APPLICATION OF INFORMATION COMMUNICATION TECHNOLOGY (ICT) IN GENERAL OFFICE ADMINISTRATION

JOHN PAUL ENEBELI

Email: paul.enebeli@uniport.edu.ng, jpaulik@yahoo.co.uk

ABSTRACT

Information Communication Technology has enhanced the daily office routines and had even contributed to their effectiveness and accuracy when handling administrative duties. This study focuses on how Information and Communication Technology has improved the method of office administration in the present dispensation. This study has proven that new technologies remain important for the improvement of performance in organisations. The study had already seen the usefulness of ICT in administration. This study is advocating for possession of standard and befitting ICT skills that will lead to the effective and efficient information processing, storage and dissemination of information in all works of life, for which usefulness is not limited to private and government establishments. This study recommends increasing awareness of administrators towards ICT tools such as smart phones, faster Windows operating systems (e.g. Windows 10), laptops and tablets for effective use in word processing, database management, desktop publishing, micrographic, reprographic, emailing, scanning, graphics and office communication. It also recommends that administrative staff should possess and keep improving on their ICT skills for efficient and effective discharge of administrative duties. Our findings from this research show that ICT makes collaboration much easier among administrators. Administrators who are not physically present in the office can communicate more easily and their duties can go unhindered; we cannot bridge activities as a result of distance from office because ICT will make communication to be a continuous process. Businesses can maintain accurate records of their communication, transactions, and interactions by using ICT tools such as databases or accounting software.

KEYWORDS: ICT, Globalization, Paradigm, Broadband, Database, DBMS, Structured, Unstructured, Reprographic

INTRODUCTION

Information and Communication Technology (ICT) refers to the use of skill in combining information and communication processes and devices to obtain, analyse, store, recall and transmit accurate information from one place to another. It could be regarded as tools used for processing, transmitting or communicating data and information electronically from one computer system to another by standardized message formatting, without the need for human intervention. Information and Communication Technology (ICT) is a major factor for effective service delivery.

Administrative duties may vary depending on the size and industrial affiliation of the organization. Administration on the other hand is the process of organizing people and resources efficiently so as to direct activities towards a common aim and objectives.

Administrative employees are office personnel who deal with correspondence - answering and transferring calls managing email enquiries, processing and sharing data and scheduling appointments, keep records and assist managers in ensuring progress of their organisations - preparing regular reports (e.g. expenses and office budgets) (Ezenwafor, 2013), basically their job schedule is such that the day to day running of an organization is their own duty. The duties of administrative officers include other responsibilities that help maintain a productive office workplace.

ICT increases the availability and accessibility of information in modern day offices; it forms a new communication method, it reintroduces productive processes and improves the efficiency of many different office administrative activities. It brings about speed, and provides needed information at the right time.

JOHN PAUL ENEBELI, University of Port Harcourt

It gives you leverage and encourages one with a boost- information that could hitherto be left unused is at ones fingertip and its accessibility is at the speed of light. Dissemination of information today is at the speed of light, the internet has brought a new method of transfer of data that encompasses speed, integrity, security and accuracy, and it is far better than older methodology that held humanity spellbound.

Information and Communications Technology (ICT) has rapidly been transforming the rules of business, and due to the size of the Internet and nature of products. The ICT industry, including telecommunications operators, computer and software producers and electronic equipment manufacturers, are playing a significant role in boosting economic growth. This growth is as a result of ease in office administration convenience which is the output from the individual end-users.

From the government sector, the private entities, individuals firms to institutions, almost everyone and everything is dependent on the enabling structures and systems that ICT has provided. With the simple click of a button, you can handle end-to-end business transaction in the comfort of your home environ with efficiency and performance. Enhancement that was brought in by ICT is not just local, it involves globalization. Individuals can work in distant industries from anywhere and the result will still be overwhelming. ICT and the Internet have led to the shrinking of the workplaces; there is no distance again between boundaries except for who is unconnected.

