

## INFORMATION COMMUNICATION TECHNOLOGY AND THE MANAGEMENT OF OFFICE OPERATIONS IN MORDEN BUSINESS ORGANISATIONS IN NIGERIA

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### *Abstract*

*During the growth of a competitive global environment, there is considerable pressure on most organizations to make their operational, tactical, and strategic process more efficient and effective. An information and Communication Technology is perceived to be a force to be reckoned with in the 21st century because it has caused and continues to cause major changes in the way we live. In the electronic media, ICTs have ignited and provoked radical and drastic changes that have affected and revolutionized the broadcast industry, most especially in immediacy and timeliness of news. Information and Communication Technology not only facilitate and enhance the creation, processing, sharing and dissemination of information in business organizations but the immediacy and timely delivery office task is of a high essence. The implication of the use of ICTs in office operations might lead to an overall shrink in the need for human correspondents. Before ICT could be more effective in enhancing office operations in Nigeria, the constraints to devices should not be neglected if business organizations must thrive or perhaps compete with its international counterpart. Consequently, many organizations decide to implement ICT in order to improve the effectiveness and efficiency of their business organizations. However, a lack of awareness of numerous and varied challenging issues surrounding the implementation process could be problematic for the whole process.*

**Keyword: ICT; Employee; Office Operations, Business Organizations; Performance**

### **Introduction**

The introduction of sophisticated office technology equipment like computers, word processors and other information technology resources coupled with new management techniques have completely changed old work habits in the office and triggered off a new business orientation thus making moribund the older methods of business transaction. According to Okute (2001), Information Communication Technology is concerned with the aspect of managing and processing information through the use of electronic computers and computer software to convert, store, protect, process, transmit and retrieve information. It is the handling and processing of information for use by means of electronic and communication gadgets such as computers, cameras, telephones etc.

Notwithstanding, with ICTs, information spread, infinitely becomes faster and cheaper and readily available. Before now, there was a significant time lag separating the

point when an event took place, and the time when the news may be publicly made available. But, ICTs, has helped bridge the time lag between when an event took place and the time it is made available to the public. Information and Communication Technologies (ICTs) is a generic term used to express the convergence of telecommunications, information, broadcasting and communications. According to Rodriguez and Wilson (2000; 33) ICT is seen as a set of activities which facilitate and enhance the processing, transmission and dissemination of information by electronic means. Also perceived ICTs as techniques people use in order to share, distribute, and gather information for communication through computers and computer networks. Promoting Information and Communication Technologies as an integral part for enhancing timely news delivery in the broadcast industry was articulated by Samadar (1995; 12-15), when he submitted that ICT is a tool for facilitating the creation, storage, management and dissemination of information by electronic means. Meanwhile, Marcelle (2000; 18) did not only see ICT as a complex entity but an application and services used for the production, distribution, processing, transformation of information with the aid of ICT tools.

### **Concepts of Information Communication Technology**

Information technology can be defined as the hardware, software, telecommunications database management and other information processing technologies used in computer based information system. IBM Annual Report (1997) Vol. 27.1. It is the technologies used for information processing.

Information communication technology is a term used to refer to the use of computers and other related devices to organize, store, retrieve and transmit information either within or outside an organization, it can be viewed as the use of computers and other device for data capture, processing, storage, retrieval and transmission in a most organized form to aid decision making process in an organization. Ifeanyi (2002) quoted financial digest 1994: described information technology as an information system meant to provide information so as to aid planning and organization; it includes the internet, e-mail and its variant, electronic commerce etc. It has also been defined as the acquisition production and transformation, storage and transfer of data by electronic means in the forms such as local pictorial, textual and numeric so as to facilitate interaction between people and machines. It includes the applications and implications (Social, economic and cultural of these process meadow journals) this information technology is born to minimize the cumbersome of time, distance and space in doing business. According to James Heskett (1999; 15) ICT technology in a broad sense includes hardware, software and methods in other words, it is a combination of hardware (the physical machine), software (the electronic programme that runs the hardware and the methods the best combination of hardware and software whose primary role affect information and presentation.

Fubara (1989:202) opines that computers are pieces of electronic equipment capable of carrying out very complex calculation and other activities in a very short space of time. A computer therefore is a sophisticated magnetic machine which is carefully assembled to be able to manipulate or solve any given complex problems which could tale ordinary human being a lot of more time to accomplish in the shorted possible time. The computer, because of its capability, can manipulate a given problem be it in the area of engineering, scientific, mathematical, all business problem etc ....., without any human intervention (Ile, 2001: 609). Based on this, it cuts down the time used in solving problems. Computer also increased productivity. It can also reduce cost of production and provide effective services. However, there are two types of computer specialist; these are the hardware and software.

He further affirms that, when information communication technology (ICT) were first introduced computer were very largely and expensive. The required special rooms and were frequently difficult for the average person to operate and understand. The demand for information technology grows everyday because of the believe that it saves time and manpower. There is no doubt that we are in the “information age” where businesses are networked into the global village using electronic media to communication worldwide clients such that the use of computer communication network internet or world wide web (www) sites are flourishing with information that can be accessed with amazing speed across worldwide links.

