently, the television industry in Nigeria has begun a rapid localization of programming content in the area of entertainment, films, education and others. The present government of President Goodluck Jonathan is working on transforming the power sector in the country so that many more rural dwellers will see the need to buy and own televisions in this 21st century and information age. The television combines audio and visual effects, which make it a powerful medium that can be exploited by government for the mobilization of the people politically and used to inform them of government's plans, programmes and policies (Kazeem, 1998; Imhonopi, 2012).

According to Nweke (1984) the radio's role as an informant and educator can best be exploited in the Third World because the majority of people there are illiterates and live in rural areas. Unlike the television and newspaper, the radio transmits its messages to more people at any given time. It is also in everybody's reach. The average worker or peasant can listen to it. Neither is there need to

make any extra effort to listen, for radio can be heard anywhere and one does not have to stop whatever chores he or she is doing in order to listen. Radio also covers a large distance and stems barriers. Also, since there are some parts of the country without electricity, rural families can easily listen to their radios by using batteries. Radio also reaches them in their local languages, and because the messages are short and simple and delivered in a pleasant manner, unlike in the print media, there is little effort needed by recipients except to turn the dial. Even the blind and the handicapped can benefit from the radio, and since repetition is a major technique used, it has become the most effective of all the news media to promote campaigns and ideas to people in the Third World (Nweke, 1984).

Television and Radio stations provide opportunities for HR practitioners and recruiters to advertise their vacancies on the air at rates fixed by the station authorities.

2.7.4 Print Media: Newspaper

The print media are made up of newspapers, magazines, books, monographs, journals, pamphlets and information materials that appeal to the sense of sight. As Imhonopi and Urim (2004) noted, specialty newspapers exist for school students, major financial dailies appeal to the commerce tycoons, financial experts and financial savvy people of the world, tabloids address the newsstands of city transportation hubs, and popular underground publications appear or disappear at the change of a trend or movement.

Newspaper refers to publication usually issued on a daily or weekly basis, the main function of which is to report news. Many newspapers also furnish special information to readers, such as weather reports, television schedules, and listings of stock prices. They provide commentary on politics, economics, and arts and culture, and sometimes include entertainment features, such as comics and crossword puzzles. In nearly all cases and in varying degrees, newspapers depend on commercial advertising for their income. Newspaper publishers estimate that nearly six out of ten adults in the United States and Canada read a newspaper every day, and seven out of ten read a paper each weekend. By the time they see a

newspaper; most people have already learned about breaking news stories on television or radio. Readers rely on newspapers to provide detailed background information and analysis, which television and radio newscasts rarely offer.

Newspapers not only inform readers that an event happened but also help readers understand what led up to the event and how it will affect the world around them. Newspapers trace their roots to handwritten news sheets posted daily in the public marketplaces of ancient Rome. The first printed newspapers appeared in China during the Tang dynasty (AD 618-907). These newspapers were printed from carved wood blocks. Precursors to modern papers first appeared in Venice, Italy, in the middle of the 14th century. Newspapers as known today, complete with advertising and a mixture of political, economic, and social news and commentary, emerged in Britain in the mid-18th century. Newspapers publish with varying frequency. Some come out every day or even twice a day. Other newspapers print once a week, once a month, four times a year, or even less often. Newspapers also differ in focus. General-circulation newspapers print news of interest to a broad audience, while special-interest papers target a more specific audience.

Today, the newspaper industry has become one of the largest in the world, employing hundreds of thousands of people, from managing editors, to investigative reporters, to carriers. It has survived wars, economic collapse, political scheming and social destruction, yet remains essentially the same type of medium that it was centuries ago – pages of print communicating information to readers (Brittner, 2002). However, as Nweke (1984) notes, the print media has limited value (and reach) in Nigeria because it is constrained by the level of literacy in place and its scale of circulation is relatively minimal and largely confined to the elite in the urban areas. Even when newspapers and magazines embrace a rural readership, they address only a particular type of reader, who in effect is marginal to the rural community. The issue of poverty is also a drawback as most Nigerians can't afford to buy a newspaper every day no matter how "newsy" it is or news hungry they are. However, the Print media is still a

powerful tool loved by the people, feared by dictators and despots and a threat to autocracies and despotic regimes anywhere (Imhonopi and Urim, 2004).

Commercial advertising takes up about two-thirds of both weekday and weekend editions, and news and features fill the remaining third. Most daily newspapers divide their content into separately folded sections. Newspapers typically have sections for local news, sports, arts and entertainment, business, and classified advertising. The newspapers' front page features eye-catching headlines and photographs that pique readers' interests and direct them to stories featured in the inner sections. The first page of each section follows the same general model to entice readers to explore that section's contents.

Newspapers offer two different types of advertisements: display advertisement and classified advertisements. Classified advertisements are small notices with a variety of offerings, such as apartment rentals, job opportunities, and personal property for sale. The rapid and widespread expansion of the Internet has enabled millions of people to read a variety of daily newspapers online, usually free of charge. This trend, along with the rise of 24-hour cable television news networks, has caused subscription and circulation rates to decline.

The percentage of Americans getting news from the Internet grew rapidly during the late 1990s. In 2002 some two-thirds of adult Americans were getting the news online. Roughly one fourth of all Americans get news from the Internet on an average day. Today almost all of the world's major newspapers have online versions. Most medium- to large-sized daily newspapers in the United States and Canada also publish on the Internet. These developments have led some media experts to predict that the printed newspaper will give way to fully electronic information services in the early decades of the 21st century. But whatever its medium—electronic or print—the newspaper will likely remain an important feature in modern society (Comer, 2009; Snyder, 2009).

In Nigeria today, daily newspapers that have national spread include the Guardian, The Vanguard, The Nation, The Tribune and so on. The print media constitute a very important tool for recruitment and selection. The process involves the recruiters to place their vacancies on the newspaper of their choice.

Such vacancies spell out the man specification and job specifications and the procedures to follow by applicants interested in applying. Most job advertisement now direct applicants to visit their websites for more details. A major advantage of the newspaper is that it is relatively cheap. Cheap in the sense that applicants may not have to buy, but through others who buy them regularly, the applicants can have the benefit of reading. In Nigeria today, job applicants are known to have formed an informal 'Readers' Club' by converging at Newspaper stands every morning to read available newspapers. A reader pays a token of N20.00, and by that he would be allowed to read all available newspapers every morning. Dailies such as the Guardian dedicate Tuesdays and Thursdays for advertisement on Vacancies and these have made them to be more patronized especially by applicants and job seekers in Nigeria.

2.8 Factors affecting Utilisation of ICT in Nigeria

Studies have shown that Nigeria is being confronted with myriads of problems affecting the level of utilisation of ICT and the bid to catch up with the revolution in the contemporary world. Makinde (1986), Obong & Idaraesit (2004), Obong, (2007); Imonhopi (2010) and Olanrewaju (2011) identify some of the factors as follows:

2.8.1 The telecommunications landscape:

The state of the infrastructure – especially telecommunications infrastructure – poses a major hindrance to the use of ICTs in Nigeria, with Nigeria having one of the lowest teledensity in sub-Saharan Africa even as the rate increased exponentially between 2002 and 2006. In 2001 there were 0.43 main telephone lines for every 100 inhabitants, with a total cellular phone subscriber base of 330,000 (or 0.28 per 100 inhabitants). By August 2006, there were more than 1.5 million connected fixed lines and almost 27 million cellular phone lines in the country raising the teledensity to 23.29 in a five year period (Nigerian Communications Commission, 2006). Also, in term of fixed broadband, Nigeria is not doing well. Broadband refers to subscriptions to high-speed access

to the public Internet (a TCP/IP connection), at downstream speeds equal to, or greater than, 256 kbit/s. This can include for example cable modem, DSL, fibre-to-the-home/building and other fixed (wired) broadband subscriptions. For example, According to Internet Coaching Library (2012), Nigeria has 15,311 broadband subscriptions and ranked 136th in the world. However, this is grossly inadequate to provide adequate internet services for the country.

Proponents of the "digital revolution" have argued that the state of telecommunications infrastructure in Nigeria can be an advantage as the country can leapfrog to the new technologies without the cost of effacing old ones. In this context, the cellular phone is considered the technology of choice that is affordable and accessible to everyone who previously had no access to a telephone. And the technology adopted in Nigeria – global system of mobile technology – makes this objective particularly achievable. The rate of cell phone diffusion in the country affirms this (Obong, 2007)

However, the cellular phone technology does not completely transcend the infrastructural concerns. For instance, providers of mobile telephone services complain of problems such as the "inadequate transmission backbone and poor level of power generation" (Okonedo, 2005).

One of the service providers, MTN, spent "unbudgeted $120 million on the construction of its own microwave transmission backbone" (Okonedo, 2005) Nigeria does not have its own international telephone circuits (ITU 2006) thus severely handicapping international telephone traffic. For Nigerians in Diaspora, calling family and friends back home can be such torture. For one thing, the calls are more expensive than calls to other countries. And secondly, the circuits are always busy. The implication of the above is that the poor telecommunications landscape constitutes a big hindrance to the country and affects the level of utilisation of ICT for socio-economic activities.

2.8.2 Electricity Constraints

ICTs generally operate on electricity. But according to the United States Energy Information Administration, only 10% of the rural households in Nigeria

is connected to the national electricity grid. Over all, just about 40% of Nigerians have access to electricity (United States Energy Information Administration, 2006). In the towns and cities where there is electricity, its presence is felt more in its absence leading to the nicknaming of the then National Electric Power Authority (NEPA) as Never Expect Power Always.

Electricity generation and distribution therefore negatively affect the diffusion levels of ICTs in the country. The competition among the PTOs has drastically reduced the cost of GSM mobile phone services. However, at 28 cents per minute (or 26 cents off-peak rate) for local calls, cellular phone costs are still very expensive relative to the income of the average wage earner in the country. The GSM operators attribute the high tariff structure to the extremely high overhead costs of doing business in the country especially given the infamously epileptic nature of power supply. One of the major cellular phone providers in the country spends about N21 billion annually on electricity generation at its base stations" (Okonedo, 2005). This cost is passed on to the cell phone user. One of the priorities of the Obasanjo Administration was the provision of stable and regular electricity supply. In March 2000, the president "replaced the NEPA management with a nine-member technical committee to run the utility with the mandate of ending power cuts by December 2001" (US Energy Information Administration, 2006). This was the first step in the achievement of this goal. The reform of the power sector continued with the re-naming of National Electrical Power Authority to Power Holding Company of Nigeria (PHCN). The government also explored the prospects of privatizing, inviting foreign participation and encouraging other groups to get into the electricity supply market. Years of military governments impervious to the needs of the people stiffened Nigerians against expectations that the government would solve their problems. Indeed several years afterward, the government continues to seek ways of solving the electricity supply problem in the country.

Although the situation has slightly improved as a result of the concerted efforts of the federal and state governments through the de-regulation of the power sector and involvement of the private sector in power generation and

distribution, but the level of power supply is still too poor to leapfrog the level of utilisation of ICT in the country.

2.8.3 Technology dependency

Another source of infrastructural obstacle in Nigeria is the absence of locally manufactured ICTs. There is some local production and improvisation but the bulk of ICTs are imported as finished products. This creates a technological dependency for the actual technologies and services. A principal actor in the sector in Nigeria (quoted in Obong, 2007) said "undue reliance on foreign companies" will severely "upset the successful implementation of the (digital) revolution." Another ICT actor in the Federal Ministry of Information in Abuja, the federal capital, agreed that the lack of basic infrastructure as well as the over-reliance on imports will negatively impact on the country's ability to achieve its ICT-related goals. But this does not have to be so, she argued, because Nigeria has the capacity to locally produce ICTs.

2.8.4 Financial incapacitation

Another major problem militating against the use of ICT in Nigeria is capital (Jagboro, 2003; Imonhopi, 2010). ICT is capital intensive especially when one considers the cost of acquiring tools such as computer, modem, and an account with an Internet Service provider (ISP) and so on. With limited resources, coupled with high cost of production and inflationary rate, it becomes very difficult especially for industrial organisations to bring about an effective internet connection. Accessing capital for expansion and rate of inflation, constant change in economic policies are all big challenges transforming into low level of organisational effectiveness. In the IT and Telecoms sector, a dominant percentage of the hardware and software needed for carrying on the business have to be imported. As such, the more the Naira depreciates, the more expensive these things become in terms of Naira Value. In fact the heart of some incumbent operators in the sector, who were able to finance their equipment in terms of foreign currency denominated loans, skips a beat every time the national currency

experiences a major plunge. With these problems, most organisations in Nigeria are not able to expand, access infrastructure and latest technology and enjoy the high degree of communication collaboration, resource sharing and other global benefits derivable from the use of ICT.

2.8.5 ICT Skill Gap

The ICT skills gap in Nigeria indicates the need for people with ICT user, ICT professional and IT Entrepreneurship skills. The enormous gaps are hindering the effective utilisation of ICT. Though digital literacy has become a necessity for all – a life skill - the majority in Nigeria lack basic ICT user skills. The excluded comprise the poor, the rural dwellers and the informal sector. But most of the economy is in the informal sector. So the problem is that Nigeria may not truly be able to establish an inclusive knowledge-based society if there is no development of ICT human capital in the informal sector. In addition to basic digital skills a strong ICT sector requires professionals and entrepreneurs in sufficient numbers to meet technical and non-technical ICT expertise requirements. The educational system in Nigeria needs to be transformed to meet these human capital needs. Nothing short of a revolution in education strategy and concepts is required to exploit opportunities and meet knowledge society challenges. Nigerians must be employable and entrepreneurial. The demand is not for degrees or qualifications. The demand is for innovative people who can contribute meaningfully to the economy and society (Awe, 2010).

2.8.6 Software

According to Awe (2010), Software is at the heart of the global knowledge economy. Any nation that values its sovereignty must take software serious. Software opportunities in Nigeria are very poor not being fully exploited to unleash the potentials of the Nigerian people and the Nigerian nation. Realistic open source strategies are not promoted. Local developers also face challenges of harsh business environment, ignorance and patronage. Existing software promotion policies have not made much impact. For the local software industry to

grow Nigeria is not seen as aggressively promoting, rewarding and encouraging local software developers and entrepreneurs. There are no practical initiatives to encourage the mass usage of indigenous software and the stimulation of demand locally and globally for local software products and services. The implication of the above is that the level of utilisation of ICT is not effective, thus hindering active competition in the global super-highways.

2.8.7 Government's Policy

Development, implementation and evaluation of policies have not effectively encouraged developmental efforts in Nigeria. According to Offiong (2001) and Nduka, (2006), political instability, corruption, party politics, bureaucratic sloganeering, unwillingness of leaders to continue predecessors' projects constitute obstacles to policy making in Nigeria. For example, in May 2000, the federal government came out with a National Telecommunications Policy, which recognizes that an efficient, reliable and affordable telecommunication system is a key factor in the overall development of any nation, and that such a system must be universally accessible and cost-effective.

The overriding objective of the Policy is to achieve the modernization and rapid expansion of the telecommunication, network and services, with the ultimate goal of making telecommunications service, efficient, affordable, reliable and available to all. The policy has nine short-term objectives, expected to be achieved within three years, and nine medium-term objectives with five years as target. Ndukwe (2006) laments that years after the policy, nothing concrete could be shown indicating the level of success, neither was any policy evaluation conducted. Presenting the hard reality of the situation, Awe (2010) observes: Nigeria's government launched "Computer for All Nigerians Initiative" CANi a Public-Private-Partnership, in 2006 to close this gap. However, CANi has not made the desired impact. And presently the scheme seems to have been abandoned. Beyond the lack of understanding and focus bedeviling the initiative, there are also project monitoring, evaluation and management issues that may be responsible for the disappointing outcomes associated with the project. The above

therefore has serious implication for the expansion of the communication sector and utilisation of ICT in Nigeria.

2.8.8 Socio-Cultural factors affecting utilisation of ICT

According to scholars, a number of socio-cultural factors have been identified as capable of affecting the level of ICT utilisation. Okiy (2005) points out poor and inadequate telecommunication facilities; poor level of computer literacy, poor level of computer facilities; poor level of awareness of internet facilities among policy makers, government officials and the ruling class in general; and minimum involvement of academic institutions in network building in Africa as challenges militating against the use of ICTs. Furthermore, low level of ICT skills; lack of functional ICT policy; economic barriers (funds); ICT infrastructure; resistance to change; low capacity of communication facility; competition for human resources, lack of policy for manpower development and so on, are common barriers mentioned as factors undermining the use of ICTs.

Gardner (1994) points out human resources, vendor and maintenance, culture, funding, education and training as key factors for ICT use in developing countries. According to him, unskilled and untrained human resources lead to the employment of expatriates and African governments cannot pay or sustain expatriates. Vendor's main concern is also making money without maintenance plan. Without adequate training, organisations may not be able to effectively use them. Other factors that contribute to the under-use of ICTs is culture. System designers need to understand or undertake a systematic study of the organisation and country within which the system will be used (implemented). Supporting this Odedra (1992) opines that culture is a strong factor that dictates if technology be accepted or not accepted. The challenge goes to system planners and programme writers to consider the local way of thinking, cultural setting, level of education and awareness. According to Makinde (2006), culture constitutes a major factor that affects the transfer of technology from the more developed societies to Africa.

Culture may have different levels of analysis. Odedra (1992) analysed culture as functional, professional, organisational, industrial, regional and national. These levels of analysis may have implications for utilisation of ICT for staff recruitment. For example, professional culture has cultural peculiarities, the way they (people) take training, supervision and socialization. National culture is about where someone is born, undergoes training and so on. Tully (2003) states that the environment where one grows up can determine his or her ability to fully use modern technologies. German Youth Institute conducted an empirical research from 1998 to 2001.Quantitative survey of 4,500 young people between ages 15 and 26 was used. The findings reveal that young people are interested in the name 'technology' and make absolute use of the technology without any hindrance. The same study also reveals that these young people started using computers right from their childhood and this has a positive influence towards their level of performance. However, the same can not be said in Africa especially when it comes to the older generation who schooled and obtained their academic qualifications without sighting a PC. Some of these do occupy key positions in administration and find it very difficult to think even an innovative way of doing things. This may therefore tend to negatively influence the decision to adopt (or not) ICT for various socio-economic activities.

2.8.9 Organisational factors affecting utilisation of ICT

The size of organisations in Nigeria is a factor hindering the level of their effectiveness with respect to utilisation of modern ICT tools. Most organisations especially in the private sector are small sized with less number of workers compared with other more developed countries. For example, in a survey conducted, out of the 72 organisations that make up the Food, Beverage and Tobacco industry in Nigeria, only 16% had staff strength of 500 employees and above (Adebayo, 2010). This low staff strength, size of organisations, location of organisation and frequency of recruitment may have serious implications for how staff recruitment and selection are conducted. Also, the excessive reliance on temporary and contract staff which does not require high level of formality in the

employment process and federal character/quota system consideration for employment especially in the public sector which does not rely on merit and objectivity are factors hindering effective staff recruitment and selection (Onoge, 1991). All these factors therefore do not encourage constant and frequent staff recruitment and the need for acquisition of sophisticated e-recruitment tools becomes unimportant.

2.8.10 Lack of integration of e-recruitment systems

Effective utilisation of e-recruitment requires integration of the entire recruitment activities with stakeholders in the recruitment process. This involves installation of software which allows HR hiring managers the flexibility to pre-filter candidates through online screening. It generally provides Hiring managers and Line Managers a platform to manage and share all the information regarding candidates for the selection process. More advantages are derivable than in isolated practice where stages of recruitment are not aligned and integrated into the overall recruitment systems and HRIS. The level of this integration has implications for effective e-recruitment exercise.

Despite the worrisome situation constituting obstacles to utilisation of ICT in Nigeria, Obong (2007) identifies factors that seem to serve as panacea to the problems in Nigeria's super-highway. Some of these are:

i. Reliance on Generators

Nigerians – at least those who can afford it – have since gotten used to providing alternative sources of energy supply for themselves. As a result, manufacturing and sale of generators and their parts and services, power back-ups, inverters and uninterrupted power supply (UPS) systems are among the fastest growing businesses in Lagos and some other big cities in the country.

In Nigeria's ICT business, when someone says he wants to buy a computer system, what he means is a computer, printer and UPS. In Nigeria, possession of computer systems includes a UPS on the floor under the computer desk. At cyber cafés, there is at least a generator and all the computer terminals

have at least one UPS that might provide up to 20 minutes of power when the public power supply is gone.

In every office (including government offices) especially in large cities and towns, there is at least one high-capacity generator, often with switches that automatically turn them on only seconds after the public power supply is gone. In many of the cyber cafés and business centers, customers are charged higher for services if a generator is providing the power. This is very common in cities that have few of the businesses, therefore leaving the customer with fewer options. But then the customer is glad that he can find a cyber café that has both connection and electricity. Oftentimes a customer is told "there is no connection." This can last for a week in an entire town especially outside the big cities. A generation of Nigerians now believes that power support is an integral part, or at least a major peripheral, of computer "systems." The detour – the interactions between context and practice – has spawned a new nature of the technologies. In other contexts, people don't automatically think of electricity when making the decision to acquire a computer.

ii. Cell Phone Technology

The cellular phone, just like alternative sources of electricity, provides detours to the obstacles of the poor telecommunications and electricity infrastructure in the country. The cell phone technology is relatively cheaper and scalable and therefore the absence of efficient telecommunications infrastructure does not deter the ability of Nigerians to connect to the global information society. For a cell phone user, the world and all it brings is only a dial away

Sophisticated cell phones such as blackberry, android and others equipped with web application protocol (WAP) grant users access to the Internet without requiring a computer, telephone, modem or electricity (though electricity is still required to charge cell phone batteries). Cell phone marketers (usually representing their offices in Europe) promote the utility of the latest generation of phones as a solution to infrastructural constraints such as access to the Internet and interconnectivity among the providers of GSM services. It is now common to

find people owning four cell phones with each subscribed to the four digital mobile phone providers. (The number of providers went up to 12 at the beginning of 2007.) That way, they can easily make in-network calls without having to deal with the hassles of interconnectivity between the networks.

Incidentally, when GSM providers tally up the number of subscribers the duplication and triplication of subscriptions are not accounted for. The number of people who own cell phones in Nigeria may actually be less than the statistics. Access is a concept that has become redefined in a local context, as seen through the ubiquity of business centers and cyber cafés as public access points. This redefinition presents a detour by itself. For instance, while a few of these centers use dial-up connections, most, especially in cities such as Lagos, Port Harcourt and Abuja, have wireless access to the Internet and offer e-mailing, instant chat and VOIP services, such as Skype and Yahoo! Internet Call. These places allow many people access to various forms of ICTs without owning any. But in a society where ownership is usually defined in communal terms, public access to ICTs is synonymous with personal ownership especially because of the relational dynamics that are observed in cyber cafés and business centers across the country (Frieden, 2009; Awe, 2010).

iii. PC access and availability

There is a gradual growth in the availability and access to ICT tools in Nigeria. Awe (2010) argues that with the advent of liberalization and the availability of cheap imports from Asia, falling prices of technological tools and the growth in the second-hand PC market, access and availability of ICT tools are on the increase. However access to computing facilities is still an issue. The average Nigerian still views the computer as a luxury. Without reasonable access how much can really be achieved? The ICT sector can't have significant impact without affordable computing facilities and interconnectivity.

2.9. ICT and Human Resource Management

Human Resource Management (HRM) is defined as the policies, practices and systems that influence employees' behaviour, attitude and performance (Noe, 2002), Ogunbameru, (2008) sees it as the strategic and coherent approach to the management of an organisation's most valued assets - the people working there who individually and collectively contribute to the achievement of the objectives of the business while Omolawal and Joshua (2011) see it as the branch of management concerned with the attraction; motivation and retention of workers needed in an organisation to enable it achieve its objectives. The terms "Human Resource Management" and "Human Resources" (HR) have largely replaced the term "personnel management" as a description of the processes involved in managing people in organisations.

According to Storey (2007), the use of technology within HR has certainly increased over recent years with 77% of organisations using some form of Human Resource Information Services in 2005 (CIPD 2005). Research from Wyatt (Cited in Storey, 2007) showed that of the European companies surveyed, 70% used the internet or intranet to deliver HR services to employees with 25% planning to enhance substantially their e-HR capabilities over the next two years after the survey. This suggests that the use of technology within HR will continue to grow. Recent research published by Cranfield School of Management (2005) found even higher levels of use, with 82% of UK organisations having some form of HRIS although the nature of these systems varied. Ensher et al (2002) and Storey (2007) argued further that technology can be used to support HR activity across the entire employment cycle; from acquiring human resources (recruiting), to rewarding (performance management, pay and benefits), developing (training and development, career management), protecting (health and safety, employee relations) and to retaining human resources (retention strategies, work-life balance).

In the contemporary world, core HR responsibilities such as recruitment, oversight of legal and regulatory compliance, benefits administration, and the safeguarding of confidential employee information cannot be carried out

effectively without high-tech tools. In a world where what matters gets measured, many HR executives are turning to sophisticated technological tools to gauge their department's strategic contributions. In addition, many HR managers are borrowing from other business disciplines and integrating collaborative and social networking tools such as listservs, Facebook applications and video.

For these HR professionals, the growth of electronic communication and Internet use requires developing policies governing the safekeeping and appropriate flow of information, including e-mail and blogs. Indeed HR professionals, working in tandem with information technologists, now rely on policy and software to monitor data flow, block inappropriate data such as pornography, and prevent the leaking of trade secrets.

Human Resource professionals also rely on automated systems to direct employee benefit contributions. Such systems automatically direct a portion of workers' pay toward their retirement savings plans unless employees opt out, for instance. And while total rewards statements that alert employees to the total value of their compensation benefits packages have been around for years, many companies now are making that information available to workers electronically through HR information systems or self-service sites.

Workplace diversity initiatives are getting a boost from technology. Remarkable developments in assistive technology, for example, have increased job opportunities for people with physical disabilities. Some employers say that investing in such technologies is simply the right thing to do; others argue that such initiatives are good for the bottom line since they allow companies to recruit from a broader pool. Employers are also turning to technology to assist in evaluating their workers and vice versa. Electronic systems can automate performance-management processes, ensure an accurate "grading curve" and guarantee feedback to employees.

Martinsons (1996) has divided the use of HRIS into ‘unsophisticated’ uses such as payroll and benefits administration, employee records and so on, and ‘sophisticated’ uses such as recruitment and selection, training and development and so on, although the uses of technology within the HR function may be

different across organisations. The reason behind an organisation's decision to adopt technology within its human resource function may also be varied. Kettley and Reilly (2003) advance reasons for adopting e-HR as including cost cutting and aiding operational efficiency, the desire of the HR function to change the nature of its relationship with employees and line managers, the transformation of HR function into a customer-focused and responsive function and the ability to produce comprehensive and consistent management information. A number of authors (Lawler and Mohrman, 2003; Shrivastava and Shaw, 2004) have commented that the use of technology within HR not only makes HR activity more efficient, but may also facilitate a change in emphasis for HRM to become more strategic within the organisation. Snell et al (2002) have observed that HR can meet the challenge of simultaneously becoming more strategic, flexible, cost efficient and customer oriented by leveraging information technology. ICT can lower administrative costs, increase productivity, speed response times, improve decision making and enhance customer service at the same time.

Research from the Ministry of Manpower, Singapore (2003), divides the potential benefits of e-HR into 'hard' and 'soft' benefits.

Hard Benefits:

- Reducing service delivery costs by automating key HR business processes.
- Reducing correction costs by improving the accuracy of HR functions
- Eliminating costs with printing and distributing information to employees by making the information available online
- Improving employee productivity by providing universal access on a 24/7 basis.
- Reducing data entry and search costs through employee and manager self service.
- Enabling more cost-effective decision making through improved analysis of HR information

Soft Benefits

- Allowing instant processing of information-leading to reduction in cycle times

- Increasing employee satisfaction by improving quality of HR service and providing access to information
- Allowing HR function to become a strategic partner to the business as routine administrative work is minimized: HR can be used to signal a change towards an organisational culture that promotes initiative, self-reliance and improved internal service standards. (Ministry of Manpower, Singapore, 2003)

Over and above the general areas highlighted where the use of ICT has become very necessary, a major HR functional area where the use of ICT has become inevitable is staff recruitment, selection and placement. Recruitment practices have been re-appraised in order to attract people from any part of the globe specifically using the technology of web-sites and internet: a major problem associated with this employment patterns is that of management of cultural diversity and this poses a challenge to human resources management in organisations. Technology has brought substantial changes to human resource functions in formal organisations. For example, it has radically altered the way recruitment functions are performed to the extent that organisations that fail to follow the global trend in such recruitment processes may find it difficult to survive in the operating environment. The momentum of the technological revolution creates rapid and disruptive changes in the way in which people live and work. As the pace shows no sign of slowing, Human resource managers are therefore faced with the challenges of adapting to the new technologies, managing the emerging functions, working with the new technologies competently and to managing workers who are also adapting to the new technologies more effectively (Ulrich, 1997; IDS, 2003)

The general process of using modern ICT tools for recruitment is referred to as E-recruitment or online recruitment. The term e-recruitment means using information technology (IT) to speed up or enhance parts of the recruitment process. It ranges from the applicant interface for advertising vacancies and making job applications, to the back office processes, which allow a liaison between human resources (HR) and line managers to set up a talent pool or

database of potential recruits. E-recruitment is the process of personnel recruitment using electronic resources, in particular the internet. Using database technologies, and online job advertising boards and search engines, employers can now fill posts in a fraction of the time previously possible. Using an online e-Recruitment system will save the employer time as usually they can rate the e-Candidate and several persons in HR can independently review e-Candidates. Internet, which reaches larger number of people and gets immediate feedback becomes the major source of potential job candidates and well known as online recruitment or e-recruitment (Etomi, 2002; Bondarouk & Ruel, 2009).

However, it may generate many unqualified candidates and may increase the diversity and mix of employees. The internet has radically changed the recruitment function from the organisational and job seekers' perspective. Conventional methods of recruitment processes are readily acknowledged as being time-consuming with high costs and limited geographic reach. However, recruitment through World Wide Web (WWW) provides global coverage and ease. Likewise, the speedy integration of the internet into recruitment processes is primarily recognised due to the internet's unrivalled communications capabilities, which enable recruiters for written communications through e-mails, blogs and job portals and other media (http://en.wikipedia.org/w/index.php?title=E-recruitment&oldid=441508769).

2.10 Recruitment, Selection and Placement

Recruitment is defined as the army of organisational practices and decisions used to affect the number of types of individuals who are willing to apply for, or accept, employment in an organisation (Etomi, 2002). Armstrong (2009) sees it as the process of finding and engaging the people the organisation needs. Selection on the other hand, may be defined as the process through which those who are recruited to serve as candidates are winnowed down to the few who are hired. Selection is often regarded as an aspect of recruitment, it can be seen that the two, though closely linked, are distinct processes. Recruitment is concerned with the process of attracting a sufficient number of individuals with

the right profile in terms of qualification, experience, skills and other relevant attributes to indicate their interests in working for the organisation. Selection on the other hand, is concerned with identifying the candidates from the recruitment pool who best meet organisational requirements for employment. Placement refers to the actual posting of selected candidates where they are expected to carry out their functions and is usually followed up with induction into the organisation (Robertson and Smith, 2001; Fajana, 2002; Armstrong, 2009)

In the past, especially in Nigeria, recruitment, selection and placement were seen as routine processes, carried out at infrequent intervals, usually with the sole objective of filling existing vacancies. The recruitment effort was usually limited to the placement of adverts in newspapers, while selection involved oral interviews that may or not have been preceded by some forms of tests. There was little deliberate effort at defining and meeting the organisation's long term staffing requirements. If any thought was given to the organisation's long term needs, it was usually an optimistic assumption that the best candidates from the recruitment process would be capable of meeting the needs of the organisation (Ubeku 1975; Nwachukwu 1988)

Recent developments in the global economy in general and the Nigerian economy in particular, suggest that this complacent approach towards recruitment and selection may not guarantee the staffing needs of organisations. Etomi, (2002) argues that the intensely competitive business environment today has resulted in fierce competition amongst employers for the best candidates from the labour market. Such potential employees must have the capacity to cope with a rapidly and constantly changing workplace, the advent of technology and the impact of emerging concepts regarding employer/employee relations. It is therefore of vital importance for HR professionals to be abreast of current and emerging practices in the field of recruitment, selection and placement and how the conduct of such exercises can be enhanced both in terms of modern tools, techniques and ideas (Armstrong, 1995; Dessler, 2008)

In terms of comparison between the private and public sectors in Nigeria, experience has shown that the recruitment and selection exercise appears to be

more objectively, rigorously and fairly handled in the private sector than in the public sector. While the private sector manager may insist, as a matter of policy, on hiring competent and qualified personnel irrespective of the person's state of origin or creed, the public sector would hire competent personnel who satisfy additional considerations associated with ethnicity, political affiliation, geo-political origin and federal character. There is also the note-syndrome, which allows a potential applicant to get notes from powerful personalities to influence appointment. Etuk-Udo (1999) cited a study conducted in Makerere University, Kampala Uganda which noted a prevailing culture of 'personalissimo' among Africans. Personalissimo is defined as the social process of knowing somebody, who knows someone, who knows the person from whom you need a service.

There is also the deliberate policy of federal character aimed at ethnic balancing in the Nigerian public sector (Inyang 2001). All these have implications for HRM in the public sector and reduce the power of professionalism in HRM. They also have implications for willingness to adopt modern technology for the conduct of the all important organisational exercise.

2.11 ICT and Staff Recruitment, Selection and Placement

ICT has become inevitable tools in the conduct of staff recruitment, selection and placement in organisations. The use of ICT has been categorized into two namely: (i) Soft or non-intensive use which involves the use of ICT tools such as the computer for storing information on applicants' records, conduct of written tests and so on, without the use of core hardware. (ii) Hard or intensive use which involves the use of the more sophisticated ICT tools such as the internet, websites, video conferencing, all of which require installation of core software. Using the more sophisticated ICT tools for staff recruitment has led to the emergence of the concept e-recruitment or online recruitment.

Armstrong (2009) defines e-recruitment as a process that uses the internet to advertise or post vacancies, provide information about the jobs and the organisation and enable e-mail communication to take place between employers and candidates. E-recruitment can be defined as any recruiting process that an

organisation conducts via Web-based tools such as the organisation's public Internet site or its intranet. E-recruitment also involves candidates searching for job information and completing at least some part of the application process online, even if that is only reading a position describing or finding instructions for applying.

The term e-recruitment means using information technology (IT) to speed up or enhance parts of the recruitment process. It ranges from the applicant interface for advertising vacancies and making job applications, to the back office processes, which allow a liaison between human resources (HR) and line managers to set up a talent pool or database of potential recruits.

E-Recruitment originated in the form of independent job sites Bulletin Board Systems in the 1980s.Initially only the United States Universities and the Military had access to internet facilities. However the PC revolution that embraced the world in the early 1990s changed the corporate landscape completely. In 1994, United States launched Monster.com with 20 clients and 200 job openings (Anderson, 2003). Monster.com pioneered e-Recruitment and today is the leading internet recruitment portal globally. The emergence of E-Recruitment as a strategy of cost and time saving mechanism coincided with the introduction of New Public Management (NPM) in the Public Sector geared toward addressing institutional and structural problems afflicting public bureaucracies in both developing and developed countries (Snell et al, 2002). In 1991, British scientist Tim Berne's Lee introduced the World Wide Web (www) to academic scientist. This is a harbinger to internet recruiting. Later, Netscape revolutionalized the concept of web browsing by making the internet accessible to the public. In 1997, KPMG established a career website at www.KPMGcareers.com in order to remain competitive and to enhance its image as a world class e-Recruitment specialist.

In Nigeria, E-Recruitment in the public sector is a new phenomenon introduced around 2005 to hire personnel in the public sector. Agencies like Federal Civil Service Commission, Nigerian Army, Nigerian Police Force, Nigerian Customs Service, and Corporate Affairs Commission among others

adopted the use of internet in their recruitment process. In contrast to some countries like Malaysia that is using organisational website to recruit potential candidates, in Nigeria the reverse is the case because, many organisations, especially those that have potential of drawing a large number of applicants, have latched on to the scratch card business by using private recruiting consultants to extort money from anxious waiting applicants (Ikechukwu, 2010).

The reason for the shift towards online recruitment activities, and use of Web 2.0 technology for more Human Resource Management functions is mostly due to the inadequacy of the paper-based process. Most hiring managers and line managers mention the lack of systematic log of information and improper storage of paper applications leading to inevitable delays in application processing time. This increases the time to hire and thus cost to hire, while compromising the quality of hire due to incompetent practices (Depardieu and Islam, 2008). Findings in a recent CIPD survey show that e-recruitment sections on employers' own websites is now the fourth most popular recruitment method. More than seven in ten employers advertise vacancies on their corporate websites, while jobs boards are used by four in ten with 73% reporting reduced costs through using e-recruitment in Europe.