ICT's use and its enhancement in office administration have prompted a new paradigm, the new idea that every organization should have an IT staff; this has created new jobs and opportunity. This group of staff has also helped in the improvement of the workplace; you cannot do without them unless you do not need your outfit to be online.

From the foregoing, one could deduce that ICT and Administration are very vital in running an office, in short without both it will be impossible to run any organization effectively. Coordinating chained organizations and relating with external ones could only be possible with an efficient administration department in an establishment. It is like a backbone of any organization. It is obvious that office administration is significant because it leads to the attainment of organizational goals, the most efficient use of resources, the reduction of operational expenses, and the smooth flow of activities.

REVIEW OF LITERATURE

Information Technology is defined as the handling of vocal, pictorial, textual and numerical data by means of micro-electronic based equipment in computing and telecommunication (Wordu et al, 2021). Offices now wear new looks, courtesy of ICT, there has been a paradigm.

To prove the spread of ICT and the Internet, (Lee *et al.,* 2017) opined that in less than two decades,

societies have achieved broader connectivity than ever before. This goes to show that office management and administration is gaining a lot from ICT. ICT investment can accelerate efficiency and productivity in all human activities (Erumban and Das, 2016). According to Nkokelonye (2008) the ability to put into use already acquired competencies, attitudes, and behaviours after theoretical knowledge acquisition in a field of study is skill; he therefore opined that the possession of appropriate skill is a necessary tool as an administrator. Skill is the ability to use knowledge efficiently in the discharge of duties. ICT skills lead to the effectiveness and efficiency in information processing, storage and disseminating of information in any administrative activity (Teryima S. J and Ayegba S 2015; Bolaji & Ajape 2022).

Modern office technological gadgets such as smart phones, faster Windows operating systems (e.g. Windows 10), laptops and tablets according to (Pfano and Beharry, 2016) are in use by Administrators, Managers and Clerks. Such tools are helpful in making the work of administrators very flexible and easy. The power of ICT has brought about speed, accuracy and transparency in the duties of administrators as it has knocked of all the inordinate delays in file processing and progress caused by many levels in the departments/organisations (Gupta, et.al, 2004).

ICT is already regarded the world over as an immeasurable tool for local, state, federal governments, and private sector which administrators should hold firm for effective discharge of services to clients. The introduction of Information and Communication Technology (ICT) into administrative duties has changed the face of offices and consequently made business environments to wear a new look. This new change brought in by ICT is highly noticeable in the area of office administration and management. He went further to say that ICT tools had improved the manner in which message is managed generally (preserved, recalled, shared and relayed) for information and communication purposes (Egoeze et al, 2018). The study also showed that ICT tools are now available for the performance of many administrative functions that were formerly done manually. ICT has brought about greater effectiveness and efficiency in the performance of office administrative activities. All the tools that came under the umbrella of ICT now make for faster, neater, more accurate and more reliable outputs. Administrators now enjoy greater efficiency and speed because of Information and Communication Technology (ICT) which promotes organizational effectiveness.

IMPACT OF ICT ON OFFICE ADMINISTRATION

In recent times, Information Technology has been playing some important roles in our day-day activities and has been influential in office work that includes handling of letter writing and reports, office communication, and archival management.

The electronic records can provide data needed by the leadership as material in carrying out its leadership function, namely in terms of planning. It is promoting efficiency in all office activities.

ICT would always lead to faster communication speed. The ccommunication speed of ICT technology is closer to the speed of light. Use of computers and the internet has drastically replaced telephone and postage services because the former two devices have led to decreased communication cost. Today information can to be sent and received faster than in the past. With enough bandwidth, 3G, 4G, 5G, broadband and connection speed on the Internet, any information can travel fast and at an instant. With more research into the global networks, there will be great improvements in the communication sector that will be cost-effective; saves time and will be inexpensive. The result will be effective administrative services at both private and public sectors of the society.

Lower communication cost. Any form of ICT that is put in use for communication will usually lead to saving cost. The cheapest of them all being the Internet which is more cost-effective than the other modes of communication such as telephone, mailing or courier service. ICT will give users the leverage to have access to large amounts of data at a very low cost. The internet gives us a wide range of services; all are tied together in the internet services, so with the Internet we do not have to pay for any basic services provided by the Internet.

