MANAGING ORGANISATIONAL EFFECTIVENESS: APPLICATION OF INFORMATION TECHNOLOGY

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Abstract

The study examined the topic "Information technology use and organizational effectiveness of Rainoil Nigeria Limited". To achieve this, four objectives were set and corresponding four research questions and a hypothesis. To guide the study, two theories namely, diffusion of innovation theory and technological determination theory were used. A cross sectional survey research design was adopted for the study. The population for the study was the 928 employees of Rainoil Nigeria Limited. Guided by baker 1958, it was determined that the sample size for the study was 311. Using the purposive sampling technique, the 311 respondents were drawn from the population. The study found that Rain oil had adopted ICT to a large extent and the use of ICT services had improved the performance of the organization significantly; that the use of ICT facilitated better data and knowledge management for the organization, improved operational efficiency of employees and also improved accountability for the organization and in quality service delivery to its customers. Based on the findings, the study recommends that Rainoil Nigeria limited should continue to embrace ICT tools and services so as to continue to have competitive edge and improve her service delivery to her customers. It also recommended that with regards to the positive link between ICT use and performance, Rainoil. Nigeria Limited offers a learning experience for other organizations in the country.
Keywords: Information technology, Organizational effectiveness, Managing.

Background of the Study

Since the early years of the 20th century, the world has been experiencing a revolution known as information technology. Some consider it to be the most fascinating development since the industrial revolution around the mid-18th Century (Tom, 1991). This revolution is changing our daily lives at home and at work, in shops and banks, in schools, colleges and universities. It is changing the way people think, communicate and behave. Today, the world has become a global village with the internet, mobile phones and satellite networks shrinking time and space, bringing together computers and communications; resulting in new ways of communication, processing, storing and distributing enormous amounts of information (UNDP, 2001). Advancement in chip, satellite, radio, and optical fibre technology has enabled millions of people around the world to connect electronically regardless of national or international boundaries. This explosion in connectivity is the latest and the most important wave in the information revolution (Evans & Wurster, 1997).

Information Technology (IT) is clearly considered as a key growth area in this century, specifically, in a dynamic and highly competitive business environment which requires utilizing advanced IT tools to improve efficiency, cost effectiveness, and deliver high quality products and services to customers (Allen & Morton, 2004). IT is also considered as a tool of marketing, contacting customers and looking for possible customers, as well as presenting IT services as distinguished potential services for customers (UNDP, 2001; Werthner & Klein, 2005).

Organisations are increasingly using information

technology to develop solutions to business problems, to improve both the efficiency and effectiveness of the decision-making process, to enhance productivity and service quality, to achieve dynamic stability, and compete for new markets (Attewell & Rule, 1984; Molloy & Schwenk, 1995; Boynton, 1993). According to Cerere (1993) organizations have always sought and adopted technologies that enhance efforts of their manpower in production and management. Indeed, he noted that although it has evolved over a considerable period of time, information technology has emerged as an important tool in management of organizational operations.

Information technology refers to anything related to computing technology, such as networking, hardware, software, the Internet, or the people that work with these technologies. According to Daft (1997) IT can be defined as the hardware, software, telecommunications, database management, and other information-processing technologies used to store, process, and deliver information. Information technology is commonly used to assist managers with direct control over business functions, personnel and other resources. As managers oversee resource coordination and allocation, it can be difficult to coordinate business functions across various projects. Information technology is one of the key innovations that is frequently implemented to assist in this process (Hobday, 2000). (Peansupap and Walker 2005) maintain that IT is often implemented as it is believed to facilitate communication, improve integration, enhance productivity and service delivery (Bjork, 1999).

As organisations grow and change, they depend more and more on information technology for their survival (Feeny & Willcocks, 1998). Companies today implement and use information technology to find solutions to business problems, to improve management decision-making, enhance productivity and quality, and compete for new markets in our global and aggressive business environment (Porter & Millar, 1985). Moreover, IT can be seen as a powerful force that opens exciting opportunities for organisations to achieve their missions and goals in an effective way. Therefore, leaders in organisations must obtain an overall appreciation of the potential of IT and link the acquisition and utilization of IT to the organizational mission (Hacker & Saxton, 2007).

Information technology is at the core of many business functions, operations, products and services. Today, organisations worldwide spend over 50% of their new investment funds on IT and related communications. How organisations manage these large investments is of critical importance to organisational efficiency and effectiveness. Further, IT is often the link between the business model and the critical drivers of success. Many organisations have been unsuccessful with their IT-based investments because of poor alignment of IT with the business.

Take for example Toyota; a Japanese automotive manufacturer, which has flourished in a highly competitive environment because it has created a set of finely-tuned business processes and information systems that simultaneously promote agility, efficiency, and quality. It can respond instantly to customers and changes in the marketplace as events unfold, while working closely with suppliers and retailers. As part of its ongoing effort to monitor quality, efficiency and costs, Toyota management saw there was an opportunity to use information systems to improve business performance. Even though technology alone would not have provided the solution, Toyota carefully revised its business processes to support a build-to-order production model that based vehicle production on actual customer orders rather than "best guesses" of customer demand. Once that was accomplished, Oracle e-business software was useful for coordinating the flow of information among disparate internal production, ordering, and invoicing systems within the company and with systems of retailers and suppliers.

This resulted in Toyota building only the cars customers have ordered, its vehicle order management system reduces inventory costs, because the company and its dealers do not have

to pay for making and storing vehicles customers did not want. The system also increases customer satisfaction by making it easier for customers to buy exactly the model, make and option they desire. Information provided by the system helps management monitor trends and forecast demand and production requirements more accurately. The system creates value for Toyota by making its ordering and production processes more efficient and effective. Electronically integrating key business processes in vehicle ordering and inventory management has made this company much more agile and adaptive to customer demands and changes in its supplier and dealer network.