The current technology allows Human Resources professionals to post open positions in detail so applicants can review this data on their own time, thus minimizing the time requirements by the Recruiter on this phase of the process. Companies of all sizes typically have, at minimum, a website which allows them to conduct part of their business on-line. Some include a career section with on-line recruiting storing information on open positions, employee benefits to entice potential applicants and an application process. As in so many other aspects of the business world, the Internet has become an integral part of the recruitment process. It started as a tool for the employer to advertise their positions to a wider audience. Job postings would be accessible to job seekers for 24 hours per day. By accepting letters of application and CVs sent via E-mail, applicants now have the opportunity to respond right up until the closure date and time of the job advertisement (Fajana, 2002; Holbeche, 2004; Stacey, 2010)

Online employment recruitment provides a quick and easy way to sort out the qualified from those less qualified thereby saving time, efforts and money. There is more pre-qualifying done prior to any interview- depending on the nature of the job and the pre-screening process (such as answering questions specific to the job), the recruiting process is somewhat simplified (Day, 2010). Many companies are now taking the next steps in incorporating the Internet into the next steps of their recruitment process: Screening suitable candidates can take up a lot of time and resources, even more so when more applicants respond. On-line attitude and aptitude tests are becoming more popular as a means of selecting the right candidates (Yazdani, 2010). Video conference has also emerged thereby allowing interviews to be conducted on-line, while job offer and acceptance are being conducted online with e-signing allowing applicants to accept and confirm offer online. In many organisations, online processes have been added to the conduct of induction, a process which is called e-on-boarding. A later trend has been the creation of on-line databases, where job seekers could store their CVs thereby giving employers the opportunity to search for candidates who fit the required profile. This can speed up the application process and give people who are interested in changing their job the initiative to show their availability, without actively applying for jobs (Elkington, 2005; McCurry, 2005). Essentially, e-recruitment works on software and some common software include web 2.0, Artificial Intelligence (AI), HR software, Application Tracking System (ATS) among others.

The entire process of e-recruitment and ICT utilisation for staff recruitment involves automation of the recruitment efforts from the beginning to the end and it is summarized as follows:

Organisations put job vacancies on the internet (own site or employment agency sites);

Interested candidates are encouraged to react with their resumes electronically;

Resumes are electronically screened;

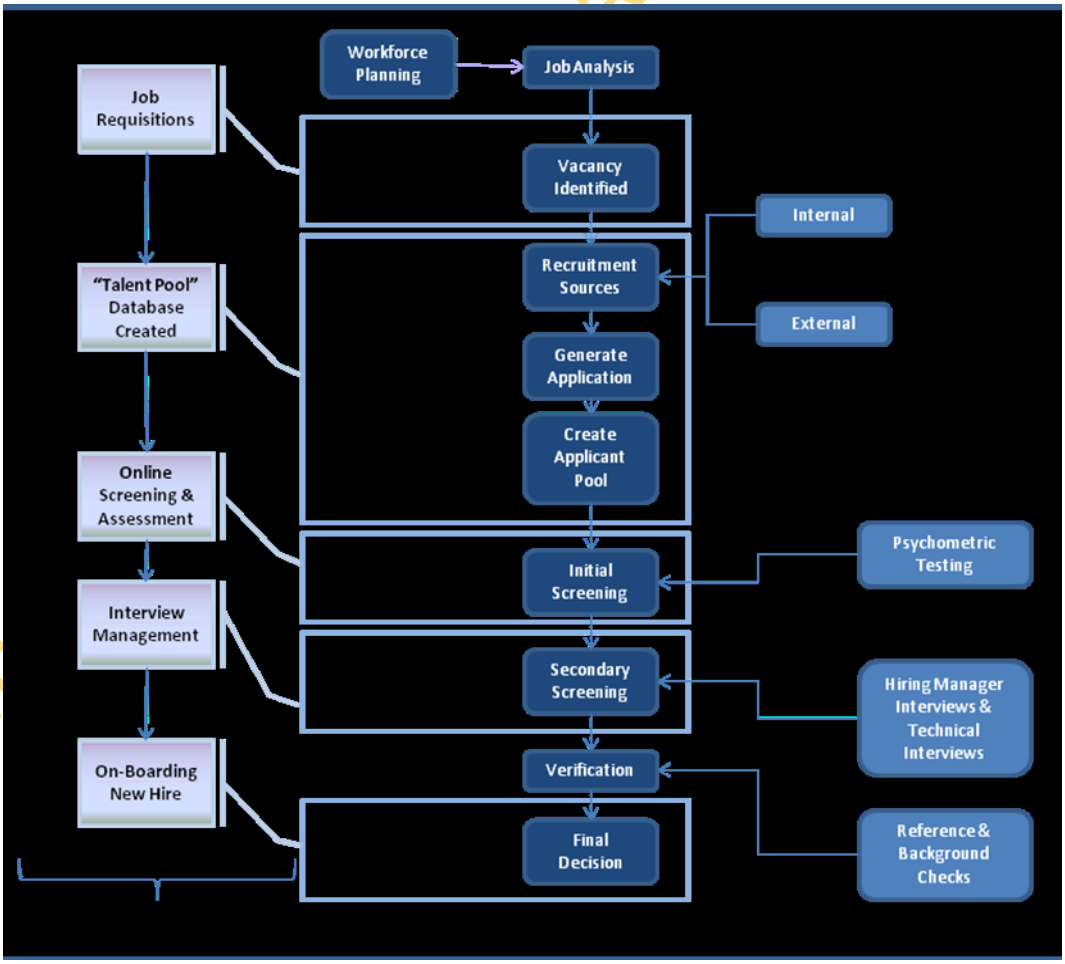
Intelligent matching system converts summary of experience to a summary of skills;

Applicants with relevant profile for the job are contacted electronically;
Interviews are conducted on-line or using computers at specific locations;
Discussions are thereafter held through telephone, e-mail or video-conferencing;
Terms are agreed

2.12 E-recruitment aligned with Recruitment and Selection Policies

According to Depardieu and Islam (2008), automated systems greatly increase efficiency of the traditional recruitment methods and selection tools. Due to the growth of the Internet, and the obvious benefits that Applicant Tracking Systems bring, more and more organisations are streamlining their recruitment process with e-recruitment software.

The e-recruitment software is usually integrated at all the stages of Recruitment and Selection functions, as shown in the following diagram.



Source: E-Recruitment Market Assessment 2006 (marketresearch.com)

In general, line managers send their Job Vacancies to the HR department. HR hiring managers create a Job Requisition for each vacancy and evaluate applications by matching qualifications against the criteria specified in Job Requisitions. Prospective candidates are added to the Talent Pool database for further assessment. E-Recruitment software provides HR hiring managers the flexibility to pre-filter candidates through online screening. It generally provides Hiring managers and Line Managers a platform to manage and share all the information regarding candidates for the selection process. In terms of benefits, by aligning e-recruitment with recruitment and selection policies, the benefits derivable include:

Cost-Effectiveness

Applicant Tracking Systems reduce the cost of recruitment considerably by reducing the time it takes to hire individuals. Much of the paper-work is eliminated, if not all, and the time needed to perform administrative duties such as scheduling appointments and maintaining records is significantly shorter. In addition, Job vacancies are posted online (on Job Sites or on the company's career sites).

Typically, cost savings are achieved through:

- Online screening and pre-filtering of unsuitable candidates and thus allowing line managers to save time by concentrating on quality hiring

- Sharing of information through the e-Recruitment system between Hiring managers, Line Managers and applicants, reducing the usual time taken for communication between parties

Efficiency

E-recruitment allows candidates to access a richer source of information via the Internet on the Company career websites. They can view the status of their applications, edit and update their profiles as necessary. These sites may also be utilised to provide candidates Realistic Job Previews (RJP). A RJP is a recruiting approach used to communicate the different aspects of a job. The aim is to provide applicants with a better picture of what to expect when working with the

Company. The corporate career site is an effective tool to provide RJPs because it can be customized to reflect the organisation's culture and even provide success stories of top performers (Depardieu and Islam, 2008; Dessler, 2008).

On the Hiring manager's side, online applications can be acknowledged and processed more efficiently using e-Recruitment software. Pre-filtering/screening of candidates using job specific questions and advanced selection techniques allows the employer to focus quickly on the most appropriate applicants only. Moreover, building a talent pool of candidates by retaining outstanding candidates for the future allows managers and hiring managers to contact them later when an appropriate vacancy arises. Line Managers have better access to the status of their Job Requisitions due to utilisation of e-Recruitment software. Although they have a more passive role in the recruiting activities, they have to be constantly updated. E-Recruitment software allows Line Managers to access candidate data as well as view progress of the recruiting activities at any time. At the same time, the software allows line managers to view in real-time the candidate profiles and their status in the recruitment process. Managers can also share information with each other, and view notes or comments made by the other managers regarding candidates under consideration. E-Recruitment software generally greatly enhances candidates-recruiters relationships by providing templates for all types of communication with applicants. Whether it is in response to applications received from candidates or to request more information, competent e-Recruitment software provides a list of relevant email templates to choose from.

These templates enable organisations to maintain consistency in communication with candidates. They also save valuable time for managers who would otherwise have to compose all the messages themselves. Furthermore, the messages are personalized for each candidate and may be edited by managers if they wish to add a personal touch. E-recruitment should be incorporated into the overall recruitment strategy of the organisation and a well defined and structured applicant tracking system should be integrated and the system should have a back-end support. Also, along with the back-office support a comprehensive website to

receive and process job applications (through direct or online advertising) should be developed. (Depardieu and Islam, 2008)

2.13 Benefits of ICT for Staff Recruitment, Selection and Placement

According to Mathis and Jackson, (2006), major advantages of the use of the hard core ICT, otherwise known as internet recruitment include cost saving, time saving, generation of expanded pool of applicants, and global catchment opportunity. Other scholars (Newell and Shackleton, 2000; Taylor, 2002; IRS, 2002b; Torrington, Hall & Taylor, 2007) argue that advantages derived include:

- It lowers costs to the organisation
- Posting jobs online is cheaper than advertising in the newspapers
- It does not involve intermediaries
- There is reduction in the time for recruitment (over 65% of the hiring time)
- It facilitates the recruitment of right type of people with the required skills.
- It enhances improved efficiency of recruitment process
- It gives a 24 hour access to an online collection of resumes.
- It helps the organisations to weed out the unqualified candidates in an automated way
- Recruitment websites also provide valuable data and information regarding the compensation offered by the competitors, and so on. which helps the HR managers to take various HR decisions like promotions, salary trends in industry and so on.

In a related manner, Armstrong (2009) argues that much of the evidence supporting the use of e-recruitment points to time and cost savings: The speed with which several steps of the recruitment process can be carried out online reportedly leads to a shorter recruitment cycle. Applications can be processed and delivered within minutes rather than weeks, saving both organisations and job seekers valuable time. Additionally, organisations can save considerable amounts of money when recruiting online. Job seekers have a greater access to more job advertisement and have the possibility through the company's web site to research

their potential employer and make a more informed choice in selecting the jobs they are interested in. Employers have a wider choice if more applications reach them in time. In addition to this, by not having hard-copies, both employer and applicant save on time, printing costs and postage. Soft-copies can be deleted or stored at little expense.

Furthermore, a survey of 50 organisations in the United Kingdom that used e-recruitment found that the organisations had decided to pursue e-recruitment in order to improve their corporate image and profile, reduce recruitment costs, reduce administrative burdens, and employ better tools for the recruitment team. The survey showed that 55 percent of respondents expected their organisation to reduce its use of other recruitment methods in the future.

Similarly, research on U.S. Federal Government recruitment methods found that e-recruitment can serve several recruitment purposes, including improving an organisation's image through branding, educating applicants about the organisation and its career opportunities, and making it easier for applicants to update their resumes and contact information. Other benefits according to Torrington et al, (2007), Storey, (2007) and Onyeonoru & Omolawal (2013), include the fact that there are no strict space constraints for position announcements posting online, which allows publishing comprehensive advertisements with links to job descriptions, applicant specifications, and job previews. Furthermore, information about open positions and applicants can be updated quickly and efficiently. E-recruiting allows hiring executives to publicize a job opening widely and almost immediately by typing a job description into the e-recruitment system. The system can post the opening on thousands of Web sites, including general job-search sites, niche sites devoted to specific industries, and professional association sites. Sites may be free to both the hiring organisation and the applicant, or may require the hiring organisation to pay a fee to post jobs (Williams, 2010)

Advertising open positions on the Internet also facilitates the recruitment of local, national, and international job candidates thereby enhancing workplace diversity. Furthermore, the integration of an e-recruitment systems and agencies'

human resource information systems (HRIS) can enable recruiters to access several databases in the core HRIS, extract data on previous hires and the workforce, and import data on the new ones. Such integration is also useful for recruiters and line managers who need to think strategically when doing workforce planning, assessments, and diversity management.

According to Kettley and Reilly (2003) and Soonhee & O'Connor (2009), e-recruitment has also led to improved internal customer relationship management. For example, e-recruitment can facilitate the decentralization of many HR operations, with responsibilities for many aspects of the recruitment process being given to staff at the business unit, departmental, or line management level. E-recruitment enables a direct link between the candidate and the recruiter or hiring manager. The trends in e-recruitment use suggest that, in the future, the candidate will be connected to the central system and the line manager will be involved in the online application process. Accordingly, the role of HR in recruitment will become more facilitative than administrative.

Scholars such as Elkington, (2005) and Torrington et al (2007) posit that online recruitment is also capable of generating the following benefits:

Enhances the applicant experience;

Communicates the employer's image and culture better;

Makes the recruitment process faster, more accountable and standardized;

Increases the diversity of applicants;

Provides better management information on applicants;

Finds the right candidate for the job.

Further, other benefits derivable include the fact that occasional candidates can be gained for free by ensuring the e-recruitment website is easily found from the front page of the corporate website, interested applicants have the opportunity to apply for specific vacancies which are available now or registering a speculative application for the future. It also provides opportunities for building a pool of talented candidates, retaining speculative and star candidates for the future, and then contacting them when an appropriate vacancy is advertised, effectively generating applicants for free.

There is also reduced administration as all applicants are held on a single e-recruitment system and they can be contacted individually or collectively with ease at the click of a mouse, reducing the time, effort and cost of the administration staff.

Pre-filtering candidates, the use of job specific (killer) questions and selection techniques allows the employer to focus quickly on the most appropriate applicants and efficiently communicate with them especially in the contemporary labour market where good candidates have many options and expect instant response to their applications. Additionally, applicants receive a much higher quality of service, ranging from prompt and timely communications through to the ability to select their own interview time through an online interview zone all of which enhances the employer's brand, making it easier in the long term to attract staff

The study of Reddick (2009), cited in Bondarouk et al (2009) classified the impact of ICT on recruitment into three stages namely operational impact, relational impact and transformational impact. The outcome of the study showed that the first stage (operational impact) tests positive on many organisations which he studied. According to him, efforts to automate record keeping and routine clerical activities such as choosing the appropriate candidates and scheduling interviews make sense. By doing away with paper work, automated processes have the likelihood to shrink company overheads and enhance major cost savings. On the relational impact, Reddick found that since organisations are able to achieve more efficiency and productivity by increasing service timeliness in recruiting process, therefore, IT has a positive relational effect on recruitment and selection processes. Lastly, he found that the highest impact of IT on recruitment is its transformational role which is owed to the fact that unlike before, recruiters are now able to attract potential candidates from any part of the world and communicate much more closely with them without spending much money.

2.14 Challenges of ICT for Staff Recruitment, Selection and Placement

According to Anderson (2003), Mathis and Jackson (2006), and Armstrong, (2009), the positives associated with internet recruiting come with a number of challenges. In getting broader exposure, employers also may get more unqualified applicants. Internet recruitment creates additional work for HR staff members who now need to review more resumes, more e-mails and the need to install expensive software to track the numerous applications. A related concern is that many of the individuals who access job sites are just browsers who are not actively looking for jobs. Another major concern, according to them is that some applicants may have limited internet access, especially the individuals from lower socio-economic groups and from certain regions of the world. Also privacy is another potential disadvantage of this new process: Sharing information gleaned from people who apply to job boards or even company websites has become common, but information sharing is being done in ways that raise ethical issues and violate discrimination.

The challenges identified by other scholars (Anderson, 2003; McCurry, 2005) include:

Screening and checking the skill mapping and authenticity of million of resumes is a problem and time consuming exercise for organisations.

There is low Internet penetration and no access and lack of awareness of internet in many locations across the world.

Organisations cannot be dependant solely and totally on the online recruitment methods.

In countries like India, the employers and the employees still prefer a face-to-face interaction rather than sending e-mails.

Other major issues and challenges with e-recruitment center on the quantity and quality of candidates using Web-based tools, the lack of knowledge of e-recruitment within the HR community, and limited commitment to e-recruitment by senior managers. For example, many applications from unqualified candidates have been received by organisations using e-recruitment systems, at the same time, the lack of knowledge of e-recruitment among HR professionals and the

limited commitment of senior managers have hindered the effective implementation of e-recruitment in some organisations. Furthermore, recruiting through the Internet has raised concerns among potential applicants about keeping their personal information secure and confidential. Many organisations' recruitment sites display privacy statements that detail how the information applicants provide will be stored and used. However, data security remains a major concern, particularly when it comes to online testing and making hiring decisions.

Shrivastava & Shaw (2004) have noted that the accuracy, verifiability, and accountability of applicants' data are also major issues for managers whose organisations use e-recruitment systems. Some managers have also been concerned that e-recruiting may limit diversity among applicants. In addition Robertson, (2001) also wrote that the lack of personal interactions during the process of applying for employment online limits the flow of communication between potential employees and the employer, leading to frustration on the part of the job candidates and missed opportunities to share or gather additional information by employers. To improve such communication, some e-recruitment systems incorporate e-mail follow-ups by recruitment personnel or managers with applicants. As Storey (2007) notes, online testing raises issues related to applicants' reactions to the testing, the equivalence of online and pencil-and-paper tests, adverse impact, and protecting candidates' identities. Therefore, before adopting any kind of online selection method, organisations should carefully study the impact of these methods and the strengths and weaknesses of the methods.

2.15 Debates about E-recruitment

Debates exist among scholars centering on different aspects of e-recruitment. For example, while some believe that e-recruitment is best fitted for organisations that engage in recruitment exercises on regular basis, others argue that e-recruitment should be adopted irrespective of the regularity of the exercise. The debate goes further on whether or not e-recruitment is suitable for all

categories of workers and works; in other words, why should clerical staff, operators and others of the low cadre be recruited online? Another aspect of the debate centres on using the internet for all stages of recruitment: Some argue that the entire processes of recruitment should be done online without giving room for physical contacts while some scholars argue that despite the benefits of e-recruitment, there should still be the need for the recruiters to be in practical face-to-face interviews for more realistic assessments which may not be possible online.

For developing countries like Nigeria, the argument extends further that e-recruitment has become another means of exploiting vulnerable and unemployed people who are often required to buy scratch cards to enable them log on to the recruiters' web site. For Government agencies private organisations especially Banks, applicants at times discover that their websites are empty of any online application forms. The often epileptic servers in cyber cafes and poor power supply also create additional problems for the applicant (Obong, 2007; Ikechukwu, 2007; Ben, 2010). Whatever the line of argument is, the Nigerian labour market seems to be peculiar as a result of combination of many factors such as nepotistic recruitment/quota system, fraudsters willing to exploit the desperate job seekers, high unemployment rate in the country, low level of recruitment plus factors militating against use of ICT and so on. All these have implications for effective e-recruitment in the country

2.16 Stages of Recruitment and applicable ICT Tools

2.16.1 Recruitment decision

This is referred to as the 'behind-the-scene' phase of staff recruitment and selection. Some scholars refer to it as pre-recruitment stage. Whatever name it is called, it is regarded as the foundation upon which recruitment and selection are based. The process involves manpower planning to determine available vacancies and how to fill such vacancies. Once this stage is successfully concluded, the next stage will be to throw open the vacancies for interested and qualified candidates

to apply. This further involves the decision on whether to adopt internal or external approach.

2.16.2 Call for Applications

This is the stage at which applicants are made aware of existing vacancies in organisations and are requested to react by submitting their applications and resume usually within a time frame. The process involves spelling out the job and applicant specifications, vacant positions, job responsibilities, mode of application, time frame and other conditions of employment.

Traditionally, this process involves the use of handbills placed in public institutions like Post Office, banks, recruitment centres, organisations' notice boards, radio, television, newspapers. In response, applicants would package their applications and credentials (hard copies) and submit such either personally, send through courier services, or post through the Post Offices to the appropriate recruiter. Each of these methods has its advantages and disadvantages. However, with the emerging ICT, employers now place their vacancies on their websites, Internet job boards or professional/career Web sites.

Internet Job Boards such as Monster, Career Builder, CareerMosaic, CareerWeb, E-Span, Yahoo! And HotJobs provide places for employers to post their vacancies or search for candidates. Job boards provide access to numerous candidates. They are analogous to job advertisement in newspapers. Equally, they comprise a catalogue of employment prospects and profiles of potential candidates. Therefore job boards are capable of being employed in double fold by recruiters, first to advertise available employment positions and opportunities, and secondly to search for suitable resume of candidates. However many individuals accessing the sites are 'job lookers' who are not serious about changing jobs, but are checking out compensation levels and job availability in their areas of interests. Various estimates are that about one third of all visitors to job boards are just browsing, not seriously considering changing employment (Bohlander, Snell & Sherman, 2001; Mathis and Jackson, 2006).

Professional/Career Websites refer to a number of private organisations who run HR functions for various employers. Their Websites therefore provide opportunities for applicants specifically interested in the job field and may reduce the number of less qualified applicants who actually apply.

Employers Websites are maintained by specific organisations who prefer handling recruitment and selection services on their own. All they do is to include employment and career information on their websites. On many of these web sites, job seekers are encouraged to e-mail their resumes or complete online application forms. A well designed corporate web site can help to stimulate interest in some passive job seekers as well as other potential candidates. Such web sites provide further opportunity for organisations to post information to the public and to market its products and services, organisational and industry growth potential, and organisational operations (Sinclair, 2003; Mathis and Jackson, 2006).

Whichever web site an employer or recruiter decides to use, the processes are generally the same: They request qualified applicants to submit their applications on such websites, and/or to complete the posted application forms. This has translated from submission of hardcopies directly to the recruiting organisations to submission of soft copies to the recruiting organisations' website. This has lots of benefits for both the recruiters and the applicants. To facilitate effective communication with the applicants, recruiters normally request applicants to provide their e-mail address and mobile phone numbers on their applications.

2.16.3 Sorting of Applications and Short listing

With the expiration of the deadline within which applicants should submit their applications, the next stage is for recruiters to sort the applications so as to determine those to be shortlisted for consideration. Such applications are sorted into three categories namely: Suitable, Possible and Unsuitable. Traditionally, this stage was done manually and could take a long time before it could be completed. It is cumbersome and the rate of accuracy is usually low (Onasanya, 2005)

However, the emerging ICT has simplified the process through the use of the computer. This often involves installation of appropriate software (resume scanner) on the computer and within a few seconds, applications could be sorted into the appropriate categories for further actions. Resume scanner is one major benefit provided by the job portals to the organisations- It enables the employers to screen and filter the resumes through pre-defined criteria's and requirements (skills, qualifications, experience, payroll and so on.) of the job. Patton (2003) and Mathis and Jackson (2006) argue that pre-employment screening done electrically has increased dramatically in the past few years. One type of screening uses computer software to scan for key words in resumes or applications submitted electronically. Hundreds of large companies use types of text-searching or artificial intelligence (AI) software to scan, score and track resumes of applicants. For example, software could be installed so that individuals can complete applications electronically, thereafter applicants' applications are then electronically compared with job profiles to determine which candidates are likely to be successful and those candidates are contacted for interviews (Armstrong, 1999).

Pre-screening, sorts the serious job contenders from the often hundreds of electronic applicants, by looking for keywords, key skills or experience. These and other features are parts of 'applicants tracking systems' that are used for screening. According to Mathis and Jackson (2006), software systems are used often when the volume of the applicants is large; when the quality of hire needs to be increased; when hiring cycles need to be shortened; when the cost of hiring needs to be reduced and when the firm needs to reach far geographic areas. These processes provide lots of advantages in terms of speed and accuracy for the recruiters, although a major problem associated with the new systems is the cost of acquiring the modern software.

2.16.4 Invitation for Interview

Having sorted out the applications into desired categories, the next stage is invitation of applicants for written tests or interviews. Traditionally, applicants

were contacted through letters hand delivered by the dispatch riders of organisations, postal services, radio and television announcements, courier services and newspaper announcement (Ubeku, 1975; Onasanya, 2005). These methods have lots of disadvantages relating to the safety of such invitation letters.

However, the available ICT have provided faster and better means of communicating with applicants. Today, most employers get in touch with applicants through: applicants' e-mail address, applicants' cellular phones (voice or SMS messages). Some employers paste and invite applicants for interview on their websites. Newspapers and postal services have become less common means of inviting applicants for interview.

2.16.5 Written Test

This is a process of testing the intelligent quotient and mental skills of applicants. Depending on a number of factors which include organisations' recruitment policy, vacant positions and so on, some recruiters/organisations do not conduct written tests for applicants. For those who use selection tests, many kinds of tests have been developed to help employers select good employees. According to Onasanya, (2005) and Mathis and Jackson, (2006), literacy tests, skill tests, psychological measurement tests, honesty tests are the major categories. They argue further that when carefully developed and properly administered, employment test allows employers to predict which applicants have the ability to do the job in question, who can learn in training and who will likely stay when employed.

Traditionally, recruiters conduct written tests by giving hard copies of question papers either essay or multiple choice objective questions. Thereafter, marking is done manually to determine the performance of applicants. This is very cumbersome for the recruiter and the process may take a long time before it could be concluded. In the recent time, emphasis is gradually shifting to the use of computer and online technologies to conduct such written tests. According to Dessler (2008), computerized testing is increasingly replacing conventional paper

and pencil and manual tests. Organisations now take online or offline computerized tests. Computerized tests take two forms:

First is the computer based tests where applicants are assembled and each allocated with a computer where the questions and other instructions are already programmed. Applicants are merely requested to provide answers usually by clicking the right options. The questions are thereafter marked either manually after being downloaded or automatically by the computer. In Nigeria today, Computer Based Centres (CBT) are beginning to emerge. These are centres equipped with computer facilities where HR practitioners can conduct their assessment tests at a fee. These centres are still few and largely located in the large cities. The centres operate by providing numerous PCs and installing relevant software on the computer. Using the given passwords, job applicants can log on at the centres and take the written tests within the time frame allowed. Results are thereafter processed automatically almost immediately, depending on the recruiters' need. This development serves a big advantage for HR practitioners as it provides them the opportunity to conduct their assessment test without having to install their own systems. A close example of this could be found in the University of Ibadan which has a Computer Based Centre. The centre was primary built for the purpose of conducting examinations for some courses, but it is gradually becoming popular for employment tests, entrance examination for school admissions and others.

The second form is a more sophisticated package which involves applicants to remain in their desired location anywhere in the world and log on to the website of the employer. Using the password and other codes provided earlier, the applicants gain access to the questions and within the specified time frame, they take the test. Whichever form the employer uses, the process involves installation of appropriate software plus intranet coding. The whole process of downloading and marking could take a few minutes. Those who meet the cut-off point are eventually invited for the next stage which is usually the oral interviews. Again cell phones (voice or SMS) and e-mail provide very fast and reliable means of communicating the results to the successful candidates.

2.16.6 Interviews:

While tests may not be adopted by all employers during the recruitment process, interviews have been found to be a universal exercise to decide on whom to employ into organisations. Selection interview is done both to obtain additional information and to clarify information gathered earlier about the applicants (Nwachukwu, 1988; Onasanya, 2005). Typically, interviews are conducted at two levels: first as an initial screening interview simply to see if the person has minimum qualifications, and then later, as an in-depth interview perhaps involving HR staff members and operating managers in the departments where the individuals will work. Mathis and Jackson (2006) identify two categories of interview: structured interviews which comprise of biographical, competency, situational interviews; and secondly, the less structured or unstructured category. There are other types which include stress interviews, team interviews, and panel interviews and so on.

Oral interviews provide the opportunity for both the recruiter and the applicants to interact, discuss further and probably conclude the employment contract. This affords the recruiter of having physical assessment of the applicants with a view to further determining the suitability of applicants for the positions under consideration. However the emerging ICT has provided an opportunity for this interaction to take place online. The less technical aspect is the telephone interview which simply is the conversation that is conducted at different geographical location but with both parties communicating with the aid of telephone. Dessler (2008) argues that telephone interview can be more accurate than face-to-face interviews for judging an applicant's conscientiousness, intelligence and inter-personal skills, because neither party need worry about things like appearance, so each can focus on substantive issues.

In contrast, Martin and Jackson (2006) argue that there is a drawback to telephone interviews especially when the candidates have not been notified that they may receive a call, thereby making them unprepared for the interview. In a typical study, interviewers tended to evaluate applicants more favourably in telephone interviews, especially where the applicants were less physically

attractive (Strauss, 2001; Rodgers, 1987, Thornburg, 1998). CIPD (2003) reports that about 28% of organisations in London use this method and it has a role when selecting for jobs in which telephone manner is critical such as call centres and contact centre staff. A major problem however is lack of non-verbal information and difficulties getting hold of the applicant (IRS, 2002b; 2003b).

The more technical aspect is referred to as Video Conferencing. Videoconferencing is the conduct of an interview or discussion (also known as a video conference or video-teleconference) by a set of telecommunication technologies which allows two or more locations to interact via two-way video and audio transmissions simultaneously. It has also been called 'visual collaboration' and is a type of groupware. Mathis and Jackson (2006) argue that Video interview is used mostly by large corporations and executive recruiting firms.

The process requires the recruiter instructing the applicant to use his own camera supported PC or to go to a designated business centre (equipped with appropriate software). Then at the appointed time, the applicant links up with the recruiter via Web video for the interview. Both parties become visible to each other and the interview is conducted. Advantages of this method include reduction in travel and recruiting expenses and convenience and simplicity for the applicants in particular**.** Major disadvantages however include; the cost of acquiring the needed software and the fact that applicants seem to be more skeptical of video interviews than face to face interviews (Chapman and Webster, 2003; Dessler, 2008)).

2.16.7 Physical Examination

This is the stage at which candidates provisionally selected are required to report at a medical centre for tests and screening with a view to determining their health conditions. The cost of such medical tests is borne by the employer and the report provides more information about the candidate. Medical information on applicant may be used to determine their physical and mental capabilities for performing jobs. The medical examinations serve other purposes which include

discovering any medical limitations in respect of the applicants; to establish a record and baseline of the applicants' health for future insurance or compensation claims; to detect any possible communicable diseases that may be unknown to the applicants; and to reduce absenteeism and accidents. Physical standards for jobs must be realistic, justifiable and geared to the job requirements. Workers with disabilities can perform satisfactorily in many jobs. However, in many places, they are rejected because of their disabilities, rather than being screened and placed in appropriate jobs. This stage of recruitment has no direct link with the emerging ICT because the emphasis is to have information about the health status of applicants, except that e-mail, cellular phones either voice or short message services are the current means of contacting the applicants for the exercise and these have replaced the traditional system of verbal and oral directive to the applicants (Onasanya, 2005; Torrington et al, 2007).

2.16.8 Reference Checks

This stage provides an opportunity for managers or recruiters to have usually, a confirmatory knowledge about job candidates. Candidates provide the names of previous employers and then prospective employers contact such previous employers to provide information on the candidates. According to Torrington et al (2007), there are two types: the factual check and the character reference. The factual check is the confirmation of facts the candidates have presented to the prospective employer. This normally follows the employment interview and decision to offer a post. It simply confirms that the facts are accurate. On the other hand, character reference is such that the prospective employer asks for an opinion about the candidate usually before the interview so that information gained can be used in the decision making phase. Whichever method is being adopted, it requires the prospective employer to communicate with the previous employers and/or an individual whose name is given by the candidate.

Traditionally, such communication involved the recruiter to write a formal letter or to send a standard reference check form through public post, courier

services, and hand delivery/dispatch riders. In response, the referee replies through any of these means of communication. However, with the emerging ICT, recruiters now have faster means of dealing with this phase by using electronic means (e-mail of the referees) and replies are forwarded through such electronic means. Mathis and Jackson (2006) however argue that telephoning is now the most common method and recommend that employers conducting a telephone reference check should use a form focusing on factual verification of information given by the applicant such as employment dates, salary history, type of responsibility, reasons for leaving the previous jobs and so on. According to Armstrong, (1999), telephone references may be used as an alternative or in addition to written references, and he argues that the great advantage of a telephone conversation is that people are more likely to give an honest opinion orally than if they have to commit themselves in writing. It may also save time to use the telephone.

2.16.9 Offer and acceptance:

This phase is the implementation of the decision made concerning the applicant. It involves releasing a formal letter of appointment to the applicant and the applicant confirming in writing his acceptance of such an offer. In the past this phase was conducted through physical contacts, through courier services, dispatch riders and postal system. These means are prone to so many disadvantages such as slowness and delays, safety and so on. According to Mathis and Jackson (2006), job offers are often extended over the phone and many are then finalized in letters and sent to applicants. The more modern trend is that this phase can be and is being conducted online. This involves the installation of web 2.0 software on the employers' website and issuance of password to successful candidates to visit the website, open their letters, accept the offer by uploading their signatures and then printing out the letters for their records. This method is fast and reduces traveling costs and efforts, but it requires costs, especially of installation of this software.

According to Depardieu and Islam (2008), top-notch e-Recruitment software provides an added feature called “e-signing” for signing contracts through the Internet. This eliminates the need to send documents by post just to obtain written signatures from candidates. E-signatures obtained in this way are legal, reduces the time involved in signing of the contract and allows for faster on-boarding of the new employees. . According to CIPD (2005), the global usage is still low and virtually not in use in the less developed countries.

2.16.10 Placement and Induction

In a more technical term, this stage is referred to as the on-boarding and orientation stage. When negotiations are completed and the Job offer is accepted, the next step is on-boarding of the new hire. Traditionally, this stage was conducted physically and requires the new employees to assume duties and for them to undergo an induction process face-to-face throughout the entire stage. Some companies use this process to strengthen their brand image by conveying an excellent first impression to their new talents. The emerging technology has however taken over some aspects of this stage.

Automating the on-boarding process through e-Recruitment software provides a more systematic and efficient way to perform this task. As a first step, welcome packages in electronic format are sent to the new hires immediately, informing them about the company administrative details and other pertinent information. The new employees are also asked to log into their profile and complete required forms online. Meanwhile, the e-Recruitment software notifies relevant managers about the new addition to the company.

Additionally, orientation programmes are effective in introducing new employees to the organisation environment and work culture and to ensure effective integration. The length and nature of the orientation depends on the nature of the job itself and the organisation. If orientation programmes are conducted, orientation schedules are included as part of the welcome package. Calendars of managers who will be conducting the orientation programme are updated simultaneously. This ensures smooth orientation to the company for the

new employee as well as allows managers to efficiently manage the on-boarding process. Costs of turnover are reduced, and the new hire is given the opportunity and support to reach productivity within a shorter time.

Web-based on-boarding systems, integrated or not in e-Recruitment software, enable organisations to standardize, coordinate and keep track of every step in the process, as well as make the new hires feel valued and supported. Efficient and successful on-boarding programmes offer a better chance to transform the new hires into committed employees (Torrington et al 2007; Depardieu and Islam, 2008)

2.17 Utilisation of ICT for Staff Recruitment, Selection and Placement in more Developed Societies

Empirical studies mostly in more industrialised societies show that the massive growth of information and communication technologies has helped business organisations in more developed countries to enhance increased productivity and business growth through cost saving, simplification of the processes and increase in the speed at which organisational functions such as staff recruitments are conducted, thereby enhancing their efficiencies. The high level of efficiency being recorded has encouraged increasing number of HR practitioners and organisations to utilise the emerging ICT tools for their staff recruitment and selection. For example, a 1996 survey showed that there were more than 1.2 million jobs posted on line, 3,512 web sites and 5,800 companies recruiting on-line Hoggler, cited in Singh & Finn, 2003). Furthermore, another survey by the Internet Business Network puts the number of on-line job posting in 1998 at about 28million and this was estimated to climb to at least 30 million in 2004.

According to the Chartered Institute of Personnel and Development, more than two thirds of organisations advertised vacancies on their own websites in 2004 in the United Kingdom (McCurry, 2005). The Consultancy Empowerment Group estimated in 2009 that online job seeking had grown by 76 per cent in the previous two years and was being used by 11 million people in the United Kingdom. Recruitment showed the biggest growth as the highest spending sector

in online advertising, with an eighty per cent increase in the first six months of 2005. According to the Internet Advertising Bureau, online recruitment represented 22.1% of all online advertising in 2005. The World Advertising Research Centre (WARC) and the Advertising Association estimated that the forecast growth in online recruitment advertising is forecast to increase from £158m in 2005 to some £262m in 2007 (Terazono 2005, Singh and Finn 2008).

E-Recruiting has various documented benefits; first it has changed recruiting from a "batch mode" to a more efficient "continuous mode" (Lee, 2005) and has reduced hiring costs by about 87% as compared to traditional recruiting through newspapers and magazines (N10,000 versus N260,000, respectively). Also prominent employers; for example, Dow Chemical were able to reduce their hiring cycle from 90 to 34 days while cutting its cost per hire by 26% (Gill, 2001). Furthermore, Li, Charron, Roshan, & Flemming (2002), showed that online sources held 110 million jobs and 20 million unique resumes including 10 million resumes on Monster.com alone, and that US online recruitment revenues will top $2.6 billion. In 2007, data show that virtually all Fortune 100 companies now use some form of e-recruiting methods (Lee, 2005) and that 94% of Global 500 companies use their websites for recruitment, as compared to just 29% in 1998 (Greenspan, 2003).

2.18 Review of related Studies

2.18.1 In a study carried out in Ibadan Nigeria, Olanrewaju (2011) set out to investigate the adoption, utilisation and social impacts of new ICT among Healthcare workers and facilities in Ibadan municipal; the researcher found out that among the healthcare workers and institutions, the aggregate adoption rate of GSM was 100% and that the significant determinants (at P=0.01) of the adoption of the internet were age of respondents, income level, employment types, years of employment, career types and prior computing skills. Among the healthcare facilities, the significant determinants (at P=0.01) of the adoption were number of professional staff employed, ownership status, the firms' average annual turnover, provision of medical retainer services and gender of the Chief Operating Officer.