Reliable mode of communication is one other advantage that came from the introduction of ICT as a means of communication. ICT tools which include devices and applications that provide access to information and enable electronic communications, like sending and receiving text messages, engaging in video chats, smart phones, computers, mobile phones, and laptops are typical ICT devices. With the internet, information could be accessed and retrieved from anywhere at anytime; it a reliable mode of communication. The error in input to the computer is contributed by humans - if the data entered to the computer is faulty, the output will automatically be faulty as well.

ICT is good in effective sharing of information. The use of ICT is paramount for knowledge to be effectively and adequately shared among people. It is done instantly, and there assurance that it will get to all destinations without any communications barriers. ICT will rather enhance the knowledge sharing process. It does this because it facilitates documents management, data storage, access of information, dissemination, exchange, and in sharing of ideas.

Using ICT for communication leads to a borderless communication. In this kind of communication there is no limit to which you can discuss with. An email sent to a group of customers gets to each and every one of them at same time carrying the same content.

ICT BASED OFFICE, COMPONENTS AND THEIR USES

The introduction of ICT into an office for the purpose of administrations makes way for greater efficacy and efficiency in the daily routine activities in an office. New digital machines and electronic equipment now make for faster, neater, more precise and more consistent outputs. All these are possible because ICT technologies are now available for the performance of many functions that were manually done before in offices. Higher managerial duties and even lower cadre jobs that were hitherto done by humans are basically done by using information and communications technologies.

Possessing standard and befitting ICT skills leads to the effective and efficient information processing, storage and disseminating of information in all works of life, for which usefulness is not limited to private and government establishments. Its use can be applied in both personal and corporate activities. The gain derivable from application of ICT in various human activities is estimated in billions of dollars. Thus, it is now possible to say that the introduction of Information and Communication Technology (ICT) has changed the equipment, the look of the offices, office behaviours and manner of running of offices. To meet the challenges of ICT- based office, users would need to possess skills that may go beyond word processing, database management, desktop publishing, micrographic, reprographic, emailing, scanning, graphics and office communication skills for effective operations of ICT- based equipment and facilities.

The word processor is a type of electric typewriter that used an added advantage of the computer's storage and processing capability to replace the manual typewriter. It is the ability to use sophisticated hardware to control words leading to the preparation of sentences, paragraphs; finally full them all to produce full documents, emails, memos or monographs. The word processor is a type of electric/electronic typewriter with storage and processing components. One of the major features of the word processor is that as the words are typed, they are displayed and viewed concurrently onscreen at the Visual Display Unit (VDU) which gives the user the opportunity to effect corrections like deleting or inserting words, sentences and paragraphs before printing the documents. One great advantage of word is that after typing one has the opportunity to preview and arrange the write-up before printing or emailing. Word has an added advantage in the sense that it aids users with spell checks facility, some come handy with auto spell, producing and suggesting words to users.

A database is storage system that enables the user to store data or information in rows and columns (structured) or otherwise in an unstructured format.

A database management system (DBMS) is normally added to the database with the aim of assisting in making requests to the database. A DBMS makes it possible for users to create, edit and update data in database files. Once created, the DBMS makes it possible for the storage and retrieval of data from those database files. A database is a modern day facility that has given users the ability to organise large numbers of records for optimum access. Database help in the collection of a considerable volume of data, which when verified; can be stored, retrieved and updated on regular basis, it gives the user/operator the needed change to grow the quantity of data without resulting in stressful retrieval. A database gives the user the right to edit, update, delete and add to its contents. The user can query the database in order to obtain information from it. Based on the configuration of the data, either it is structured or unstructured, the speed of receiving responses for queries is determined. Ideally structured databases have faster response rate than unstructured ones. Structured data generally will consist of numbers and is objective. It simply is data that exists - there is no interpretation. Unstructured data may represent texts, contents of emails that in the real world will make approximately 80% of the information that is used to make good business decisions. Unstructured data is more biased and is usually text heavy. It is not possible to them put into a data structure, like columns or rows. Unstructured data can be found in documents, presentations, audio, images, videos, messages, and books. Unstructured data can also come from social media sites, such as Facebook, LinkedIn, Twitter, Tumblr, Flickr, Yelp, YouTube, and Pinterest. Some examples of unstructured data include customer reviews that describe how they feel about an experience, identified triggers for readmission to hospital care, or call centre conversations.