The impact of Information Technology on organizations' services and performance has been examined by many studies (Beckey, Elliot, & Procket, 1996; McNutt, & Boland, 1999). Although most of these studies have suggested that IT plays a vital role in improving the quality and quantity of information, its potential for adoption and innovation is often uncertain (Mano, 2009). Different firms allocate their resources differently in a way that maximizes their objectives and those firms that allocate more resources on IT perform better than those firms that allocate less resources (McAfee & Brynjolfsson, 2008). Achieving high performance also requires good IT infrastructure supported by good IT management practice (Mwania & Muganda, 2012).

To ascertain the impact of information technology use and organizational effectiveness, I will x-ray the activities and growth of Rainoil Nigeria Limited, which is an indigenous company that has consistently grown its asset base despite the uncertain economic climate in the downstream sector. Rainoil Nigeria Limited is an integrated downstream oil and gas company. A prominent player in the Nigerian industry, the company's operations span across the downstream value chain i.e. Petroleum Product Storage, Haulage/Distribution and Retail Sales. Their primary products include Petrol (PMS), Diesel (AGO) and Kerosene (DPK). **The company** was incorporated in November 1994. Rainoil Nigeria

Limited commenced business as petroleum products marketing company in May 1997, the company's assets base has grown over the last 20 years to include:

- Bulk Storage - 2 ultra-modern petroleum product storage depots i.e. a 50 million litre capacity multi-product depot in Oghara, Delta State and a 50 million litre capacity multi-product depot in the Calabar Free Trade Zone, Calabar, Cross River State.
- Retail Services - 57 retail outlets spread across the country. Their stations are strategically located in major cities such as Lagos, Abuja, Kaduna, Port Harcourt, Calabar, Uyo, Enugu, Onitsha, Asaba, Makurdi, Sapele, Lafia, Keffi etc. They have a large and diverse customer base of retailers who rely on them for supply of products.
- Logistics - A fleet of over 80 tank trucks for efficient delivery of products to their network of stations and customers across the country. The fleet is frequently renewed through a deliberate truck acquisition policy.
- Marine Services – 1 shipping vessel; with a total carrying capacity of over 20,000 metric tonnes.

Rainoil limited remains a wholly indigenous company and a recognized player in the downstream oil and gas industry. The ultra-modern head office is located in Lekki, Lagos State.

Statement of the Problem
The concept of performance has always been present in management literature covering various aspects such as efficacy, efficiency, competitiveness, relevance and financial viability. Marmouse (1997) highlighted that; organization's performance represents the manner in which the company is organized to reach its objectives and the way it manages to reach them. In these days of heightened uncertainty in the economic sector and high competitiveness in business sector most organisations are in dire of a formula that will aid them improve their organisational effectiveness which will have a positive impact in the

achievement of their organisational goal. They are on a quest to unravel if truly adopting the use of IT will lead to more effectiveness in the activities which will have overall impact on their profit margin. Presently most organisations are grappling with inefficiency, low productivity and inability to compete favourably in a rapidly digitalized world.

The essence of this study is to unravel the impact of IT use and how it lead/led to organisation effective. Most organisations are in dire need of a proof that adopting the use of IT will contribute positively to their organizational performance hence the essence of this research.

In this study, Rainoil Nigeria Limited is the company understudy to ascertain if IT use indeed has a positive impact on organisational effectiveness. I discovered that over the years, Rainoil Limited has continued to grow as an organization and this involved a change in its operations and processes. There was tremendous growth in the number of technological devices used by staff at Rainoil Limited and investments on data management and communications systems.

Illustrations of studies done on IT's impact on performance included; a study of an information services firm by Pulley and Braunstein (1984), which found an association with increased economies of scope; another was by Diewert and Smith (1994) which provided an interesting case study of a large Canadian retail firm. According to their accounting frame-work, the distribution firm experienced an astounding 9.4% quarterly multi-factor productivity growth, for six consecutive quarters starting at the second quarter of 1988. They argued that "these large productivity gains were made possible by the computer revolution which allowed a firm to track accurately its purchase and sales of inventory items and used the latest computer software to minimize inventory holding costs". While Loveman (2001) found no evidence on performance increase from IT investments; Weill (1990) found that transactional IT had a positive impact on firm

performance but strategic IT or informational IT did not. Pourmirza (2006) found that IT labour produced substantial high returns in organizational performance but IT capital did not.

These studies had not quite given detailed insights and analysis of the issues that were addressed in this study therefore leaving a knowledge gap on the impact of information technology on organizational performance. The purpose of this study is to determine the level of IT use at Rainoil Limited and its relationship with performance of the organisation. In particular, the following research question is addressed; what is the impact of information technology on performance at Rainoil Limited?

Objectives of the Study
The objective of this study is to;
1. Ascertain if the adoption of information technology at Rainoil Nigeria Limited has any impact on the overall effectiveness of the organisation.
2. Find out the human, material and environmental challenges facing Rainoil in her application of information technology.

Scope of the Study
This study is limited in scope and in context. In scope, the objective of this study is to examine the role of information and communication technologies in the achievement of organizational goals at Rainoil Nigeria Limited. This study is therefore limited to looking at the types of communication strategy employed by the company in their quest to achieving their set goals as an organisation in the oil and gas industry in Nigeria. Contextually, the study focused on only issues relating to the adoption of ICTs for the purpose of achieving organizational effectiveness.

Organizations generally are association of human beings working co-operatively towards common objective under an authority and leadership (Onwuchekwa, 1995). Organization are designed and organized at a particular point in time to pursue certain goals and objective as defined by their founders. It is on the basis of these goals; it becomes a functional performance(s) for societies

where organizations are located. These diverse aspects of goal attainment performances in real world situations are aspects of need satisfaction for diverse societies. Hence, societies, including Nigeria satisfy their need problems through the functioning of organization.