The study further established that extraneous factors such as low cost of technology acquisition and utilisation, efficient technology service, technology use requiring little or no technical skills appeared to be driving the adoption of GSM. Also the study found out that both internet and GSM were making social and economic impacts on the healthcare value chain system in Ibadan, access to scientific information during periods of local/international health emergencies, availability of new innovations like telemedicine and cost effective medical care for healthcare users. The study recommended an examination of policy interventions such as upgrading of clinical facilities in all federal/states' healthcare centres; revamping of the energy sector; enhanced deregulation of the ICT sub-sector that would enable healthcare in Nigeria draw optimum benefits from the new ICTs.

2.18.2 In a related study on Influence of utilisation of internet services on Teaching and Research outputs among Academic staff of selected Universities in South-West Nigeria carried out by Imhonopi (2010), he found out that internet utilisation had improved the quality of the teaching and research outputs among the study population. The study established further that most of the respondents had published articles, attended conferences with the aid of internet and majority had also used the internet to aid their teaching in the last three years before the study. The study also identified constant power interruption, inconsistent server, busy schedule, lack of funds as the main hindrances affecting their use of internet services. The study established further that most respondents were using the internet services to meet up with their various institutional requirements on career advancement and to be globally relevant. The study concluded that most academic staff of the surveyed universities were high internet users and their outputs had been moderate, and went ahead to recommend an improvement in the infrastructural facilities, availability of research grants, adequate funding, proper training and mentoring, and better conditions of work to improve the situation.

2.18.3 In a study conducted by Sesan, (2006) on Technology for Development: A Case study on e-advocacy and technology use by Civil Society in Nigeria, it was discovered that some civil society organisations in Nigeria were increasingly taking advantage of the opportunities provided by Information and Communication Technologies (ICTs) in the conduct of their security operations. The use of ICT had enhanced productivity and increased efficiency – and majority of these civil society organisations were exposing themselves to better appreciation, acquisition and use of ICT tools. The research exercise for this case study revealed certain trends that were of interest concerning the use of ICT tools by civil society in Nigeria. All of the fifty-one organisations that took part in the questionnaire used mobile phones in their day to day operations, including those who were situated in very remote areas of the country…. 98% of respondents had e-Mail addresses but only 88% used e-mail in their work; 58% of the organisations had websites.

The interviewed civil society organisations that have websites put these websites to various uses, including publicity, information sharing on advocacy issues, research, online interaction, and information dissemination on the organisation's activities. Even though 70% used mailing lists, only 39% of the civil society organisations had blogs, only 40% had internet access in their offices and only 40% used mobile applications (such as Short Message Service) available through their mobile phones for advocacy. Also, 40% of the organisations had dedicated Information Technology (IT) staff and their annual budgets dedicated varying amounts to information and technology (IT). It was obvious, at the time that much of the progress and challenges were very much related to the policy environment.

The research showed further: "71% of respondents believed that Nigeria has a favourable atmosphere for the application of Information and Communication Technologies towards development, and an equal 71% believed that the nation's IT and telecommunications policies had impacted positively on their work – even though only 40% knew about the nation's IT Policy, only 40% knew about the Telecommunications Act, only 30% were actually aware of the IT

Policy's provision and an equal 30% were aware of the provisions of the Telecommunications Act. However, 60% of respondents knew the agency responsible for IT (National Information Technology Development Agency) and 90% knew about the work of the Nigerian Communications Commission, the telecommunications regulator"

2.18.4 In a related study conducted by Reilly and Barber (2006), on -recruitment: practices and trends in Ireland, the researchers sought to establish the overall trends in e-recruitment use and practice in Ireland; to identify what e-recruitment methods were being used, what the experiences are of organisations trying to implement e-recruitment and to establish how organisations were evaluating their e-recruitment initiatives, and establish the level of success being experienced. The findings of the research showed that the use of e-recruitment in Ireland was broadly at par with what was happening in the United Kingdom and North America, although it appears to be less advanced in some areas, in particular in relation to the use of the Internet for selection testing.

On the drivers and benefits for introducing e-recruitment, the study found out that Irish organisations that have implemented e-recruitment methodologies have done so for a number of reasons, most notably: to reduce costs, increase the efficiency of the process, reduce time to hire and to provide access to a larger and more diverse candidate pool. The most notable benefits reported by organisations having introduced e-recruitment were cost savings, which have mainly been due to reduced advertising costs, a reduction in the resources required to process applications, and a reduction in recruitment agency costs. Other substantial benefits included more efficient management of communication with candidates, and the ability to easily report on key performance metrics as a result of Internet-based tracking systems.

On the challenges associated with e-recruitment, the study found out that Irish organisations in implementing e-recruitment had included problems with the technology and difficulties in tailoring e-recruitment systems to meet the

particular needs of their recruitment process. Other challenges included problems with having to simultaneously operate both online and offline systems, and a lack of integration of e-recruitment systems and existing HR systems. A traditional concern with e-recruitment was in relation to its acceptability to a broad range of applicants. This appears to be becoming much less of an issue, as more and more applicants are using the Internet as part of their job search process. In fact, there was significant evidence to suggest that the Internet was the preferred application method for a large majority of candidates. Nevertheless, many organisations involved in this research showed concern in relation to candidate access and perceptions, and were designing their online processes to be as candidate-friendly as possible, in addition to accepting applications, in some cases, by other methods. The report clearly showed that online recruitment had established itself as a significant part of the recruitment strategy and practices of a wide range of organisations operating in Ireland. In an increasingly competitive recruitment market, it is critical that organisations maximize their use of the Internet in the recruitment process, or risk losing out on quality applicants as the Internet becomes the standard job search and application medium for job seekers.

The study identified a growth in the use of online systems to track and manage candidate applications, especially for larger organisations, where there will be significant benefits in terms of efficiency, cost, and capability to monitor and report on recruitment activities. It also identified significant potential for relevant and objective online screening and assessment tools to add value in terms of matching the competencies and skills of the job applicant with the requirements of the organisation in an efficient and cost-effective manner. The findings of the research suggested that organisations need to examine and challenge their existing processes and strategy in an effort to identify the barriers to attracting and recruiting the best talent in a timely, customer-friendly and resource-efficient manner.

This study provided a new benchmark on practices and trends in e-recruitment in the Irish market. It provided organisations with an indication of

how advanced/developed their e-recruitment practices were in relation to other organisations, and helped to identify where their e-recruitment strategy needed to be further developed to enable them to attract and recruit the best candidates in the most efficient manner possible.

2.18.5 A related research was conducted on E-recruitment Best practice in the private sector, London by Aitchison Margaret, (2006). The aim of this research was to discover what the latest key benefits of e-recruitment are emerging from the private sector that will help in developing the e-recruitment best practice agenda across the public sector. A series of interviews for the first phase of this research were held with: innovative HR personnel in large organisations of similar size to the larger government departments; providers of IT solutions and the publisher of Online Recruitment Magazine. Findings from the study revealed that e-recruitment is becoming increasingly sophisticated in the private sector. The concept of issuing and applying for a job via a website has moved forward to tracking the complete employment lifecycle of a successful candidate within the organisation. This data is being used imaginatively, for example, in developing talent pools containing profiles of candidates' special skills to match vacancies to the right candidates quickly. The private sector also perceives an e-recruitment system as playing an important role in business planning. To make the best use of an individual's personnel data, metrics to measure data such as fulfillment of training and diversity targets and performance records are being developed to inform future business decisions.

The private sector was exploring novel ways in filtering and screening techniques to select the best applicants in a competitive market place. These may range from basic spelling and arithmetical testing for operational staff to in-depth psychometric assessments for potential strategic managers.

Horizon scanning for innovation and overseas best practice, especially in the USA, was considered vital to the private sector in maintaining a competitive edge in talent sourcing to ensure economic success. For example, HR personnel in several large companies had seized the initiative to form a group to brainstorm

best practice ideas and benchmark progress in e-recruitment against one another. This excellent concept could be explored further as part of the developing dialogue between the public and private sectors in establishing best practice standards. A further emerging concept is the promotion of rich content via RSS feed to push pro-actively job adverts to personal laptops, mobile 'phones and personal web addresses to those who have registered their career aspirations either online or through a dedicated hot line.

The key benefits of e-recruitment are not solely dependent on this process as an end in itself, but as a vital component in an organisation's holistic recruitment policy and this is where an important aspect of the debate is focused. Recruitment is a multi-faceted industry, in which other media: broadcasting, recruitment and headhunting agencies, Internet search engines, press and poster advertising are all playing an essential part in a complementary strategy.

Apart from the invaluable input of novel concepts and horizon-scanning ideas, dialogue with the private sector will pay dividends for the public sector in providing vital insight into the depth of preparatory research and estimate of the change management and other risk impacts, which must be reviewed before the start of each e-recruitment project. But ultimately, this is a two-way and ongoing debate for the interchange of best practice ideas in which both sectors should achieve a winning outcome.

2.19 Theoretical Framework

This study was guided by three theories. These are World System Theory, Business Innovation theory, and Rogers' Diffusion of Innovation Theory. The three theories were adopted so as to provide a complementary support for each other.

2.19.1 World System Theory

The world system theory sees the world as a social system which is self contained with a set of boundaries held together by variety of forces (Ritzer 1996, Offiong 2001). Wallerstein (1974) identifies two major world forces: the metropolis (developed countries) and the periphery (less developed countries).

To him, the countries of the world belong to either of the two categories. The more developed countries (metropolis) are more advanced and more capable of responding to their internal needs, whereas the less developed countries (periphery) have a reflex type of development and are constrained by their incorporation into the global economic system. This constraint results from adaptation to the requirement of the expansion of the metropolis.

The core or metropolis, according to the theorists, are technologically advanced, utilise modern technology for their production, exchange and consumption, pay higher wages, have relatively free markets and have higher standard of living. The periphery on the other hand is characterized by low technology, low wages, weak and fragile states and lower standard of living. The above situation therefore tends to increase economic inequality and sustain the digital divide between the rich and the poor countries of the world. As such the periphery will continue to support the core with cheap labour, raw materials and provide markets for their finished goods whereas the core will also support the periphery with technology, Foreign Direct Investment (FDI) and so on.

For Wallerstein, "a world-system is a social system, one that has boundaries, structures, member groups, rules of legitimation, and coherence. Its life is made up of the conflicting forces which hold it together by tension and tear it apart as each group seeks eternally to remold it to its advantage. It has the characteristics of an organism, in that is has a lifespan over which its characteristics change in some respects and remain stable in others. Life within it is largely self-contained, and the dynamics of its development are largely internal" (Wallerstein, 1974). A world-system is what Wallerstein terms a "world-economy", integrated through the market rather than a political center, in which two or more regions are interdependent with respect to necessities like food, fuel, and protection, and two or more polities compete for domination without the emergence of one single center forever (Goldfrank, 2000, Wallerstein, 2000).

In his own first definition, Wallerstein (1974) said that a world-system is a "multicultural territorial division of labour in which the production and exchange of basic goods and raw materials is necessary for the everyday life of its

inhabitants." This division of labour refers to the forces and relations of production of the world economy as a whole and it leads to the existence of two interdependent regions: core and periphery. These are geographically and culturally different, one focusing on labour-intensive, and the other on capital-intensive production (Goldfrank, 2000). The core-periphery relationship is structural. Semi-peripheral states act as a buffer zone between core and periphery, and have a mix of the kinds of activities and institutions that exist in them (Skocpol, 1977).

Among the most important structures of the current world-system is a power hierarchy between core and periphery, in which powerful and wealthy "core" societies dominate and exploit weak and poor peripheral societies. Technology is a central factor in the positioning of a region in the core or the periphery. Advanced or developed countries are the core, and the less developed are in the periphery. Peripheral countries are structurally constrained to experience a kind of development that reproduces their subordinate status (Chase-Dunn and Grimes, (1995). The differential strength of the multiple states within the system is crucial to maintaining the system as a whole, because strong states reinforce and increase the differential flow of surplus to the core zone (Skocpol, 1977). This is what Wallerstein called unequal exchange, the systematic transfer of surplus from semiproletarian sectors in the periphery to the high-technology, industrialised core (Goldfrank, 2000). This leads to a process of capital accumulation at a global scale, and necessarily involves the appropriation and transformation of peripheral surplus.

The current world-economy is characterized by regular cyclical rhythms, which provide the basis of Wallerstein's periodization of modern history (Goldfrank, 2000). After our current stage, Wallerstein envisions the emergence of a socialist world-government, which is the only alternative world-system that could maintain a high level of productivity and change the distribution, by integrating the levels of political and economic decision-making.

The adoption of the theory is justified on the ground that many institutions and organisations in the metropolis have benefitted and are still benefitting from

the effective use of technology especially for their production processes and information communication. This is because these technologies depend on easy mode of acquisition, availability of fund and reliable infrastructure, conditions hard to meet in Nigeria and other less developed countries, whereas these conditions may not be challenges for the metropolis from where the technologies originate. The world system theory therefore provides the basis for diffusion of technology from the metropolis to the periphery (Wallerstein 1974, Bosewell 1989, Bussiek 2005). Although the theory provides explanation for the inequality of nations in terms of technological advancement and transfer of technology, it does not explain what specific technologies are used for, hence the need for adoption of the theory of business innovation discussed here under.

2.19.2 Theory of Business Innovation

Broadly speaking, an innovation is the use of new technological and business-related knowledge to offer new products or services that customers want (Afuah 2003, Afua & Tucci, 2003). To comprehend the scope and impact of an innovation, it is necessary to organize them systematically and to understand them fully (Zwass 2003). Abernathy and Clark's (1985) innovation model classifies innovations based on the impact on the existing technological and business capabilities of the adopting firm.

The taxonomic model indicates that the subject of innovation can be described in terms of its technological knowledge and business model. An innovation can be placed anywhere on a continuum from *incremental*, *transitional*, *radical*, to *disruptive* depending on the extent to which the innovation impacts the technological knowledge and business model of an organisation. An innovation is incremental if it preserves the existing technological knowledge and business model; transitional if it destroys technological knowledge but preserves the business model, radical if it destroys the business model but preserves the technological knowledge and disruptive if both the technological knowledge and business model become obsolete.

Technological knowledge in the context of this study, refers to the technical capabilities to mobilize and deploy the new information and communication technologies that help maintain an e-recruitment environment across the globe. Sourthard and Siau (2004) looked at five functions: informational, administrative, transactional, portal, and others. In sum, the essential dimensions of technological knowledge can be classified into three areas: IT-infrastructure, data analysis, and service.

E-recruitment is essentially a technological innovation that is enabled by creative use of emerging IT and other business forces (Stamoulis, Kanellis & Martakos, 2002). Accordingly, the innovation encompasses a set of aspects: IT, clients/applicants, service providers, and strategy. These aspects can be classified into two major domains: technology and business model that underpin an organisations' capabilities (Holland & Westwood, 2001; Wu & Siau, 2004).

Although this theory provides explanation on what specific technologies are used for, and in this context, the use of ICT for staff recruitment and selection, it does not provide explanations for the processes through which actors (individuals, organisations, communities, and so on) become aware of such technologies and the process of final adoption, hence the need for the theory of diffusion of innovations to be discussed under the next subheading.

2.19.3 Diffusion of Innovation Theory

Diffusion of Innovations is a theory that seeks to explain how, why, and at what rate new ideas and technology spread through cultures. It stresses that innovation flows through certain channels over time among members of a social system. Diffusion of innovation model reveals that individuals must pass through certain stages in adopting new technology (awareness, interest, evaluation, trial and adoption or rejection (Yahaya, 2003). The concept was first studied by the French sociologist Gabriel Tarde (1890) and by German and Austrian anthropologists such as Friedrich Ratzel and Leo Frobenius.

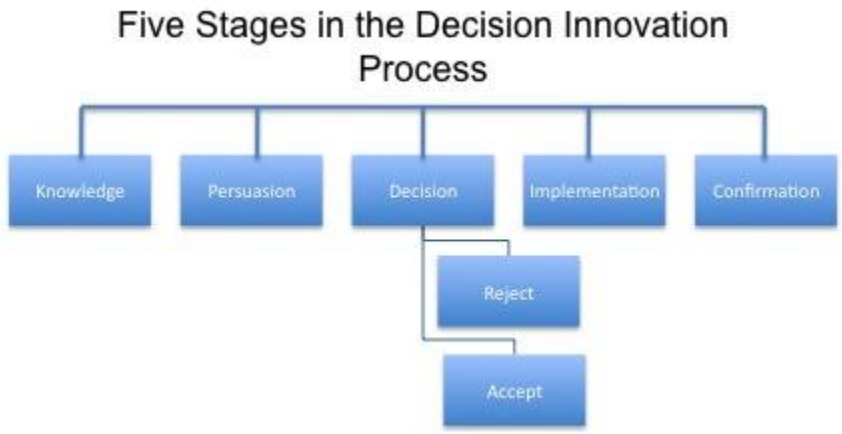
In 1962, Everett Rogers, a professor of rural sociology published a book titled 'Diffusion of Innovations'. In the book, Rogers synthesized research from over 508 diffusion studies and produced a theory for the adoption of innovations among individuals and organisation. The book proposed 4 main elements that influence the spread of a new idea: the innovation, communication channels, time, and a social system. That is, diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. During communication, the idea is rarely evaluated from a scientific standpoint; rather, subjective perceptions of the innovation influence diffusion. The process occurs over time. Finally, social systems determine diffusion, norms on diffusion, roles of opinion leaders and change agents, types of innovation decisions, and innovation consequences.

The key elements in diffusion research are:

- Innovation: Rogers defines an innovation as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption".
- Communication channels: A communication channel is "the means by which messages get from one individual to another".
- Time: "The innovation-decision period is the length of time required to pass through the innovation-decision process".
- "Rate of adoption is the relative speed with which an innovation is adopted by members of a social system".
- Social System: A social system is defined as a set of interrelated units that are engaged in joint problem solving to accomplish a common goal" (Rogers, 1983)

Diffusion of an innovation occurs through a five–step process. This process is a type of decision-making. It occurs through a series of communication channels over a period of time among the members of a similar social system. Rogers categorizes the five stages (steps) as: awareness, interest, evaluation, trial, and adoption. An individual might reject an innovation at any time during or after

the adoption process. In later editions of the Diffusion of Innovations Rogers changes the terminology of the five stages to: knowledge, persuasion, decision, implementation, and confirmation. However the descriptions of the categories have remained similar throughout the editions. These stages are diagrammatized below:



Five stages of adoption process

Stage one: Knowledge: In this stage the individual is first exposed to an innovation but lacks information about the innovation. During this stage of the process the individual has not been inspired to find more information about the innovation.

Stage two: Persuasion: In this stage the individual is interested in the innovation and actively seeks information/detail about the innovation.

Stage three: Decision: In this stage the individual takes the concept of the innovation and weighs the advantages/disadvantages of using the innovation and decides whether to adopt or reject the innovation. Due to the individualistic nature of this stage Rogers notes that it is the most difficult stage to acquire empirical evidence.

Stage four: Implementation: In this stage the individual employs the innovation to a varying degree depending on the situation. During this stage the individual

determines the usefulness of the innovation and may search for further information about it.

Stage five: Confirmation: Although the name of this stage may be misleading, in this stage the individual finalizes his/her decision to continue using the innovation and may use the innovation to its fullest potential (Rogers, 1962).

The rate of adoption is defined as: the relative speed with which members of a social system adopt an innovation. It is usually measured by the length of time required for a certain percentage of the members of a social system to adopt an innovation (Rogers, 1962). The rates of adoption for innovations are determined by an individual's adopter category. In general individuals who first adopt an innovation require a shorter adoption period (adoption process) than late adopters.

Rogers defines several intrinsic characteristics of innovations that influence an individual's decision to adopt or reject an innovation as follows:

Relative Advantage: This is how improved an innovation is, over the previous generation:

Compatibility: This refers to the level of compatibility that an innovation has to be assimilated into an individual's life;

Complexity or Simplicity: This refers to if innovation is too difficult to use, an individual will not likely adopt it;

Triability: This is how easily an innovation may be experimented with, as it is being adopted. If a user has had a hard time using and trying an innovation, this individual will be less likely to adopt it;

Observability: The extent that an innovation is visible to others. An innovation that is more visible will drive communication among the individual's peers and personal networks and will in turn create more positive or negative reactions.

Innovations are often adopted by organisations through two types of innovation-decisions: collective innovation decisions and authority innovation decisions. The collection-innovation decision occurs when the adoption of an innovation has been made by a consensus among the members of an organisation.

The authority-innovation decision occurs when the adoption of an innovation has been made by very few individuals with high positions of power within an organisation (Rogers, 2003). Unlike the optional innovation decision process, these innovation-decision processes only occur within an organisation or hierarchical group. Within the innovation decision process in an organisation there are certain individuals termed "champions" who stand behind an innovation and break through any opposition that the innovation may have caused. The innovation process within an organisation contains five stages that are slightly similar to the innovation-decision process that individuals undertake. These stages are: agenda-setting, matching, redefining/restructuring, clarifying, routinizing.

In terms of consequences of adoption, there are both positive and negative outcomes when an individual or organisation chooses to adopt a particular innovation. Rogers states that this is an area that needs further research because of the biased positive attitude that is associated with the adoption of a new innovation (Rogers, 2003). In the Diffusion of Innovation, Rogers lists three categories for consequences: desirable vs. undesirable, direct vs. indirect, and anticipated vs. unanticipated. Adoption of innovations has both benefits and costs. The benefits of an innovation obviously refer to the positive consequences, while the costs refer to the negative. Costs may be monetary or nonmonetary, direct or indirect. Direct costs are usually related to financial uncertainty and the economic state of the actor. Indirect costs are more difficult to identify. An example would be the need to buy a new kind of fertilizer to use innovative seeds. Indirect costs may also be social, such as social conflict caused by innovation (Wejnert, 2002).

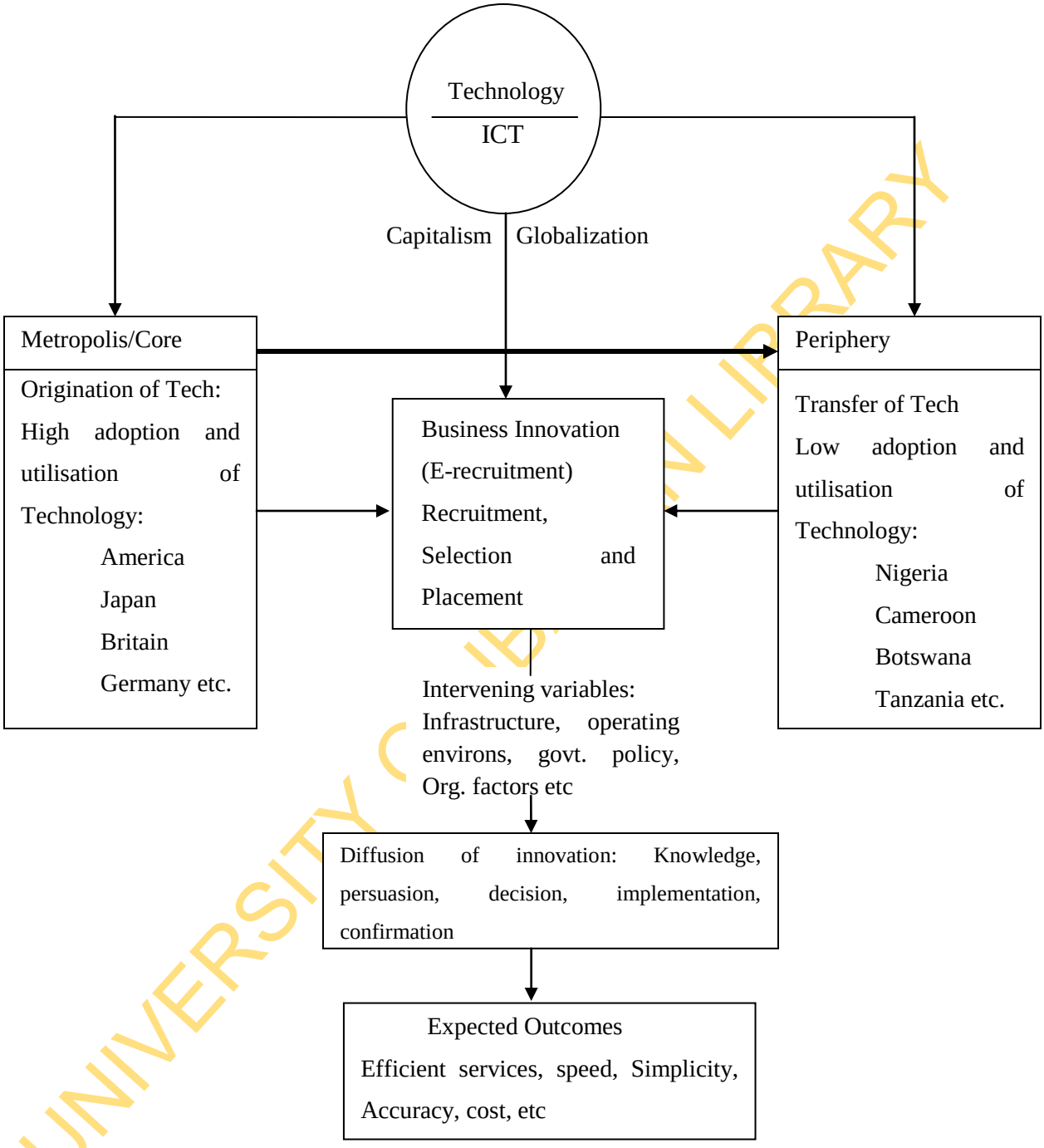
In practical terms in Nigeria, telecommunication services are receiving rapid diffusion irrespective of country characteristics. For example, taking one indicator, Cellular phone lines increased dramatically from less than 1,000,000 in August 2001 to nearly 30 million at the end of 2006. By January 2011, the number of active lines has increased to 89.8 million with an impressive teledensity of 64.79 (NCC, 2011) and the diffusion is not limited to the large towns and cities alone but as well as the rural areas of the country. Same trends

are observable with other components of ICT in the country. Available statistics have shown that the diffusion of ICT in Nigeria is widespread. This could be linked to the validity and applicability of Rogers' diffusion of innovation based on the variables relating to the intrinsic characteristics of innovations, diffusion patterns, costs and benefits, all of which facilitate technology diffusion.

2.19.4 Synthesis of the Theories

Synthesizing the theories, World System Theory provides an explanation for the inequality of nations of the world in terms of their level of technological advancement. Nations regarded as belonging to the metropolis or core are more advanced and possess advanced technology for their operations both at individual and organisational levels. Their ability to access new technology is higher and so they adopt various technologies for their operations for improved efficiency. On the other hand, the periphery countries have low level of technology but they are made to see the reason for incorporation into the world economy, thus they have to depend on the metropolis to acquire such technologies and adopt them for their operations. The theory provides the basis for diffusion of technology from the metropolis to the periphery. The theory of business innovation explains the emergence of a particular innovation and the application of such for a specific function. In this context, the application of particular aspects of ICT for recruitment purposes is expected to promote an enhanced level of simplicity, ease and efficiency in the process of attracting the right candidates to fill positions. The theory of diffusion of innovation provides explanation on how, why, and at what rate new ideas and technology spread through cultures. It stresses that innovation flows through certain channels over time among members of a social system. Diffusion of innovation model reveals that individuals must pass through certain stages in adopting new technology (knowledge, persuasion, decision, implementation and confirmation).

2.20 Conceptual Framework



Source: Omolawal, 2011

From the above conceptual framework, ICT has emerged within the general context of various innovations on technology and application of such to

all spheres of life. ICT/technology, capitalism and globalization go hand in hand and produce opportunities and threats in the world economy. The metropolis according to the World System Theory comprises the nations of the world which are more advanced especially in science and technology and as such, are able to effectively adopt the modern technology to make their society better. On the other hand, there is the periphery which comprises of the less advanced countries, and has not been able to produce technological innovations compared with the metropolis. The rate of adoption of technology is low because technology is diffused to them from the metropolis. The theory of Business innovation explains the application of a particular technology for specific organisational function and commercial activity. E-recruitment has emerged in this dimension to aid the organisational function of recruitment, selection and placement. Diffusion of Innovation explains the processes involved in adopting a particular technology. It also explains the costs and benefits, elements and intrinsic characteristics of innovations. The application of these ICT for organisational functions has created organisational changes which need to be properly managed. The expected outcomes of e-recruitment include efficient service, ease, simplicity, speed, accuracy and so on. The level of adoption of technologies and attainment of the expected outcomes depends on the level of availability of certain infrastructures such as power, technological equipment, the operating environment, government policies and so on.

CHAPTER THREE

METHODOLOGY

3.1 Research Design

This study adopted cross sectional survey design. This design was adopted in view of its suitability for studying a large population, and especially when it is only necessary to quickly study a population once and draw conclusions. The study was descriptive, combining both qualitative and quantitative techniques of study. Quantitative techniques are particularly strong at studying large groups of people and applying generalizations from the sample being studied to broader groups beyond that sample. Qualitative methods on the other hand, are particularly strong at attaining deep and detailed understanding about a specific group or sample but at the expense of generalizability. Each approach has unique strength and weaknesses and each is valuable depending on the purpose of the research (Holton and Burnett, 1997). The adoption of both methods for this study therefore was to enable the research tap the advantages of both and to use the strength of one to support the weakness of the other.

3.2 Research Location

This study was carried out in the South-West Geo-political zone of Nigeria. This geo-political zone comprises six states and it is home to many big private manufacturing and service organisations and the largest and oldest civil services, all of which have been in the fore-front of the economic development of Nigeria, and are constantly engaged in staff recruitment. The zone also occupies a vital and leading position in the link with other nations of the world through early adoption of western education and technology.

3.3 Research Population

The population for this research comprised Human Resource (HR) Practitioners who are based in the South Western geo-political zone of the country. HR practitioners refer to individuals or officials involved in human

resource management in the Civil and Public services, Organised Private Sector and Unorganized Private Sector such as HR Consultants, Recruiting Agents and so on. They were identified and located through the membership records of the Chartered Institute of Personnel Management of Nigeria (CIPMN), the only body licensed to promote, develop and regulate the practice of HRM in Nigeria.

3.3.1 Chartered Institute of Personnel Management of Nigeria

The Chartered Institute of Personnel Management of Nigeria is a non profit making organisation formally launched on 1st November 1973. It started as the Personnel Management Association of Nigeria on 15th November 1968. The Institute's cradle is the Yaba College of Technology, Department of Management Studies. The inspiration for establishing the institute arose from the existence and activities of the U.K Institute of Personnel Management. The Institute was granted an official charter in 1992 courtesy of Decree No 58 of 1992 and it is the only body licensed to develop, promote and regulate the human resource profession both in the private and public sectors of the Nigerian economy.

The mission statement of the CIPM is as follows: "to promote excellence in the acquisition of knowledge and skills by members of the profession, thereby contributing to sustainable national development". Objectives of the Institute are: to promote and develop the science and practice of personnel management in all its ramifications; to foster and maintain investigations and research into the best means, methods of applying the science and art of personnel management and to encourage, extend, increase, disseminate and promote knowledge and the exchange of information and ideas with regard to all questions relating thereto or connected therewith; to develop and maintain high standards of professional competence and ensure that the management of the human resource in Nigeria, both in public and private sectors, conforms with the best professional standard; to conduct research into and publish materials on all matters relating to the discipline of Human Resource Management.

The Institute is a corporate body charged with the general duties of: Determining what standard of knowledge and skill are to be attained by persons seeking to become registered as personnel management practitioners and raising these standards from time to time as circumstances may permit; securing in accordance with the provisions of the decree, the establishment and maintenance of a register of members and publications in all its aspects and ramifications;

The Institute provides a wide range of services, and these include: research and development, publications, library services, training and development programmes (general and locally designed), free professional advice on HR issues and problems. The Institute also has a professional code of conduct guiding the members and this is summarized under the headings of confidentiality, fair hearing, self development, development of others, accuracy of advice and guidance, counseling, integrity, rule of law and professional conduct. In addition, the Institute is at the verge of issuing practitioners' license to members as a way of guiding against corrupt and unethical practices among members.

The day to day activities of the Institute are run by a team of staff headed by the registrar/Chief Executive, while the overall decision making body is the Council. Membership grades are Affiliate/Students, Graduates, Associate, Member, and Fellow. CIPMN has branches in 28 states of the country including all the six states in the South Western Geo-political Zone. Annual up-dating of records at the national secretariat, attendance at branch meetings and participation in branch activities are major criteria for upgrading to higher membership grades and for maintaining membership of the Institute (CIPM, 2003 & 2004)

3.4 Sample size and Sampling Technique

The sample size for this study was 1086 Human Resource practitioners in south-west Nigeria, who were duly registered as members of the Chartered Institute of Personnel Management of Nigeria

The researcher adopted total enumeration sampling technique to involve all HR Practitioners identified through the membership records of the CIPMN. The researcher relied on the membership lists of the Chartered Institute of Personnel

Management at the national level as well as the state branch level which served as the sample frame. They were contacted through their regular meetings, fora and other events, while many others were contacted in their respective places of work.

The exit interview approach necessitated the researcher and the research assistants employed to repeatedly attend the monthly meetings and programmes of the Institute at both national and state branches as well as their office locations so as to administer the sets of questionnaire. For the in-depth interviews, the sample size of 20 respondents was purposively selected by virtue of their various positions either at the national or state branches of CIPMN. Their membership status, their long experience in HR practices and positions in their various organisations were the major criteria for their inclusion in the In-Depth-Interview.

3.5 Instruments of Data Collection

The researcher made use of a combination of three instruments for the purpose of data collection. The instruments were:

(a) **Questionnaire:** This was designed to gather the primary data for the study. The questionnaire administered was divided into various sections: Section A contained 19 questions on the socio-economic characteristics of the respondents; Section B contained 39 questions on level of utilisation of ICT for staff recruitment functions; Section C contained 6 questions on the influence of utilisation of ICT for staff recruitment on the quality of staff recruited; Section D contained 18 questions on the benefits derivable from utilisation of ICT for staff recruitment; Section E contained 11 questions on the challenges associated with utilisation of ICT for staff recruitment; while section F contained 16 questions on perceived factors affecting utilisation of ICT for staff recruitment. The close ended questions provided options for the respondents to choose from while the open ended questions enabled the respondents to freely express their views and opinions on the appropriate question. One thousand and sixty six (1066) copies of the questionnaire were administered on practitioners who met the inclusion criteria in Lagos, Oyo, Osun, Ogun, Ondo and Ekiti states which form the South-West geo-political zone of Nigeria. The respondents were not required to identify

themselves on the questionnaire. This anonymity and impersonality no doubt enhanced the rate of return of the questionnaire and objective response. One major advantage of the questionnaire is that it allows for easy categorization of responses and it is believed to be the best method where it is necessary to examine user's motives, opinions and satisfaction.

(b) **In-depth Interview:** This was also designed for gathering primary data needed for the study. The researcher conducted twenty (20) in-depth interviews (IDI). The IDIs involved face-to-face interactions between the researcher and respondents with pre-determined structured and unstructured questions. The interactions were recorded with the aid of tape recorder. The In-Depth Interviews gave room for flexibility and provided the opportunity to probe deeper on some aspects which the questionnaire could not cover.

Interviewees included:

1. Two (2) Principal Officers of the CIPM;
2. The Branch Chairmen of all the six states' branches of the Institute in South-west Nigeria;
3. 12 practising members of the Institute purposively selected from all branches including at least 6 who have attained the grade of fellow (1 from each state).

Further analysis is given on the table below:

	Sample size	
Location	**Questionnaire**	**IDI**
CIPMN	-	2
Lagos State	368	3
Ogun State	282	3
Oyo State	174	3
Osun State	105	3
Ondo State	78	3
Ekiti State	59	3
Total	1066	20

(c) Archival Studies: This instrument was used to gather the secondary data for the study. This involved the use of secondary data which was sourced from available materials such as textbooks, journals, articles, seminar and conference papers and general library materials, internet and other related facilities were also of assistance.

The researcher believed that a combination of these instruments was necessary to provide a basis for cross-checking for consistency, to capture a broad based understanding of the research topic and provide greater reliability and validity for the study.

3.5.1 Methodology by Objective

S/N	Research Instruments	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5
1	Questionnaire	√	√	√	√	√
2	IDI	√	√	√	√	√
3	Archival Studies		√	√	√	√

3.5.2 Validity and Reliability of the instruments

Warwick and Linninger (1975) describe the goal of research instruments as being able to obtain information relevant to the purpose of the study; to collect information with maximal reliability and validity. Content validity was adopted to authenticate that the study instruments actually measured exactly what they were designed to measure. Also, to ensure the reliability of the instruments, a pilot study was conducted by administering the instruments on the Oyo State branch of CIPM. This allowed for proper review and modification of the instruments before the final administration.

3.6 Methods of Data Analysis

Two methods of data analysis were adopted for this study. These were quantitative and qualitative methods.

3.6.1: Quantitative method

The researcher carried out analysis of the primary data at two levels; univariate and bivariate levels. The quantitative data obtained through the questionnaire were analyzed with the aid of the Statistical Package for Social Sciences (SPSS) and results were presented in tables, graphs and analyzed and interpreted by the use of simple percentages. The data were thereafter subjected to univariate analysis to present and discuss the study variables while the bivariate analysis involved testing relationships between relevant variables of the study. While the univariate approach is descriptive, the bivariate approach involves tests conducted with chi square and correlation analysis. Chi square test is a non-parametric statistical method that deals with the difference between observed simple and expected frequencies obtained from the distribution.

