# The Impact of Mutual Influence of Organisations and Information Technology Systems

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#### Abstract

This study was instrumental in justifying the mutual influence of organizations and information technology systems. Specifically, the paper examine the extent to which information technology tools are utilized to maximizing efficiency in business organizations., and explore the challenges affecting the utilization of information technology. The paper used the qualitative approach applying survey design. The study purposively selects fifty (50) entrepreneurs and business owners to form the sampled subjects. The instrument for data collection used for this study was the close ended questionnaire. Conclusively, it was found that computers, mobile phone, computer software and internet are utilized for maximizing efficiency of business organizations to a high extent. Also, it was revealed that challenges such infrastructural deficiencies, lack of maintenance culture, poor/no access to the internet and lack of skilled and competent CT personnel has affected the utilization of information technology to a high extent. It was recommended that business owners should embrace training policy to upgrade the knowledge and skills of their employees on ICT.

Keywords: Information technology Systems, Organizations, Usage, Challenges.

#### Introduction

Interestingly, the changes that occur in organizations that adopt new technologies may themselves discourage employees' future usage of IT. For instance, organizational researchers frequently note that changes in technology have contributed to the deteriorating relationship between employer and employee, because often changes in technology lead to changing work roles, restructuring, and even downsizing (Shore & Coyle-Shapiro, 2003). With this in mind, it is possible and even likely that employees' beliefs about the broader organizational environment may influence their use of workplace IT. Understanding how the broader organizational environment influences technology use is important because managers exert a direct influence on the work environment. Linking the organizational environment to beliefs about IT may help managers identify levers that encourage individual IT use.

It goes without saying that current century underlines how important is the effect of globalisation on a highly competitive business environment. Many discussions are considered under the influence of the booming technological innovations and accordingly growing demand for better organisational structures. Organisations in current world, it is vital to gain the desired information internally and externally and use them in order to maximise efficiency. There is no doubt that a balanced coordination and very open communication channels between the units and groups in the organisations help to stimulate this efficiency. Therefore making use of information and the communication with the IT as a combining tool and sharing its outcomes will set the stage for very productive organisations. In recent knowledge societies, it is a must to provide transfers for corporate information to create ideal organisational structure. This can mainly be provided by moving learning from a narrow perspective to spread and share the information through the organisation.

Information technologies are influencing all aspects of human existence from our communication to business. Information technology has been seen as a required tool for every form of business enterprise both profitable and non-profitable, private or public firms and above all sector of the economy. I.T tools are upgrading the business from the traditional paper-based system to a more effective electronic management system to support effective communication among customers and business owners, speedy processing and storage of information, integrating of management and employees, and maximizing the efficiency of the overall business administration (Eke, 2023).

Eke (2023), found that computers, mobile phone, computer software and internet are utilized for maximizing efficiency of business organizations to a high extent. Also, it was revealed that challenges such infrastructural deficiencies, lack of maintenance culture, poor/no access to the internet and lack of skilled and competent ICT personnel has affected the utilization of information technology to a high extent.

## **Problem statement**

For business organizations to fully utilize information technology for business processes, there must be an established support from the owners of the business or management of the organization. The support from the leadership of the organization is very paramount to develop ICT-oriented practice in the digital edge (Ukanwa & Eze, 2019). However, despite the varieties of roles played by IT in the administration and management of routine business objectives, there are structural and behavioral impediments militating against its effective use for business management, of which some of the challenges are infrastructural deficiencies, lack of maintenance culture, poor/no access to the internet, lack of skilled and competent ICT personnel. These challenges can possibly hamper or slow down the utilization of information technology. On this note, this paper will look into the required information technology tools needed for utilization of information technology and the challenges affecting the utilization of information technology.

## Objectives

This paper is to examine the utilization of information technology is an elixir to maximizing efficiency in business organizations. Specifically, the paper will;

- 1. Examine the extent to which information technology tools are utilized to maximizing efficiency in business organizations.
- 2. Explore the challenges affecting the utilization of information technology.

# Literature Review: Conceptual

# ICT Application Tools in Business Administration and Management

Several ICT application tools have been extensively used in corporate management and administration. Internet, websites, software, and hardware including printers, scanners, photocopiers, and PCs are all ICT applications that may be used for company administration (Kazi, 2012). The following provides further information on the ICT tools that are frequently used in corporate management and administration:

**Internet** —**Based and Web-Based Tools:** The use of the Internet and ICT application tools in business has increased significantly during the past twenty years. This is because the Internet may offer opportunity for implementing cutting-edge teaching and learning techniques. Students can become proficient workers of the future thanks to the sophisticated and contemporary methods of education.