So, goals attainment is of great importance to focal organizations and societies of their locations at large and, in this 21st century, information technology has been a veritable means for judiciously achieving the objective goals of organization in particular and the society at large. Thus, it is on this ground that this chapter focused on exposing the relevant literatures and terms sacrosanct to the study; not excluding the pains and gains of information technology and communication as well in an organization's efficiency both internally and/ or externally.

Theoretical Framework
In order to situate and align any study within its proper perspective, there is a need for existing theories that will form the pivot on which the study will revolve. Therefore, this study is anchored on Diffusion of Innovation theory and Technological Determinism theory.

Diffusion of Innovation Theory
This theory was propounded in 1972 by Everett Rogers. It seeks to explain how, why, and at what rate new ideas and technology spread. Rogers argues that diffusion is the process by which an innovation is communicated over time among the participants in a social system. For Rogers (2003), adoption is a decision of "full use of an innovation as the best course of action available" and rejection is a decision "not to adopt an innovation". Rogers defines diffusion as the process in which an innovation is communicated through certain channels over time among the members of a social system". As expressed in this definition, innovation, communication channels, time, and social system are the four key components of the diffusion of innovations.

The following are the basic assumptions:

- The media as well as interpersonal contacts provide information and influence opinion and judgment.
- Opinion leaders exert influence on audience behaviour via their personal contact, but additional intermediaries (called change agents or gatekeepers) are also included in the process of diffusion.
- The information flows through networks; the nature of networks and the roles opinion leaders play in them determine the likelihood that the innovation will be adopted.

The main thrust of this theory is deciphering how new ideas and discoveries spread to members of a social system. Bittner (2003) opines that in the diffusion of innovation process, the media presents information that makes us aware of the existence of an item. From there, the person gets interested, evaluates the item, tries the item then finally, acquires it. Daramola (2003) further adds saying that this paradigm holds that the media have a crucial role to play in the process of diffusion of innovations because they create awareness among a large number of people at the same time. Katz et al (1996) cited in Ojobor (2002) states that for a new idea or innovation to diffuse, there must be the awareness stage, interest stage, evaluation stage, trial stage and adoption stage.

With reference to this study, information technology is a veritable tool for the diffusion of innovations in the society. It can be used to inform the society of the existence of new innovations in society that could positively impact the development of an organization through efficiency. The widespread of the information technology in this 21st century makes it useful in the diffusion of innovations. Rogers (1995) suggests that interactive innovations, or those that offer two way communications as seen in the digital media, can speed up the adoption process because they attain a critical mass of users more quickly. In a study by Weir (1998) on the adoption of an electronic news product produced by a metropolitan newspaper, it was found that the use of the new medium, which is an offspring of the

digital media, was related to opinion leadership, the perception of internal incentives and the perception of external benefits, but not to the knowledge of computers or general status as an innovator.

According to Rogers (1983) in describing organizational transition defined organizational innovation as the development and implementation of ideas, systems, products, or technologies that are new to the organization adopting it. The adoption of innovations is a process that includes the generation, development, and implementation of new ideas or behaviours (Rogers, 1983)17. The innovation does not necessarily have to be new in terms of discovery or invention; it only has to be perceived as new by the organization (Zaltman, Duncan & Holbek, 1973)18. Thus, innovation diffusion theory is well suited for researching the adoption of ecommerce in developing countries. Various studies have classified the factors influencing innovation adoption (Kim and Galliers, 2004)19. Rogers (1983)17 grouped the factors under characteristics of innovation. Tornatzky and Fleischer (1990)20 identified three different categories of factors – organizational, technological, and environmental factors – that influence the technological innovation decision.

Kimberly and Evanisko (1981) identify three groups of predictors of innovation: characteristics of organizational leaders, characteristics of organization, and characteristics of environment. In summary, four categories of factors can be found in technological innovation literature: (1) Managerial; (2) Organizational; (3) Technological; and (4) Environmental. Researchers have identified the following common.

This theory is very appropriate for this study because it helps give the study a guide. This study is on information technology use and organisational effectiveness. The theory is concerned with the spread of innovations. Considering that technological innovation which is what is meant when we talk about information technology, this theory becomes germane as it

guides the researcher in investigating how information technology use can influence effectiveness.

Concept of Organization
An organization is an entity comprising multiple people, such as an institution or an association that has a collective goal and is linked to an external environment. The word is derived from the Greek word organ on which means "organ" It also means an organized group of people with a particular purpose, such as business or government department. It is a group of individuals working together to achieve one or more objectives.

All formal organization both business and non-business has six basic elements. These are technology, goals, structure, participants, environments, and organizational structure.

Social Structure: This is patterned and regularized relationship among the people in the organization. According to the view of Scott (1984) there are two major components of the social structure of organizations. These are the normative and the behavioural structures. In the real world situation, the behavioural structure is the actual structural grouping of the organizational workers.

The normative structure is oriented towards their beliefs and the role expectations, norms, ethics etc. so the normative structure is a constraint on the actions of the behavioural structure in the study of organizational behaviour, interest will be centred on understanding the social structure and the ways we can introduce changes.

Technology: This is viewed as the state of arts in a society or the cause effect beliefs in the transformation process. Technology exerts influence on the organizational structure and constraints activities of organizational participants. This will depend on the type of technology that is prevalent.

Participants: Organizational participants are workers in the organization. It is their patterned and regularized relationship that forms the social structure of organization. Understanding the

beliefs and orientations of the participants is essential for directing their actions towards organizational goals. Formal organizations have common goals, which they pursue and these become measure of organizational effectiveness or performance. Organization as sub systems performs for the society. They are finalistic i.e. when organizations, achieve their goals, then they are content as there is virtually nothing more to worry about.