3.6.2: Qualitative method

The qualitative data obtained through the IDIs were analyzed using content analysis and descriptive methods. This process involved the qualitative data to be transcribed, sorted and the contents described and narrated qualitatively. The data were used to complement the data obtained from the questionnaire and where necessary, comments from the interviewees were quoted verbatim to bring out important points.

3.6.3 Measurement of Level of Utilisation

In measuring the level of utilisation of ICT by HR practitioners, this study adopted Reilly & Barber's (2006) model which classified level of utilisation into three categories: Low, Moderate and High.

Two different measurements were carried out in this study.

a. To measure the level of utilisation of the more sophisticated aspects of ICT, otherwise known as e-recruitment, relevant questions on the questionnaire were used. Based on the value attached to each question, the maximum value any respondent could score was 38, while the minimum was 19. Therefore the range attached was: Low: Below 19; Moderate: 20-29; High: 30-38.

b. In measuring the use of the less sophisticated aspects of ICT which involves effective use of the computer and other tools without internet connectivity**,** relevant questions on the questionnaire were used. The maximum value any respondent could score was 32, while the minimum was 12. Therefore the range attached was as follows: Low: Below 12; Moderate: 13-22; High: 23-32.

3.7 Ethical Consideration

According to Babbie (1998), ethical principles comprise the consideration for voluntary participation, anonymity and confidentiality. In compliance with these and other ethical standards on research work involving human subjects, the researcher made every attempt to uphold the principles which aim at protecting the dignity and privacy of every individual who in the course of the research work was requested to provide valuable information for the study. The principles were observed in the following areas:

Informed Consent

The consent of the respondents was sought before the instruments were administered. This was preceded by a careful introduction and explanation of the purpose of the research to the participants who eventually gave their consent before the data collection.

Voluntary participation

Respondents' participation in the study was totally voluntary. They had the opportunity right from the beginning to voluntarily participate or to withdraw from participation at any point in time. On no occasion was pressure exerted on any respondent before and during the process of data collection.

Non-malfeasance of participants

Participants in the study were not subjected or exposed to any harm. Their identity was kept strictly confidential so as not to expose them to any harm.

Beneficence to participants

The general objective of the study was to investigate the utilisation of ICT for staff recruitment, selection and placement among HR practitioners in the south-west Nigeria. This was with a view to coming up with policy recommendations that will assist in formulating ICT policies that will aid operational efficiency. This will in the long run benefit the respondents in the course of their recruitment functions in their respective organisations and the larger society in general.

Confidentiality of information

Information obtained from the respondents was treated with utmost confidentiality. This was done by ensuring that respondents in the study remained anonymous. Names and any other means of identification were not divulged to any body. Responses were coded to erase any link to individual respondents. Data collected was stored and used strictly for the intended purposes. Publications from the study will present aggregate data, not in personalized and recognizable form.

3.8 Field Work Experience

In every research work, there are bound to be challenges and unexpected problems. This research was not an exception. The first major challenge encountered was the delay in retrieving the copies of the questionnaire sent out. This was due to the busy schedule of the respondents who are top officers in their various organisations. Many of them were unwilling to complete the questionnaire after their monthly meeting or programme on the excuse that they were tired or needed to leave for home or another engagement. This delay eventually led to the extension of the time frame initially allocated for the data collection. At the end of the day, not all the copies of the questionnaire sent out were retrieved. The delay consequently led to the extension of the contract of

some of the research assistants and this led to extra cost on the part of the researcher.

Another major challenge had to do with conducting the In-Depth-Interviews with the selected respondents. Although the targeted respondents were just twenty in number, but their schedule also caused a delay and the initial appointments had to be cancelled and re-scheduled before they were eventually conducted.

Also, covering six states of the federation was a big challenge, especially when there was the need to meet specific targets for each state in terms of administering the questionnaire and conduct of desired in-depth interview. Here, the Administrative Officers of some of the state branches were of immense assistance to the researcher and the research assistants in locating some of the respondents.

The challenges were however overcome through the persistence and endurance of the researcher. The Secretaries and Personal Assistants of some of the respondents who were top officers in their organisations also greatly contributed to the eventual retrieval of some of the questionnaires.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

The broad objective of this study was to investigate the utilisation of Information and Communication Technology for staff recruitment, selection and placement among Human Resource Management Practitioners in South-west Nigeria. Five specific research objectives were raised and addressed.

To address the specific objectives of the study, copies of the questionnaire were administered on 1066 Human Resource Management Practitioners in the study location and 20 in-depth interviews were conducted with Human Resource Practitioners who were purposively selected. Out of the 1066 copies of the questionnaire administered, 1046 copies were returned; this represented 96.8% response rate. Out of the 1046 copies returned, 14 copies were not duly completed and so could not be used for analysis. A total of 1032 copies which were duly completed, were analyzed for this study. This chapter covers the presentation and analysis of the data collected through these research instruments. Quantitative data obtained through the questionnaire were collated and analyzed in tables, graphs, simple percentage and discussed, while the qualitative data were content analyzed and used to complement the quantitative data. The chapter also presents the results of the hypotheses tested for the study.

The data analysis is divided into various sections: Section One presents and discusses the socio-economic characteristics of the respondents while subsequent sections present and discuss the data obtained in respect of the substantive issues of the study, and this was done according to the arrangement of the study objectives.

4.1: -Socio-Economic Characteristics of the respondents

This section deals with the socio-economic characteristics of the respondents and these included sex, age, marital status, religious affiliation, ethnic origin, educational qualifications, professional qualifications, nature of employment, sector of employment, nature of business, membership of CIPM

and length of membership, monthly income, staff strength, state of location, staff grade. Questions 1 – 19 of the questionnaire were raised to address the socio-economic variables of the respondents. Advantages of having these characteristics is that they help to differentiate the respondents, to provide basis for comparison of responses and they also help to explain issues that may account for similarities or differences in response to substantive issues of research work.

Table 4.1.1: Frequency Distribution of Respondents by Sex, Age, Marital Status and Religious Affiliation

Sex	**Freq**	**%**
Male	634	61.4
Female	398	38.6
Total	**1032**	**100**
Age	**Freq**	**%**
Below 30 years	7	0.7
30-34	72	7
35-39	92	8.9
40-44	249	24.1
45-49	280	27.1
50-54	190	18.4
55-59	94	9.1
60 years and above	48	4.7
Total	**1032**	**100**
Marital status	**Freq**	**%**
Single	142	13.8
Married	738	71.5
Others	152	14.7
Total	**1032**	**100**
Religious Affiliation of the respondents	**Freq**	**%**
Christianity	534	51.7
Islam	486	47.1
African Traditional Religion (ATR)	0	0
Others	12	1.2
Total	**1032**	**100**

The table above presents some socio-economic characteristics of the respondents. In terms of sex, majority of the respondents, representing 61.4% were male compared with their female counterparts (38.6%). This result was expected considering the lower level of women in the formal sector in Nigeria,

especially at the top positions and vital sections of formal organisations. The finding therefore supports existing literature and statistics on male dominance in the formal sector. Women reproductive roles, socio-cultural beliefs, education, glass ceiling barrier are some of the likely reasons for the imbalance (Awe, 1990; Udegbe, 1997)

On the age of the respondents, majority (24.1% and 27.1%)) were within the age brackets 40-44 and 45-49 years respectively. This indicates that for employees to have found themselves in top positions such as the positions of HRM, they must have been in employment for quite some time, suggesting that they had grown up to middle age as indicated in the findings.

On the marital status of the respondents, majority of them, (71.5%) were married, while others were single, divorced, separated or widowed. With the majority here, it is expected that the study respondents would be mature in terms of orientation to life, work life balance and ability to shoulder organisational responsibilities.

On the religious affiliation of the respondents, majority of them were Christians while none of them practised African Traditional Religion. These results were purely coincidental, because as formal organisations, religion could not have been used as basis for consideration in the process of staff recruitment into their various organisations.

Table 4.1.2: Frequency Distribution of Respondents by ethnic group, educational qualifications, and professional qualifications

Ethnic Group	**Freq**	**%**
Hausa	48	4.7
Igbo	247	23.9
Yoruba	620	60.1
Others (please specify)	117	11.3
Total	**1032**	**100**
Educational Qualifications	**Freq**	**%**
HND	134	13
First degree	346	33.5
Master's degree	482	46.7
Ph.D	24	2.3
Others	46	4.5
Total	**1032**	**100**
Do you have any professional qualification?	**Freq**	**%**
Yes	789	76.5
No	243	23.5
Total	**1032**	**100**

The table above presents further socio-economic characteristics of the respondents. On the ethnic origin of the respondents, majority of them (60.1%) were expectedly Yoruba because the study was conducted in predominantly Yoruba speaking states of the federation. It was however quite interesting to realize that as many as 23.9% were Igbo. This might be explained as being due to the fact that many of the organisations in which the respondents worked were public liability companies who spread their ownership structure and recruitment patterns across the nation. This might have influenced a great influx of workers of ethnic origin outside the Yoruba ethnic group.

In terms of educational qualification, majority of the respondents, (49%) had post graduate qualifications. None of them possessed a qualification below Higher National Diploma (HND) while 2.3% of them possessed doctorate degrees. In addition, 76.5% of the respondents possessed additional professional qualification, and this was expected because as professionals, they were expected to possess the qualifications of the relevant body regulating the HR profession and in fact, be registered with such a body. These findings are generally very

revealing and suggest a high level of educational attainment among the respondents. This high educational qualification coupled with the professional qualifications they possessed would in no small measure account for their statuses and positions in their various organisations, and would also enhance their performance in the discharge of their duties.

Table 4.1.3: Frequency Distribution of Respondents by nature and mode of employment and nature of business

Nature of Employment	**Freq**	**%**
Paid employment	832	80.6
Self employment	200	19.4
Total	**1032**	**100**
Sector in paid employment	**Freq**	**%**
Private	602	72.4
Public	230	27.6
Total	**832**	**100**
If private, status of organisation	**Freq**	**%**
Limited Liability	119	19.8
Public Liability	426	70.8
Multi-national	57	9.4
Total	**602**	**100**
Mode of self Employment	**Freq**	**%**
Management Consultancy	36	18
HR Consultancy	62	31
Recruiting Agency	102	51
Total	**200**	**100**
Nature of business	**Freq**	**%**
Service	501	48.5
Manufacturing	510	49.5
Others	21	2.0
Total	**1032**	**100**

The table above presents further data on the socio-economic characteristics of the respondents. On the nature of employment, majority of the respondents, (80.6%) were in paid employment, while the rest were self employed. Among the 832 respondents in paid employment, 72.4%, representing the majority were in the private sector. Among the respondents in the private sector, 70.8% were in public liability companies, while the others were in limited

liability companies (19.8%) and multi national companies (9.4%). Those in the private sectors were from different sub-sectors such as Agriculture and Allied products, Banking, Food, Beverage and Tobacco, Building materials, Chemical and Paints, Private Tertiary Institutions, Commercial services, Conglomerates, Construction, Healthcare, Hotel and Tourism, Industrial and Domestic products, Information and Communication Technology, Insurance, Packaging, Oil and Gas, Printing and Stationery, Textile and Garments and so on. On the other hand, those from the public sectors included Tertiary Institutions, Government Agencies and Parastatals, Public Service, and Civil Service.

Among the respondents who were in self employment (200), majority of them (51%) were Recruitment Agencies while others were Management Consultants (18%) and HR Consultants (31%).

Furthermore, among the total respondents, a narrow majority (49.5%) was in the manufacturing sub-sector closely followed by those (48.5%) in the service sub-sector. This suggests a wide diversity among the respondents and such will enhance a more holistic analysis of the topic of the study, and will also provide a basis for comparisons between the two sectors.

Table 4.1.4: Frequency Distribution of Respondents by CIPM Membership, Length of Membership, Monthly Income and Staff strength

CIPM Membership Grade	**Freq**	**%**
Graduate	45	4.4
Associate	360	34.9
Full Member	512	49.6
Fellow	115	11.1
Total	1032	100
Length of Membership of CIPM	**Freq**	**%**
0-5 years	65	6.3
6-10 years	188	18.3
11-15 years	249	24.1
16-20 years	373	36.1
21 years & above	157	15.2
Total	**1032**	**100**
Monthly Income of the Respondents	**Freq**	**%**
Less than #100,000	106	10.3
#100,001 -#200,000	154	14.9
#200,001 -#300,000	199	19/3
#300,001 -#400,000	216	20.9
#400,001 - #500,000	299	29.0
#500,000 and above	58	5.6
Total	**1032**	**100**
Staff Strength	**Freq**	**%**
001-100	363	35.1
101- 200	256	24.8
201 -300	165	16.0
301-400	106	10.2
401- 500	75	7.3
500 and above	68	6.6
Total	**1032**	**100**

The table above presents further socio-economic characteristics of the respondents. As shown on the table, majority (95.6%) of the respondents belonged to the three core professional grades of the Chartered Institute of Personnel Management, and majority of them were full members, while 4.4% belonged to Graduate members, and this may likely represent those at the early stage of their career.

In terms of their length of membership of the Institute, only 6.3% had been members below five years, while majority, (36.1%) had been members of

the Institute between 16 and 20 years. This suggests that they must have been in the HR practice for quite some time and this might have influenced their statuses in their various organisations and enhanced their suitability for this study.

On the monthly incomes of the respondents, a narrow majority of them (20.9%) earned between #200,001 and #300,000 per month, while a significant number (5.6%) earned over #500,000 per month. In general, the findings show that the respondents were well remunerated, and this was expected considering their caliber, cadre and statuses in their various organisations. However, when cross tabulated with the nature of business of the respondents, all those who earned #300,000 per month and above were from the private sector, while majority of those who earned below #200,000 per month were from the public sector. The implication of this is that the level of remuneration was higher in the private sector than in the public sector and this is one area of difference between the two sectors.

On the staff strength of the respondents' organisations, majority of the organisations (35.1%) and (24.1%) had less than 100 and 200 employees respectively, while organisations that had over 500 employees were 6.6%. These findings are very revealing and indicate that most organisations in the study location were small especially in terms of staff strength. This may therefore have implications for regularity of recruitment and the recruitment tools adopted by such organisations.

Table 4.1.5: Frequency Distribution of Respondents by Staff grade, length of service and state of location

Staff Grade	**Freq**	**%**
Junior Management	42	4.1
Middle level management	293	28.4
Senior/Top management	602	58.3
Director	95	9.2
Total	**1032**	**100**
Length of Service	**Freq**	**%**
0 – 5 years	47	4.6
6 – 10 years	173	16.7
11 – 15 years	216	21.0
16 - 20 years	198	19.2
21 – 25 years	204	19.7
26 – 30 years	118	11.4
30 years and above	76	7.4
Total	**1032**	**100**
State where located	**Freq**	**%**
Lagos	363	35.2
Ogun	276	26.7
Oyo	171	16.6
Osun	100	9.7
Ondo	70	6.8
Ekiti	52	5.0
Total	1032	100

The table above presents data on the distribution of the respondents by their staff grades, length of service and state of their business location. On their staff grades, majority of the respondents, (58.3%) were in Senior/Top management cadres, while just 4.1% fell into the junior management cadre. This suggests that unlike in the past, the Human Resource Managers in the contemporary Nigeria have come to occupy vital positions in organisational hierarchies and are now seen as strategic partners as argued by Oni (2003).

On their length of service, most of the respondents had spent between 11 years and 25 years at work. This means that they must be very experienced workers and this might have greatly contributed to the positions they occupy in their various organisations.

The highest numbers of respondents were from Lagos and Ogun States. This was expected in view of the large concentration of industrial and service organisations in the two states, while Ekiti state had the lowest number, most likely due to lower business activities, especially in the formal sector.

4.2: Level of Utilisation of ICT for Staff Recruitment, Selection and Placement

(a) Utilisation of the more sophisticated aspects of ICT for staff recruitment functions

Table 4.2.1: Level of utilisation of ICT for recruitment, selection and placement

Is staff recruitment in your organisation your direct responsibility?	**Freq**	**%**
No	205	19.9
Yes	806	78.1
No comment	21	2
Total	**1032**	**100**
Regularity of recruitment	**Freq**	**%**
Rarely	54	5.2
Often	336	32.6
Regularly	621	60.2
No comment	21	2
Total	**1032**	**100**
Do you conduct any phase of your recruitment online?	**Freq**	**%**
No	103	10
Yes	925	89.6
No comment	4	0.4
Total	**1032**	**100**
If you recruit online, do you have your own website?	**Freq**	**%**
No	174	18.8
Yes	751	81.2
Total	**925**	**100**
If No, whose website do your use?	**Freq**	**%**
Free Internet job boards	15	8.6
Recruitment Agencies	95	54.6
Career Agencies	64	38.8
Total	**174**	**100**

The table above presents data in respect of recruitment responsibility and regularity of recruitment among the respondents. Majority of the respondents, representing 78.1% responded that recruitment in their organisations was their direct responsibility. This being the case, it means that they were in the best position to provide data needed for this study.. Also in term of how regular recruitment, selection and placement were conducted, majority of them (60.2%) responded that the exercise was conducted on regular basis. Regularity of recruitment and selection exercises according to Adebayo (2010) is a function of the size of the organisation, the rate of voluntary and involuntary turnover, rate of expansion and growth. Either one or some of these reasons could therefore have accounted for the regularity of recruitment among the respondents' various organisations.

As shown on the table above, a total of 89.6% of the respondents, representing the majority, indicated that they engaged in e-recruitment, meaning that they conducted some or all of their recruitment, selection and placement exercises online. This is quite revealing, indicating that they were aware of, and have actually adopted the use of ICT for their recruitment functions. Majority (81.2%) of the respondents indicated that they had their own websites which they used for their recruitment exercises while 18.8% responded otherwise. Probing further, those who did not have their own websites indicated that they relied on free internet job boards, recruitment agencies and career agencies. This suggests that they have contracted out their recruitment functions, and this confirms scholars' view that many employers now prefer to contract or outsource their recruitment functions to specialists either to provide specialist services, for cost savings or other reasons (Anderson, 2003; Holbeche, 2004; Armstrong, 2009).

Table 4.2.2: Level of utilisation of ICT for recruitment, selection and placement

Do you advertise vacancies online?	**Freq**	**%**
No	121	13.1
Yes	804	86.9
Total	**925**	**100**
In addition to advertising jobs online, do you still advertise through any other medium?	**Freq**	**%**
No	412	44.5
Yes	513	55.5
Total	**925**	**100**
Do you request applicants to apply online?	**Freq**	**%**
No	305	33
Yes	620	67
Total	**925**	**100**
Do you respond to further information online?	**Freq**	**%**
No	785	84.9
Yes	140	15.1
Total	**925**	**100**
Are application forms completed online?	**Freq**	**%**
No	547	59.1
Yes	378	40.9
Total	**925**	**100**
Do you track sources of applications online?	**Freq**	**%**
No	847	91.6
Yes	78	8.4
Total	**925**	**100**

The table above presents further data in respect of the level of utilisation of ICT for staff recruitment functions. Among the respondents who engaged in e-recruitment, 86.9% indicated that they advertised their vacancies online. This majority view suggests a high adoption of e-recruitment among the respondents and supports scholars' views that using e-recruitment rather than conventional print media offers considerable cost savings (90% of recruitment costs) and extensive candidate reach for most roles (Bohlander, Snell and Sherman, 2001; Mathis and Jackson, 2006).

Furthermore 55.5% of the respondents claimed to use an additional medium like newspapers to support the online advertisement, probably to ensure a

wider circulation of information to applicants. Buttressing the above, a 52 year old male Senior Manager in Ibadan during an IDI session explained:

> For a country like Nigeria, it is not wise to totally depend on the website alone to advertise vacancies. Despite E-recruitment, the newspaper in particular still occupies a very important place, and the idea to use it to complement the website is still very much desirable.
> **(IDI/Male HR Practitioner/Ibadan/2012)**

Another respondent explained further:

> What HR practitioners do is to place a small advert in the newspaper, without full details of job specifications and then direct applicants to their websites for full details. This has saved them (recruiters) the cost of huge spending on newspapers if they have to provide full details. Applicants will get the small notices and then do a follow up on the websites.
> **(IDI/Male HR Practitioner/Otta/2012)**

From these responses, it could be seen that advertising jobs on the net has dramatically improved in the country and the combination of the use of the newspaper was to provide support so that a wider range of applicants can be reached. This again has the advantage of saving costs in terms of large newspaper advert slots as well as simplifying the process for applicants who may not have the financial or technological resources of browsing every time (IDS, 2003). This then therefore probably explains the reason for combination of both modern and traditional methods in the recruitment, selection and placement of staff in the country.

Most of the respondents (67%) indicated that they requested applicants to apply online either to complete posted application forms or to upload their curriculum vitae and credentials. However the number of those who did not request applicants to respond online (33%) was significant enough and suggests a lower level of adoption of the use of ICT/e-recruitment among the respondents for this phase.

On whether they responded to further information online, majority of the respondents, (84.9%), indicated that it was not their practice to respond to applicants' request for information online. This implies that even when applicants needed clarifications on their application, wanted to know the status and progress report of their application, or other information about the vacancies or the recruiting organisation, such enquiries would not be possible. This finding was buttressed by a respondent during an IDI session. His words:

> Use of e-recruitment has not advanced to the stage of responding to applicants questions online. Although few recruiters do this, but their number is very negligible. Doing that goes beyond the capabilities of most organisations.
> **(IDI/Female HR Practitioner/Akure/2012)**

This further suggests a decline in the utilisation of ICT for staff recruitment, selection and placement, and negates the opportunity for effective communication which is a major benefit of the use of ICT/e-recruitment identified by Kettley and Reilly, (2003) and Depardieu & Islam, (2008). This also falls short of the findings in more developed countries as established by Reilly and Barber (2006).

It was also noteworthy that majority of the respondents (59.1%) indicated that they did not have application forms posted online for applicants to fill and submit. Completion of application forms constitutes an important aspect of recruitment as it enables recruiters to raise specific questions concerning applicants and upon which further recruitment decisions are made (CIPD, 2005; Mathis and Jackson, 2006). This finding therefore suggests a low adoption of e-recruitment.

Furthermore, 91.6% of the respondents indicated that it was not their practice to track sources of application submitted online. This might be due to inability to install necessary software for this process. The finding falls short of the finding of Aitchison (2006) which established that the use of ICT to track and sort applications was high in the private sector in London, a process which had greatly enhanced the efficiency of recruitment, selection and placement there. Depardieu and Islam (2008) had argued that the general trend in more developed countries

where sources of applications submitted online are tracked and identified had greatly helped in further analysis of applications.

Table 4.2.3: Level of utilisation of ICT for recruitment, selection and placement

Do you do initial screening of applications online?	**Freq**	**%**
No	791	85.5
Yes	134	14.5
Total	**925**	**100**
Do you use online test at assessment stage?	**Freq**	**%**
No	818	88.4
Yes	107	11.6
Total	**925**	**100**
Do you conduct further interview online?	**Freq**	**%**
No	908	98.2
Yes	17	1.8
Total	**925**	**100**
Do you conduct reference checks online?	**Freq**	**%**
No	844	91.2
Yes	81	8.8
Total	**925**	**100**

The table above presents further data in respect of the level of utilisation of ICT for staff recruitment functions. On whether it was the practice to do initial screening of applications online, 85.5% of the respondents indicated that it was not their practice, and this suggests that such a process was done offline; manually or with the use of the computer without internet connection. This falls short of the situation in the more developed societies. Pre-employment screening done electronically has increased dramatically in the past few years in the more developed societies (Mathis and Jackson (2006). One type of screening uses computer software to scan for key words in resumes or applications submitted electronically. Many organisations use types of text-searching or artificial intelligence (AI) software to scan, score and track resumes. Pre-screening sorts the serious job contenders from among the numerous available applications and offers a lot of benefits for recruiters. Anderson (2003) however warns that

regardless of the electronic pre-employment systems used, the analysis must be job related without using age, gender or other data as screening criteria.

A total of 88.4% among respondents who adopted e-recruitment indicated that online tests were not used at assessment stage, indicating that such tests were done offline either manually or with the use of computer. Tests constitute an important aspect of the recruitment process as it provides the opportunity to assess the skill, intelligence and knowledge of applicants. Computerized tests include numerical ability test, reading comprehension test, clerical comparing and checking tests, Personality Profile analysis online test. There is also the automatic in-basket tests which require applicants to deal with a 'virtual inbox' comprised of e-mails, phone calls and documents and folders, to assess the candidates' decision making and problem solving skills. These and other types of computerized tests are used depending on the nature of employment the candidates are being considered for. Not conducting such a test online may probably be due to inability to install the required software or perhaps the preference to conduct such a test physically (Onasanya, 2005; Mathis and Jackson, 2006).

On the conduct of interviews online (telephone and video-conference), majority of the respondents (98.2%) indicated that they did not conduct their interviews online. This indicates a low level of use of video-conference or telephone interview. This again could be attributed to a number of factors which may include the cost of installation of software, the general low internet penetration in the country, and absence of infrastructural support among others. This was captured by a respondent as follows:

> Tests and interviews are still largely conducted offline in Nigeria. How many organisations can afford the cost of installing and constantly upgrading their ICT equipment and software?
> **(IDI/Male HR Practitioner/Otta/2012)**

Furthermore, reacting to the question of conducting interviews through the use of the more sophisticated tools, a 49 year old male Manager in Lagos

explained that Nigerian recruiters and organisations are not ripe enough for video conferencing as a result of very many factors. He spoke further:

> Telephone interviews and video-conferencing are still luxuries to a large number of organisations in this country. Despite the benefits derivable from their use, they are still too costly and sophisticated for Nigerian organisations and Nigerian environment.
> ***(IDI/Male HR Practitioner/Lagos/2012)***

When cross tabulated with the socio-economic variables, it was revealed that the few respondents (1.8%) who conducted their interviews with video-conference came from the private sector (Telecommunication and Oil industries), and none from the public sector. Although, all these methods of conducting interviews have their advantages and disadvantages, the findings are indications of low level of adoption of the sophisticated ICT tools for this phase, and it implies inability to enjoy the benefits associated with such tools.

On how respondents conducted their reference checks, 91.2% of the respondents indicated that they were not conducting reference checks online. The percentage of those who conducted this phase online in this study was very small (8.8%). This suggests that the majority still operated the traditional mode of contact with previous employers and referees of new employees. Reference checks conducted online require the new employer to request for confidential information concerning a new recruit from his or her previous employer. According to scholars, conducting such a phase of the recruitment exercise online offers a number of advantages which include lower recruitment costs, fast processing speed and convenience (Gutierrez, 1995; McCurry, 2005; Torrington et al, 2007)

Table 4.2.4: Level of utilisation of ICT for recruitment, selection and placement

Do you make job offers online?	**Freq**	**%**
No	844	91.2
Yes	81	8.8
Total	**925**	**100**
Do you request successful applicants to accept job offer online?	**Freq**	**%**
No	844	91.2
Yes	81	8.8
Total	**925**	**100**
Do you use electronic means in any stage of your placement?	**Freq**	**%**
No	875	94.6
Yes	50	5.4
Total	**925**	**100**
Do you build data bases for future vacancies?	**Freq**	**%**
No	711	76.9
Yes	214	23.1
Total	**925**	**100**

Source: Fieldwork, (2012)

The table above presents further data on the level of utilisation of the more sophisticated aspects of ICT for staff recruitment, selection and placement. Only a few of the respondents (8.8%) indicated that they made job offers online, while majority did not. Same minor proportion also indicated that they requested applicants to accept job offer online, leaving majority to be on the other side. On whether respondents used electronic means such as welcome packages for job applicants in the course of the placement and induction phases, only 5.4% of the respondents indicated 'Yes", while the majority, 94.6% indicated 'No'. This therefore indicates that majority of the respondents conducted their placement and induction physically. This finding falls short of scholars' view on using electronic means during the induction, otherwise known as on-boarding process, that is, placement and induction of new workers which offers a number of benefits such as ease and convenience for both parties, flexibility, time saving and less human effort (Lee, 2005; Torrington et al, 2007; Depardieu and Islam, 2008, Onyeonoru & Omolawal, 2013)

On whether respondents built data bases for future vacancies, surprisingly most of the respondents (76.9%) indicated that it was not their practice to build data bases, which implies that any time they wanted to recruit workers, they would send out fresh vacancies. This was corroborated by a 48 year old female Manager in Lagos during an IDI session and she spoke as follows:

> The high unemployment situation in the country does not encourage HR practitioners to build data bases for future applications. Even if organisations can afford to do so, of what use is it when there are numerous applicants out there that could be gathered anytime the need arises?
> **(IDI/Female HR Practitioner/Lagos/2012)**

This finding aptly defeats one of the fundamental purposes of e-recruitment. Data bases are built and maintained by recruiters to keep records of applicants who could be contacted for further action especially when the recruitment time frame is short, thereby saving time and costs (Martin and Tricia, 2002; Elkington, 2005, McCurry, 2005). This finding is a confirmation of the low level of utilisation of the more sophisticated aspects of ICT for staff recruitment, selection and placement in South-west Nigeria.

Table 4.2.5: Level of utilisation of ICT for recruitment, selection and placement

Does your online recruitment cover all stages of recruitment?	**Freq**	**%**
No	847	91.6
Yes	78	8.4
Total	**925**	**100**
If No, at what stage does it stop?	**Freq**	**%**
Advertising job	470	50.7
Submission of applications	346	37.4
Written tests	76	8.2
Interview	19	2.1
Job offer	7	0.8
Reference checks	7	0.8
Total	**925**	**100**
Does your online recruitment cover all positions?	**Freq**	**%**
No	530	57.3
Yes	395	42.7
Total	**925**	**100**
Does your online recruitment cover all cadres?	**Freq**	**%**
No	515	55.7
Yes	410	44.3
Total	**925**	**100**
How do you communicate with your applicants?	**Freq**	**%**
Physically	46	5
Cell phones	36	3.9
E-mail	12	1.3
Combination of cell phones and e-mail	831	89.8
Total	**925**	**100**
Do you request applicants to buy scratch cards?	**Freq**	**%**
No	877	94.8
Yes	48	5.2
Total	**925**	**100**

The table above presents further data in respect of level of utilisation of ICT for staff recruitment functions. A total of 91.6% of the respondents indicated that their online recruitment did not cover all the stages of recruitment, selection and placement exercises, leaving a meager 8.4% who indicated that it covered all the stages. Furthermore, 50.7% of the respondents indicated that their online

recruitment stopped at the initial stage of job advertisement, while 37.4% claimed that they stopped at the point of submission of applications. Very few respondents indicated that their online recruitment went beyond to cover other stages such as written test, interviews, reference checks and job offer stages. A further cross tabulation of available data shows that respondents working in communication sector, oil and gas sector and banking sector were those who indicated highest level of utilisation of ICT for their recruitment, selection and placement exercises. This suggests that the utilisation of ICT is higher among HR practitioners in the service sector than in the manufacturing sector as evidenced through the chi square test result (X^2 = 34.478 (0.000)) and correlation analysis (R=0.185 (.000).

These findings support the earlier findings on use of ICT for staff recruitment, selection and placement, and imply that most HR practitioners in S/W Nigeria still relied on the traditional methods. The findings imply that what is happening largely in Nigeria is what Reilly and Barber (2006) termed e-enabled recruitment, and not e-recruitment. What this means is that recruiters only use the online system to commence the recruitment process and thereafter revert to the traditional methods for other later stages of the exercise. The findings also contribute to the debates on e-recruitment on whether e-recruitment should cover all stages of recruitment without leaving room for some traditional processes (Patton, 2003).

Majority of the respondents indicated that their online recruitment did not cover all positions and all cadres and they mentioned that junior staff positions such as clerical, artisans, operators and other supportive staff were not covered. A 50 year old male Manager in Ado Ekiti responded during an IDI session as follows:

> Most recruiters limit their online recruitment to top cadres and certain jobs. To me, with the low level of Computer literacy and the unemployment situation, it is waste of time and resources to extend e-recruitment to clerks and operators.
> **(IDI/Male HR Practitioner/Ado-Ekiti/2012)**

This suggests that online recruitment was being used for core functional business areas and strategic positions, and for positions requiring the use of higher skills. It also tends to be a reflection of the high unemployment level of the country whereby employers are faced with unsolicited applications thereby preventing them from spreading their nets too far to get the prospective workers they need.

On how respondents communicated with job applicants, majority of them (89.8%) indicated a combination of both cell phones and e-mail, while a few others indicated through physical contact only, cell phones only or e-mail only. From the majority position here, it could be seen that there was a high level of adoption of both cell phones and e-mail for communicating with job applicants. This could be traced to the high level of adoption of these gadgets in Nigeria, particularly as a result of the deregulation of the telecommunication sector which has led to widespread adoption.

The multi-functionality of cell phones in general, and Smartphone in particular, further promotes a high level of adoption because it could be used for oral contact, text messages, internet applications and so on. This finding is consistent with the findings of Sesan (2006) whose study revealed that the level of adoption of GSM for security operations in Nigeria was high and encouraging and the study of Olanrewaju (2010) on the high aggregate adoption rate of GSM among healthcare workers and institutions in Ibadan Nigeria thereby assisting in making social and economic impacts on the healthcare value chain system in Ibadan.

On the request for applicants to buy scratch cards or to pay certain amounts into bank accounts to enable them have access to job portals, majority of the respondents indicated that it was not their practice to request applicants to buy scratch cards, while 5.2% claimed that they requested applicants to buy scratch cards. The total number of respondents who indicated ‘yes’ was seen as significant enough to attract further comments. Furthermore, a 51 year old male Director in Lagos expressed his concern over the issue during an IDI session. His words:

> It is very unfortunate that practitioners do engage in unethical practices such as this…This is an issue that deserves an urgent action, and we at the secretariat need to conclude work on the issuance of practitioners' license, which I believe will curb the practice.
> **(IDI/Male HR Practitioner/Lagos/2012)**

When this data was cross tabulated with the socio-economic characteristics of the respondents, it was discovered that this practice was only among those in the public service and recruitment agencies, and not among the Organized Private Sector (OPS). This supports Ikechukwu (2010) who had argued that job applicants were being exploited in Nigeria by some recruiters in the name of using ICT for staff recruitment by making them to buy scratch cards for their application processes. This therefore could be seen as a corrupt practice which needs to be discouraged in the Nigerian society.

This is a new and worrisome trend in the Nigerian labour market and seems to suggest a way of exploiting applicants in the country. This practice was seen as very exploitative as indicated by the CIPM, in a newspaper advert (The Guardian, October 18, 2011, page 70) tagged 'Unethical practice by unscrupulous Recruitment agencies: our position'. The body particularly castigated government agencies and recruitment consultants for engaging in this and other unwholesome practices. An excerpt of the advertorial is presented thus:

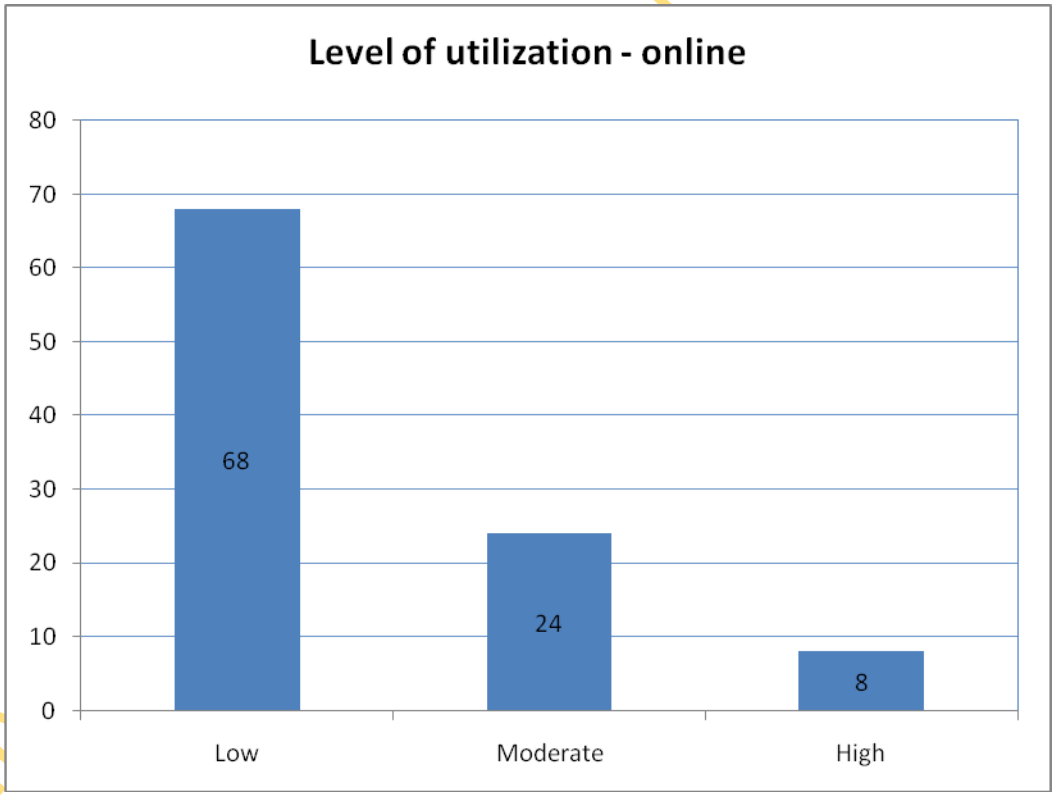
> "Due to very high unemployment situation in Nigeria, where about seven out of every ten graduates are unemployed, job seekers have become prey to dubious recruitment agencies and organisations, who smile to the banks with proceeds from exploiting unwary desperate job seekers. The trend is becoming increasingly worrisome as some government agencies in concert with recruitment consultants request prospective applicants to part with money either for purchase of scratch cards or to pay sums to declared bank accounts to access the portals where application forms are completed. Through these dubious acts, money is extorted from unsuspecting applicants…

The full paper is attached as Appendix V.