Excel or any other worksheet is an ideal platform for office managers and clerks to plug in and have office jobs that have to do with calculations and arrangement in tabular form done, it has an advantage of doing most of the calculations in auto mode, relieving staff of the stress of looking up formulae from time to time as the need arises. Issuance of commands can easily get tables populated for users, being another good advantage of most resent worksheet applications.

Office communication, which includes electronic mail (e-mail), voice mail, bulletins board systems, and facsimiles; these are central nervous systems of today's organisations which the secretaries ought to acquire the skills in other to operate them. In the organisational settings these item find their usefulness in the sending of messages in text, video, or voice form or to transmit copies of document and to receive instantaneously in matter of seconds, not hours or days. Office communication system is more efficient among work groups and organisations ass enhances information communications and coordination. An added advantage of this is reduction in the use paper, which directly leads to cost minimization; their end products can easily be stored in several locations with little or no added cost. It also helps to reduce the space that paper utilization would have led to.

Desktop Publishing skill is another facility that ICT has brought into use in administration. It is, however, the ability to use modern printing process that combines personal computers and design software to create and edit layouts for producing all kinds of materials such as reports, magazines, brochures, flyers, books, and newsletters. Desktop publishing is the ability to generate high quality printed documents such as text and graphic. Desktop publishing is very much related to word processing and both require same skills.

Reprographic skill is another ICT facility with the ability to produce many copies of original document for administrative purposes. It is defined as a means to reproduce documents in such a way that they may not be distinguishable from the original. Depending on the machine and quality of production, there may be differences in colour. It has the ability to minimize documents or enlarge depending on need. It also has the ability for multiplication of documents. Copiers and duplicators are the two major sources of reprographic reproduction of documents. The difference between Copiers and duplicator is that while copiers use an image-forming process similar to a camera to form copies directly from existing originals, duplicators make copies from special papers that must be arranged before copies are made.

What is ICT?

ICT can also be defined as an umbrella term that includes any communication device, comprising radio, television, cell phones, computer and network hardware, satellite systems and so on, as well as their associated devices; their various services and appliances with them such as aid video conferencing and distance learning.

Hardware such as physical devices and equipment used for information processing, storage, and communication - including computers, servers, routers, switches, mobile devices, and peripheral devices like printers and scanners are the primary components of ICT.

Establishments, whether private or public, have over the years clamoured for trained manpower with an added advantage of possessing ICT skills and have with this possession turned all their activities to E Government, e-commerce – focusing on the role of ICT to deliver government services through the internet and other emerging digital technologies. ICT has, therefore, turned this world to a global village, as ICT has made all humans to be common neighbours. A click of the computer button links one to another, maybe a customer, with goods and services.

You can buy or sell with ease. Apart from communication, that is, reaching people both far and near; it has also made work (rendering services) easier and better. Information and communications technology (ICT) is used in most of the fields such as e-commerce, e-governance, banking, agriculture, education, medicine, defence, transport; these services that were, hitherto difficult and takes longer to do, can now be discharged at the speed of light.

What is Office Administration?

Office administration may be defined as a set of routine activities that ensure smooth administrative, corporate, and monetary functioning at the workplace. Though it might look simple like a straightforward set of function to the layperson, in reality, it covers a lot of activities, which are performed on a daily basis or at as when due.

In the US, the Office of Administration was established by Executive Order on December 12, 1977; the sole task is to provide administrative services to all entities of the Executive Office of the President (EOP), including direct support services to the President of the US. It is so in every country and smaller organizations inherent in each sovereign state.