Environment: The entities, customers, institutions, competitors etc which formal organization deal with but have no control over them are the environment. There are two major dimensions of the environment, the task system environment are these competitors or those organizations who are in the same area of business with the focal organization in terms of whose activities have direct influence on the focal organization in terms of differential advantage. Generally, environment e.g. government institution and regulation climate conditions have a general influence on all organizations. However, important factors that aid co-ordination of the different integrating element of an organization is organizational culture and communication. This point shall be buttressed in the course of this work.

Organizational Culture
Organizational culture is defined as the underlining beliefs, assumptions, values and ways of interacting that contribute to the unique social and psychological environment of an organization. Different definitions have been given by different author on what organizational culture is. According to Needle (2004), the culture of an organization includes the organization's visions, values, norms, system, symbols, language and assumptions, beliefs and habit. Deal and Kennedy (2000) avers that, organizational culture is the way things are done around here. This means that, every organization have a particular way of doing things as regard the organization. Organizational culture may be considered as the shared way of being, thinking and acting in a collective of coordinated people with reciprocal expectations; it is shaped,

disseminated, learned and changed over time, providing some predictability in every organization.

While the above definitions of culture express how the construct plays out in the work place, other definition stress employees behavioural component, and how organizational culture directly influence the behaviours of the employees within an organization. Ravasi and Schultz (2006) said organizational culture is a set of shared assumptions that guide what happens in organizations by defining appropriate behaviour for various situations. Schrodt (2002) also contributed that organizational culture affects the way people and groups interact with each other, with clients, and with stakeholders and also organizational culture may influence how much employees identify with their organization.

To achieve organizational goals, it takes sustained effort and a solid approach. In many ways organizational culture helps the organization to achieve their goal and to formulate strategies and propaganda so that proper and effective decision making process should work in favour of the organization. The organization culture directly put effects on organizational policies like structure of the organization, team behaviour, group psychology, working condition in the organization, motivating the workers/employees, job satisfaction, organizational values and effective control over management.

Effective organizational culture can contribute in melting off various types of complexness, precariousness, dubiety arising in the particular organization. It supplies a substance in prospect and helps to make skilful decision making, recruitment, accomplishing short term goals attainment, effective interaction of harmonious movements related to control over the various policies of the organization.

Here are 7 steps that will help in achieving organizational goals:
1.   Clearly Define Your Goals: While you may have made a list of your goals and spoken about them at an organizational meeting, that does not mean everyone understands

them. Get feedback from your subordinates and revise the goals so they are clearly understood. Next, give the goals some context. Why are they important? What happens if the organization does not achieve them?

2. Make Sure Everyone Knows About Your Goals: Every person in the organization has to have the same level of understanding and commitment to the goals. Everyone! If the goals are not clearly understood there will be potential for people to disregard them.

3. Refer to Your Goals Often: Just because you spoke about your goals once does not mean your organization's employees will always have them on their minds. The goals have to be worked into every meeting throughout the year. If you do not refer to them often other things will occupy your employee's minds and drive them elsewhere.

4. Define the Building Block Initiatives That Will Make Your Goals a Reality: Very few goals can be accomplished without building block initiatives. These initiatives are smaller discrete portions of work that will make your goals become a reality when they are accomplished with other initiatives. Because of their size and scope, building block initiatives have a better chance of success.

5. Establish an Approach to Completing the Building Blocks Initiatives: Each of the building block initiatives must have an approach for completing them. Just saying "do it" won't work; Employees must be equipped with skills for organizing, tackling, and delivering what is needed for each initiative to be successful.

6. Give the Building Block Initiatives Adequate Effort to be completed: Your organization only has so much capacity for completing work. Your employees have to pay attention to the operational work that constitutes the purpose of your organization. Then, with whatever time

they have left over your employees can work to complete the building block initiatives that will ultimately achieve your goals. Sometimes leaders have to cut back on operational work for individuals so they can complete the initiatives. The bottom line is this: if effort is not allocated to your building block initiatives, the goals will not be accomplished.

7. Publicize Progress in Achieving Your Goals: Everyone likes to keep score. If you achieve something important, your employees will want to know if they are winning or losing. Each building block initiative should have a completion date during the year to show that progress is being made towards your goals. It rallies the troops and gives them motivation.

By working through these steps, your organization will be able to achieve its goals. But remember – progress is not cheap. It takes time and effort to reach your goals.

The Concept of Technology
The arrival of information technology to every aspect of human life and business has been so noticeable that it does not need to be highlighted more. Information technology has been of abundant essence in the banking system. Information Technology and its application are valuable assets for the banking sector to face the challenges of the new economy. Information technology has been the keystone of recent financial sector developments aimed at enhancing the speed and reliability of financial processes and of initiatives to strengthen the banking sector. Information Technology (IT) is a dominant force in today global society. The improvements in IT have pointedly influenced the essential alterations of the twentieth century. Similar to other developing countries, it is necessary for the management of the organizations to measure and assess the organization performance to use organizations resources in a superior way and to earn good organization repute. Managers measure and control organization performance because it leads to better asset management, to an increased

ability to provide customer value, to increase the organizational knowledge and extent of organizational performance do have an impact on an organization's reputation. The organizational performance can be measured by using the organization efficiency (productivity), organizational effectiveness and industry ranking.

The enhancement of the management systems centered on the growing level of professional training is particularly important for the creation of the potential of working and for its capitalization. It is difficult to integrate the new technology with existing process. This integration helps to enhance the customer value, reduction of cost, modernize supply chains. The technology should and must support for existing policies and procedure and people. Information technology has a substantial effect on the movement of people and product. Financial institutions always remained the largest stake holders in technology. Technology has modified a traditional concept of banking from merely accepting deposit and advancing loan. Today's banks services are more than the customer expectation and they focus on customer oriented services. They are providing maximum services to facilitate their customer and capture maximum market. Today's customers are more demanding, they want quick response, convenient service, multiple delivery channels, access to their account at any time anywhere.