Measurement of level of utilisation: In measuring the level of utilisation of ICT for staff recruitment, selection and placement, the study adopted Reilly & Barber's (2006) model which classifies level of utilisation into three categories: Low, Moderate and High.

To measure the level of utilisation of the more sophisticated aspects of ICT, otherwise known as e-recruitment, relevant questions on the questionnaire were used. Based on the value attached to each question, the maximum value any respondent could score was 38, while the minimum was 19. Therefore the range attached was: Low: Below 19; Moderate: 20-29; High: 30-38.

Figure 1: Level of Utilisation of e-recruitment



Source: Field Survey, (2012)

The histogram above presents data on measurement of the level of utilisation of the more sophisticated aspects of ICT for staff recruitment functions (e-recruitment). From the histogram chart, 68% of the respondents had low level

of utilisation; 24% had moderate level of utilisation; while 8% had high level of utilisation. The conclusion here is that the level of utilisation of the more sophisticated aspects of ICT for staff recruitment, selection and placement was low among majority of HR practitioners in South-west Nigeria.

(b) Utilisation of the less sophisticated aspects of ICT for staff recruitment functions

Table 4.2.6: Level of utilisation of ICT for recruitment, selection and placement

How do you advertise job vacancies?	**Freq**	**%**
Internal notice boards	18	17.5
Print media	74	71.8
Radio	7	6.8
Television	4	3.9
Total	**103**	**100**
How do you request applicants to submit applications?	**Freq**	**%**
By hand	95	92.2
By post	0	0
By courier	8	7.8
Total	**103**	**100**
How do applicants complete standard application forms?	**Freq**	**%**
Manually	7	6.8
With computer/soft copy	96	93.2
Total	**103**	**100**
How do you sort your applications?	**Freq**	**%**
Manually	7	6.8
With computer	96	93.2
Total	**103**	**100**

The table above presents data in respect of utilisation of less sophisticated aspects of ICT for staff recruitment, selection and placement. An earlier analysis had shown that a total of 103 respondents had indicated that they did not adopt e-recruitment. On how respondents advertised their job vacancies, majority of them (74%) indicated that they used the print media, while only a few indicated other sources such as internal notice boards (17.5%), radio (6.8%) and television

(3.9%). The preference for the print media must have been as a result of the advantages it has in terms of low cost, wider coverage and record keeping as argued by Shrivastava and Shaw, (2004) and Storey (2007).

On how respondents requested applicants to submit their applications, a total of 92.2%, constituting the majority indicated 'by hand'. No respondent indicated 'by post' while 7.8% indicated 'by courier services'. The fact that no respondent indicated 'by post' could be as a result of the problems associated with the Nigerian postal system in terms of slowness and insecurity of mails. However, the majority position, indicating a preference for hand-delivery could be a way of ensuring the security of such applications, to save costs and the opportunity to carry out an immediate assessment of the applicants.

Concerning the issue of how applicants were requested to complete standard application forms, it was revealing to observe that majority of them (96%) indicated the 'use of the computer'. Out of the total respondents, 93.2% indicated that they sorted their applications with the computer while less than 4% sorted theirs manually. This finding follows from the earlier finding on how respondents requested applicants to submit applications. Sorting applications with the use of the computer implies making use of relevant software for processing the applications as argued by Li, Roshan and Flemming (2002) and Elkington (2005). The majority position could therefore be seen as a high level of adoption of less sophisticated aspects of ICT for the recruitment functions.

Table 4.2.7: Level of utilisation of ICT for recruitment, Selection and Placement

How do you screen applications?	**Freq**	**%**
Manually	50	48.5
With computer	53	51.5
Total	**103**	**100**
How do you conduct written tests?	**Freq**	**%**
Manually	76	73.8
With Computer	27	26.2
Total	**103**	**100**
How do you conduct further interview?	**Freq**	**%**
Physical contacts	99	96.1
With computer	4	3.9
Total	**103**	**100**

The table above presents more data on the level of utilisation of ICT for staff recruitment. On the conduct of written tests, majority of the respondents (73.8%) conducted written tests for their applicants manually which involved the use of paper and pencil while 26.2% conducted it with the use of the computer. Also majority of the respondents conducted their further interviews physically (96.1%), Conducting written tests manually could be very cumbersome especially with the follow up process of grading and recording (Thornburg, 1998; Taylor, 2002). A probable factor that could be responsible for the low level of adoption may be traced to the issue of appropriate software that needs to be installed for this phase of the recruitment exercises.

Table 4.2.8: Level of utilisation of ICT for recruitment, selection and placement

How do you make job offers?	**Freq**	**%**
Physical contacts	98	95.1
Post	0	0
Courier	5	4.9
Total	**103**	**100**
How do you handle reference checks?	**Freq**	**%**
Hand delivery	63	61.2
By post	14	13.6
Courier	26	25.2
Total	**103**	**100**
How do you conduct placement of workers?	**Freq**	**%**
Manually/physically	85	82.5
With the use of the computer/soft copy	18	17.5
Total	**103**	**100**
Do you build data base for the future?	**Freq**	**%**
No	32	31.1
Yes	71	68.9
Total	**103**	**100**
How do you communicate with applicants in the course of recruitment exercise?	**Freq**	**%**
Internal notice boards	8	7.8
Physically	6	5.8
By post	2	1.9
By courier	7	6.8
By mobile phones	80	77.7
Total	**103**	**100**

The table above presents more data in respect of utilisation of less sophisticated aspects of ICT for staff recruitment, selection and placement. From the table, majority of the respondents made job offers physically (95.1%); handled reference checks through hand-delivery (61.2%); conducted their staff placement physically (82.5%) and built data bases for the future using hard copies (68.9%). These findings suggest low adoption of the use of the computer for these different phases of staff recruitment, selection and placement in the study area.

On how respondents communicated with their applicants, majority of them (77.7%) indicated 'through mobile phones'. Mobile phone, either through voice or SMS has become very vital in the communication between recruiters and applicants in terms of costs and convenience. This supports the views expressed by Obong and Foster (2007) and Olanrewaju (2011) that mobile phones have changed the communication landscape of the Nigerian society. During an IDI session, a 47 year old male Manager in Otta explained as follows:

> The main area where the use of ICT has grown exponentially is in the use of e-mail and mobile phones to communicate with job applicants. Both provide flexibility, comfort and ease and have become indispensable for recruitment of workers.
> **(IDI/Male HR Practitioner/Otta/2012)**

Speaking in a similar vein, a respondent explained that the availability of Smartphone and internet services provided by GSM service providers have further made it easier for recruiters and applicants to communicate. His words:

> Today, blackberry facilities have provided ample opportunities for applicants to relate with recruiting organisations. Such communication takes place without the inhibiting process of going to the Cyber-café or power failure. Although it is not a perfect arrangement but it has made things much easier.
> **(IDI. Male/HR Practitioner/Lagos/2012)**

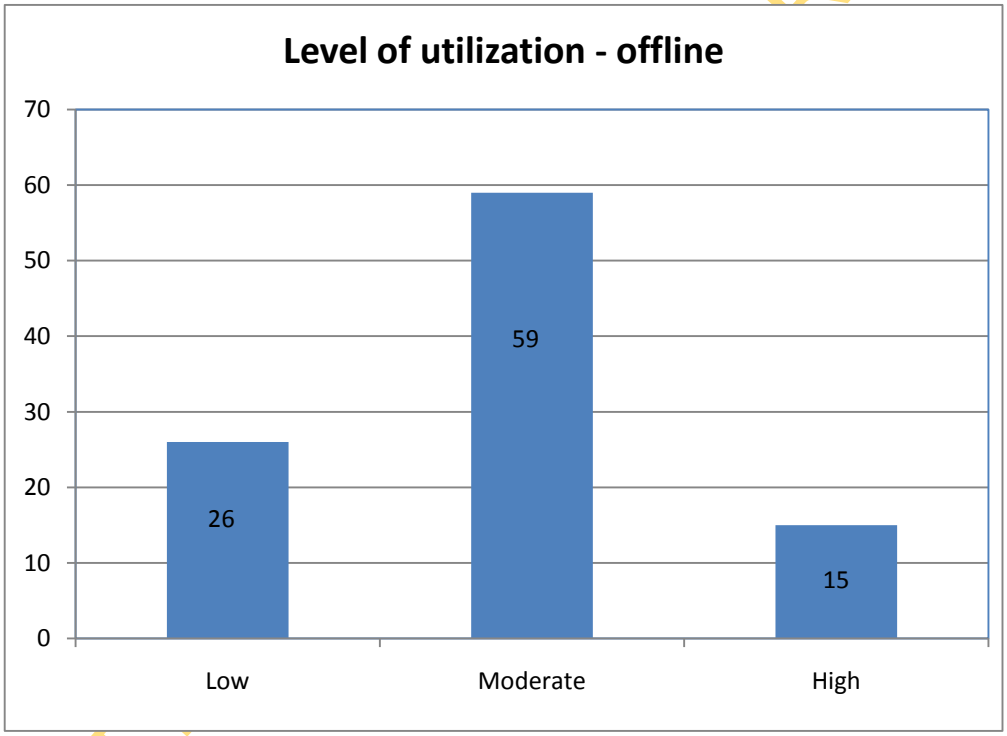
These findings are very remarkable and suggest a high level of utilisation of ICT in the area of communication with applicants. In a way, it could be said that Nigeria is reaping the benefits inherent in the Global System of Mobile telecommunication (GSM), especially in the context of cost, simplicity and convenience.

Measurement of level of utilisation

In measuring the use of the less sophisticated aspects of ICT which involves effective use of the computer and other tools without internet

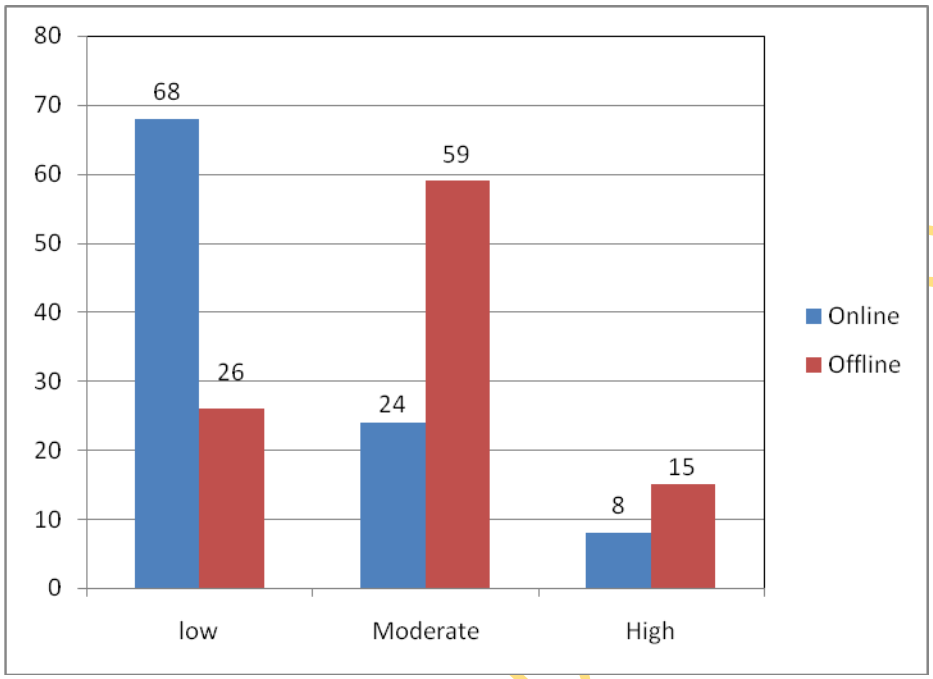
connectivity**,** relevant questions on the questionnaire were used. The maximum value any respondent could score was 32, while the minimum was 12. Therefore the range attached was as follows: Low: Below 12; Moderate: 13-22; High: 23-32.

Figure 2: Level of Utilisation of offline ICT tools



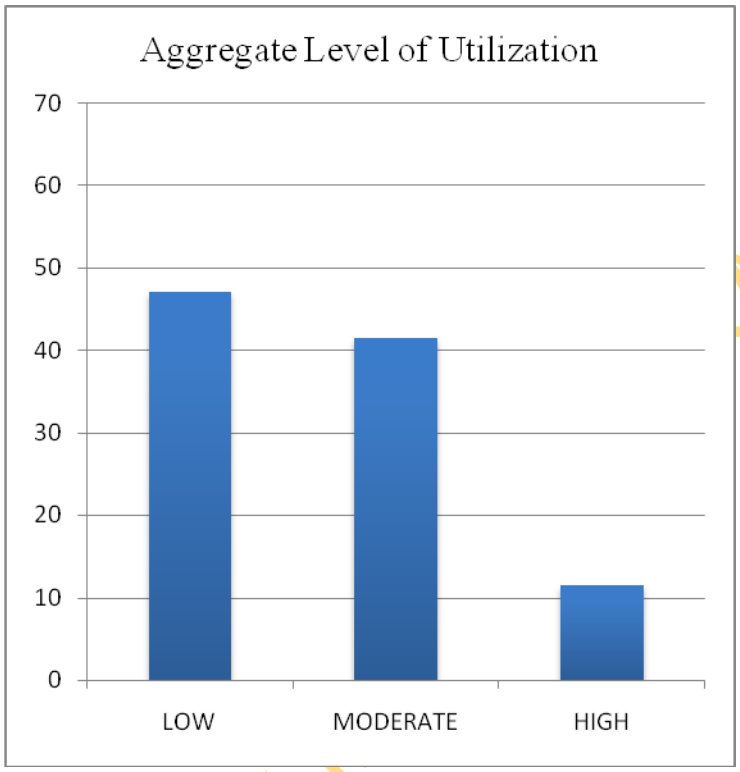
The table above presents data on the level of utilisation of the less sophisticated aspects of the emerging ICT for staff recruitment, selection and placement in the study area. From the histogram chart, 59.0% of the respondents, representing the majority were moderate users; 26% were low users while 15% were high users. Although these findings indicate that the level of adoption and utilisation of these aspects of ICT was better, but the findings were still not encouraging.

Figure 3: Comparison of utilisation of e-recruitment and offline ICT tools



The histogram above presents a comparative analysis of the earlier two histograms. It shows that when the rating was under 'low', only 26% of the respondents were found to be low users of the less sophisticated aspects of ICT whereas as many as 68% were low users. On the other hand, when the rating was under 'moderate', 24% were found to be moderate users of the online system while 59% were moderate users of offline. This shows an improvement on the level of usage of the offline system. When the rating was under 'high', those found to have adopted the online system (8%) were lower than the offline system (15%). It therefore shows that the aggregate level of utilisation of ICT for staff recruitment, selection and placement was low among majority of HR practitioners in the study area.

Figure 4: Aggregate level of utilisation of e-recruitment and offline ICT tools



The histogram above presents the aggregate utilisation of both the online and offline ICT facilities for staff recruitment, selection and placement of workers. As shown on the table, majority of the respondents (47.0%) were low users of ICT for staff recruitment functions in south-west Nigeria and only a few (11.5%) were high users. This low level of utilisation may have implications for efficiency in staff recruitment in the country.

The general findings above suggest that the aggregate level of utilisation of ICT for staff recruitment, selection and placement was low. In the areas of making use of the cell phone and e-mail, statistics showed a high level of adoption, but these tools were only used for the peripheral aspects of contacting or communicating with job applicants. Also the major areas where the findings suggested high level of adoption were the areas of posting jobs on the website and requesting applicants to apply online. The study statistics on these two areas were remarkable. But findings on other areas such as sorting of applications, tracking

application sources, responding to applicants' enquiry, initial screening at assessment stage, conducting online interview, reference checks, making job offers online, requesting applicants to accept offer online and building data bases for future vacancies all indicated low level of adoption.

Further cross tabulation showed that the level of utilisation of ICT in the private sector is different from that of the public sector, that is, it is higher in the private sector than in the public sector and this shows an area of difference between the two sectors. Scholars such as Onoge, (1991) and Inyang, (2001) had argued that the level of efficiency and service delivery is higher in the private sector than in the public sector as a result of factors which include bureaucratic arrangement, adoption of technology, workers' orientation to work, training and development among other factors. The results also show that in the organized private sector (OPS), the level of utilisation was highest among respondents from the Telecommunication sector, Banking sector and Oil and Gas sector, while it was lowest among respondents from the Construction sector, Agriculture and Allied Products sector, and Textiles and Garments sector.

In all, all indicators pointed to low utilisation of ICT gadgets in the conduct of staff recruitment, selection and placement in the study location. These findings were supported by a 54 year old male Manager in Oshogbo during an IDI session. His words:

> The level of adoption of ICT, especially the online recruitment is still abysmally low although the level could be higher in the areas of use of the computers. A lot of challenges are in our technology landscape and they militate against effective usage.
> **(IDI/Male HR Practitioner/Oshogbo/2012)**

However, these findings here were not consistent with the findings of Reilly and Barber (2006) in their study where they established that the use of e-recruitment in Ireland was broadly at par with what was happening in the United Kingdom and North America. This therefore suggests the persistence of inequitable distribution of access to IT, called the digital divide as espoused by Kellner (2002).

The implication of the general low level of utilisation of ICT for staff recruitment, selection and placement is that HR practitioners and recruiters in south-west Nigeria are yet to begin to enjoy the benefits that are associated with the use of ICT for the staff recruitment, selection and placement functions. This defeats the purpose of the business innovation theory where e-recruitment is seen as providing a lot of benefits for users among which are faster processing speed, greater accuracy, cost saving and greater efficiency in service delivery. This however could be explained in the context of the dependency of Nigeria on other countries for her technological needs as espoused in the World system theory. Most of the technologies adopted in Nigeria are being diffused from the more developed countries and this may affect the level of adoption in the country because the capacity to adopt these imported technologies is low. Other related challenges include infrastructure, cost and so on.

4.3: Influence of the Utilisation of ICT for Staff Recruitment on the quality of staff recruited

Table 4.3.1: Frequency distribution on the influence of use of ICT on quality of staff recruited

Does the use of ICT for staff recruitment lead to recruiting a higher quality of staff?	**Freq**	**%**
No	231	22.4
No comment	78	7.6
Yes	723	70
Total	**1032**	**100**
Does it lead to recruitment of staff with better computer knowledge and skill?	**Freq**	**%**
No	169	16.4
No comment	276	26.7
Yes	587	56.9
Total	**1032**	**100**
Does it lead to acquisition of staff with wider experience and exposure?	**Freq**	**%**
No	214	20.7
No comment	252	24.4
Yes	566	54.9
Total	**1032**	**100**

Source: Field survey (2012)

The table above presents data on the influence of utilisation of ICT for staff recruitment on the quality of staff recruited. From the table, majority (70%) of the respondents indicated that the use of ICT leads to recruitment of a higher quality staff, while others either responded in the negative (22.4%) or chose to give no comment (7.6%) to the question. The number of those who responded in the negative or made no comment was too significant to be disregarded. It could therefore be implied that since they did not utilise the more sophisticated aspects of ICT for their staff recruitment functions, they may likely have difficulty in assessing whether it was capable of enhancing a higher quality of staff for their organisations. It is however noteworthy that as many as 70% of the respondents indicated that the use of e-recruitment was capable of leading to recruitment of workers with higher quality in terms of expertise, computer knowledge and so on.

On the issue of recruiting staff with better computer knowledge and skill through e-recruitment, majority of the respondents (56.9%) indicated that e-recruitment leads to recruitment of knowledgeable and skilled workers in terms of computer knowledge, meaning that using ICT for staff recruitment produces staff who have good knowledge of the computer. This is further evidenced by the chi square result (X^2= 131.283 (.074)) meaning that there was association between adoption of e-recruitment and employing staff with higher quality in terms of knowledge, skill and attitude. This was expected considering the fact that for them to have been employed, they must have made use of the computer, the internet and other aspects of ICT for the recruitment processes, and obviously such knowledge will be displayed in the course of their official functions. This was buttressed by an IDI respondent who said as follows:

> Computer skill has become indispensable for organisational workers of today. With computer knowledge and skill, organisations need minimal resources to key in any worker into any position.
> **(IDI/Male HR Practitioner/Ilesa/2012)**

This finding supports Oni (2003) who argues that employees with computer knowledge constitute good assets to organisations because such workers could easily work in all computerized areas of organisations. Such workers are said to be multi functional in many areas of the organisational operations. Computer skill is a vital ingredient workers especially in the telecommunication and banking sectors must possess, and this makes them to be multi-functional in many areas.

On the other issue of recruiting staff with wider experience and exposure as a result of the use of the modern ICT for staff recruitment, a simple majority, 54.9% indicated that the use of ICT leads to recruitment of experienced staff and who have wide exposures. This may likely impinge positively on the efficiency of organisations that use ICT for staff recruitment functions. This is consistent with Imonhopi's (2010) finding, in his study, that internet utilisation has improved the quality of the teaching and research outputs among academic staff in south-west Nigeria. A 50 year old male Manager in Lagos buttressed this finding during an IDI session with him. His words:

> It is expected that hiring employees through sophisticated tools and processes will generate employees who are skilled, resourceful and experienced. They will bring their skills to bear upon the organisational performance and add value.
> **(IDI/Male HR Practitioner/Lagos/2012)**

This suggests that using the modern ICT tools for staff recruitment, selection and placement will bring about workers from various environments where they must have acquired experience and exposure that will equip them better for their new jobs.

Table 4.3.2: Frequency distribution on the influence of use of ICT on quality of staff recruited

Does it lead to diversity of workers in terms of culture, ethnicity, and other background?	**Freq**	**%**
No	229	22.2
No comment	257	24.9
Yes	546	52.9
Total	**1032**	**100**
Does it lead to recruitment of multi-functional staff?	**Freq**	**%**
No	384	37.2
No comment	88	8.5
Yes	560	54.3
Total	**1032**	**100**
Does it lead to acquisition of staff with higher propensity to remain with the organisation for long?	**Freq**	**%**
No	454	44
No comment	346	33.5
Yes	232	22.5
Total	**1032**	**100**

The table above presents more data in respect of the influence of the utilisation of ICT for staff recruitment on the quality of staff recruited. A total of 52.9% respondents indicated that the use of ICT for staff recruitment functions leads to recruitment of staff with diverse backgrounds in terms of culture, skill, orientation and so on. The chi square test conducted also supported this finding

(X^2 =71.263 (.000). This finding was buttressed by a respondent during an IDI session. His words:

> Diversity of workers is an emerging challenge HRM need to prepare for these days. ICT utilisation for staff recruitment is a major factor promoting such diversity among workers.
> **(IDI/Male HR Practitioner/Lagos/2012)**

This finding supports Dauda (2007) and Onipede (2012) who argue that e-recruitment is promoting recruitment of workers from different backgrounds thus making workers diversity to become an important emerging HR issue in modern organisations which needs to be properly managed towards attainment of the organisational goals. Organisations in the contemporary world are beginning to experience the presence of workers with various backgrounds such as culture, ethnic origin, skill, attitude, orientation and other factors. Diversity management is about acknowledging differences and adapting work practices to create an inclusive environment in which diverse skills, perspectives and backgrounds are valued. It is about understanding the individual differences in the people we work with that arise from a broad range of backgrounds and lifestyles, and recognizing the value of using those different perspectives, ideas and ways of working to enhance the quality and outcomes of work, and it builds on the principles of equal employment opportunity (EEO) which is well respected in organisations in the more developed societies (Allen, Dawson, Wheatley, & White, 2004).

Diversity management has become a big challenge in the contemporary world, and HR practitioners are beginning to realize the benefits derivable from effective diversity management which include greater bonds among workers, increasing tolerance and so on. For a multi cultural society like Nigeria, workers' diversity in both public and private organisations could contribute to greater tolerance and re-orientation among workers.

On whether the use of ICT leads to recruitment of workers with higher propensity to remain with the organisation for a long time, majority of the respondents, (44%) indicated 'No'; as many as 33.5% made no comment while only 22.5% indicated 'Yes'. The percentage of those who made no comment was

seen as significant and could be an indication of their having no knowledge about this particular issue. The majority view is that the use of ICT does not lead to recruitment of staff with higher propensity to stay for long on the job, this supports available literature. Scholars such as Adegboyega (2004) have argued that increasingly, there are emerging cosmopolitan/ knowledge/multi-skilled workers and professionals who consider themselves capable of crossing corporate boundaries and able to take care of their own interest without relying on the union or other interest groups. Such groups of people rely on their self intellectual development and skill acquisition as vital tools needed to compete anywhere in the world and are ready to leave at the earliest opportunity.

Adegboyega (2004) argues further, that the growth of service and knowledge industries with special emphasis on computer skills has contributed a premium on mobility, flexibility and multi functionality. Although such people may be good assets to the organisation, they could also cause unnecessary turnover by their ability to secure other jobs more easily and leave. What this implies is that such groups of workers may not have the propensity to remain long with any organisation. Their knowledge of the computer puts them ahead of others and may likely continue to put them on constant move.

4.4: Benefits derivable from utilisation of ICT for Staff Recruitment, Selection and Placement

Table 4.4.1: Frequency Distribution of Respondents on Benefits of ICT

Items	Strongly Agreed		Agreed		Undecided		Disagreed		Strongly Disagreed	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Use of ICT enhances speed in recruitment process	607	58.8	404	39.2	11	1.1	10	0.9	0	0
Greater accuracy is enhanced	797	77.2	214	20.8	10	0.9	11	1.1	0	0
There is wider range of applications	774	75	237	23	21	2.0	0	0	0	0
Recruitment costs are reduced	782	75.8	229	22.2	0	0	21	2.0	0	0
Provides 24/7 access to collection of applications	728	70.5	266	25.9	17	1.6	21	2.0	0	0
Facilitates effective communication with applicants	705	68.3	278	26.9	3.0	0.3	28	2.7	18	1.8
It boosts corporate image of organisations	476	46.1	385	37.4	56	5.4	94	9.1	21	2.0
ICT allows proper documentation and keeping of applicants' records	362	35.1	604	58.5	12	1.2	36	3.5	18	1.7

The table above presents data on the benefits derivable from utilisation of ICT for staff recruitment, selection and placement. On the benefits derivable from the use of ICT for staff recruitment, selection and placement, the study established that the use of ICT enhances speed in recruitment process as evidenced from 58.8 % and 39.2% who indicated 'strongly agreed' and 'agreed' respectively, leaving a very few who made no comment or responded in the negative. This finding

supports scholars' views on the benefits derivable from the use of the emerging ICT. Newell and Shackleton (2003) and Torrington et al, (2007) had argued that with the emerging ICT tools, recruiters could save as much as 65% of the time previously spent on recruitment while using the traditional techniques.

Also majority of the respondents (98%) indicated that greater accuracy is enhanced when the modern ICT tools are used for staff recruitment, selection and placement. Accuracy in the context of staff recruitment and selection could particularly be seen when the computer is used to conduct written tests and appropriate software is installed for grading of scores. A greater level of accuracy is enjoyed than when such a process is manually conducted. Scholars such as Elkington (2005) and Williams (2010) have argued in a similar way, thus the finding is supportive of their views.

Majority of the respondents (98%) were in agreement that using ICT for recruitment functions leads to wider range of applications obtainable from job candidates. This finding is similar to the finding of Aitchison (2006) in his study of e-recruitment in London. By posting jobs on the website, interested applicants anywhere in the world are capable of accessing it, as long as there is internet connectivity, even when they do not have a prior knowledge of the recruiter's website (Cailliau, 2011). This therefore translates to wider range of applications compared with the past when probably only those in the local environments had the opportunity to know about existing vacancies. The increasing use of Smartphone also contributes greatly to applicants' awareness of job opportunities in organisations that recruit online.

On reduction in cost of recruitment when recruitment and selection exercises are done electronically, a total of 98% of the respondents were in agreement (78.8% strongly agreed and 22.2% agreed). In a similar study conducted by Reilly and Barber (2006) in Ireland, their findings also revealed that recruitment costs were drastically reduced when the new ICT tools were used. Torrington et al (2007) had particularly argued that recruiters could save as much as 90% of their previous recruitment costs with the modern tools. Therefore, the findings from this study are in consonance with studies elsewhere.

The study also sought to establish whether using ICT for staff recruitment could provide 24/7 access to collection of applications, about 96% of the respondents were in agreement. This finding supports existing literature on the benefits derivable from e-recruitment (IRS, 2002b; Mathis and Jackson, 2006). This is so because jobs are posted on the website which remains open throughout the duration of the time frame given by the recruiter. Applicants therefore have the opportunity to send their curriculum vitae and other credentials any time of the day throughout the duration of the job posting. This is unlike the traditional system of hand delivery of applications and through post which are limited to only working hours of the day and on week days alone.

On the issue of whether the use of ICT provides effective communication with applicants, majority (96.2%) of the respondents indicated their agreement and this confirms what scholars such as Elkington (2005), Storey (2007), Depardieu and Islam, (2008) consider as an important benefit of using the modern ICT tools for staff recruitment. They have argued that effective use of available tools provides an opportunity for all stakeholders in the recruitment process to share and pass information. For instance, e-mail, mobile phones/Smartphone, and so on, provide opportunity for recruiters to contact the applicants who on the other hand receive such information almost immediately. Results or applicant's status can be posted on the websites for applicants to check and respond to, while integration of recruitment with HR systems can provide the opportunity for user departments and chief executives to monitor the progress situation without any recourse to the HR persons handling the process (Depardieu and Islam, 2008).

On whether the use of ICT boosts corporate image of organisations, 83.5% of the respondents agreed that it does while others indicated that it does not. However, this issue of promotion of corporate image is not related to the efficiency of the recruitment system but portrays the organisation as being computer savvy and technologically advanced. This therefore boosts the image of such organisations. This supports the findings of a survey conducted in the United Kingdom where 50 organisations that used e-recruitment had decided to do so in

order to improve their corporate image and profile among other reasons (Newell and Shackleton, 2000; Storey, 2007).

On proper documentation and keeping of applicants' records, which is also seen as a benefit derivable from the use of ICT, majority (93.5%) of the respondents indicated that utilisation of ICT enhances proper documentation and keeping of applicants' records, and this finding supports the benefits identified by Ministry of Manpower, Singapore (2003). A respondent during an IDI session supported this finding and explained as follows:

> The use of computer provides good opportunity to document and keep job applicants records. All that is needed is to install relevant backups and storage devices.
> **(IDI/Male HR Practitioner/Owo/2012)**

Since applications are downloaded and stored on the computer, it becomes easier for such records to be kept permanently. Use of appropriate software can also be adopted to create a backup in case the computer is infected with virus or other mishaps. This therefore shows a lot of advantages over the manual or traditional systems of operations. Even when recruiters are not using the internet or other more sophisticated aspects, they are still able to enjoy this benefit as long as they have computers to work with.

Furthermore, respondents during various in-depth-interview sessions claimed that in general, the adoption of ICT for staff recruitment functions bridges recruitment cycles because it enhances the speed, simplifies the processes and provides greater flexibility for recruiters. This was particularly captured in the words of a respondent as follows:

> ICT has generally bridged the recruitment cycle by ensuring that recruitments are initiated and completed within a very short time, compared with the traditional system.
> **(IDI/Male HR Practitioner/Lagos/2012)**

Table 4.4.2: Further Frequency Distribution of Respondents on Benefits of ICT for Staff Recruitment Functions

Variables	Strongly Agreed		Agreed		Undecided		Disagreed		Strongly Disagreed	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Recruitment processes are simplified	685	66.4	326	31.6	11	1.1	10	0.9	0	0
Human efforts are reduced	813	78.8	198	19.2	0	0	21	2.0	0	0
It reduces human traffic to offices	286	27.7	303	29.4	133	12.9	253	24.5	57	5.5
Reduces pressure on HR practitioners	215	20.8	299	29	115	11.1	307	29.8	96	9.3
Buying of scratch cards defrays recruitment costs	77	7.5	184	17.8	64	6.2	328	31.8	379	36.7
Increases level of computer literacy	346	33.5	496	48.2	85	8.2	84	8.1	21	2.0
Reduces volume of hard copies	553	53.6	388	37.6	52	5.0	16	1.6	23	2.2
Remarkable improvement in recruitment and selection	640	62.1	371	35.9	21	2.0	0	0	0	0

The table above presents further data in respect of the benefits derivable from the use of ICT for staff recruitment, selection and placement. Concerning the claim that recruitment processes are simplified while using the modern ICT, as many as 66.4% and 31.6% indicated strongly agreed and agreed respectively. Simplification of processes here involves dividing the major processes into smaller bits and using available ICT tools to carry them out. For example, a single mail or text message inviting applicants for interview or other thing could be sent to as many as 50 candidates at once, thereby increasing the efficiency of operations. This finding has a support in literature where scholars such as

Elkington (2005) and Torrington, et al (2007) have identified simplification of process as a major benefit of the e-recruitment system.

On whether human effort is reduced**,** majority of the respondents responded in the affirmative. The study statistics reveals that 78.8% and 19.2% indicated strongly agreed and agreed respectively. Both totaled together shows about 98% indicating agreement that human effort is reduced when the emerging ICT tools are used for staff recruitment and selection. This finding supports scholars such as Sing and Finn (2008), and Day (2010) in their analysis of the benefits of using especially the more sophisticated aspects of the new ICT for staff recruitment, selection and placement. Physical energy is required to be expended at various processes and stages of staff recruitment. For example, opening application letters, sorting them, analyzing them, short listing and other processes entail a great deal of human efforts and energy. These processes could now be handled electronically thereby reducing human effort.

On the issue of whether the use of ICT for staff recruitment, selection and placement reduces human traffic to offices, 27.7% and 29.4% of the respondents indicated 'strongly agreed' and 'agreed' respectively. On the other hand, 24.5% indicated disagreed. This number, though in the minority is significant enough to be discussed. By automating the process of recruitment, it is expected that there will be less opportunity for applicants to visit offices where they have submitted their applications, but the finding from this study does not support existing literature where scholars have argued that e-recruitment keeps away applicants from the office. What the finding seems to suggest is that applicants still do a follow up on their application either to see HR practitioners or to see someone who is close to the HR practitioners. This therefore supports the African practice of *personalissimo*, a term that was adopted in Kampala Uganda to describe a social process of knowing somebody, who knows someone, who knows the person from whom you need a service (Cited in Etuk-Udo, 1999).

On whether the use of ICT for staff recruitment, selection and placement reduces pressure on HR practitioners, the majority view here comprised those who disagreed with this assertion: as many as 29.8% showed their agreement.

What this suggests is that using ICT for staff recruitment does not reduce the pressure on HR practitioners, and it is revealing about the situation in Nigeria where social connections are seen as integral aspect of the business relations. A respondent during an IDI session explained to support the above finding. Her words:

> In Nigeria, one challenge faced by HR Practitioners is the pressure from job applicants and their supporters. Politicians, Religious leaders, and other highly placed individuals would always put pressure on behalf of their candidates. At times, your job could be at stake.
> **(IDI/Male HR Practitioner/Otta/2012)**

This finding further confirms the earlier discussion about *personalissimo* in Nigeria and other African countries. This practice is more rampant in the public service especially when recruitments into the public service are being conducted. It involves applicants obtaining notes from senators, politicians and other top public servants in order to guarantee their recruitment. As a matter of fact, it is claimed that for public service recruitment, slots are given to top officers, politicians, senators. This practice and finding therefore defeat the purpose of merit which the use of ICT, especially the sophisticated aspects addresses as part of the benefits derivable.

Concerning the issue of selling of scratch cards to defray recruitment costs, a total of 31.8% and 36.7% indicated disagreed and strongly disagreed respectively. These two, constitute the majority position, thereby indicating that selling of scratch cards to applicants to log in for job does not defray recruitment costs. However, the number of those who responded in the affirmative was significant enough to be mentioned. As many as 7.5% and 17.8% indicated strongly agreed and agreed respectively. This finding therefore confirms the unusual and worrisome practice among certain recruiters (usually private recruiters and officials in the public service) who exploit job seekers by selling scratch cards to them and this shows part of the contradictions and corrupt

practices in Nigeria which need to be discouraged as argued by Ben (2010) and the Chartered Institute of Personnel Management, (2011).

On whether utilisation of ICT for staff recruitment, selection and placement increases level of computer literacy, as many as 88.7% were in agreement indicating that a lot of HR practitioners will be forced to have computer knowledge and update it on regular basis so as to keep up with the trend in the ICT landscape especially on software. This benefit also applies to applicants and job seekers who are expected to use the computer and other ICT tools to initiate the recruitment process and so this finding could be a further way of promoting computer literacy in Nigeria.

Concerning whether the use of ICT reduces volume of hard copies of recruitment and selection documents, a total of 91.2% of the respondents constituting the majority were in agreement. This finding also supports scholars such as Ministry of Manpower, Singapore (2003) and Storey (2007) who have argued that because applicants are not required to submit hardcopies, the volume of hard copies printable becomes very minimal. The applications are downloaded and stored on the computer for further actions, thus preventing heaps of applications which eventually become nuisance after the recruitment exercises have been concluded.

The study also sought to know if there was a remarkable improvement in recruitment and selection, as a result of the use of the modern ICT tools. Almost all the respondents (98%) were in agreement. This finding is expected considering all the benefits that have been identified and discussed above. The ultimate goal of adoption of technology is improvement in service. This supports the explanation offered in the discussions of both the theory of business innovation and world system theory. Proponents of the world system theory have argued that there is higher level of efficiency among countries identified as constituting the core, compared to those in the periphery as a result of high level of adoption of technology for their economic activities. Also, adopting e-recruitment as a business innovation has generated remarkable improvements in the recruitment, selection and placement processes. (Afuah et al, 2003; Zwass, 2003)

During various IDI sessions, it was established that utilisation of ICT for staff recruitment provides opportunities for recruiters to build data bases. This is done by putting on hold, and storing on the computer data about applicants which may not be immediately required and which however may become urgently needed in the nearest future. Rather than going through the recruitment process all over again, such candidates are simply contacted. This may save a lot of time and efforts for recruiters and in all, enhances the recruitment process.