In different several offices, activities like processing invoices and payroll to even stricter ones like monitoring expenses and preparing budget reports, office administrators often handle essential financial tasks. These set of activities, when followed and monitored well, ensures that the company stays on budget (afloat) and that all financial dealings are transparent and accountable.

ICT in Administrative Planning and Decision Making

Application of ICT in administration helps in the performance its public functions by simplifying the work processes; the internal functioning via internal computerization and automation of operations are simplified as well as made efficient, thus fostering transparency and accountability.

Modern ICT solutions provide real-time visibility in all the various aspects of a business and administrative activity it was deployed in. Managers and decision-makers can monitor operations, sales, inventory, and financial metrics instantly as well as in absentee situations. ICT brought technologies that can assist a supervisor to observe and identify emerging opportunities and challenges promptly; thus allowing enabling quick responses and agile decision-making. So we can vividly say that ICT promotes effective communication between persons in business in several ways; this benefits the organization with cheap communication services. ICT also allows for faster and more efficient communication among employees, departments, and customers, too; it also allows for swift communication between employees and management, thereby removing hitches. It makes for easy collaboration among groups in organization much easier.

Employees do not need to be in around the premises to communicate, not physically present in the office cannot distort communicate.

The emergence of ICT which also brought with it better development in terms of modern office equipment has also imparted the administrative duties. It has increased administrative efficiency; it has made accessibility of information easy, and has also made for easy decision making. It has made today's workplace look more sophisticated and more interesting place of work.

Lack of ICT Knowledge and its Consequences

It is unarguably clear that ICT is very important in the day-to-day running of every establishment, more especially in administrative duties where records and responses are the core duties. ICT has led to restructured administrative organisation, reengineered work processes, strategic management, and decentralisation. It has also brought about delegated authority and control, delegated decision-making, localness, shared and participative vision and purpose, and entrepreneurial skills, insightfulness and innovativeness.

When we say that ICT is lacking, it is as a result of low Internet connectivity bandwidth, unreliable telecommunication network, expensive hardware and software, expensive ICT facilities, unstable power supply and inadequate ICT facilities for networking.

What can Computers do in administration?

ICT helps administrators communicate faster and cheaper than ever before, this also means that people now have more information at their fingertips than in any time of human history.

ICT is useful to administrators in the everyday performance of its public functions by making simple the various work processes and internal functioning; ICT is beneficial in internal computerization and automation, as it fosters transparency and accountability. As ICT emerged, it came with modern office equipment that impacted the activities of office administrators, which brought about increased administrative efficiency and has made their accessibility of information easy for decision making. It has given the offices new looks and made them more sophisticated and interesting place to work.Computers, internet, mobile phones can be found and applied to almost all public administration including, but not limited to workflow – it led to new tracking of cases through a system which today can be done by one individual, unlike before when a group of people may be needed to handle such a job. The application of ICT in administrative duties as transaction processing, including financial processing is today faster and more effective. Administrators can carry out their public functions by an easy work processes and internal functioning via internal computerization and automation, thus fostering transparency and accountability.

In the private sector of the economy, administrators use ICT to make businesses more efficient, effective; it helps them to promptly respond to customers' needs. Since activities in the private sector is profit oriented, ICT can assist business activities including design, manufacturing, R&D, distribution and sales to go on at the needed speed that ICT is known for, it helps them in getting feedback from customers.

Private sector executives rely greatly on ICT. Technology can be a great ally for executive assistants who may want to organize their administrative tasks and increase their productivity and efficiency – their routine tasks such as data entry, report generation, and email notifications can be ICT generated. Activities such as stock and inventory management, budget control and planning are basic routine activities that ICT has come to be beneficial to senior executives. The truth remains that successful businesses require a strategic control in budgeting; they can manage risk and report any variances easily using ICT tools.