Technologies can only lead to increased productivity or improve performance when combined with other resources effectively by human resources or when done effectively, and use technology productively and ethically Employee can more rapidly acquire new knowledge and further advancement competencies through training Motivation of the employee has direct influence on technological advancement Employee's performance is closely linked with technological advancement. It can be managed by the employees and training should provide to the employee, it corrects the errors, time of working and enable the employees to face the advance challenges. Training provides a motivation for employees as well as it helps to do

the challenging task in the work place. Five major areas were absorbed on to define the effects of E-Banking on customer services.

They comprise correctness of records, 24 hours' service; prompt and fair attention; quicker services; and possibility for home and office banking, many firms emphasize that accounting transaction should updated daily so that they try to implement the accounting information system in their organization. A hypothetical significant role of the internal accounting system is to produce information about partial performance for use in human resource and compensation decisions. Adoption of the cloud computing services has been rapidly growing during the past years. The use of cloud computing in the organizations will have the significant improvements in their business processes.

Technology can be referred to as the application of knowledge for the execution of a given task. It entails skills and processes necessary for carrying out activities (works) in a given context. Information and Communication Technology (ICT), encompasses computer systems, telecommunication, networks, and multimedia applications (Frenzel, 1996)1. It came into use in the late 1980's replacing earlier terms like Electronic Data Processing (EDP), Management Information System (MIS), although the latter terms are still in use (Frenzel, 1996). ICT has transcended the role of support services or only electronic data processing; its fields of applications are somewhat global and unlimited. Its devices especially the Internet through the World Wide Web (www) and modern computer email facilities have further strengthened early innovations like the telephone and fax. Other ICT devices include data recognition equipment, factory automation hardware and services, telecommuting and teleconferences using real time and online system (Adeoti, 2005)2. It is a concept that is having a remarkable effect on almost every aspect of human endeavour. This connotes that it involves the application of principles to engage physical component in achieving an intended goal.

The convergence of computer and telecommunication after about four decades of applying computers to routine data processing, mainly in information storage and retrieval, has created a new development where information has become the engine of growth around the world. This development has created catch-up opportunities for developing countries such as Nigeria to attain desired levels of development without necessarily 'reinventing the wheels' of economic growth. This new technology has brought far-reaching revolution in societies, which has tremendously transformed most business (banking) scenes (Ovia, 2005).

Management in Organization
The subject of management as a science has long been the concern of social scientist. However, it was not until latter part of the 19th century that far-reaching attempts were made to investigate in a systematic manner, basic principle of management.

Management means different thing to different people. To some, it means the growing board, the top hierarchy of the organization. This conception is not acceptable because it gives the impression that subordinate officers are not involved in management. We do know that they are very much involved. Hence, regarding management as the total utilization of scarce resources in order to achieve predetermined organizational objectives becomes pertinent. Resources are an umbrella term which comprises people, money, materials, machines, information, knowledge, time etc.

In the case of utilization of resource, a manager is involved in the basic function of planning, organizing, directing and controlling which will be later explained. Objective however refers to the aim of the organization and these should be clearly stated, written down and easily understandable to the work force. Akpala (1990) viewed management in two ways. Firstly, management is looked at as getting things done through and with other people. This supports the concept above that subordinate officer are very much involved in management. Secondly, we also

defined it as a process of combining and utilizing organizations inputs of money, men and materials through planning, organizing, directing services desired by customers so as to achieve organizational goals. The above definition from all indication seems to agree with principle of management, which are planning, organizing, directing, controlling, shifting and budgeting.

Ever since people began forming group to accomplish goals they could not achieve as individuals, managing has been essential to assure the co-ordination of individual efforts. As society has come to rely increasingly on your efforts and as many organized groups have become large, the task of manager has risen in importance. Manager never operate in a vacuum or in a system unaffected by outside influence for him, whether managers head a government, a company or department or a section within an organization, manager must always take into account the many influences both inside and outside the organization which affect their task. For instance, a sales manager cannot administer a group of sales people without taking into account such internal factors as the company's engineering, mission and such external influence as economic condition, the market and applicable government regulations.

Oshinebo (1992) regarded the functions of management as planning, organizing, directing, controlling, shifting and budgeting. Planning is the establishment of objectives, policy and standard methods to guide workers and developing programme to keep the work moving forward to the objective.

Organizing means assigning various tasks to different people and coordinating their efforts. As the organization expands, the process leads to department and division each of which has its particular mission leading to directory involves a manager behaving in man-to-man relationship with the subordinates in leading, a manager strives to integrate people with welfare as its organization.

Controlling measures the progress if he is to

obtain his objectives and if operations are not going according to plan, he takes corrective measures or action to get back on course. Directing refers to guiding subordinates in order to achieve the objectives on the organization. It entails communication, leadership and motivation. Finally, controlling involves the manager ensuring that the set goals are actually being attained. Its steps include establishment of standard, measuring performance, compassion of actual results to standard, taking corrective measures. Management is defined as concerned with the direction and control of an enterprise and involves planning and direction of others, management has various branches of study. The most common among these is personnel management and human resource management. Personnel management refers to the conduct of affairs to human resource on the other hand was referred to as, the pool of manpower that undertakes both the formulation and execution of policy.

According to Eric (1974) human resource management is a series of activities in which the job, the individual and the organization all interacts as each develops and changes. It is concerned in other words, recruitment, selection and placement. He defined personnel management as being concerned with obtaining the best possible staff for an organization and having got them, looking after them so that they will want to stay and give their best to their jobs. From this definition, it is known that the prime task of the personnel department is to recruit people of suitable calibre required to meet organization needs. Getting them would not be enough, conditions have to be created which would make then stay on the job, happy on the job and cope with the demand of the job.