### **Information Communication Technology and its Products**

Clinton (2009) affirms that Products of information technology include such as these: computers, Electronic messaging, Audio/video conferencing and Office automation.

**Computer-** a computer is a system of information processing components that performs input, processing, output, and storage and control functions. Its hardware components include; Input device, Output device, Central processing unit (CPU) and Secondary storage device.

They are of types such as the mini computers, mainframe computers and personal computers. Computers are designed to handle the information processing needs of businesses or organizations with many customers’ employees of even complex computational problems.

The software of a computer consists of (i) System software and (ii) Application software System software controls and supports the operations of a computer system as it performs its carious information processing task while application software directs the performance of a particular user application to meet the information processing needs of end users.

The computer operates using two basic types of telecommunication networks namely:

- (i) WAN – wide area network
- (ii) LAN – local area network

WAN covers a wide geographical area while LAN interconnects end user work stations and other devices (printers, scanner etc) at local work sites.

The software resources of an information system consist of programs to direct operation of the computer hardware and procedures to direct the activities of people who use the system. System software can be subdivided into system management programs, system support programs and system development programs. System management programs manage the hardware, software and data resources of a computer system during its execution of information processing jobs. Major system management programs are operating system, database management systems and telecommunications monitors. System support programs support the operations, management and users of computer system by providing variety of support services. Major system support programs are system utilities, performance monitors, and security monitors. System development program help users develop information processing programs, procedures and prepare user programs for computer processing.

Application software includes a variety of programs that can be segregated into general purpose, business, scientific and other application categories examples are word processing, electronic spread sheet, graphic programs, database programs etc.

Telecommunications networks (LAN or WAN) can help a firm to compress the time taken for business activities reduce geographic limits on business markets and restructure business relationships. This can lead to significant improvements in operational efficiency,

business effectiveness, and organization innovation. The major components of telecommunication network are

- (1) Terminals
- (2) Telecommunications processing
- (3) Communication channels and media
- (4) Computers
- (5) Telecommunications controls software

Telecommunication processors include modern multiplexers and various devices to enhance capacity and efficiency of telecommunication channels. Telecommunication software consists of computer programs that control and support the communications occurring in telecommunication network. Communication channels include such media as twisted pair wire, coaxial cables, fibre optic cables, and cellular radio and satellite systems.

**Electronic Messaging:** Individuals or business can send written messages to others at any time of the day or night and from any place in the world electronic messaging allows document communication to take place. A disadvantage of electronic messaging however that is an important message may not be read immediately, in fact it could be several days before a message is read. A basic form of electronic messaging is electronic mail (e-mail) in which simple the message is sent between people. It is designed mainly for document communication. It is possible however to send various types of files even the non-document files in an e-mail usually called an attachment, which could contain a sound, photo, or video. Because electronic messaging is different time collaboration, a message may not be read immediately upon receipt. Some messaging software uses a technique called instant messaging to overcome this problem. With this technique, the sender uses the messaging software to determine whether the intended receiver is currently connected to the network and if so can receive a message which appears almost immediately on the receiver's screen. The receiver can then read the message and reply using instant messaging.

**Audio/Video Conferencing:** Many personal computers have speakers (or headphones) and a microphone, so it is natural to incorporate telephone capabilities into computers. Some PCs come with telephone circuitry that allows communication over telephone lines. Another approach called computer telephony uses a network usually the internet for audio communication thus by passing the regular telephone lines. In audio conferencing 2 or more employees of a particular organization at different locations communicate with each other by voice over a computer network. During audio conference, one may want to see who is being talked to as facial expressions and body language can sometimes convey more information. This leads to video conferencing which allows one to see who is being talked to. It usually includes audio although audio conferencing can be done without video.

**Office Automation:** The use of computers and the various applications to support or for various offices referred to as office automation. Employees at all levels need computer applications/support to do their jobs. Historically office tasks have been done mainly by secretarial personnel but with the introduction of information technology managers and other personnel began doing their own office work office automation includes individual applications such as word processing desktop publishing, and presentation of graphics. It also includes workgroup applications such as e-mail information sharing, calendaring, scheduling, and workflow management. Office automation equally includes voice processing facsimile unified messaging, electronic filing, image processing and document management electronic filing instead of filing a paper copy of a document in order to save it, a copy can be filed electronically in a secondary storage. The document can be retrieved in the future and printed if necessary.

**Image Processing:** Copies of graphs, charts, photographs and other images can be storage in secondary storage and be accessed at any time.

**Document Management:** This is the combination of electronic filing and image processing so as to keep track of documents information technology is a wide filed and has enabled organizations across the world to work in an efficient manner. It plays a very important role in effective management and running of any business.

The use of IT in any businesses inevitable be it any type of business such as manufacturing or medical sector. It has contributed to process advancements in organization.