From the general responses presented above, it could be seen that the use of ICT, especially the more sophisticated aspects for staff recruitment, selection and placement offers a number of benefits for users in this study area and has enhanced changes in the way staff recruitment exercises are conducted. These findings are supportive of Omolawal & Joshua (2011) who argue that the recruitment function has been undergoing dramatic changes as a result of technology. They argue further that with technology, the recruitment process has been simplified and produces greater speed, accuracy, comfort and ease. Adoption of ICT has widened the scope of applicants' catchment to the global level. During an IDI session, a respondent explains that the benefits inherent in these modern tools are immeasurable and generally contribute to the efficiency of the whole recruitment exercise. Her words:

> ICT generally has brought significant changes to man and the society. In HR in particular, it has led to greater efficiency especially in recruitment and selection. Even with the low level of adoption as a result of challenges, the benefits are still immeasurable compared with the traditional system.
> **(IDI/Male HR Practitioner/Ogbomosho/2012)**

Speaking in similar vein, another respondent indicated that the efficiency of organisations depends greatly on the level of the technology they are able to adopt. His words:

> Today, the more individuals are able to adopt relevant technology for their operations, the higher their operational efficiency. Relying on old systems will never take you to the desired realm of success
> **(IDI/Male HR Practitioner/Lagos/2012)**

With the wide realization of the benefits inherent in the modern technological tools, it is left for individual HR practitioners to ensure adequate adoption of relevant technology to enable them enjoy these benefits. As indicated through the theory of business innovation, e-recruitment is a business innovation specially conceived to bring about improvement and greater efficiency in recruitment and selection exercises. Thus the benefits discussed above which HR practitioners associate with the use of ICT support the theory of business innovations.

4.5: Challenges associated with utilisation of ICT for Staff Recruitment, Selection and Placement

Table 4.5.1: Respondents distribution by challenges associated with ICT

Are there too many applications to sort out?	**Freq**	**%**
No	329	31.9
Yes	703	68.1
Total	**1032**	**100**
Does e-recruitment create additional works for HR practitioners?	**Freq**	**%**
No	309	29.9
Yes	723	70.1
Total	**1032**	**100**
Does e-recruitment prevent face-to-face interactions?	**Freq**	**%**
No	183	17.7
Yes	849	82.3
Total	**1032**	**100**
Does e-recruitment prevent physical assessment of applicants?	**Freq**	**%**
No	314	30.4
Yes	718	69.6
Total	**1032**	**100**
Is checking of numerous applications cumbersome?	**Freq**	**%**
No	314	30.4
Yes	718	69.6
Total	**1032**	**100**
Does e-recruitment reduce the chances of social responsibility in terms of recruitment of local candidates?	**Freq**	**%**
No	353	34.2
Yes	679	65.8
Total	**1032**	**100**
With e-recruitment, are those without computer knowledge at a disadvantage?	**Freq**	**%**
No	204	19.8
Yes	828	80.2
Total	**1032**	**100**

The table above presents data in respect of the challenges associated with the utilisation of ICT for staff recruitment. Most of the respondents (68.1%) indicated that the use of ICT in collecting applications and resumes leads to generation of too many applications that will eventually need to be sorted out; In a

related manner a higher number of respondents (70.1%) also indicated that the availability of these numerous applications becomes extra work for them especially in the process of analysis, short- listing and further actions. Demonstrating a practical explanation of the situation, a respondent explains:

> A few years ago when we first advertised jobs on our website, a total of 4005 applications were received for only three positions. The experiences in sorting them and short listing were inexplicable. We eventually solved the problem when we went a step further to install a e-recruitment software.
> **(IDI/Male HR Practitioner/Ibadan/2012)**

The above may likely show the experiences of organisations. This supports the views expressed by scholars such as Mathis and Jackson (2006) and Torrington et al, (2007) that a key drawback in e-recruitment is the way employers get bombarded with hundreds of applications, and that this occurs because of the large number of people who read job advertisements and also, because it takes so little effort to e-mail a copy of pre-prepared Curriculum Vitae to the employer concerned. However, they argue further that in order to prevent 'spamming' of this kind, it is necessary to make use of online short listing software which is able to screen out unsuitable applications. Such technologies however are not wholly satisfactory, because by looking for key words in the Curriculum Vitae, there is the possibility of screening out good candidates simply because they have not chosen a particular word or phrase. The implication of this for Nigerian recruiters is that they will need to spend extra cost in installing and upgrading the relevant software.

Furthermore, majority of the respondents, (82.3%) indicated that e-recruitment prevents face to face interaction with applicants - when such a phase is conducted with no opportunity for face to face interactions, some fundamental issues that may assist both parties in their future formal interaction could be lost. On whether e-recruitment prevents physical assessment of applicants, majority of the respondents, 69.6% also claimed that it does. Essentially, if applicants have to take their written tests online and be interviewed through video conferencing, the

processes tend to prevent the recruiters from being able to physically assess their candidates (Strauss, 2001; Chapman & Webster, 2003; Onyeonoru & Omolawal, 2013). According to a 48 year old female Manager in Ibadan during an IDI session, technology can not handle all the processes of recruitment. Her words:

> There is no way technology can do everything for you, staff recruitment involves a process whereby the recruiter should be able to physically meet with the applicants and assess them for some traits and natural endowment. For example, recruiting sales men, secretaries and front-desk officers involves physical assessment on possession of some physical qualities, Can the computer do this for you?
> **(IDI/Female HR Practitioner/Ibadan/2012)**

The implication of the above is that recruiters must be able to meet physically with the applicants before a final offer is made. This finding also contributes to the debate on e-recruitment and supports relevant literature on the disadvantages associated with the use of ICT for staff recruitment functions (Anderson, 2003; McCurry, 2005; Mathis and Jackson, 2006).

Concerning the issue of whether e-recruitment reduces the chances of social responsibility to the host communities in terms of recruitment slots, it was surprising to discover that majority of the respondents, (65.8%) stated that it does. When cross-checked with the socio-economic variables, it was discovered that most respondents who made this indication were from the private sector. This finding was consistent with the opinion of Adeyi (2004) that organisation should be socially responsible to their host communities. Social responsibility in the context of this study refers to reservation of slots for local citizens to be employed. While it is a good thing that the result shows the increasing need for organisations to be socially responsible to their host communities by offering them certain benefits including slots for recruitment, the purpose for which the use of ICT is being adopted and utlised seems to be defeated. For example, ICT is used to be able to recruit the best applicants among the large pool available (Holbeche, 2004; Armstrong, 2009). This view was aptly captured by a respondent during an IDI session:

> To us in the public service, our recruitment system is different a bit. Everything is not about the best candidate at the interview as is the practice in the private sector. There are usually influences on political considerations and federal character. So the most qualified may not really be the one employed.
> **(IDI/Male HR Practitioner/Lagos/2012)**

This therefore tends to bring in a debate between merit and political factor especially in a nation like Nigeria where political factors seem to undermine merit in the public service human resource management (Inyang, 2001).

Majority of the respondents, (80.2%), claimed that those without computer knowledge are at a disadvantage when it comes to the issue of e-recruitment. E-recruitment requires both the recruiters and the applicants to have adequate knowledge of the computer. Such knowledge will need to be displayed right from the time of visiting the websites, down to the process of completing applications, uploading relevant documents and so on. This finding therefore supports the views on the need for applicants to possess adequate knowledge of the computer. Although the CANi initiate of computer for all in Nigeria seems to be a bold step, but it has not translated to good results as most public schools in Nigeria still lack basic computer infrastructure (Awe, 2010).

Table 4.5.2: Frequency Distribution of Respondents by Challenges of ICT for Staff Recruitment

Are acquisition/updating of computer skills by HR practitioners a disadvantage associated with the use of ICT?	**Freq**	**%**
No	118	11.4
Yes	914	88.6
Total	**1032**	**100**
Does cost of acquisition of ICT facilities militate against use of ICT by HR practitioners?	**Freq**	**%**
No	88	8.5
Yes	944	91.5
Total	1032	100
Are installation, maintenance and upgrading of software additional burdens for recruiters?	**Freq**	**%**
No	130	12.6
Yes	902	87.4
Total	**1032**	**100**

Table 4.5.2 above presents data on whether acquisition and updating of computer skills by HR practitioners, cost of acquisition of basic ICT infrastructure and installation, maintenance and upgrading of software are challenges associated with the use of ICT for staff recruitment.

Majority of the respondents, (88.6%) indicated 'Yes' on acquisition and updating of computer skills by HR practitioners as constituting a challenge. Majority, 91.5% also responded 'Yes' to the question of cost of acquisition being a challenge associated with the use of ICT; and majority (87.4%) also responded 'Yes' that installation, maintenance and upgrading of software as being additional burdens for recruiters in terms of monetary costs. From the above majority decisions, it could be seen that having the knowledge and constantly updating such by HR practitioners, as well as the cost of acquisition, installation and maintenance of equipment and software are seen as challenges facing HR practitioners in adopting ICT for their recruitment functions in Nigeria.

A respondent during an IDI session speaks further:

> Our journey in ICT is still not far enough. Not many ministries can afford to constantly update the computer skills of their top officers talk less of the general staff. How much is the budget for training and development in a year.
> **(IDI/Male HR Practitioner/Abeokuta/2012)**

The above was the view of a public service official, and shows the seriousness of the situation especially in the public sector. A private sector respondent however believes that the situation should not be seen as insurmountable and that a lot depends on individual organisations. His words:

> Adoption of technology depends on the organisational goal being pursued and the strategy adopted for attainment. This will affect the willingness to devote rich budget to meet the desired purpose.
> **(IDI/Male HR Practitioner/Ijebuode/2012)**

The views show some divergences between practitioners in both the private and public service and their various positions may have implications for HR practices and the level of efficiency they will eventually achieve.

Furthermore, majority of the respondents (87.4%) indicated 'Yes' to the question of whether installation, maintenance and upgrading of software constitute additional financial costs for recruiters. This was corroborated by a respondent during an IDI session who explained that organisations that are ready to adopt ICT for their recruitment functions must be ready as well to procure relevant software and update such on regular basis. His words:

> Software is at the heart of modern ICT for staff recruitment, they keep the system working either online or offline. You need to constantly update them as new ones emerge, but be prepared for the financial costs that come with them.
> **(IDI/Male HR Practitioner/Oshogbo/2012)**

The above discussions underscore the importance of software in utilising ICT for staff recruitment, and this supports Awe (2010) who had argued that software drives the ICT functionality in the modern world. Although such software could come with costs in terms of acquisition and regular upgrading, however, in the long run, such perceived cost may turn out to be beneficial to organisations utilizing the modern ICT tools.

During IDI sessions with respondents, it was indicated that other major challenges affecting utilisation of ICT in Nigeria include network failure and power supply. For example, this was captured in the words of a respondent as follows:

> The technological landscape in Nigeria is so terrible to the extent that on regular basis, there is connection problem, there is network problem. Imagine, a user on the internet, all of a sudden is cut off because there is power failure or network failure. It is very frustrating and needs to be addressed.
> **(IDI/Male HR Practitioner/Ibadan/2012)**

These are challenges with the state of infrastructure in Nigeria, and this is in tune with the findings of Sesan (2006), Imhonopi (2010), and Olanrewaju, (2011) in their various studies on utilisation of ICT for different socio-economic activities in the country.

4.6 Perceived factors affecting utilisation of ICT for Staff Recruitment, Selection and Placement

Perceived factors affecting the utilisation of ICT for staff recruitment, selection and placement were categorized into two namely: infrastructural and organisation factors.

Table 4.6.1: Frequency Distribution of Respondents by perceived infrastructural factors affecting utilisation of ICT for staff recruitment

Items	Strongly Agreed		Agreed		Undecided		Disagreed		Strongly Disagreed	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Poor implementation and evaluation of ICT policy	402	39	391	37.9	85	8.2	123	11.9	31	3.0
Low level of computer literacy	406	39.3	532	51.6	31	3.0	63	6.1	0	0
Technology Dependence	426	41.2	450	43.6	47	4.6	109	10.6	0	0
Low internet penetration	445	43.1	443	42.9	47	4.6	52	5.0	45	4.3
Lack of availability of software	351	34	578	56	26	2.5	52	5.0	25	2.5
Quota system and other political factors	49	4.7	342	33.1	122	11.8	345	33.4	174	16.9
Lack of public utilities like power supply	552	53.5	360	34.9	42	4.1	78	7.6	0	0
Corruption	374	36.1	597	57.8	23	2.4	22	2.1	16	1.6

The table above presents data on the perceived infrastructural factors that affect the utilisation of ICT for staff recruitment functions. Majority of the respondents, (76%) believed that there is poor implementation and evaluation of ICT policy, thereby affecting the level of utilisation in the country. This finding confirms the views of scholars such as Nduka (2006) and Offiong, (2007) that Nigeria needs to effectively implement existing ICT policies and to constantly

review the policies so as to improve its social and economic development through the use of ICT. During an IDI session, a 54 year old male HR practitioner in Ibadan put it more succinctly:

> Nigeria has always come up with policies to aid her socio-economic development, but where the problem lies is in the area of implementation and evaluation. Of what use is a policy that is not properly implemented, evaluated and reviewed to reflect changes in the society?
> **(IDI/Male HR Practitioner/Ibadan/2012)**

This finding therefore suggests government failure in its effort to promote technological development in a developing country like Nigeria that depends on other countries for its technology as espoused by the World system theory. Existing ICT policies need to be reviewed on constant basis because the ICT world is changing rapidly, and so policies for adoption must constantly reflect the changes (Nduka, 2006).

On whether the low level of computer literacy and internet penetration could negatively affect the level of utilisation of ICT for staff recruitment and selection, about 90.9% and 86% of the respondents indicated 'Yes' respectively. This again shows a worrisome situation about the state of social and economic development of the nation especially as it affects the issue of technology. This confirms the view of scholars (Awe, 2010; Ben, 2010) that apart from the cities and state capitals, possession of computer is still seen as luxury which only few can afford. With the current internet usage in Nigeria compared with other more developed countries, there is no way such a low penetration level will not negatively affect the level of utilisation of ICT.

> Nigerian market is filled with computer hardware that is adequate for effective utilisation. Where the problem lies is in the area of software needed to make the hardware work. Greater attention should therefore be focused on software availability.
> **(IDI/Male HR Practitioner/Ijebuode/2012)**

Also, unavailability of relevant software was seen as a great challenge affecting the level of utilisation of ICT for recruitment functions in Nigeria as evidenced by 34% who indicated 'strongly agreed' and 56% who indicated 'agreed' respectively. During an IDI session, a respondent explained that in terms of hardware, there is adequacy in Nigeria, but where the problem lies is in the area of software. He speaks further:

Software such as AI, Application Tracking Software, HR software and so on are among the available software for e-recruitment. It also involves sourcing for software that will make the e-recruitment package to be user friendly especially in a society like Nigeria where the availability of facilities is an issue.

According to Mathis and Jackson (2006), the Application Tracking Systems do more than compiling incoming web-based resumes and track applicants during the hiring process. In addition, they also help in knocking out applicants who do not meet the minimum job requirements. They are also used in testing and screening applicants online, and finally, they also help to discover 'hidden talents from the applicants' pool. They therefore offer a number of benefits to users.

This finding aligns with the view of Awe, (2010), who had earlier on argued that software constitutes the heart of effective utilisation of ICT and that its unavailability in Nigeria poses a threat to effective utilisation. Awe (2010) argues further that any nation that values its sovereignty must take software serious. Software opportunities in Nigeria are very poor not being fully exploited to unleash the potentials of the Nigerian people and the Nigerian nation. Realistic open source strategies are not promoted. Local developers also face challenges of harsh business environment, ignorance and patronage. Existing software promotion policies have not made much impact. For the local software industry to grow Nigeria is not seen as aggressively promoting, rewarding and encouraging

local software developers and entrepreneurs. There are no practical initiatives to encourage the mass usage of indigenous software and the stimulation of demand locally and globally for local software products and services. The implication of the above is that the level of utilisation of ICT is not effective, thus hindering active competition in the global super-highways.

On technology dependence, majority of the respondents were in support of the view that it is affecting the level of utilisation of ICT in Nigeria. This finding rubs off on the earlier finding concerning the level of internet penetration and availability of software discussed above, and they all confirm scholars' view that depending on imported technology will continue to be a challenge to this nation especially in the context of using technology for economic activities (Nduka, 2006). There is some local production and improvisation but the bulk of ICTs are imported as finished products. This creates a technological dependency for the actual technologies and services. A principal actor in the sector in Nigeria (quoted in Obong, 2007) said "undue reliance on foreign companies" severely "upsets the successful implementation of the (digital) revolution." Another ICT actor (also quoted in Obong, 2007) in the Federal Ministry of Information in Abuja, the federal capital, agreed that the lack of basic infrastructure as well as the over-reliance on imports negatively impacts on the country's ability to achieve its ICT-related goals. But this does not have to be so, she argued, because Nigeria has the capacity to locally produce ICTs.

A respondent explains the situation more succinctly as follows:

> Installing and maintaining of computer equipment and software are serious problems in Nigeria when you consider the low level of maintenance culture. This equipment will just function when newly installed and thereafter abandoned when they need to be upgraded.
> **(IDI/Male HR Practitioner/Otta/2012)**

In another way, a respondent describes the situation thus:

> As at today, we still depend largely on foreign technology. Nigeria has not demonstrated that she can develop her own technology or even maintain the ones imported. That is why our markets are filled with goods, both new and fairly used imported from Asia and other countries. This dependence negatively affects the rate of development.
> **(IDI/Male HR Practitioner/Ibadan/2012)**

These findings and views are confirmations of the argument of the World system theorists on level of technological development of societies but what is of concern is that with the abundant natural and human resources in Nigeria and having gained independence over 50 years ago, the nation ought to have moved from the periphery to the core zone as classified by Wallerstein (1974). Depending on foreign technology may continue to affect the nation's socio-economic development.

Majority of the respondents ((50.3%) did not agree that quota system and other political factors could affect the level of utilisation of ICT for staff recruitment and selection; however, 33.1% believed that quota system and other political factors were affecting the use of ICT. Cross tabulating this finding with the socio-economic characteristics of respondent, it became clearer that majority of those who agreed were from the public service. This tends to imply that fully adopting the use of ICT for staff recruitment may not be the preferred method by HR practitioners in the public service where decisions on whom to employ may be influenced by the need to fill a quota, or other political factors. This finding supports the argument of Inyang (2001) who believes that HR practices in the public service need to be harmonized with the private sector and that, factors of ethnicity, religion, politics and quota system should be relegated to the background especially in the conduct of public and business activities.

The study also sought to know if corruption could be a factor affecting the utilisation of ICT in the country. Majority of the respondents (93.9%) indicated 'strongly agreed' and 'agreed' and this was buttressed by a respondent during an IDI session. He speaks thus:

> Until Nigerian leadership is able to tame the problem of corruption, we will continue to sing the same song. How can the ICT sector grow if like any other sector, it is infected with the bug of corruption? The financial resources for such growth never get to the target, but are diverted into private purses.
> **(IDI/Male HR Practitioner/Lagos/2012)**

This finding supports the views in all discourses where corruption is seen as a hydra headed animal and a cankerworm which has not only eaten deep into the fabric of the nation but has also accounted greatly for the very low level of the socio-economic development of the nation (Nduka, 2006; Offiong, 2007). Corruption therefore is an issue that needs to be urgently addressed in Nigeria.

In summary, this section of the work has been able to identify some of the perceived infrastructural factors affecting the level of utilisation of ICT for staff recruitment and selection in particular and other economic activities in general in Nigeria.

Table 4.6.2: Frequency Distribution of Respondents by perceived organisational factors affecting Utilisation of ICT for Staff Recruitment

Items	Strongly Agreed		Agreed		Undecided		Disagreed		Strongly Disagreed	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Organisation's financial capability	461	44.7	417	40.4	67	6.5	66	6.4	21	2.0
Frequency of recruitment in organisations	384	37.2	374	36.2	44	4.3	169	16.4	61	5.9
Non-Integration of e-recruitment with HR system	38	3.7	187	18.1	21	2.0	420	40.7	366	35.5
Inability to tailor e-recruitment to organisational needs	130	12.6	370	35.9	207	20	194	18.8	131	12.7
Size of organisations	318	30.8	378	36.6	37	3.6	207	20.1	92	8.9
Location of organisation	245	23.7	554	53.7	38	3.7	100	9.7	95	9.2
Status of HR functions in organisations	318	30.8	456	44.2	56	5.4	122	11.8	80	7.8

The table above presents data in respect of organisational factors that may affect the utilisation of ICT for staff recruitment, selection and placement in south-west Nigeria.

On the financial capability of organisations, 44.7% of the respondents indicated 'strongly agree' while 40.4% indicated 'agreed' as a factor that affects the level of utilisation of ICT for staff recruitment. These therefore constitute the majority views as against less than 10% who indicated otherwise. This finding implies that the financial cost of acquisition seems to outweigh the possible benefits derivable from the use of modern ICT for the recruitment functions. This finding supports Jagboro, (2003) and Imonhopi, (2010) who had earlier argued

that a major factor affecting the level of utilisation of ICT in Nigeria is the financial ability of organisations. According to them, ICT is capital intensive especially when one considers the cost of acquiring tools such as computer, modem, and an account with an Internet Service provider (ISP) and so on. With limited resources, coupled with high cost of production and inflationary rate, it becomes very difficult especially for industrial organisations to bring about an effective internet connection. Accessing capital for expansion and rate of inflation, constant change in economic policies are all big challenges transforming into low level of organisational effectiveness. In the IT and Telecommunications sector, a dominant percentage of the hardware and software needed for carrying on the business have to be imported. As such, the more the Naira depreciates, the more expensive these things become in terms of Naira Value. In fact the heart of some incumbent operators in the sector, who were able to finance their equipment in terms of foreign currency denominated loans, skips a beat every time the national currency experiences a major plunge. With these problems, most organisations in Nigeria are not able to expand, assess infrastructure and latest technology and enjoy the high degree of communication collaboration, resource sharing and other global benefits derivable from the use of ICT.

With regard to frequency of recruitment in organisations, majority of the respondents (totaling 73.4%) also indicated that this may affect the utilisation of ICT for staff recruitment in organisations. The probable logic behind this is that when recruitment, selections and placement are not conducted on regular basis, it will amount to waste of resources to invest on acquisition of certain ICT facilities and software. Reasons for low frequency of staff recruitment, selection and placement according to (Martinsons, 1996; Storey, 2007) include low staff turnover, increasing use of casualisation and contract staff, nature of the business among others. In support of the above, a respondent during an IDI session explained that more organisations are capitalizing upon the unemployment situation in the country by using more casual workers who are recruited without any formal interviews. He speaks further:

> People ready to work are waiting there at the gate, and you don't need any formal interview to employ them as casual workers. Also, some organisations depend on contingent workers who are needed just for a particular season of the year. All these affect the frequency of formal recruitment of workers.
> **(IDI/Male HR Practitioner/Ado Ekiti/2012)**

However, a 51 year old male HR practitioner in Lagos disagreed with the above during an IDI session, believing that the use of emerging ICT is a reflection of adjusting to the changes in the society. His words:

> 'Not embarking on acquisition of modern ICT tools is an indication of unwillingness to adapt to change. These tools provide more efficient services and the benefits they provide must be taken above other factors, even where recruitment is not conducted on regular basis.'
> **(IDI/Male HR Practitioner/Lagos/2012)**

On integration of e-recruitment with HR systems in organisations, majority of the respondents did not agree that integration of e-recruitment with HR systems could affect the utilisation of ICT for staff recruitment. This is evidenced by the analysis of the responses where 40.7% and 35.5% indicated 'disagree' and 'strongly disagree' respectively. This finding is very revealing and falls short of what scholars see as an emerging trend in HR systems (CIPD, 2005; Depardieu & Islam, 2008; Dessler, 2008). The finding also falls short of the findings of Reilly and Barber (2006) in their study in Ireland where e-recruitment was seen as having been fully integrated into the entire HR system. According to Mathis and Jackson (2006), elements in such integrated solution include: a requisition management system which facilitates requisition creation, routing, approval and posting of job opening; a recruiting solution which includes job advertisement, recruitment marketing, applicant tracking and online recruitment vendor management to increase and improve applicant pool quality; screening service such as background checks, skills and behavioural assessment services; and hiring management which involves software to capture and manage candidate information while providing standard workflow practices.

Furthermore, such integration involves creating a consonance with other HR functions and networking the process to the user departments and the chief executive officers. This will enable these officers to monitor the recruitment process, know the status of applicants as well as the situation report when recruitment and selection exercises are taking place. The process will also serve as check on the HR practitioners thereby making it difficult to introduce biases into the exercise.

On the question of whether difficulty or inability to tailor e-recruitment to meet the particular needs of recruitment process constitutes a factor affecting utilisation of ICT for staff recruitment, majority (48.5%) of the respondents were in support while others did not agree. As many as 20% of the respondents were undecided, which suggests that probably they did not have an understanding of what the process involves. The majority view however suggests that the respondents actually knew what tailoring e-recruitment to meet the needs of individual organisation implies. The increasing utilisation of ICT for staff recruitment is an aspect of the Human Resource Information System (HRIS) which involves the use of ICT not just to cover the recruitment cycle but more widely to embrace the whole HR processes in such a way that the HR processes will be integrated and together, tailored and aligned with the corporate structure for strategic reasons. This way the Chief Executive and top level officers could be linked together to play the role of participant observers, but without tampering or disturbing the HR processes. A major reason for this is that since HR activities cut across all departments, there is need to ensure best practices which will translate to effective management of the human resources. It also provides opportunity to transform HR function into a customer-focused and responsive function and regular management information (Ensher, 2002; Kettley & Reilly, 2003; Storey, 2007).

On whether the size and location of organisations could be factors affecting the utilisation of ICT for staff recruitment, selection and placement, majority of the respondents (23.7% and 53.7%) indicated ‘strongly agree’ and ‘agree’ respectively. This suggests that small organisations and those in rural or

remote areas may decide not to embark on adoption of ICT for staff recruitment. The size and location of an organisation will likely have an effect on the frequency of its recruitment as well as on the financial capability to embark on acquisition of modern tools. This finding supports the view of Onoge, (1991) who also concluded that the size of organisation could be a factor accounting for the level of technology adopted in organisations. A 45 year old female recruiter, during an IDI session, explained further to support this finding. Her words:

> Organisations in rural areas may likely not adopt e-recruitment because their catchment areas are the immediate local environments. Why then throwing wide the recruitment net when all they need is within the locality?
> **(IDI/Female HR Practitioner/Lagos/2012)**

This statement is quite illuminating. If actually organisations can get their manpower within the local environment, spending the minimum cost appears a more reasonable option for them. Also, candidates from distant locations may not be willing to reside in the rural areas if eventually they are recruited because of the push and pull factors identified with residents in urban centres by demographers. However, another respondent disagreed with the above, claiming that the location of organisations should not be a barrier to utilisation of ICT for staff recruitment. He speaks thus:

> The location of organisations has nothing to do with the adoption of technology for operations. Irrespective of the location, technology should be adopted to enhance greater efficiency
> **(IDI/Male HR Practitioner/Akure/2012)**

The above suggests that greater emphasis should be placed on the operational efficiency of organisation as a major factor for the decision to adopt technology, rather than any other factor such as location or size of organisations.

On whether the status of HR department/functions could be a factor affecting the level of usage of ICT for staff recruitment, majority (75%) of the respondents indicated that it does. Where the HR is seen as a strategic partner in

the organisation, the respect it will command may translate to provision of modern facilities for its operation. In organisations like this, the HR specialist will likely be a member of the management team and this will provide an opportunity to have a say in organisational resource control and acquisition. However, where the HR is seen as support function or mere staff manager, this low status may affect the willingness to acquire and install sophisticated tools for its operations. This is supported by a respondent during an IDI session:

> HR Department is still facing status problems in many Nigerian organisations. This has implications for their working tools and the best practices in HR. The CIPMN is working hard to promote the status of HR practices and this partly accounts for its legal instrument in ensuring all practitioners are duly registered to qualify them for practice.
> **(IDI/Male HR Practitioner/Ibadan/2012)**

As argued by Snell, et al (2002), where HR occupies a high status in the hierarchy of an organisation, HR can meet the challenge of simultaneously becoming more strategic, flexible, cost efficient and customer oriented by leveraging information technology. This is supported further by Oribabor (2000), Fajana (2002) and the Singaporean Ministry of Manpower (2003) that HR can be used to signal a change towards an organisational culture that promotes initiative, self reliance and improved internal service standards. Also, Ogunbameru (2008) argues that with the growing importance of Human Resource Management to the success of the firm, Human Resource Managers and their departments are getting more involved in the organisation and establishing a partnership with line managers. He argues further that they are getting to know the needs of the business, where it is going, where it should be going and are helping it to get there. Omolawal & Joshua (2011) argue that changes in the global world, promoted by the driving forces of globalisation such as technology, cyber-revolution, competition and spirit of capitalism have all combined to necessitate a change from being a service support to strategic business partner. They have also led to changes in the HR institutional functions and mode of carrying out the functions. As a consequence, they and their department are playing many more

roles: linking human resource management to the business role and are now playing enabler role, monitoring role, innovative role and adaptor role.

Rogers (2003) in his analysis of diffusion of innovation explains that authority-innovation decision occurs when the adoption of an innovation has been made by very few individuals with high position of authority and power within an organisation. When HR practitioners are seen as strategic partners, they become part of the authority holders and it becomes easier to adopt the use of ICT for HR functions and this will in no doubt promote the level of their functional efficiency. Therefore, the status of HR functions in organisation may affect the level of utilisation of ICT for staff recruitment, selection and placement.

During an interview session with a respondent, he indicated that the nature of employment offered to applicants is a possible factor affecting the level of utilisation of ICT for staff recruitment. He explained that in the contemporary world, many employers in Nigeria and other parts of the world now prefer casual workers and temporary/contract workers. These categories of people do not need much effort in their recruitment because they are not always taken through the processes of selection which may warrant the use of technology. He speaks further as follows:

> Casual and temporary workers do not in most cases go through interviews and other selection techniques. Since they are readily available at the gates and are largely unsolicited, employers simply take them in without formal procedures.
> **(IDI/Male HR Practitioner/Lagos/2012)**

This finding therefore points out another negative practice associated with the emerging employment patterns in the modern world as argued by scholars such as Okougbo (2004) and Omolawal & Joshua (2011).

In summary, this subsection has identified certain organisational factors that may affect the level of utilisation of ICT for staff recruitment and selection. These factors rub off on each other and when taken together, they are real eye openers on the factors affecting the level of adoption of ICT for this

organisational function. If HR practitioners must improve the level of their adoption of ICT for their staff recruitment functions, they must be willing to address both the infrastructural and organisational challenges as discussed above.

Further more, suggestions offered by respondents as ways of improving the level of utilisation of ICT for staff recruitment and selection include:

Government should make more favourable economic policy concerning the importation of ICT tools;

Computer education should be made compulsory for students at all levels and computer facilities be provided in public schools especially at the primary and secondary levels.

Government should design more viable policy on ICT and ensure full implementation and regular evaluation of such policies;

There should be greater private sector participation in ICT policy and the business environment be made more conducive; let there be improvement in the provision of basic infrastructure especially power supply.

These findings support the discussions on the world system theory that explain less adoption of technology among the countries constituting the periphery. Nigeria and other less developing countries are within the periphery and their ability to enjoy the technology transferred from the core could be traced to some of the challenges identified in this study.

4.7 Test of Hypotheses

Hypothesis 1:

H_0 There is a significant relationship between respondents' sector and utilisation of ICT for staff recruitment functions.

H_1 There is no significant relationship between respondents' sector and utilisation of ICT for staff recruitment functions.

Table 4.7.1: Distribution of responses on relationship between respondents sectors and level of utilisation of ICT for Staff recruitment functions

Variables	**ICT Utilisation Level**			
Sector	**Low**	**Moderate**	**High**	**Total**
Private	335 (33.1%)	520 (51.4%	43 (4.3%	898 (88.8%)
Public	76 (7.5%)	37 (3.7%)	0 (0%)	113 (11.2%)
Total	411 (40.7%)	557 (55.1%)	43 (4.3%)	1011 (100)

X^2 c = 39.095; X^2 t = 5.991; DF = 2; P< 0.05

The result in the table above indicates that there is significant relationship between the respondents' sector and ICT utilisation. The chi square result shows, at the degree of freedom of 2 and P value of 0.05, X^2 c is greater than X^2 t. Also, the correlation analysis shows that there is significant relationship at 0.01 level (R=1.000 (.083). The inference that can be drawn is that the level of utilisation of ICT in the private sector is different from that of the public sector, that is, it is higher in the private sector than in the public sector and this shows an area of difference between the two sectors. This finding therefore supports literature because scholars such as Onoge, (1991), Inyang, (2001) had argued that the level of efficiency and service delivery is higher in the private sector than in the public sector as a result of the factors which include bureaucratic arrangement, adoption of technology, workers' orientation to work, training and development among other factors.

Hypothesis 2:

H_0 There is a significant relationship between respondents' sector and benefits derivable from utilisation of ICT for staff recruitment functions.

H_1 There is no significant relationship between respondents' sector and benefits derivable from utilisation of ICT for staff recruitment functions.

Table 4.7.2: Distribution of responses on relationship between respondents' sectors and benefits derivable from utilisation of ICT

Variables	ICT Benefits		
Sector	**Low**	**High**	**Total**
Private	314 (31.6%)	568 (57.2%)	882 (88.6%)
Public	48 (4.8%)	63 (6.3%)	111 (11.2%)

X^2 c = 2.486; X^2 t = 3.841; DF = 1; P> 0.05

The results in the table above show that there is no significant relationship between the respondents' sector and ICT benefits derivable, because, with the chi square test at the degree of freedom of 2 and level of significance of 0.05, X^2 t is greater than X^2 c. The implication of this is that no matter the sector, the benefits of usage of ICT for staff recruitment and selection are the same. This finding supports literature on the benefits derivable from the use of ICT for staff recruitment functions. For example, scholars such as Aitchison (2006) in his study of e-recruitment in London, have argued that by posting jobs on the website, interested applicants anywhere in the world are capable of accessing it, as long as there is internet connectivity, even when they do not have a prior knowledge of the recruiter's website. Thus the importance of the theory of business innovation becomes pronounced through this finding. In other words, e-recruitment is a business innovation adopted to promote efficiency of service irrespective of the sector of users. If a difference is now discovered in the level of adoption of e-recruitment in both private and public sectors, such could be accounted for, by other factors already identified in a previous section. HR practitioners, irrespective of their sectors, therefore need to adopt a higher level of utilisation of ICT so as to enjoy the inherent benefits in them and to enhance their level of functional efficiency.

Hypothesis 3:

H_0 There is a significant relationship between location of organisations and adoption of e-recruitment

H_1 There is no significant relationship between location of organisations and adoption of e-recruitment

Table 4.7.3: Distribution of responses on relationship between location of organisations and adoption of e-recruitment

Variables	**Adoption of e-recruitment**		
Location of organisation	**No**	**Yes**	**Total**
Lagos	35 (3.5%)	307 (30.4%)	342 (33.9%)
Ogun	17 (1.7%)	259 (25.6%)	276 (27.3%)
Oyo	15 (1.5%)	156 (15.4%)	171 (16.9%)
Osun	8 (0.8%)	92 (9.1%)	100 (9.9%)
Ondo	7 (0.7%)	63 (6.2%)	70 (6.9%)
Ekiti	4 (0.4%)	48 (4.7%)	52 (5.1%)
Total	86 (8.5%)	925 (91.5%)	1011 (100%)

$X^2t = 3.558$, $X^2c = 11.070$, DF = 5, $P< 0.05$

The result on the above table shows that there is significant relationship between the location of respondents and adoption of e-recruitment for staff recruitment functions, because with the chi square test, at the degree of freedom of 5 and level of significance of 0.05, X^2t is less than X^2c. The correlation analysis (R=1.000 (.21)) also shows a relationship between location of respondents and adoption of e-recruitment. The implication of this is that location of organisations is a contributory factor responsible for low adoption of ICT for staff recruitment, selection and placement. This supports an earlier finding and the views of Onoge (1991) that locations of organisations contribute to the level of adoption of ICT for staff recruitment, selection and placement. Organisations sited in remote areas may not likely invest on ICT tools for their staff recruitment functions because the internet penetration may be low and because the local environment may constitute their major catchment areas in term of human

resource needs. This could also be explained in the context of the world system theory that countries located in the periphery have lower level of technology adoption and utilisation than countries in the core zone. Similarly, organisations in rural areas will also likely have lower level of technology adoption.

4.8 THEORETICAL DISCUSSION OF FINDINGS

Three theories were adopted as the framework to guide this study. These are: world system theory, business innovation theory and Rogers' diffusion of innovation theory.

With respect to the level of utilisation of ICT for staff recruitment in south-west Nigeria, this study has established that the aggregate level of utilisation was low. One of the perceived factors affecting the low level of utilisation was technology dependence. Going by the analysis of the world system theory, Nigeria is classified as belonging to the periphery, which comprises nations characterised by low technology, low level of development and low standard of living. For such countries to develop, they need to rely on the 'core' countries that are more technologically advanced. Awe (2010) had argued that there is a gradual growth in the availability and access to ICT tools in Nigeria with the advent of liberalization and the availability of cheap imports from Asia and the growth in the second hand PC market, but Obong (2007) counters the argument by saying that undue dependence on foreign imports will continue to upset the successful implementation of any digital revolution in Nigeria and the achievement of ICT related goals. This finding therefore finds support in the world system theory.