Personnel management on the other hand is the planning organizing, directing, and controlling of the procurement, development compensation, integration, maintenance and separation of human resource to the end that individual organization and societal objectives are accomplished. From the above definition of managements and even its study, it is obvious that the key factor is the achievement of the objectives or goals of the organization. This can only be done through group effort, for individual to put in their best therefore they have to be motivated. Critics of the earliest attempts to define the scope of management argued that the organization is a social system and that, instead of the focus on the work and work place technology, the human side of the enterprise should be emphasized. They therefore, concentrated on how to adopt organization structure and processors to the socio-psychological needs of human beings written in each organization.

Elton Mayor, Chester Bernard, Chris Argyris, Douglass McGregor Abraham Maslow, Fredrick Hertzberg etc. are prominent in this human relation school. The work of these scholars emphasizes the need for enriching the job of the worker through challenging and stimulating responsibilities and with commensurate authority to enable him to perform. Elton Mayor, for instance, in his theory believed that if informal organizations or associations were allowed to spring up the formal organizations workers are bound to put in their best in the organization.

Douglas McGregor propounded theories x and y. Theory x was based on the believe that the average human being does not dislike work that control and punishment should not be used to achieve organizational objectives because the individual would accept as well as seek responsibility. McGregor is regarded theory x which he propounded for classicist Henry Fayol, whereas theory Y was his opinion for workers. This would motivate workers to put in their best Maslow propounded the hierarchy of needs theory where he classified the needs of individual in order of urgency such as physiological needs, safety, social, esteem and self-actualization. Physiological needs have to do with need for food, shelter, clothing etc.

Safety needs is the protection in the workplace. Social need is for prestige or respect for oneself, and actualization is the need to be recognized in the society. Maslow believed that the satisfaction

of these needs in the order described by workers would definitely persuade them to work. Fredrick Hertzberg propounded the theory known as the two-factor theory. They were the hygiene or maintenance factors and motivators. Hygiene factors according to him, when present do not necessarily motivate workers, but when absent; it brings disorder to the organization. These factors include good working conditions, wages and salaries, company policies and administration. Motivators on the other hand, includes the high needs of Maslow's theory and are self-esteem, respect etc. with the knowledge of the above theories, managers now recognized the importance of work teams, informal groups, recognition, participatory decision making etc.

As major source of work satisfaction, it is believed that good communication is very important for any establishment where workers are not happy with the conditions of service; they can through dialogue communicate with the management of the company. This action is borne to settle the matter rather than go on strike action. For this reason of communication managerial performance is improved. A key factor for a successful communication is to talk at the level of employers understanding of the interest. For instance, employers will be all eyes and ears if the news is about pay or new bonus schemes.

A progressive company gets attention from all its employees on how the company is doing as a whole because ones pay and business depend on it. In this case, managers have to play an active role in decision concerning the firm, the need to improve cannot be over-emphasized. The achievement of this desirable objective will depend on full realization and appreciation that managerial effectiveness is determined by two important and essential components of the managerial work environment. These are the tasks at hand and relationship with other people within the organization. This view seems to agree with the statement that good state communication is vital to improve managerial performance.

Information Technology and Organization

Information technology systems are used by organizations to perform various tasks. Some use IT to provide for the basic processing of transactions, while others enable customers, distributors and suppliers to interact with the organization through various communication technology systems such as the internet. The term ''information technology systems in an organization '' is composed of four distinct parts which include: an organization, information in an organization, and information technology and information technology systems in an organization. Below I have listed some of the impacts of information technology in an organization.

Flow of Information
Information is a key resource for all organizations. What information describes might be internal, external, objective or subjective. External information describes the environment surrounding the organization. Objective information describes something that is known. Subjective information describes something that is currently unknown. With information technology the flow of all these three types of information is made simple by use of centralized data centres where all this data can be retrieved. Information in an organization can flow in four directions and these include upward flow of information, downward flow of information, outward flow of information and horizontal flow of information.

Transaction Processing
Information technology simplifies the transaction process of an organization. A transaction process system (TPS) is a system that processes transactions that occur within an organization. At the heart of every organization are IT systems whose main role is to capture transaction information, create new information based on the transaction information. TPS will update any transaction process and store that information in a database, so any concerned party in the organization can access that information via a centralized information storage network of internet.

Research Design

This researcher used survey method in carrying out this research. This design offered the opportunity of eliciting information from staff of Rainoil Nigeria Limited. Considering the population of the company, the survey method is the most suitable because surveys are useful in describing the characteristics of a large population. The survey allowed for many questions to be asked about the given topic, giving considerable flexibility to the analysis. This method also allowed for flexibility at the creation phase in deciding how the questions will be administered: as face-to-face interviews, by telephone, as group administered written or oral survey, or by electronic means. The survey method is suitable because it also allowed for the application of standardized questions which makes measurement more precise by enforcing uniform definitions upon the participants. Standardization ensures that similar data can be collected from groups then interpreted comparatively (between-group study). Usually, high reliability is easy to obtain--by presenting all subjects with a standardized stimulus and observer subjectivity is greatly eliminated.

Population of the Study

According to Onwioduokit (2000, p.23) "the term population is used to signify the entire class of objects or events to which generalization are to be referred." The population for this study are the 928 employees of Rainoil Nigeria Limited. This number is made up of staff members working in all the locations of the organization in the South-South geo-political zone of the country. The number of the employees of Rainoil Nigeria Limited was obtained from the company's website, www.rainoilnigerialimited.com.

Sample Size

Sampling is the process of selecting a subset of the study population. In this regard, Baker (1999, p. 152) states that "if a population is under 1,000, it is generally thought that the sampling ratio of 30% is good."

Therefore, 30% of the population of the study formed the sample size. The sample size is 311 and this is considered representative enough of the population studied.

Sampling Technique

The purposive or judgmental sampling method was apt for this study based on the assertion of Wimmer and Dominick (2003:88) that says "Purposive sampling includes only objects or elements selected for specific characteristics or qualities and eliminates those that fail to meet the criteria".

The purposive sampling method enabled the researcher to pick respondents who were willing to participate in this study based on their understanding and knowledge of the subject matter as well as their availability.