**Basic Elements of ICT are:-**

- (1) **Software and Application** – Software is an important part of IT with relates to computer application that enable a company to generate, store, program and retrieve data as and when needed. There is much software developed for different purposes. All operations in business are carried out by software that is assigned for executing specific tasks. Operating system ERP (enterprise resources planning) special purpose applications and web browsers are some examples of different software.
- (2) **Hardware Devices** – These are the various computer equipment that house (the software. Devices such as micro computer midsize serves, huge mainframe systems etc are some example of hardware. Because businesses have a huge collection of important data which needs to be stored and retrieve when bedded, these hardware devices are employed.

### **Assessment of Information Technology on Business Performance**

Shark (2005; 44) Information technology has revolutionized the phase of business around the world. Local businesses have become international due to a simple website. Information technology has helped businesses in advertising. People who check their e-mail may suddenly have a pop up at their page ends with sales up to 60%.

Information technology helped in customer service, huge corporations like Microsoft attend to customer needs through email and chat services. Networking internal and external in organizations has improved the working of businesses. Staffs and clients likewise can get in touch with the managers for feedback, progress reports and extensions. Communication has bloomed; two business organizations if they need to work together can easily do so. Hotmail, when merged with MSN was easy since the service was online. Business these days require a lot of planning, due to high tech organization systems on computers, planning can be done on an organized pattern, with schedule formats, grant chart etc. Huge database can now be controlled and stored on network and backup drives. Clinton (2009; 19)

Together with the advancement of science and technology, technological innovations grew along with it, resulting to the emergence of new equipment and gadget. No matter how big or small your company is, technology brings both intangible and tangible benefits to become cost efficient and to meet the growing demands and needs of customers. Technological innovations affect corporate efficiency, culture and relationship among employees, clients, suppliers and customers. The type and quality of technology used affect the security of confidential business information. Shark and Scakel (2007; 44) observes that due to the burden brought by administrative tasks, like inventory, bookkeeping and records keeping both big and small companies rely on computers to do their administrative works. The birth of internet and online social networking sites tremendously decreased the costs of business operations. It also makes it easier for companies to use the Six Sigma management methodologies. Some firms shifted to outsourcing instead of hiring their own personnel due



to the low costs associated with it. Because of the huge impact of technological innovations to companies, it is impossible for them to live with it. Commonly used high technology equipment:

- ✓ Computers
- ✓ Photocopier
- ✓ Telephone
- ✓ Computer printer
- ✓ Internet
- ✓ Paper shredder
- ✓ Multimedia projector
- ✓ Touch screen
- ✓ monitors
- ✓ Computer mouse
- ✓ Laptop computers

### Advantages of Technology in Business Environment

Studies conducted by Wigatap Institute of Research in Lebanon reveals that ICT has affected the broadcast media professionally; and goes further to outline the key areas which ICT has added colour to office operations. Some of the ICTs functions are listed:

**Customer Relations:** Technology affects the way companies communicate and establish relations with their clients. In a fast moving business environment, it is vital for them to interact with clients regularly and quickly to gain their trust and to obtain customer loyalty. With the use of Internet and online social networks, firms interact with consumers and answer all their queries about their products. Establishing effective communication with customers not only creates rapport with them, but it also creates strong public image. It allows business enterprises to reduce and to cut carbon dioxide emissions.

**Business Operations:** With the use of technological innovations, business owners and entrepreneur understand their cash flow better, how to manage their storage costs well and enables you to save time and money.

**Corporate Culture:** Technology lets employees communicate and interact with other employees in other countries. It establishes clique and prevents social tensions from arising.

**Security:** Modern security equipment enables companies to protect their financial data, confidential business information and decisions.

**Research Opportunities:** It provides a venue to conduct studies to keep themselves ahead of competitors. It allows companies to virtually travel into unknown markets.

**Corporate Reports:** With technology, business enterprises communicate effectively with their branch offices to deliver quality financial and operational reports.

**Industrial Productivity:** Through the use of business software programs or software packages, it automated traditional manufacturing process, reduces labour costs and enhances manufacturing productivity. It enables companies to increase efficiency and production output.

**Business Mobility:** Technological innovations improve companies' sales, services; facilitate timely receiving and delivering of goods and services, and enable them to penetrate multiple markets at least costs.

**Research capacity:** It enables them to conduct studies on various companies to gain knowledge on the new trends in the market and way on avoiding them.

## Conclusion and Recommendations

This paper uncovered some of the numerous benefits associated with the use of ICT in Office environment. This study concludes that ICT has created opportunities for widespread electronic and timely delivery of office operations.

The implication of the use of ICTs in office operations might lead to an overall shrink in the need for human correspondents. Before ICT could be more effective in enhancing office operations in Nigeria, the constraints to devices should not be neglected if business organizations must thrive or perhaps compete with its international counterpart.

The paper, recommended that there is need for training and retraining of IT personnel in order to compete, and catch up with the rapidly and swiftly changes in business organisation. Employee in business organizations should always be ready and open-minded to acquire additional training/skills development, bearing in mind that changes occur frequently in the line of their chosen career and they are not left behind in the use of ICT in this digital age.

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