DISCUSSION

Knowledge in computer packages is becoming useful and important in organizations today. Skills in computer appreciation and database management greatly influence the performance of office administrators as most of their duties today rely majorly on the application of ICT. Based on the findings of this study, some recommendations were made. Regular training in the use of basic office equipment, especially those that are ICT based tools should be carried out on a regular basis to increase the knowledge level of administrators and subsequently their performance. There is the need to equip administrative staff with modern working tools and continuously be training and retraining them on the use and maintenance of these equipment. By so doing, innovation and standardization in offices will be met.

CONCLUSION

From the findings of this research, we now know that ICT makes collaboration much easier among administrators. Administrators who are not physically present in the office can communicate more easily. Administrative duties can go unhindered; we cannot bridge activities as a result of distance from office because ICT will communication to be a continuous process. Businesses can maintain accurate records of their communication, transactions, and interactions by using ICT tools such as databases or accounting software.

Based on findings from this study, it is recommended that there should be increased awareness towards ICT tools by administrators. The awareness should be geared towards item like smart phones, faster Windows operating systems (e.g. Windows 10), laptops and tablets for effective use in word processing, database management, desktop publishing, micrographic, reprographic, emailing, scanning, graphics and office communication. It also recommends that administrative staff should possess and keep improving on their ICT skills for efficient and effective discharge of administrative duties. ICT in administration has led to positive developments. The introduction into administrative duties enabled administration, removed all manual processes, bringing with it better working methodologies, re-engineered work processes, better decision-making, implementation, monitoring, evaluation, and efficiency in administrative output. Accountability and efficiency both got increased value. Administration has now become easy, as they are able to dispose of most of their duties online. With the introduction of services like networking and online servers added, service delivery is becoming integrated at both front-end and back-end, the burden of administrators facing hundreds of people every day and being scrambled in the file work has been reduced, allowing departments to focus more on their core administrative functions. Administrative internal monitoring of disposal of applications is possible; the previously observed delay, harassment and corruption is now easily checked. There is enough transparency; problem relating to the number of applications received and the concerned department to handle such requests are taken care by ICT system.

REFERENCES

Bolaji Hameed and Ajape, Rasheedat Oladunni, 2022. Information and Communication Technology as a Veritable Tool for Administrators in University: From Teaching Perspectives to Challenge in Education Indonesian Journal of teaching in Science

Egoeze Fidelis, Misra Sanjay, Maskeliunas Rytis, and Damaševičius Robertas, 2018. Impact of ICT on Universities Administrative Services and Management of Students' Records: ICT in University Administration International Journal of Human Capital and Information Technology Professionals

Erumban, A.A. and Das, D.K., 2016 Information and communication technology and economic growth in India, Telecommunications Policy, Elsevier, Vol. 40 No. 5, pp. 412-431.

Ezenwafor J.I., 2013. Enhancing the relevance of secretarial staff in the University of System. Journal of New Trends in Educational Research and Policy Studies, 4(3):424-432.

Gupta, M., P., P., Kumar, and J., Bhattacharya, 2004. Government Online-Opportunities and Challenges, Tata McGraw-Hill Publishing Company Ltd., New Delhi

Lee, S.-O., Hong, A. and Hwang, J., 2017. "ICT diffusion as a determinant of human progress", Information Technology for Development, Routledge, Vol. 23 No. 4, pp. 687-705.

Nkokelonye, C.U., 2008. Skill and competencies needed by Education History Graduates for higher production and productivity. In B.G. Nworgu. A reform agenda: Educational reforms and the attainment of the MDGs: The Nigerian Experience 328 -333.

Pfano, M. and Beharry, A. 2016. The effect of modern office technology on management performance: Durban Westville. Problems and Perspectives in Management, 14(2):376-384.

Teryima Sev Joseph and Ayegba Sunday, 2015. The role of information communication technology (ICT) in enhancing productivity in local government administration in Benue State, Nigeria International Journal of Business and Economic Development Vol. 3 Number 1.

Wordu H; Woryi J. H and Charley R. B., 2021. Global Influence of Information and Communication Technology (ICT) On Education amidst Covid-19 Pandemic International Journal of Innovative Social and Science Education Research 9(3):72-79, July-Sept., 2021