Level of IT Usage at Rainoil Nigeria Limited

IT device/System	Very Large Extent (%)	Large Extent (%)	Neutral (%)	Little Extent (%)	Very Little Extent (%)	Mean	SD
Laptops and desktop computers	50.53	38.42	4.21	5.26	1.58	4.31	0.899
The intranet	41.05	47.37	5.79	3.16	2.63	4.21	0.890
HR System	24.21	56.84	10	3.16	5.79	3.91	0.993
Office365 (email/OneDrive/ Yammer etc)	51.05	24.21	10	8.95	5.79	4.06	1.222
Mobile devices and tablets	26.32	34.21	23.68	10	5.79	3.65	1.143
CRM	15.26	5.26	23.68	9.47	16.32	3.24	1.290
DHIS2	14.74	24.74	31.05	8.42	21.05	3.04	1.331

The study sought to find out the level of use of IT devices and systems at Rainoil Nigeria Limited. Table 8 shows that majority of the respondents agreed to a very large extent (50.53 percent) on the level of use of laptops and desktop computers at Rainoil Nigeria Limited, while mobile phones and tablets level of usage was closely followed at (34.21percent). In addition, the respondents agreed to a large extent on the level of use of various IT systems at Rainoil Nigeria Limited; the intranet usage was at 47.37 percent, HR system usage was at 56.84 percent, office365 usage was at 51.05 percent and CRM usage was at 35.26 percent. On the hand, the respondents were neutral on the level of use of DHIS (The District Health Information Software) at 31.05 percent.

Impact of IT on Rainoil Nigeria Limited Performance in Data Management

Data Management Aspect	Mean	SD
Use of IT tools and services has significantly improved the data collection process by field officers.	4.32	0.598
Use of IT tools in data collection is easier as compared to previous paper based process.	4.25	0.608
Use of IT has facilitated better management of departmental data needs.	4.30	0.555
Use of IT data management systems has made the decision making process faster.	4.16	0.565

Use of IT has facilitated better knowledge management for the organization.	4.21	0.608
Use of IT tools has improved operational efficiency of employees at Rainoil Nigeria Limited.	4.23	0.589
Use of IT has helped Rainoil Nigeria Limited improve collaboration activities with her partners.	4.19	0.604
Average	**4.22**	

The study sought to find out the impact of IT on performance in various areas at Rainoil Nigeria Limited.

The respondents were requested to indicate their level of agreement with various statements on various aspects of organization performance. The results in Table 9 show that majority of the respondents represented by an average mean of 4.22/5 agreed that the use of IT had improved Rainoil Nigeria Limited performance in data management processes significantly. Data collection process of field officers had a mean of 4.32/5, and data collection activities using IT tools had a mean of 4.25/5. Management of departmental data needs had a mean of 4.30/5, while decision making process had a mean of 4.16/5. Facilitation of better knowledge management for Rainoil Nigeria Limited had a mean of 4.21/5 and improved operational efficiency of employees a mean 4.23/5 while collaboration activities with Rainoil Nigeria Limited partners had a mean of 4.19/5.

Impact of IT on Rainoil Nigeria Limited Performance in Target Achievements

Target achievement Aspect	Mean	SD
Use of IT has improved target monitoring and reporting significantly at Rainoil Nigeria Limited.	4.22	0.593
Use of IT has helped Rainoil Nigeria Limited incorporate quantitative targets at planning stage.	4.07	0.653
Use of IT has helped Rainoil Nigeria Limited implement target schedules on time. ..	4.05	0.658
Use of IT has helped Rainoil Nigeria Limited improve employee's productivity and increased flexibility.	4.13	0.631
Use of IT has helped Rainoil Nigeria Limited attract sustainable donor funding.	3.92	0.717
Average	**4.07**	

Results in Table 10 show that majority of the respondents agreed that the use of IT had a significant impact on Rainoil Nigeria Limited performance in target achievement aspect with an average mean of 4.07/5. Through the use of IT at Rainoil Nigeria Limited had improved the target monitoring and reporting; mean of 4.22/5, incorporated quantitative targets at planning; mean of 4.07/5, improved employee performance and increased flexibility; mean of 4.13/5, and attracted sustainable donor funding; mean of 3.92/5.

Impact of IT on Rainoil Nigeria Limited Performance in Accountability

Accountability Aspect	Mean	Total
Use of IT has helped Rainoil Nigeria Limited monitor variances (budget versus actual) in real time basis.	4.02	0.735
Use of IT has facilitated better management of Rainoil Nigeria Limited Products and services offered to Its customers (Sara)	4.09	0.636
The use of IT has led to more formalization of communication and procedures.	4.22	0.602
Whistle blowers have used Rainoil Nigeria Limited IT services in reporting malpractice and malfeasance.	3.68	0.844
Average	**3.99**	

Results in Table 11 show that, majority of the respondents agreed that the use of IT has facilitated better accountability of resources at Rainoil Nigeria Limited with an average mean of 4.99/5. Through the use of IT Rainoil Nigeria Limited can monitor variances against budget in real time basis; mean of 4.02/5, manage products and services better; mean 4.09/5 and also helped whistle blowers report malpractice and malfeasance; mean 3.68/5.

Discussion of Findings

Research Question 2: How are information and communication technologies adopted by Rainoil Nigeria Limited deployed in achieving organizational goals?