Also, findings from this study showed that HR practitioners were aware of the influence of the utilisation of ICT for staff recruitment on the quality of the staff recruited, as well as the benefits derivable and disadvantages associated with the ICT gadgets. These findings provided justification for the adoption of the business innovation theory for this study. According to the business innovation theory, an innovation is the use of new technological and business related knowledge to offer new products or services that customers want (Afua, 2003).

The innovation in using the emerging ICT tools for staff recruitment, selection and placement is incremental in the sense that it preserves the existing technological knowledge and the business model inherent in staff recruitment as a way of acquiring workers needed to achieve the goals of organisations. The essential dimensions of the technological knowledge of e-recruitment are classified into three areas namely: IT-infrastructure, data analysis and service. E-recruitment is essentially introduced to improve the recruitment functions in terms of cost, ease, accuracy, speed, convenience and other benefits. When organisations adopt e-recruitment systems, it is usually with a view to enjoying the benefits associated with it. This therefore justifies the adoption of the business innovation theory for this study.

Moreover, Rogers (2003) explains that innovations are often adopted by organisations through two types of innovation decisions: collective decisions and authority innovation decisions. E-recruitment system is often adopted through the latter when the decision on adoption is made by a few individuals with high positions of power within an organisation. These individuals are referred to as the management team or board of directors. Such decisions are made with a view to improving the organisational processes for higher profitability and organisational survival. Such decisions only become possible after adequate knowledge of the processes Rogers identifies. These are: knowledge, persuasion, decision, implementation and confirmation. Findings from this study showed that HR practitioners were fully aware and persuaded of the availability of these modern ICT tools for the staff recruitment functions, their eventual decision to adopt them or otherwise was as a result of the infrastructural and organisational factors identified in the course of the study. The implication of this low level of adoption of ICT for staff recruitment is that the benefits derivable may not be enjoyed fully by HR practitioners in the country.

Also, findings from the study especially on the adoption of e-mail and GSM for conducting certain aspects of staff recruitment exercises were consistent with the findings of Sesan (2006), Imhonopi (2010) and Olanrewaju (2011) who had carried out studies on the use of certain aspects of ICT for various areas of

human endeavours in Nigeria and established similar findings. Sesan (2006) had established that Civil Societies in Nigeria were adopting the use of mobile phones, e-mail and organisational websites for various security operations and these were promoting efficiencies. Similarly, Imhonopi (2010) in his doctoral work, established that internet utilisation had improved the quality of teaching and research outputs among academic staff of selected Universities in south-west Nigeria, and that most of the respondents were using the internet services to meet up with their various institutional requirements on career advancement. Olanrewaju (2010), also in his doctoral study on the adoption, influence and social impacts of new ICT among healthcare workers and facilities in Ibadan municipal, established that the aggregate adoption rate of GSM among the study population was high and thus promoting greater efficiency in the medical profession. Theses findings are confirmation of the position of NCC (2011) that telecommunication services are receiving rapid diffusion in Nigeria irrespective of country characteristics, and that such diffusion is not limited to the large towns and cities alone, but as well as the rural areas of the country. This could therefore be linked to the validity of Rogers' diffusion of innovation theory based on the variables relating to the intrinsic characteristics of innovations, diffusion patterns, costs and benefits, all of which facilitate technology diffusion patterns. Thus in all, the findings from the study validate the theoretical framework adopted for the study.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1: Summary

It was indicated in the previous chapters of this study that the emerging Information and Communication Technology has not only challenged the traditional process of human resources management, but that they have particularly revolutionised the core HR function of recruitment, selection and placement of workers all over the world. Today, technological tools such as the Computer, Internet, Websites, Telephone/Cell phone, E-mail, Video-conferencing, and so on have become important tools in the conduct of staff recruitment, selection and placement. The process of using the more sophisticated aspects of modern information and communication tools for recruitment is referred to as E-recruitment.

Empirical studies mostly in more industrialised societies show that the massive growth of information and communication technologies has helped business organisations in more developed countries to enhance increased productivity and business growth through cost saving, simplification of the processes and increase in the speed at which organisational functions such as staff recruitments are conducted, thereby enhancing their efficiencies. However, same can not really be said about Nigerian business organisations, and this suggests that Nigeria has not yet begun to reap the abundant benefits of the global information society and the information economy in an area such as e-recruitment. This study was therefore designed to investigate the utilisation of ICT for Staff Recruitment, Selection and placement among HR Practitioners in S/W Nigeria. The specific objectives included: to examine the level of utilisation of ICT for staff recruitment, selection and placement; to examine the influence of utilisation of ICT for staff recruitment on the quality of staff recruited; to examine the benefits derivable by HR practitioners from utilisation of ICT for staff recruitment and selection in S/W Nigeria; to investigate the challenges faced by HR practitioners in utilisation of ICT for staff recruitment and selection in S/W Nigeria; and to

investigate the perceived factors which affect the utilisation of ICT for staff recruitment and selection among HR practitioners in S/W Nigeria.

The study carried out literature review under various subheadings and was anchored on three theoretical frameworks namely: the world system theory, the theory of business innovation and Rogers' diffusion of innovation theory. The study was conducted among 1052 Human Resource Practitioners in south-west Nigeria, and total enumeration sampling method was adopted to identify and locate HR practitioners within the study location as at the study time framework. The primary data were collected with the aid of structured questionnaire and In-depth-Interviews, while data generated were analyzed using both quantitative and qualitative techniques. Measurement of the level of utilisation of ICT was carried out using Reilly and Barber's (2006) model which classifies the utilisation level into three categories namely low, moderate and high. Findings from the study are summarized thus:

With respect to objective one of the study, the study established that the level of utilisation of ICT for staff recruitment was low among HR practitioners in South-west Nigeria. On specific variables, using the more sophisticated aspects of ICT (otherwise known as e-recruitment), the study found out that as many as 89.7% claimed to engage in e-recruitment, out of which 81.2% had their own websites. Most of the respondents, (86.9%) advertised their vacancies online. A total of 67% of the respondents requested applicants to apply online. However, as many as 84.9% did not respond to further information or applicants online, and 91.6% did not track sources of applications. A total of 85.5% did not do initial screening of applications online. Furthermore, majority of the respondents did not use online test at assessment stage (88.4%); did not conduct further interview online (88.4%); did not conduct reference checks online (91.2%). Also, Most of the respondents did not offer jobs online (91.2%); did not request applicants to accept offer online (91.2%) and did not build data bases for future recruitment as evidenced by 76.9%. Among the total respondents (925) who adopted e-recruitment, 57.3% of them did not make their online recruitment to cover all

positions; 55.5% did not make it to cover all cadres and only 5.2% asked applicants to buy scratch cards. The number of those who requested applicants to buy scratch cards to enable them apply was seen as significant enough and was given a special attention during the discussion of the findings. The practice was seen as unethical and a way of exploiting job applicants. It could therefore be seen that the level of utilisation of ICT was only high at the front end of the recruitment exercise, that is, the stages of job advertisement and collection of applications. Beyond these, and in subsequent stages, the level of adoption became lower.

Using the less sophisticated aspects of ICT such as the computer, intranet for staff recruitment, the study found out a higher level of utilisation among respondents. As many as 70.5% sorted their applications with the aid of the computer while majority have adopted the use of e-mail and mobile phones to communicate with applicants, although majority still largely conducted their written tests manually, further interviews were conducted through physical contacts. Job offers and reference checks were still largely done physically.

On the level of utilisation calculated with the use of relevant questions on the questionnaire, the study found that for e-recruitment, the utilisation level was lower as many as 68% were scored low, 24% were scored moderate while 8% were scored high in terms of utilisation. On the use of ICT facilities without internet, the finding showed a higher level of utilisation as a total of 26% were scored low, 59% were scored moderate while 15% were scored high. However, on the aggregate, the level of utilisation of ICT for staff recruitment, selection and placement was low (47%) among majority of the respondents in the study location within the study time frame.

On objective two which was on the influence of utilisation of ICT for staff recruitment and selection on the quality of staff recruited, the study found out that the utilisation of ICT for staff recruitment, selection and placement was capable of generating a higher quality of workers. Using specific variables, the study

found out that e-recruitment generates workers with better computer knowledge and skill as evidenced by 56.9% of the respondents; it also showed that it led to generation of workers with wider experience and exposure as indicated by 54.9% of the respondents. The study also found out that it has led to increase in workers' diversities in terms of culture, ethnicity and other background as evidenced by 52.9% of the respondents, and that it led to recruitment of multi-functional staff (54.3%). However the study also found out that those recruited through the use of e-recruitment may have higher propensity to leave for other jobs. The percentage of those who indicated this was 22.5% but it was considered significant enough for the conclusion drawn. In all, E-recruitment was seen as having positive influence on the quality of workers in the contemporary world.

On objective three of this study, the study found out that HR practitioners who participated in this study realized the benefits derivable from the use of ICT, especially the more sophisticated aspects, for staff recruitment and selection. They agreed that the benefits include cost saving, speed in the process, simplification of the process, greater accuracy, reduction in human effort, time and energy, reduction in human traffic to recruiters' offices, reduced pressure on recruiters, increasing level of computer literacy especially among stakeholders in recruitment, 24/7 access to collection of resumes, wider range of applications, effective communication with applicants, reduction in volume of hardcopies, allows proper documentation and keeping of applicants' records, boosts corporate image and generally improving recruitment processes. The study however found out that e-recruitment does not reduce pressure on HR practitioners as applicants were seen as flooding recruiters' offices to do a follow up on their application.

This situation defeats one of the purposes of e-recruitment and is seen as a peculiar situation in Nigeria and other African countries. The study also found out that requesting applicants to buy scratch cards was not in any way to defray recruitment costs but to exploit vulnerable and desperate job seekers and this suggested the pervasiveness of corruption in the country. Qualitative findings also revealed that the utilisation of ICT for staff recruitment functions support the

quantitative findings and in addition, bridges the recruitment cycle thereby bringing greater efficiency to staff recruitment functions in the contemporary world.

With regard to objective four, the study identified challenges associated with using the new ICT tools to conduct staff recruitment and selection. Some of the challenges included: numerous applications to be sorted out and analyzed thereby creating additional burdens for recruiters; cost of procuring ICT tools, prevention of face to face interaction between applicants and recruiters; prevention of physical assessment of applicants; reduction in chances of corporate responsibility especially to the host communities; putting non-computer literates at a disadvantage, putting HR practitioners on the edge as a result of the need to have and update their computer skill and knowledge regularly, low internet penetration, network failure, and maintenance and upgrading of software to guide against system failure in the course of recruitment and selection. However, the study found out that the non-installation of relevant software accounted for the main disadvantage associated with the use of ICT for staff recruitment. For example, if HR practitioners go a step further to install the software for sorting their numerous applications, then the process will become better and the sorting of the numerous applications will no longer be a disadvantage associated with the use of ICT.

On objective five, the study also identified two categories of factors perceived as affecting the level of utilisation of ICT for staff recruitment functions. These factors were infrastructural and organisational factors. The infrastructural factors included government's policies, low level of computer literacy, technology dependence, low internet penetration, quota system and political factors, availability of software and public utilities such as power supply. Organisational factors include organisation's financial capability, frequency of recruitment in organisation, size of organisation, location of organisation and status of HR department in organisations. Both factors were seen as hindering effective utilisation of ICT in the country.

5.2: Conclusion

From the study, it could be seen that a significant proportion of HR practitioners in South-west Nigeria were using the Internet to facilitate their recruitment process in some way, but many were using e-enabled processes alongside traditional methods rather than relying solely on e-recruitment. The most significant progress has been made in using online methodologies at the front end of the recruitment process, in terms of advertising posts and receiving application. On the other hand, a very scanty number of HR practitioners were using Internet-based technology to track applications and communicate with and manage relationships with applicants. Also, the use of online tools for screening and assessing candidates was less prevalent among the practitioners in the study location. Using online methods for making checking references, making job offers, and accepting jobs online were also very poor as the trend seems to be only within a few service organisations. When it comes to utilisation of the computer and other ICT tools without internet connectivity, the study found out that the situation was a bit better, as most respondents were using the computer to sort, analyze and keep records of the recruitment and selection processes. The use of mobile phones and e-mail especially in communicating with applicants had also dramatically improved.

Based on the above, although online recruitment appears not to have become a significant part of the recruitment strategy for a wide range of HR practitioners in S/W Nigeria, compared with the situation in the more developed countries of the world, but HR practitioners in S/W Nigeria were fully aware of the emerging ICT tools and realized the benefits derivable, and this suggests that given proper landscape in terms of cost, availability of tools and software, and internet penetration, they will be willing to utilise the available ICT tools and techniques for staff recruitment, selection and placement and online recruitment will become an important part of the recruitment strategy for an increasing number of HR practitioners in the country.

5.3: Policy Recommendations

5.3.1 Policy Recommendations for HR Practitioners

1 HR practitioners must be prepared to invest in ICT tools and skills. Such tools include procurement of relevant facilities, software, while the training and development processes must take adequate care of ICT skill and knowledge. There is also the need to constantly upgrade such tools and skills as newer technologies emerge. In a related manner, they must have an understanding of the Internet access and proficiency levels amongst target groups and stakeholders in staff recruitment, selection and placement.

2. HR Practitioners are challenged to improve on their professionalism by integrating e-recruitment with the recruitment, selection and placement processes and the general HR functions in their various organisations; this will promote efficiency of service and effective communication during, and after recruitment and selection exercises.

3. HR practitioners are enjoined to build knowledge and understanding of the technology options available. Nigerian ICT market is filled with technologies diffused from many countries and these technologies have variations and peculiarities, although they provide similar services. HR practitioners therefore need to understand the various options available and choose the ones that will suit their individual requirements. The option adopted should also ensure candidate- and user-friendly interfaces on their systems

4. HR practitioners are also challenged to improve on the quality of their service delivery so as to enhance the status of HR practices in their various organisations. This involves transforming the HR functions from administrative roles and staff managers to strategic partners. This will increase the level of recognition accorded them and enhance the quality of their working tools including the emerging ICT.

5 HR practitioners are also enjoined to patronize the emerging Computer-Based-Centres (CBT) for parts of their recruitment exercises. Much as they may not be able to provide computer facilities for such written tests, they can avail themselves of the use of the centres thereby promoting the efficiency of service and enjoying the benefits inherent in such facilities.

6. There is need for HR Practitioners to integrate both online and offline recruitment services so that even without using the more sophisticated ICT tools, a higher level of efficiency could still be ensured and HR practitioners must also be ready to tailor the e-recruitment system to meet the particular needs of the recruitment process in their respective organisations.

5.3.2 Policy Recommendations for Chartered Institute of Personnel Management of Nigeria

1. As the only body licensed to develop, regulate and promote the art of human resource management in the country, the CIPMN needs to make itself more relevant in the country, especially by facilitating the on-going process of issuing practitioners' license to HR practitioners in both private and public sectors. This will promote greater level of professionalism of HR practice in the country and put checks on practitioners.
2. Also, the body, in conjunction with relevant government agencies, should intensify efforts against HR practices of exploiting job seekers manifesting in sale of scratch cards and payment to have access to job portals. These have been identified as ways of exploiting job seekers rather than being ways of defraying recruitment costs.

5.3.3: Policy Recommendations for the Government

1. There is need for the federal government to improve the ICT landscape in the country. Effective utilisation of ICT for all business and economic functions depends on a smooth landscape including conducive environment where all stakeholders will be free and have the desired infrastructure to work with. In the

developing economies such as Nigeria, the status of the state can be viewed as a mega force; it is the strategic gatekeeper determining who has access to key resources and whose actions affect all others or stakeholders in the business of government and government of business. It is therefore the role of the government to ensure availability of structures and provision of access to such structures for the overall development of the society. Such improvement should be in the following areas: Putting in place well designed ICT policy that will promote the availability and sustainability of adoption of ICT; Putting in place more effective structures for effective implementation, monitoring and evaluation of these policies for their success.

2. There is also need to encourage local investors to design software that will be suitable and affordable for local consumption especially as they apply to ICT. The availability of relevant software will promote the level of usage and adoption of ICT for all facets of personal and business activities.

3 The internet penetration of the country also needs to be addressed. The current penetration is not good enough to promote efficient usage of the emerging ICT. This has to be done through the expansion in broadband width and current broadband subscription of 15,311 to a higher level. This will afford the Internet Service Providers the opportunity to improve on their generating and distribution capacities. The private sector needs to be fully encouraged to be willing and ready to invest in this area.

4. There is need for government to put more efforts at combating the issue of corruption in the country. The battle should go further to address shortcomings especially on the part of regulatory agencies responsible for ensuring the standard and quality of manufactured products. In particular, Nigerian market is filled with fake and substandard manufactured products including ICT tools. The flooding of the market with fairly used items is also worrisome. Most of these products were imported from Asia and dumped into the Nigerian market. For the ICT market to grow therefore there is the need for genuine promotion of quality and standard goods.

5. Political factors such as ethnicity, federal character, political party affiliation, quota system, reservation of appointment slots for political office holders, religion need to be played down in the nation's human resource management system. Where these are used as standards for recruitment and selection, as against merit, it plays down the process of using the modern ICT tools which usage promotes merit and efficiency in HR services. This will also promote greater professionalism in Human Resource Management especially in the public service.

5.4 Contributions to Knowledge

The study adds to existing body of knowledge on the level of adoption and utilisation of the emerging ICT tools for staff recruitment, selection and placement, and the statistics obtained from the study add to existing literature and statistics on the utilisation of ICT tools for various organisational functions in Nigeria.

The study adds to knowledge on the various factors that militate against effective utilisation of ICT for staff recruitment, selection and placement. In this study, the factors have been categorized into two namely: infrastructural factors that affect the technological landscape of the country, and organisational factors which affect the staff recruitment and selection exercise in various organisations. This will enable practitioners and policy makers to be able to streamline their actions in terms of improving the level of utilisation of ICT in organisations.

The study contributes to existing body of knowledge on the prevalence of corrupt practices in almost all sectors of the Nigerian society. In particular, it has shown that some recruiters, especially in the un-organized private sector and public sector, exploit vulnerable and desperate job applicants by extorting money from them through the sale of scratch cards and payment of certain amount into bank accounts to enable them have access to job portals.

The study also identified certain areas of differences in the way recruitment, selection and placement were conducted in both the private and public sectors, thereby enriching the existing body of literature in the discussions on the operational efficiencies of both sectors in the country.

5.5 Suggestions for Further Studies

On areas for further studies, the researcher suggests that there is need to carry out a study on the perception of job seekers on e-recruitment especially as they constitute the other side of recruitment, selection and placement processes. This is to ensure a holistic understanding of the issue of e-recruitment among recruiters as well as among applicants.

Secondly, the researcher suggests that a similar study could be carried out in other geo-political zones of the country so as to have a basis of comparison of findings as well as to have a more holistic and overall data on utilisation of ICT for staff recruitment, selection and placement in Nigeria as a whole.

REFERENCES

Abernathy, W. & Clark, K.B. 1985, Mapping the Winds of Creative Destruction, *Research Policy*, Vol. 14, Pp 3-22

Adebayo, S.M, 2010, Survey on Food, Beverage and Tobacco Employers, Unpublished Project, submitted to the Chartered Institute of Personnel Management, Nigeria

Adegboyega, A, 2004, Maintaining Industrial Harmony in the Workplace: Current Challenges, in *Human Resources Management*: *Journal of Chartered Institute of Personnel Management of Nigeria*, Vol. IV No 2, Pp 26 – 31.

Adeoti, J.O., 2004, The Adoption of GSM by Small-Scale Enterprises in Ibadan Metropolis, *Nigerian Institute of Social and Economic Research, 2004 Project Report*, NISER, Ibadan

Adesope, O.M., Mathews-Njoku, E.C., and Asiabaka, C.C., 2005, Awareness and Utilisation of Information Technology among Agricultural Scientists in Nigeria, *The Information Technology*, Vol. 2, No 2, Pp 1-8

Adeyi, S.O.R, 2004, Impact of ICT in the Marketing Chain of Food Industries in Lagos State, Unpublished MBA project in the Department of Business Admin, University of Ado Ekiti

Admin Technology. 2011. *Smartphone, Changing definition*, admin technology.com, retrieved on 15th January, 2012

Afuah, A & Tucci, C.L. 2003, *Internet Business Models and Strategies: Text and Cases*. New York: McGraw-Hill.

Afuah, A., 2003. *Innovation Management*, New York: Oxford University Press

Aitchison, M., 2006, E-recruitment Best Practice in the Private Sector, London: A Research Project. Retrieved from dti.gov.uk on 22nd April 2012

Ajayi, G.O., 1996. Full Internet Connectivity in Africa: The Journey so far and the way Forward, in Sanni, M.A and Adagunodo.O, (eds), *Telematics for Development in Infotech '96,* Ile-Ife:NACATEM

Ajuwon, G.A, 2006. Use of the Internet for health information by physicians for patients care in a teaching hospital in Ibadan, Nigeria, *Biomedical Digital Libraries*, Vol. 3, No12,Pp1-9

Al-Gore, A., 2000, Electronic Payment, Anywhere, Everywhere, *Banking 2000*, Silverline Publishing, p75

Allen, R.S, Dawson, G., Wheatley, K., and White, C.S., 2004, *Diversity Management: Learning Responses for Modern Organisations, Development and Learning in Organisations,* Vol 18, No. 6, 13-15

Aluko, E.M., 2004, Some Issues in ICT for Nigerian Development, On-line Available: http://www.nigeriamuse.com/projects/TelecomProject/InterConnectivity_Aluko.ppt.

Anderson, N., 2003, Applicants and Recruiters' reactions to New Technology in Selection, *International Journal of Selection and Assessment*, Vol. 2, Pp 121-136

Antonoff, M., 2009, *Television,* Microsoft Encarta, Redmond, W.A: Microsoft Corporation

Anyemedu, K., 2000. Trade Union Responses to Globalization: Case Study on Ghana. *Discussion Papers Series in Labour and Society Programme*, No 121, Geneva: ILO.

Armstrong, M., 1995, *A Handbook of Personnel Management Practices*, London: Kogan Page Ltd.

Armstrong, M., 1999, *A Handbook of Human Resource Management Practice*, 7th edition, London: Kogan Page

Armstrong, M., 2009, *Armstrong's Handbook of Human Resource Management Practice*, (11th edition), London: Kogan Page

Awe, B, 1990, The role of Nigerian Women in Management in the 90s, *Journal of Nigerian Institute of Management,* Nov/Dec. Vol. 1, No 5

Awe, J., 2010, "Public Private Partnership (PPP) in ICT for Development in Nigeria" Presented at the e-Nigeria 2010 International Summit held at the Shehu Musa Yar' Adua Centre, Abuja, Nigeria on May 20, 2010

Awodun, M.O., & Otokiti, S.O., 2001. Innovation in Information Technology and Smartcard in Nigerian Banking Industry: An Empirical Study, *Lagos Journal Of Business*, Vol. 1, No 1, Jan-June, Pp1-13

Babbie, E., 1998, *The Practice of Social Research,* Eighth edition, California: Wadsworth

Bamiro, O.A., A.E. Oluleye, M.A Tiamiyu, 2006. Use of Computers and the Internet for Research purposes, in *Methodology of Basic and Applied Research*, 2nd Edition, in Olayinka, A.I, V.O. Taiwwo, A. Raji-Oyelade, I.P Farai, (eds), Ibadan: Post Graduate School, University of Ibadan, Pp 215-233

Ben, U.J., 2010, Nigeria's internet quandary, retrieved from http://www.businessdayonline.com/index on 11/12/2011

Bohlander, G., Snell, S., and Sherman, A., 2001, *Managing Human Resources*, S.S.A: South Western College Publishing

Bondarouk, T.V and Ruel, H.J.M, 2009, Electronic Human Resource Management Challenges in the Digital Era, *The International Journal of Human Resource Management*, Vol. 20 No 3, Pp 505-514

Bosewell, T., 1989, Colonial Empires and capitalist World-Economy: a time series Analysis of colonialisation, 1640-1960, *American Sociological Review*, Vol. 54, Pp 180-196

Bittner, J.R. 2002, *Mass Communication: An Introduction*. Ibadan: Heinemann Educational Books

Blurton, C., 1999, New Directions in Education, in *UNESCO's World Communication and Information, 1999-2000*, Paris: UNESCO, Pp 46-61

Burnie, D., 2009, *Science*, Microsoft Encarta, Redmond W.A, Microsoft Corporation

Bussiek, H., 2005. Pipes without water- and where are the pipes? Information and Communication Technologies in Africa, *International Politics and society*, Vol. 3, Pp 97-107

CIA World Fact book, 2012, Internet hosts, retrieved from http://www.cia.gov/library on 6th December, 2013

Cailliau, R., 2007,"A Little History of the World Wide Web" http://www.w3.org/History.html. Retrieved 14/11/2011

Castells, M., 1996, The Information Age: Economy, Society and Culture, *The rise of the Network Society*, Oxford-England: Blackwell

---------- 1997. The Information Age: Economy, Society and Culture, Vol. 2, *The power of Identity*, Oxford- England: Blackwell

---------- 1998. The Information Age: Economy, Society and Culture, Vol. 3, *End of Millennium*, Oxford- England: Blackwell

Centre for Strategic and International Studies, (CSIS), 2006 in Global Envision Series

Chapman, D. & Webster, J, 2003, Technology Use in Screening and Selection, *SHRM Forum*, June 2003, 1-5

Chase-Dunn, C., & Peter G., 1995, "World-Systems Analysis", *Annual Review of Sociology*, Vol. 21, Pp 387-417

CIPD, 2003, *Recruitment and Retention*, London: CIPD

CIPD, 2005, *People Management and Technology: Progress and Potential*, London: CIPD

CIPM, 2003, About the Institute, Human Resource Management; *Journal of the Chartered Institute of Personnel Management of Nigeria*, Vol. III, No 1, 2003

CIPM, 2004, About the Institute, Human Resource Management; *Journal of the Chartered Institute of Personnel Management of Nigeria*, Vol. IV No. 2, 2004

Comer, D. E., 2009, *Internet*, Microsoft Encarta, Redmond W.A, Microsoft Corporation

Cranfield School of Management, 2005, Cranet Survey of International Comparative HRM, Available at www.cranet.org

Dauda, A, 2007, Research and Development for Organisational Competitiveness: Human Resource Technology Innovation Management, in *Management Discoveries, A Quarterly Journal of Management Review Ltd*, Vol. 1, Issue 1, Oct-Dec 2007, Pp16-27

Day, R, 2010, assessing the future of online employee recruitment, USA: Helium Incor

Depardieu, G. & Islam, P, 2008, in Efficient Talent Acquisition through E-recruitment, being report of E-Recruitment Market Assessment 2006 by marketresearch.com

Dessler, G., 2008. *Human Resource Management*, 11th Ed, New Delhi: Prentice-Hall Inc.

Elekwa, I., Bamiro, O.A., Oluyide, A.O., Ladoye, D.L., Nurudeen, A., Aturu, I.O., 2009, *Basic Technology*, Ibadan-Nigeria: Evans Brothers (Nigeria Publishers) Limited

Elkington, T. 2005. "Bright Future for Online Recruitment, *Personnel Today*, 18 January, p.9

Ensher, E., Nelson T. & Grant-Vallone, E., 2002, Tales from the hiring line: effects of the Internet and technology on HR processes, *Organisational Dynamics*, Vol.31, No 3, Pp 224-244

Etomi, E., 2002. The Changing Faces of Recruitment and Selection, in *Human Resource Management- Journal of the Chartered Institute of Personnel Management of Nigeria*, Vol.11 No.1, Pp26-33

Etuk-Udo, A, 1999, Professionalizing Human Resource Management in Nigeria: Challenges for the present and the future, a paper presented at the Institute of Personnel Management of Nigeria Second Eastern Zonal Conference, Aba, on 18-19 February

Fajana, S., 2002, *Human Resource Management (An Introduction)* Lagos: Labofin and Company

Frieden, R., 2009, *Cellular Radio Telephone*, Microsoft Encarta, Redmond, W.A: Microsoft Corporation

Galtung, J, 1997. *Development, Environment and Technology: Towards a technology for self- Reliance*, New York: United Nations

Gardner, B. 1994, *Ensuring Successful Information Technology Utilisation in Developing Countries*, Garborone: Botswana (Pty) Limited, Pp 12-20

Gate, W.H., 1999, *Business @ the Speed of Thought*, New York: Warner Books

Gilder, G., 1999, *Microcosm*, New York: Simon and Schuster

----------, 2000, *Telecosm*, New York: Simon and Schuster

Gill, J., 2001, July 18, Now hiring, apply on-line. Business week Online, Retrieved from http://www.businessweek.com/careers/content/jul2001/ca20010718_003.htm

Goldfrank, W. L., 2000, "Paradigm Regained? The Rules of Wallenstein's World-System Method, *Journal of World-Systems Research*, Vol. 6. No. 2, Pp. 150-195

Greenspan, R., 2003, Job seekers have choices ClickZNetwork. Retrieved from http://www.clickz.com/showPage.html?page=2210701

Gutierrez, L.H.S., 1995, "Transformations of the HR Function in the Context of Restructuring," *International Journal of Manpower* Vol. 16 No. 10, Pp 25-38

Held, D., McGrew, A., Goldblatt., D & Percaton, J., 1999, *Global Transformations*, Cambridge England: Polity Press

Held, D., 2003, *The Global Transformations Reader: An Introduction to the Globalization Debate*, Second Edition, Polity Press

Holland, C.P. & Westwood, J.B. 2001, Product-Market and Technology Strategies in Banking, *Communications of the ACM*, Vol. 44, No.5, Pp 53-57.

Holbeche, L., 2004, *Aligning Human Resources and Business Strategy*, Burlington: Elsevier Butterworth-Heinemann

Holton, E.F. & Burnett, M.F., 1997, Quantitative Research Methods, in Swanson, R.A & Holton, E.F. (eds), *Human Resource Development, Research Handbook*, San Francisco: Berrett-Koehler Publishers, pp 65-87.

IDS, 2003, *Recruitment Practices*, IDS Study No 751, June, London: Incomes Data Services

Ikechukwu, A.O, 2010, How jobless and job-seeking Nigerians are exploited, retrieved From http;//www.saharareporters.com/articles/external-contrib/3530-how-jobless-and-job-seeking-nigerians-areexploited.html

Imhonopi, D. & Urim, U. M., 2004, *Current Issues in the Sociology of Mass Communication*, Ibadan: Euphrates Publications.

Imhonopi, D., 2010, *Influence of internet Services on Teaching and Research Output Among Academic Staff of Selected Universities in S/W Nigeria*, an unpublished Ph.D thesis submitted to the Dept of Sociology, University of Ibadan.

Imhonopi, D., 2012. The Development and Influence of the Mass Media in the Nigerian Society, in *Peoples and Cultures of Nigeria*, (eds) A.S Jegede, O.A Olutayo, O.O. Omololu, B.E Owumi, Ibadan: Samlad: Publishers, Pp 288-307

Internet Coaching Library, 2010, *Internet Usage Statistics for Africa 2010*, retrieved on 7th January 2011 from Internetworldstats.com

Internet Coaching library, *Internet Usage Statistics for Africa 2012*, retrieved on 12th November 2013 from Internetworldstats.com

International Telecommunications Union, 2006, World Telecommunication/ICT Report: Measuring ICT for Social and Economic Development. Geneva, Switzerland: ITU

Inyang, B.J., 2001, Harmonizing Human Resource Management (HRM) Practice in the Public and Private Sectors, in *Human Resource Management, Journal of the Institute of Personnel Management of Nigeria*, Vol. 10 No.7, Pp 8-14

IRS, 2003b, Better Recruitment Process, *IRS Employment Review*, No 780, 18 July

IRS, 2002b, I've got your number: telephone interviewing, *Employment Review*, No 756, 22 July, Pp34-36

Jagboro, K.O., 2003, A Study of Internet usage in Nigerian Universities: A case study of Obafemi Awolowo University, Ile Ife Nigeria, http//Org/issue 2Jagboro/index-tat.htm

Kaku, M., 1997, *Visions: How science will revolutionise the 21st century*, New York: Anchor Books

Kazeem, T. 1998. "Evolution and Development of Mass Communication in Nigeria" in Atere, W. & Olagbemi, A. (eds) *Communication, Language & Culture in Society*, Lagos: OPEDS Nigeria Limited

Kellner, D., 2002, Postmodern War in the Age of Bush II, *New Political Science*, Vol. 24, No 1, Pp57-72

Kellner D., 2002, Theorizing Globalization, *Sociological Theory*, Vol. 20, No 3 (Nov 2002), Pp 285-395

Kettley, P. and Reilly, P., 2003, *e-HR: An Introduction, London*: Institute of Employment Studies

Kolawole, T.O., 2008, Information and Communication Technology: A Tool for Organisational Growth and Development, in Ogunbameru, O.A. and Oribabor, E.P. (Eds), *Industrial Sociology*, Ibadan: Penthouse Publications, Pp 389-407.

Koontz, H., and Weihrich, H., 2005, *Essentials of Management: An International Perspective*, New Delhi: Tata McGraw-Hill Publishing Company.

Lawler, E. and Mohrman, K., 2003, HR as a Strategic Partner: What does it take to make It happen?, *Human Resource Planning* Vol. 26 No 3, Pp 15-29

Lee, I. 2005, The evolution of e-recruiting: A content analysis of Fortune 100 career web sites. *Journal of Electronic Commerce in Organisations*, Vol. 3 No 3, Pp 57−68

Li, C., Charron, C., Roshan, S., Flemming, G.N., 2002, Online recruitment grows up. Forrester Research. Available at www.forrester.com

Makinde, A. M., 1986, "Technology Transfer: An African Dilemma," in Murphy, John W., Algis Mickunas and Joseph J. Pilotta (eds.), *The Underside of High-Tech: Technology and the Deformation of Human Sensibilities.* New York: Greenwood Press.

Mathis, L. R., & Jackson, H. J., 2006, *Human Resource Management*, Eleventh Edition; USA: South Western Corporation

Martin, M., & J, Tricia, 2002, *Personnel Practice*, Third Edition, London: CIPD

Martinsons, M., 1996, Human Resource Management Applications of knowledge based systems, *International Journal of Information Management*, Vol. 17 No. 1, Pp 35-53

McCurry, P. 2005. "Getting the Best from E-Recruitment, *Third Sector*, Vol..379, Pp.28-29.

Ministry of Manpower, 2003, e-HR: Leveraging Technology, *Case Study Series*, Singapore, 2/2003

Molley, T.A., 1994, *The ideals of Development in Human Society*, New York: Apple Press

National Communications Commission, 2006, Industry Statistics http://www.ncc.gov.ng/index5.htm (Retrieved November 11, 2006)

National Communications Commission, 2011, *Annual Subscribers' Report*, Lagos

Nduka, O., 2006. *The Roots of African Underdevelopment*, Ibadan: Spectrum Books Ltd

Ndukwe, C. 2006, Mobile Telecommunications: The Journey so far, being text of Paper delivered at the Branch Conference of Oyo State Chapter of CIPMN

Newell, S., & Shackleton, R., 2000, Recruitment and Selection, in S. Bach and K. Sission (eds), *Personnel Management: A Comprehensive Guide to Theory and Practice*, Oxford: Blackwell

Noe, R, A., 2002, *Employee Training and Development*, Second Edition, New York: McGraw Hill

Nwachukwu, C.C., 1988. *Management Theory and Practice*, Onitsha: Africana Press Pub Ltd.

Nweke, T., 1984, *The Extent of the Print Media's Contributions to the WAI: Women's Role.* Being a paper delivered at a seminar sponsored by the Federal Ministry of Information, Social Development, Youth, Sports & Culture on April 24.

Obilor, B.C., 2004, The Internet as a catalyzing agent in scientific research – challenges And prospects, *Bulletin of Science Association of Nigeria*, Vol. 25:297-310

Obong, A., 2007, Information and Communication Technologies in Development, Proceedings of the 9th International Conference on Social Implications of Computers in Developing Countries, São Paulo, Brazil, May 2007

Obong, A., and Idaraesit, P., 2004 "From the Margins to the Center: Information and Communication Technologies as Tools for Development," in Kelechi Kalu, ed., *Agenda Setting and Public Policy in Africa*, London, UK: Ashgate Publishers.

___ and Foster W.A., 2007. "Cell Phone Diffusion in Nigeria: Recent Developments And Trends," *Computing and Communication Africa*

Odedra, M., 1992, Enforcement of Foreign Technology on Africa: Its Effect on Society and the Use of Information Technology, *African Technology Forum*, August/September, Pp18-22

Offiong, D A., 2001. *Globalization, Post-Neo-dependency & Poverty in Africa* Nigeria: Fourth Dimension Publishers.

Ogunbameru, O.A., 2008, Human Resource Management, in Ogunbameru, O.A & Oribabor, E.P, (eds), *Industrial Sociology*, Ibadan: Penthouse Publications, Pp 167-193

Ogunsola, L.A., 2005. Information and Communication Technologies and the Effects of Globalization: Twenty-First Century "Digital Slavery" for Developing Countries--Myth or Reality? *Electronic Journal of Academic and Special Librarianship*, Vol. 6 No.1-2 (Summer 2005)

Okiy, R.B., 2005, Strengthening Information Provision in Nigerian university Libraries through Information communication technologies, *The Electronic Library* 23.3: Pp 311-318.