Table 14, 15 and 16 provides answers to this research question. From Table 14, the study sought to know if the deployment of the ICTs in Rain Oil Limited is done well or not. Data from the respondents shows that the majority of the respondents, 233 or 76% agrees that the ICTs are well deployed in the company. In the same vein, Table 15 which deals on the aspects of the company's operations where the ICTs are deployed reveals that the data collated reveals that the majority of the sampled respondents (232 or 74) indicated that the ICTs are deployed for Marketing activities, employee communication activities and public/customer relations. Thirty-five respondents indicated that the ICTs are deployed for marketing activities alone, 33 respondents said that the ICTs are deployed for employee communication activities while the remaining 12 respondents said that the ICTs are deployed for public/customer relations activities. Lastly, Table 16 sought to know the ICT that is mostly deployed by Rain Oil Limited for her activities and Table presents the data for this. From the Table, it can be gleaned that the majority of the respondents (192 or 62%) said that mobile phones are the most deployed ICT in the company while 76 respondents or 24% said that the Point of Sales machines are the most deployed ICT by Rain Oil Limited. The remaining 43 respondents or 14% indicated that the laptop computers are the most deployed ICTs in the company's operations.

From the foregoing, it is clear that the adoption of information and communication technology in Rainoil makes working from anywhere possible, makes meeting targets easier as well as makes work schedule a lot more flexible. There is therefore, no reason why more and more members of staff will not be more committed to the organisational goals, especially when the organisation is able to acquire state-of-the-art communication technologies.

This position is further supported by the study by Malhotra (1993) when he argued that the survival and growth of organisations in an increasingly turbulent environment would depend upon effective utilization of information technology for aligning the organisational structure with environmental preferences and for creating symbiotic inter organisational structures. Fields, Wilder, Bunch, & Newbold, (2008, p. 187) further support this position in their conclusion that these changes in technology, and their rapid evolution in recent years, have had influences on employee commitment for all generations. Because job performance in Rainoil is indicated by members of staff scoring high in their Key Performance Indicators (KPI), it would mean therefore, that the respondents are simply saying that the adoption of communication technologies helps their commitment to the organisation by giving them the opportunity to increase their output. While the researcher agrees that calculating organizational effectiveness could vary from organisation to organisation, setting of performance indicators is one of the very effective ways organisations gauge the effectiveness of their organisation. Richard, M. Walker, F. D. and Carlos A. D. (2009) support this view.

They hold that organizational effectiveness captures organizational performance plus a myriad of internal performance out comes normally associated with more efficient or more effective operations.

Research Question 3: What are the human, material and environmental challenges facing Rainoil in her application of information technology?

1.   Here the researcher intended to find out how and what type of human, material and environmental challenges Rainoil had to deal with in the application of information and communication technologies in the organization. The answer to this question can be found in tables 5 and 6. As shown in table 5, 75% of the respondents agreed that there exist human, material and environmental challenges facing the adoption of communication technologies in Rainoil, while 18% disagreed. Considering the percentage of respondents that agree to the existence of human, material and environmental challenges to Information and communication application, it becomes safer to agree that there are indeed such challenges and this position had been put forward by Pinto (2008 p1), in her article E-Waste Hazard: The Impending challenges where she stated that   "New electronic gadgets and appliances have infiltrated every aspect of our daily lives, providing our society with more comfort, health and security and with easy information acquisition and exchange… The knowledge society however is creating its own toxic footprints". She went further to say that "the same hyper technology that is hailed as a 'crucial vector' for future modern societal development has a not-so-modern downside to it: electronic waste (e-waste)". Kling (2000) notes in his study on Learning about Information Technologies and Social Change that we may be ignorant of the needless waste and human distress that improperly conceived virtualisation may cause. However, even if we do not work in an organisation that suffers from poorly realised virtual communication, these wastes and stressors may affect us more

directly and more frequently than we realize.

Summary of Findings

This study has emphasized that the implementation and effective use of ICT in organizations brings about competitive advantage. The use of ICT has a great impact on organizational performance as it helps to provide a platform for growth in many companies. In order words, ICT is known to improve organizational operations, growth and competitiveness as well as efficiency. From the literature reviewed, it is certain that there are a number of advantages associated with the use of ICT. Therefore, the effective use of ICT in many organizations would assist in creating several opportunities. This implies that there is a need for organizations to invest in ICT in order to set themselves apart from their competitors and also have sustainable competitive advantage.

This study was aimed at assessing the impact of information technology on the organizational performance at Rain Nigeria Oil Limited. It adopted cross-sectional survey research design where all the staff at the organization were the targeted for the study. Data was collected using questionnaires. All completed questionnaires proceeded to data analysis. A total of 311 questionnaires were returned. That represented a response rate of 71% which was sufficiently high to yield the results sought. Data was analyzed using IBM SPSS Version 21 for descriptive and inferential statistics.

The findings reveal the following:
1. That Information technology has made Rainoil more effective in its operations by bringing down cost of production, reducing fatality during production, increasing employee commitment and creating a favourable working relationship between Rainoil and her publics.
2. That Information technology, while quite desirable for Rainoil, creates yet another problem which is hazardous to the environment, that is, the management of waste generated from the use of information and communication technology. Management of e-waste in Africa is a major challenge especially due to the fact that Africa is just beginning to experience the impact of information and communication technologies.

Conclusion

The study found that, Rain Oil Limited had adopted and used ICT to a large extent and that ICT had a significant impact on performance. Some of the ways in which ICT had an impact on organization performance include; Rainoil Nigeria Limited was able to attract donor funding and collaborate with other partners more effectively, Rainoil Nigeria Limited was also able to achieve, monitor and evaluate organizational targets accurately while incorporating them at planning stages. ICT use had enhanced service delivery standards; improved customer's satisfaction and improved productivity of employees and increased flexibility in majority of organizations functions.

The study confirmed that there exists a positive relationship between information technology use and organizational performance. This was evident in all the operations information technology use variables analyzed: data management, accountability, target achievement and service delivery.

Recommendations

From the findings the study recommends
1. That Rainoil Nigeria Limited should continue to employ the use of ICT as that will in turn ensure that they meet their set goals and objectives.
2. That Rainoil Nigeria Limited should have a deliberate plan on how to dispose of waste materials generated from the use of ICT. This is necessary because the progress made from the use of ICT can easily be eroded by the effects of e-waste if not properly managed.

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