Okonedo, B., 2005, Nigeria Marks 4 Years since the Introduction of GSM Services. *BusinessDay*,http://rights.apc.org/africa/index.shtml?apc=21877i21833e_1&x=828264 Retrieved September 27, 2006

Okougbo, E, 2004, *Casualisation in Nigeria*, Lagos: Wepoapo Enterprises

Olanrewaju, A., 2011, *Adoption, Utilisation and Social Impacts of Information and Technology Communication among Healthcare Workers and facilities in Ibadan Metropolis*, an unpublished Ph.D Thesis submitted to the Department of Sociology, University of Ibadan

Omolawal, S.A & Joshua, A.T, 2011, Contemporary Issues in Human Resource Management and Implications for the Nigerian Labour Market, In Onyeonoru, I.P., Olanrewaju, J., Rafiq-Alaji, F., and Anisha, E. (eds), *Perspectives on Nigerian Labour Market and the Global Economy,* Ilorin: Michael Imoudu National Institute for Labour Studies, Pp 202-215

Onasanya, S.A.B., 2005, *Effective Personnel Management and Industrial Relations*, (Revised Edition), Lagos: Centre for Management Development

Oni, B., 2003. Situating Emerging Best Practices in Human resources Management within the Nigeria Context, in *Journal of the Institute of Personnel Management of Nigeria*, Vol. iii

Onimode, B, 2000. *Africa in the World of 21st Century*, Ibadan: University Press

Onipede, O. 2012, Managing Diversity for Organisational Success, in *Journal of the Chartered Institute of Personnel Management of Nigeria,* Vol. 1 No 1, 2012, Pp 7-10

Onoge, F. O., 1991, The Positive use of Quota System in the management of Human Resources, in *Nigerian Journal of Personnel*, Vol. 5 No 2, Pp 15-20

Onyeonoru, I.P & Omolawal, S.A., 2013, Issues and Emerging Trends in Recruitment, Selection and Placement, in O.A Ogunbameru, *Human Resource Management: Basic and Contemporary Issues,* Huntersville, NC: Warren Publishing Inc.

Onwubiko, C., 2004, The Internet: a new opportunity for librarians and information specialists in Nigeria, *The Information Technologists*, Vol. 1 No 1&2, Pp 71-80

Oribabor, P. E., 2000. Human Resource Management: A Strategic Planning Approach, In *Journal of the Institute of Personnel Management of Nigeria*, Vol. 9 No 4, Pp 21 – 26

Patton, C., 2003, *Test for the Best, HR Executive*, June 16, 2003, 25-29

Reilly, P & Barber, L, 2006, *e-recruitment: Practices and trends in Ireland*. Public Appointment Service, Ireland (retrieved from hhht://www.employment-studies.co.uk/pubs/summary.php?id=pas 0806)

Richard, D & Richard, H., 2001, *Information and Communication Technologies and Small Enterprises in Africa*, Lagos: Institute for Development Policy and Management.

Rickert, R.M., 2009, *Telephone,* Microsoft Encarta, Redmond, W.A: Microsoft Corporation

Ritzer, G., 1996, *Sociological Theory*, (4th edition), New York: The McGraw-Hill Co Inc.

Robertson, I.T and Smith, M., 2001, Personnel Selection, *Journal of Occupational and Organisational Psychology,* Vol. 74 No. 4, Pp 441-472

Rodgers, D., 1987, Computer-Aided Interviewing: First Impression, *Personnel Journal*, April 1987, Pp 148-152

Rogers, E. M., 1962, *Diffusion of Innovations*, Glencoe: Free Press.

Rogers, E. M., 1983, *Diffusion of Innovations*, New York: Free Press

Rogers, E. M. 2003, Diffusion of innovations (5th ed.). New York, NY: Free Press

Sesan, G, 2006, Technology for Development: A Case study on e-advocacy and Technology use by Civil Society in Nigeria (Retrieved from www.w-teconline.org/nfsblog/?p=231 on 31st January, 2012)

Shrivastava, S., and Shaw, J., 2004, Liberating HR through technology, *Human Resource Management*, Vol. 42, No 3, Pp 201-222

Singh, P. & Finn, D., 2003, The Effects of Information Technology on Recruitment, *Journal of Labour Research*, Vol. 24, No. 3, Pp 395-408

Sinclair, M, 2003, So who is an applicant Anyway? *SHRM Forum*, July 2003, Pp 1-2.

Skocpol, T., 1977, "Wallerstein's World Capitalist System: A Theoretical and Historical Critique," *American Journal of Sociology*, Vol. 82, N 5

Snell, S., Stueber, D and Lepak, D., 2002, Virtual HR Department: getting out of the middle, in R. Heneman and D. Greenberger (eds) *Human Resource Management in Virtual Organisations*, Greenwich: CT. Information Age Publishing

Snyder, T.L., 2009, *Computer*, Microsoft Encarta, Redmond, W.A: Microsoft Corporation

Soonhe K. & O'Connor, G., Assessing recruitment in state governments=issues and challenges, retrieved from http:/www.entrepreneur.com/trade journals/article/198412916.html

Southard, P.B. & Siau, K, 2004, A Survey of Online E-Banking Retail Initiatives," *Communications of the ACM*, Vol. 47, No. 10, Pp 99-102

Stacey, D., 2010, assessing the future of online employee recruitment, USA: Helium Incor

Stamoulis, D., Kanellis, P. & Martakos, D. 2002, An Approach and Model for Assessing The Business Value of E-Banking Distribution Channels: Evaluation as Communication," *International Journal of Information Management*, Vol. 22: 247-261, 2002

Stephenson, D., 1997. *Information and Communication Technology in UK Schools*, (http://rubble.ultalab.anglia.ac.uk/stephenson/-ICTUKIndex.html

Storey, J., 2007, *Human Resource Management*: A Critical Text (3rd Edition), London: Thomson Learning

Snyder, T. L. "Computer," Microsoft Encarta 2009. Redmond, WA: Microsoft Corporation, 2008

Strauss, S., 2001, The effects of Videoconference, Telephone, and Face-to-Face Media on Interviews and Applicants Judgments in Employment Interviews, *Journal of Management*, Vol. 27 No.3, Pp 363-381

Taylor, S., 2002, *People Resourcing*, London: CIPD

Terazono, E., 2005 Print media takes note as recruitment boosts online Advertising, *Financial Times*, 10 October 2005, P2

Thornburg, L., 1998, Computer Assisted Interviewing Shortens Hiring Cycle, HR Magazine, February 1998, p 73ff

Thorburg, L., 2012, Computer-assisted interviewing shortens the hiring cycle, *HR Magazine*, No 43 P.73

Torrington, D., Hall, L & Taylor, S., 2007, *Human Resource Management*, (6^{t} Edition), England: Prentice Hall Ltd.

Tully, C.J., 2003, Growing Up in Technological Worlds: How Modern Technologies Shape the Everyday Lives of Young People, *Bulletin of Science, Technology and Society*, Vol. 23.6, Pp 444-456.

Tusubira, F.F. & Kyeyune, A., 2001, Tutorial Paper: What is Information and Communication Technology? Makerere University, being text of paper presented at ICT Awareness Workshop, Makerere University, 6-7 July

Ubeku, A.K., 1975. *Personnel Management in Nigeria*, Benin City: Ethiope Pub Corporation.

Udegbe, J.B., 1997, *Gender and Leadership Positions: Images and Reality*, Faculty Lecture delivered in the Faculty of the Social Sciences, University of Ibadan

Ukaegbu, C.C., 1987. Job Satisfaction and Skill Utilisation in Research Institutes, in *Management in Nigeria*, Sept-Oct 1987, Pp14-20

Ulrich, D., 1997, *Human Resource Champions, the next agenda for adding value and delivering results*, Massachusetts: Harvard Business School Press.

UNDP, 2005, Human Development Report: Making New technologies Work for Human Development, New York

US Energy Information Administration, 2006, "Nigeria," http://www.eia.doe.gov/emeu/cabs/Nigeria/Electricity.html (Retrieved November 14, 2006)

Wallerstein, I.M, 1974. *The Modern World System*, London: Academic Free Press

Wallerstein, I., 1974, *The modern World System I: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*. New York: Academic Press

Wallerstein, I., 2000, *The Essential Wallerstein*. The New York Press. New York

Warwick, D.P & Linninger, C.A, 1975, *The Sample Survey: Theory and Practice*, New York: Mcgraw Hill

Wejnert, B., 2002, "Integrating Models of Diffusion of Innovations: A Conceptual Framework", *Annual Review of Sociology* (Annual Reviews) 28: 297–306

Williams, E., 2010, assessing the future of online employee recruitment, USA: Helium Incor

Woherem, E.E., 2001, *Information Technology in the Banking Industry*, Ibadan-Nigeria: Polygraphics Venture Limited.

Wu, J.H. & Hsia, T.L. 2004, Analysis of E-Commerce Innovation and Impact: A Hypercube Model, *Electronic Commerce Research and Applications,* Vol.*3*, No 4, Pp 389-404.

Yahaya, M. K., 2003, Development: Lessons from change and social Engineering Projects, Ibadan: Corporate Graphics Ltd

Yazdani, M., 2010, Assessing the future of online employee recruitment, USA: Helium Incor

Zwass, V. 2003, Electronic Commerce and Organisational Innovation: Aspects and Opportunities, *International Journal of Electronic Commerce*, Vol. 7, No. 3, Pp 7-37

Website Sources

http://www.businessdayonline.com/index.php?option-com_content&view=article&id=9327:nigerians-internet-quandary-&catid=117:news&itemid=349

http://en.wikipedia.org/w/index.php?title=E-recruitment&oldid=441508769)

http://en.wikipedia.org/wiki/Information_and_communication_technologies).

http://en.wikipedia.org/wiki/Information_technology

http://www.webstylus.net/?q=taxonomy/term/31 Retrieved, March 20, 2007

http://tutor2u.net/business/ict/intro_what_is_ict.htm

http://en.wikipedia.org/w/index.php?title=E-recruitment&oldid=441508769)

http://www.businessweek.com/careers/content/jul2001/ca20010718_003.htm

http://www.clickz.com/showPage.html?page=2210701

http://en.wikipedia.org/wiki/Information_and_communication_technologies

http://en.wikipedia.org/wiki/Smartphones

http://en.wikipedia.org/wiki/Information_technology

http://tutor2u.net/business/ict/intro_what_is_ict.htm

http://en.wikipedia.org/wiki/Human_resource_management_system"

"http://en.wikipedia.org/wiki/Diffusion_of_innovations"

http://www.isoc.org/internet/history/brief.shtml

http://www.computerhistory.org/exhibits/internet_history

http://en.wikipedia.or/w/index.php?title=Telecommunications _in_Nigeria&oldid=581085506

http://www.thefreedictionary.com/Website.

http://www.telecomsmarketresearch.com

http://www.thefreedictionary.com/Website, Retrieved 14/11/2011.

APPENDIX I

Dept. of Sociology
Faculty of Social Sciences
University of Ibadan, Ibadan

Serial No: ----------
Date: ----------

Dear Respondent,

RESEARCH QUESTIONNAIRE

I am a Post graduate student of the Department of Sociology, University of Ibadan, carrying out a study on **Utilisation of Information and Communication Technology for staff Recruitment, Selection and Placement among Human Resource Practitioners in South-west Nigeria**. This questionnaire is aimed at collecting data for this study.

You have been selected to participate in this study. I will therefore appreciate your cooperation in completing it. You do not need to write your name on it. I assure you that it is purely for an academic purpose and it will not in any way affect your employment.

Please tick or answer under the response column as appropriate.

Thank you.

Samuel Ayodeji OMOLAWAL

SECTION A: SOCIO-ECONOMIC CHARACTERISTICS OF RESPONDENTS

Please tick/ explain as appropriate.

S/N	Question	Response	Code	Skip to
1	Sex	Male Female	1 2	
2	Age	Below 30 years 30 – 34 years 35 – 39 years 40 – 44 years 45 – 49 years 50 – 54 years 55 – 59 years 60 years and above	1 2 3 4 5 6 7 8	
3	Marital Status	Single Married Divorced/Separated Widow/widower	1 2 3 4	
4	Religious Affiliation	Christianity Islam ATR Others (Specify)	1 2 3 4	
5	Ethnic Origin	Hausa Igbo Yoruba Others (Specify)	1 2 3 4	
6	Educational Qualification	HND First Degree Masters Degree Ph.D Others	1 2 3 4 5	
7	Any Professional Qualification?	No Yes	1 2	
8	Nature of your employment	Paid employment Self employment	1 2	
9	If paid employment, in which sector does your organisation operate?	Private Public	1 2	
10	If private, what is its status?	Limited Public Liability Multi-national Any other	1 2 3 4	
11	If self employment, which type?	Management Consultancy Human Resource – Consultancy Recruiting Agency	1 2 3	

		Any other	3 4	
12	Nature of your business	Service Manufacturing/Production Others	1 2 3	
13	Your Membership Grade of CIPMN	Graduate Associate Full Member Fellow	1 2 3 4	
14	Length of membership of the Institute	0 – 5 years 6 – 10 years 11 – 15 years 16-20 years 21 years and above	1 2 3 4 5	
15	Your monthly income	Below #100,000 #100,001 - #200,000 #200,001 - #300,000 #300,001 - #400,000 #400,001 - #500,000 #500,000 and above	1 2 3 4 5 6	
16	Your Staff Strength	Below 100 101 – 200 201 – 300 301 – 400 401 – 500 500 and above	1 2 3 4 5 6	
17	Your Staff Grade	Junior Management Middle level Management Senior/Top Management Executive Director	1 2 3 4	
18	Length of Service	0 – 5 years 6 – 10 years 11 – 15 years 16-20 years 21 – 25years 26 – 30 years 30 years and above	1 2 3 4 5 6 7	
19	Your state of location			

SECTION B: LEVEL OF UTILISATION OF ICT FOR RECRUITMENT, SELECTION AND PLACEMENT OF STAFF

20	Is recruitment in your organisation your direct responsibility?	No Yes	1 2	
21	How often do you employ workers into your organisation?	Rarely Often Regularly	1 2 3	
22	Do you engage in E-recruitment/recruit online?	No Yes	1 2	If No skip to 45
23	If yes, do you have your own dedicated website for recruitment?	No Yes	1 2	
24	If No, which of these do you use?	Free Internet Job - Boards Recruitment Agencies Career Agencies Any other	1 2 3 4	
25	Do you advertise vacancies online?	No Yes	1 2	
26	In addition to advertising online, do you also advertise through any other medium?	No Yes	1 2	
27	Do you request applicants to apply online?	No Yes	1 2	
28	Do you respond to further information online?	No Yes	1 2	
29	Are application forms completed online?	No Yes	1 2	
30	Do you track sources of application online?	No Yes	1 2	
31	Do you do initial screening of application online?	No Yes	1 2	
32	Do you use online test at assessment stage?	No Yes	1 2	
33	Do you conduct further interview online?	No Yes	1 2	
34	Do you conduct reference checks online?	No Yes	1 2	
35	Do you make job offers online?	No Yes	1 2	
36	Do you request successful candidates to accept offer online?	No Yes	1 2	
37	Do you use electronic means in any stage of your placement and induction processes?	No Yes	1 2	
38	Do you build data bases for future vacancies?	No Yes	1 2	

39	Does your online recruitment cover all the stages of recruitment?	No Yes	1 2	
40	Does your online recruitment cover all positions?	No Yes	1 2	
41	Does your online recruitment cover all cadres?	No Yes	1 2	
42	How do you communicate with your applicants in the course of recruitment processes?	Physically Cell phones E-mail Combination of cell phones and e-mail	1 2 3 4	
43	If No to question 37 above, at what stage does it stop?	Advertising jobs online Submission of applications Written test Interview Selection stage Job offer Reference Check Placement	1 2 3 4 5 6 7 8 9	
44	If No to question 38, which positions are not covered?			
45	If No to question 39, which cadre is not covered?			
46	Do you request applicants to buy scratch cards before they could apply?	No Yes	1 2	
47	How do you advertise job vacancies?	Internal notice boards Print media Radio Television	1 2 3 4	
48	How do you request applicants to submit applications?	By hand By post By courier	1 2 3	
49	How do you make applicants to complete standard applications forms?	Manually With computer	1 2	
50	How do you sort your applications?	Manually With computer	1 2	
51	How do you screen applications?	Manually With computer	1 2	
52	How do you conduct written tests?	Manually With computer	1 2	
53	How do you conduct further interviews?	Manually	1	

		With computer	2	
54	How do you make job offers?	Physical contact By post By Courier	1 2 3	
55	How do you handle reference checks?	Hand delivery Courier By post	1 2 3	
56	How do you conduct your placement of staff?	Manually/physically With computer	1 2	
57	Do you build data bases for the future?	No Yes	1 2	
58	How do you communicate with your applicants in the course of recruitment processes?	Internal notice boards Physically By Post By courier By cell phones	1 2 3 4 5	

SECTION C: INFLUENCE OF THE USE OF ICT FOR STAFF RECRUITMENT ON THE QUALITY OF STAFF RECRUITED

59	Does the use of ICT for staff recruitment lead to recruiting a higher quality staff?	No Yes	1 2
60	Does it lead to recruitment of staff with better computer knowledge and skill?	No Yes	1 2
61	Does it lead to recruitment of staff with wider experience and exposure?	No Yes	1 2
62	Does it promote diversity of workers in terms of culture, ethnicity and other backgrounds?	No Yes	1 2
63	Does it lead to recruitment of multi-functional staff?	No Yes	1 2
64	Does it lead to acquisition of staff with higher propensity to remain long with the organisation?	No Yes	1 2

SECTION D: BENEFITS DERIVABLE FROM USE OF ICT FOR RECRUITMENT BY HR PRACTITIONERS

Using the keys provided below, please tick as appropriate

Keys: SA=Strongly Agree, A=Agree, U=Undecided, D= Disagree, SD= Strongly Disagree

	ITEMS	SA	A	U	D	SD
65	Use of ICT enhances speed in recruitment process					
66	Use of ICT enhances greater accuracy					
67	With e-recruitment, you have a wider range of applications					
68	E-recruitment reduces recruitment costs					
69	In recruitments involving use of ICT, human efforts are reduced					
70	E-recruitment gives 24/7 access to collection of resumes/applications					
71	Use of ICT facilitates effective communication with applicants					
72	Using ICT for staff recruitment boosts the corporate image					
73	It allows proper documentation and keeping of applicants' records					
74	Recruitment processes are simplified through ICT					
75	With ICT, human efforts are reduced when recruiting					
76	E-recruitment reduces human traffic to your office					
77	E-recruitment reduces pressure on HR practitioners					
78	By requesting applicants to buy scratch cards, you are able to regain your recruitment costs					
79	E-recruitment has increased the level of computer literacy among stakeholders					
80	ICT/e-recruitment reduces volume of hard copies of documents					
81	In all, the application of ICT has led to remarkable improvement in Staff recruitment and selection processes					
82	Could you please suggest other benefits derivable?					

SECTION E: CHALLENGES ASSOCIATED WITH USE OF ICT BY HR PRACTITIONERS

83	With E-recruitment, you have too many applications to sort out	No Yes	1 2	
84	E-recruitment creates additional works	No Yes	1 2	
85	E-recruitment prevents face-to-face interactions	No Yes	1 2	
86	E-recruitment prevents physical assessment of applicants	No Yes	1 2	
87	Checking of numerous applications is cumbersome	No Yes	1 2	
88	E-recruitment reduces chances of social responsibility to the host community	No Yes	1 2	

89	With e-recruitment, those without computer knowledge are at a disadvantage	No Yes	1 2	
90	Is acquisition /upgrading of computer skills by HR practitioners a challenge associated with the use of ICT			
91	Cost of acquiring ICT facilities militates against use of ICT by HR practitioners			
92	Are installation, maintenance and upgrading of software additional burdens?	No Yes	1 2	
93	What other challenges could you identify?			

SECTION F: PERCEIVED FACTORS AFFECTING UTILISATION OF ICT AMONG HR PRACTITIONERS IN S/W NIGERIA

Using the keys provided below, please tick as appropriate

Keys: SA=Strongly Agree, A=Agree, U=Undecided, D= Disagree, SD= Strongly Disagree

	ITEMS	SA	A	U	D	SD
94	Poor implementation and evaluation of Government economic policies promote effective utilisation of ICT for staff recruitment					
95	Low level of computer literacy in Nigeria affects the utilisation of e-recruitment					
96	Technology dependence is a challenge to effective utilisation of ICT					
97	Low internet penetration is a barrier to utilisation of ICT					
98	Lack of Availability of software					
99	Factors such as quota system, nepotism, god-fatherism etc negatively affect the level of utilisation of ICT and E-recruitment					
100	Public utilities like power supply are inadequate to promote high rate of utilisation					
101	Corruption in the society					
102	Organisational financial capacity may negatively affect the acquisition of ICT tools for staff recruitment/ e- recruitment					
103	Frequency of recruitment in organisations may negatively affect the adoption of e-recruitment and other ICT tools?					
104	Lack of integration of e-recruitment systems and existing HR systems is a barrier to adoption of e-recruitment					
105	Difficulty or inability to integrate e-recruitment to meet particular needs of recruitment processes					
106	The size of an organisation may negatively affect the adoption of e-recruitment					

107	Location of organisation					
108	Status of HR functions in organisations					
109	Can you please suggest possible ways of improving the level of utilisation of ICT for Staff Recruitment?					

APPENDIX II

IN-DEPTH-INTERVIEW GUIDE

Introduction: I am S.Ayodeji Omolawal. I am conducting a research on Utilisation of Information and Communication Technology for staff Recruitment, Selection and Placement among Human Resource Practitioners in South-west Nigeria. This interview with you is therefore to gather information that will be used for this research.

Confidentiality and Informed Consent: Please note that all information generated from this discussion is purely for academic purposes and will be treated with utmost confidentiality.

Do I have your permission to continue? Yes ( ) No ( )

Bio Data of Respondents

Sex:	Position in Organisation:
Age:	Years of Service:
Education:	Name of Organisation:
Membership status:	Sector of Organisation:

1. How should HR practitioners react to the changes in the world of ICT as regards the conduct of their functions? (Probe)
2. What is the level of utilisation of ICT for staff recruitment, selection and placement among HR practitioners in South-west Nigeria? (Probe)
3. What is the influence of the use of ICT for staff recruitment, selection and placement on the quality of staff recruited? (Probe)
4. What are the benefits associated with utilisation of ICT for staff recruitment? (Probe)
5. What are the challenges associated with the use of ICT for staff recruitment, selection and placement among HR practitioners in S/W Nigeria? (Probe)
6. How do HR Practitioners in S/W Nigeria perceive the factors that affect utilisation of ICT for staff recruitment, selection and placement in S/W Nigeria? (Probe)

Date and Place of Interview:

APPENDIX III

INTERNET USAGE STATISTICS FOR AFRICA

AFRICA	Population (2010 Est.)	Internet Users Dec/2000	Internet Users Latest Data	Penetration (% Population)	User Growth (2000-2010)	% Users in Africa
Algeria	34,586,184	50,000	4,700,000	13.6 %	9,300.0 %	4.3 %
Angola	13,068,161	30,000	607,400	4.6 %	1,924.7 %	0.5 %
Benin	9,056,010	15,000	200,000	2.2 %	1,233.3 %	0.2 %
Botswana	2,029,307	15,000	120,000	5.9 %	700.0 %	0.1 %
Burkina Faso	16,241,811	10,000	178,200	1.1 %	1,682.0 %	0.2 %
Burundi	9,863,117	3,000	65,000	0.7 %	2,066.7 %	0.1 %
Cameroon	19,294,149	20,000	750,000	3.9 %	3,650.0 %	0.7 %
Cape Verde	508,659	8,000	150,000	29.5 %	1,775.0 %	0.1 %
Central African Rep.	4,844,927	1,500	22,600	0.5 %	1,406.7 %	0.0 %
Chad	10,543,464	1,000	187,800	1.8 %	18,680.0 %	0.2 %
Comoros	773,407	1,500	24,300	3.1 %	1,520.0 %	0.0 %
Congo	4,125,916	500	245,200	5.9 %	48,940.0 %	0.2 %
Congo, Dem. Rep.	70,916,439	500	365,000	0.5 %	72,900.0 %	0.3 %
Cote d'Ivoire	21,058,798	40,000	968,000	4.6 %	2,320.0 %	0.9 %
Djibouti	740,528	1,400	25,900	3.5 %	1,750.0 %	0.0 %
Egypt	80,471,869	450,000	17,060,000	21.2 %	3,691.1 %	15.4 %
Equatorial Guinea	650,702	500	14,400	2.2 %	2,780.0 %	0.0 %
Eritrea	5,792,984	5,000	250,000	4.3 %	4,900.0 %	0.2 %
Ethiopia	88,013,491	10,000	445,400	0.5 %	4,354.0 %	0.4 %
Gabon	1,545,255	15,000	98,800	6.4 %	558.7 %	0.1 %
Gambia	1,824,158	4,000	130,100	7.1 %	3,152.5 %	0.1 %
Ghana	24,339,838	30,000	1,297,000	5.3 %	4,223.3 %	1.2 %
Guinea	10,324,025	8,000	95,000	0.9 %	1,087.5 %	0.1 %
Guinea-Bissau	1,565,126	1,500	37,100	2.4 %	2,373.3 %	0.0 %
Kenya	40,046,566	200,000	3,995,500	10.0 %	1,897.8 %	3.6 %
Lesotho	1,919,552	4,000	76,800	4.0 %	1,820.0 %	0.1 %
Liberia	3,685,076	500	20,000	0.5 %	3,900.0 %	0.0 %
Libya	6,461,454	10,000	353,900	5.5 %	3,439.0 %	0.3 %

Madagascar	21,281,844	30,000	320,000	1.5 %	966.7 %	0.3 %
Malawi	15,447,500	15,000	716,400	4.6 %	4,676.0 %	0.6 %
Mali	13,796,354	18,800	250,000	1.8 %	1,229.8 %	0.2 %
Mauritania	3,205,060	5,000	75,000	2.3 %	1,400.0 %	0.1 %
Mauritius	1,294,104	87,000	290,000	22.4 %	233.3 %	0.3 %
Mayotte (FR)	231,139	---	---	---	---	0.0 %
Morocco	31,627,428	100,000	10,442,500	33.0 %	10,342.5 %	9.4 %
Mozambique	22,061,451	30,000	612,500	2.8 %	1,941.7 %	0.6 %
Namibia	2,128,471	30,000	127,500	6.0 %	325.0 %	0.1 %
Niger	15,878,271	5,000	115,900	0.7 %	2,218.0 %	0.1 %
Nigeria	152,217,341	200,000	43,982,200	28.9 %	21,891.1 %	39.6 %
Reunion (FR)	822,986	130,000	300,000	36.5 %	130.8 %	0.3 %
Rwanda	11,055,976	5,000	450,000	4.1 %	8,900.0 %	0.4 %
Saint Helena (UK)	7,670	n/a	800	10.4 %	n/a	0.0 %
Sao Tome & Principe	175,808	6,500	26,700	15.2 %	310.8 %	0.0 %
Senegal	14,086,103	40,000	923,000	6.6 %	2,207.5 %	0.8 %
Seychelles	88,340	6,000	33,900	38.4 %	465.0 %	0.0 %
Sierra Leone	5,245,695	5,000	14,900	0.3 %	198.0 %	0.0 %
Somalia	10,112,453	200	106,000	1.0 %	52,900.0 %	0.1 %
South Africa	49,109,107	2,400,000	5,300,000	10.8 %	120.8 %	4.8 %
Sudan	41,980,182	30,000	4,200,000	10.0 %	13,900.0 %	3.8 %
Swaziland	1,354,051	10,000	90,000	6.6 %	800.0 %	0.1 %
Tanzania	41,892,895	115,000	676,000	1.6 %	487.8 %	0.6 %
Togo	6,199,841	100,000	356,300	5.7 %	256.3 %	0.3 %
Tunisia	10,589,025	100,000	3,600,000	34.0 %	3,500.0 %	3.2 %
Uganda	33,398,682	40,000	3,200,000	9.6 %	7,900.0 %	2.9 %
Western Sahara	491,519	---	---	---	---	0.0 %
Zambia	12,056,923	20,000	816,700	6.8 %	3,983.5 %	0.7 %
Zimbabwe	11,651,858	50,000	1,422,000	12.2 %	2,744.0 %	1.3 %
TOTAL AFRICA	1,013,779,050	4,514,400	110,931,700	10.9 %	2,357.3 %	100.0 %

Source: internetworldstats.com 2010

APPENDIX IV

INTERNET USERS, POPULATION AND FACEBOOK STATISTICS FOR AFRICA 2012						
AFRICA	Population (2012 Est.)	Internet Users Dec/2000	Internet Users 30-June-2012	Penetration (% Population)	Internet % Africa	Facebook 31-Dec-2012
Algeria	37,367,226	50,000	**5,230,000**	14.0 %	3.1 %	4,111,320
Angola	20,139,765	30,000	**2,976,657**	14.8 %	1.8 %	645,460
Benin	9,598,787	15,000	**335,957**	3.5 %	0.2 %	171,780
Botswana	2,098,018	15,000	**268,620**	12.8 %	0.2 %	294,000
Burkina Faso	17,275,115	10,000	**518,253**	3.0 %	0.3 %	141,740
Burundi	10,557,259	3,000	**176,040**	1.7 %	0.1 %	41,900
Cameroon	20,129,878	20,000	**1,006,494**	5.0 %	0.6 %	562,480
Cape Verde	523,568	8,000	**167,542**	32.0 %	0.1 %	107,340
Central African Rep.	5,057,208	1,500	150,920	3.0 %	0.1 %	163,780
Chad	10,975,648	1,000	**208,537**	1.9 %	0.1 %	43,120
Comoros	737,284	1,500	**40,550**	5.5 %	0.0 %	19,940
Congo	4,366,266	500	**295,132**	6.8 %	0.2 %	107,640
Congo, Dem. Rep.	73,599,190	500	**915,400**	1.2 %	0.5 %	903,020
Cote d'Ivoire	21,952,093	40,000	**968,000**	4.4 %	0.6 %	n/a
Djibouti	774,389	1,400	**61,320**	7.9 %	0.0 %	50,140
Egypt	83,688,164	450,000	**29,809,724**	35.6 %	17.8 %	12,173,540
Equatorial Guinea	685,991	500	**42,024**	6.1 %	0.0 %	32,980
Eritrea	6,086,495	5,000	**377,363**	6.2 %	0.2 %	20,940
Ethiopia	87,302,819	10,000	**960,331**	1.1 %	0.6 %	902,440
Gabon	1,608,321	15,000	**128,665**	8.0 %	0.1 %	132,000
Gambia	1,840,454	4,000	**200,057**	10.9 %	0.1 %	97,280
Ghana	25,292,392	30,000	**3,568,757**	14.1 %	2.1 %	1,630,420
Guinea	10,884,958	8,000	**141,504**	1.3 %	0.1 %	68,780
Guinea-Bissau	1,628,603	1,500	**43,484**	2.7 %	0.0 %	n/a
Kenya	43,013,341	200,000	**12,043,735**	28.0 %	7.2 %	2,045,900
Lesotho	1,930,493	4,000	**83,813**	4.3 %	0.1 %	51,440
Liberia	3,887,886	500	**116,637**	3.0 %	0.1 %	n/a
Libya	5,613,380	10,000	**954,275**	17.0 %	0.6 %	781,700
Madagascar	22,005,222	30,000	**418,099**	1.9 %	0.2 %	282,880
Malawi	16,323,044	15,000	**716,400**	4.4 %	0.4 %	203,840
Mali	15,494,466	18,800	**414,985**	2.7 %	0.2 %	212,020
Mauritania	3,359,185	5,000	**151,163**	4.5 %	0.1 %	106,200
Mauritius	1,313,095	87,000	**458,927**	35.0 %	0.3 %	367,900

Mayotte (FR)	223,426	n/a	**18,640**	8.3 %	0.0 %	19,500
Morocco	32,309,239	100,000	**16,477,712**	51.0 %	9.8 %	5,091,760
Mozambique	23,515,934	30,000	**1,011,185**	4.3 %	0.6 %	362,560
Namibia	2,165,828	30,000	**259,899**	12.0 %	0.2 %	231,340
Niger	16,344,687	5,000	**212,480**	1.3 %	0.1 %	63,500
Nigeria	170,123,740	200,000	**48,366,179**	28.4 %	28.9 %	6,630,200
Reunion (FR)	843,459	130,000	**300,000**	35.6 %	0.2 %	240,040
Rwanda	11,689,696	5,000	**818,048**	7.0 %	0.5 %	188,800
Saint Helena (UK)	3,687	n/a	**1,217**	33.0 %	0.0 %	n/a
Sao Tome & Principe	183,176	6,500	**36,928**	20.2 %	0.0 %	6,940
Senegal	12,969,606	40,000	**2,269,681**	17.5 %	1.4 %	675,820
Seychelles	90,024	6,000	**38,854**	43.2 %	0.0 %	27,600
Sierra Leone	5,485,998	5,000	**69,240**	1.3 %	0.0 %	76,880
Somalia	10,085,638	200	**126,070**	1.2 %	0.1 %	123,480
South Africa	48,810,427	2,400,000	**8,500,000**	17.4 %	5.1 %	6,269,600
South Sudan	10,625,176	n/a	**100**	0.0 %	0.0 %	n/a
Sudan	34,206,710	30,000	**6,499,275**	19.0 %	3.9 %	n/a
Swaziland	1,386,914	10,000	**251,448**	18.1 %	0.2 %	89,500
Tanzania	46,912,768	115,000	**5,629,532**	12.0 %	3.4 %	705,460
Togo	6,961,049	100,000	**356,300**	5.1 %	0.2 %	117,420
Tunisia	10,732,900	100,000	**4,196,564**	39.1 %	2.5 %	3,328,300
Uganda	33,640,833	40,000	**4,376,672**	13.0 %	2.6 %	562,240
Western Sahara	522,928	n/a	n/a	n/a	0.0 %	n/a
Zambia	13,817,479	20,000	**1,589,010**	11.5 %	0.9 %	327,600
Zimbabwe	12,619,600	50,000	**1,981,277**	15.7 %	1.2 %	n/a
TOTAL AFRICA	**1,073,380,925**	**4,514,400**	**167,335,676**	**15.6 %**	**100.0 %**	**51,612,460**

Source: internetworldstats.com 2012

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Unethical Practices by Unscrupulous Recruitment Agencies
OUR POSITION!

Registered and qualified Recruitment agencies all over the world provide the service of linking job seekers with available openings from employers, with whom they maintain contractual working relationships. Within the ambits of the law permitting their operations and respect for requirements for full disclosure, some offer this matching service at a fee to the employers who advertise their openings through the recruiters' platforms without charging the applicants. Besides, others also charge applicants for specified levels of additional services and engagements which may include preparation of curriculum vitae to meet best practice standards or offer of other advisory support. To charge for such additional services requested by an applicant is acceptable and legitimate. We however hasten to add that if the State had provided job centres equipped with computers where job seekers can self-compose their Cvs from existing format, as practiced in Korea, Japan and China, they would be spared these additional costs.

Due to very high unemployment situation in Nigeria, where about seven out of every ten graduates are unemployed, job seekers have become prey to dubious recruitment agencies and organizations, who smile regularly to the bank with proceeds from exploiting unwary desperate job seekers. The trend is becoming increasingly worrisome as some government agencies in concert with recruitment consultants request prospective applicants to part with money either for purchase of scratch cards or to pay sums to declared bank accounts to access the portals where application forms are completed. Through these dubious acts, money is extorted from unsuspecting applicants . Also, others who may not have the money to pay for such access are denied employment opportunities.

This is a gross abuse of the ethics and practice of Human Resource Consultancy in Nigeria, where nefarious elements, create bogus media presence, advertising non-existent job vacancies, with claims of briefs to recruit for organizations. In the Guardian Newspaper of 16th August 2011, the management of Nigerian Communications Commission (NCC), published a public notice disclaimer of vacancies, which were purported to exist in NCC. The disclaimer clearly stated that NCC had no vacancies it was filling and that the advertisement of vacant positions , inviting responses from applicants to a particular email address for which a payment of an administrative processing fee of N85,000 per application was' fake and fraudulent'. NCC further added that the advert was a ploy to rip off unsuspecting applicants and warned 'would be' applicants to beware. This action by NCC is commendable and typifies what is expected of employers of repute.

The sad and unfortunate aspect of this abuse of ethics of HR Consultancy services is that some Government agencies and parastatals have been alleged to condone or even actively participate in the perpetration of this exploitation of unwary and helpless applicants.
The question on the lips of those mature enough to recall public service recruitment practices of the 1960-70s is, what has happened to the erstwhile Federal and states civil services recruitment drives, examinations and interviews, which gave both the sons of the rich and poor equal opportunity to join the public service? Are all public service jobs now quarantined for political patronage and sharing among politicians to only those connected to them?

The implication of the various forms of abuses in the employment terrain does not only make life frustrating to Nigerian youths, it has turned private employment agencies services (an otherwise useful service) to a ruse, for both employers and job seekers. This growing scale of scam does not only impoverish applicants but wholly erodes their faith in published advertised vacancies in various commonly used media- print and electronic. The Chartered Institute of Personnel Management of Nigeria (CIPMN), which by Charter No 58 of 1992 is authorized to regulate the practice of Human Resources Management practice in Nigeria condemns in its entirety this emerging trend and warns fraudulent recruiters to desist as they could be prosecuted and their licenses withdrawn. The attention of the Federal Ministry of Labour is invited to this ugly trend and to keep it in check as the body that issues Recruiters licenses. While it is on record that the ILO, FML , NECA etc are working on setting up a code of practice for all private employment agencies in Nigeria, the Federal Ministry of Labour should expedite the process and install the instruments to guide and regulate what practitioners can do.

Signed

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