Most corporate companies enable professors to interact individually with their pupils via email, forums, or social media sites like Facebook and Twitter. Also, students' assignments are uploaded to and received through the Internet. There is evidence in the literature that instructors believe that the internet offers access to relevant data and technologies that may benefit both groups of pupils and teachers (Afshari, Ghavifekr Saeda & Rahniad 2012). Yet, using the internet for finding, communicating, and organizing documents will directly and indirectly increase the effectiveness of the organization (Afshari et al, 2012). Moreover, internet-based solutions have opened up several chances for management of corporate organizations to maximize their resources.

When it comes to better, faster, and more affordable methods of running, managing, and performing daily chores like information processing, transmitting, storing, and retrieving, the internet is the most important facilitator (Susmita, 2017). Administrators of business organizations should thus pay closer attention to

providing knowledge and information access to all academic and non-academic workers using Internetbased business apps and tools.

**Hardware Applications:** Every year, gear for information technology and communications, including computers, advances. Modern machines and new equipments provide new prospects notably in company administration to make management process easier, faster, and cheaper. We can observe from this context that commercial organizations' management and administration are equipped with several typical ICT application equipment, such as computers and photocopiers. Televisions, radios, scanners, digital cameras, DVI players, laptops, multimedia projectors, and overhead projectors (Nwankwoala, 2015).

Computers were utilized to store a variety of administrative, teacher, student, and other staff members' papers. Moreover, administrators frequently employ interactive whiteboards, smart boards, and multimedia projectors for managing meetings, internal training for teachers and staff, video conferencing, and presenting reasons (Nwankwoala, 2015).

**Software Applications:** Management and administration in business companies frequently employ a variety of software programs for administrative tasks. Office solutions like Microsoft Office were the most often utilized programs by corporate enterprises for administration and management (Word, Excel, and PowerPoint) and add up (Nwankwoala, 2015). Administrators are conversant with a variety of information-handling applications, including spreadsheets and databases, as observed by Kalaivani (2013).

The majority of commercial companies now employ inefficient and ineffective methods to handle information. There are many other software programs that have been utilized by corporate organizations' management and administration; for instance, EMIS is the most well-known program in these businesses. EMIS, short for "Business Management Information System," is a component of a business system whose goal is to gather and retain data. Information processing, analysis, and dissemination (Kalaivani, 2013).

**Challenges Of Information Technology in Business Organizations Management and Administration** Managers and administrators in corporate organizations now face special difficulties that their forebears had never even considered. Access to mountains of online material may expose students to more knowledge in just one day than people from earlier generations would have been able to acquire in a lifetime. Information processing skills have become a survival skill that is almost universal (Ukanwa & Eze, 2019).

Managers and administrators need the guidance and direction of business organization officials who are aware of 21st century abilities in order to prepare kids for the future. Notwithstanding the significant contributions that ICT has made to administration and management of business organizations, there are glaring issues that prevent its efficient application to business organization management. This essay aims to draw attention to the difficulties in using ICT in business organization management in the twenty-first century and to suggest solutions as a result. The successful use of ICT in business organization management is hindered by a number of issues, including insufficient infrastructure, a lack of maintenance culture, limited or no internet connection, and a lack of experienced ICT staff.

**Infrastructural Deficiencies:** Infrastructure problems are a very frequent and serious barrier to using ICT. In order to supply energy and a suitable atmosphere for whatever ICT device you are utilizing within your company organizations, other infrastructures like furniture, electricity (power), and cool weather condition must be given.

So, there must be enough power and backup to maintain high-tech equipment like computers running effectively, especially in harsh weather conditions like those seen in some underdeveloped nations. So, it is almost impossible for commercial organizations to take advantage of using ICT gadgets like computers, radios, televisions, and video recorders in locations where they do not have access to electricity (power) or its substitute. As a result, the usage of ICT for administration and management in corporate organizations is impacted by the absence of electricity and other alternate sources of power supply (Ukanwa & Eze, 2019).

Lack of maintenance culture: ICT equipment has to be maintained, repaired, and restored over time due to wear and tear brought on by constant use. As a result, when ICT devices are not routinely maintained, they eventually break down completely, making it difficult to use them effectively for management and administration of commercial enterprises (Ukanwa & Eze, 2019).

Limited/no access to the internet: Another problem in business organizations management utilizing ICT is limited/no access to the internet. The bedrock of every Business Management System using ICT is the internet through which activities are carried out on the cloud, and an absence of this internet connection means that information/data being manipulated in any business organizations with no internet access remain local and doesn't go beyond that business organizations and hence cannot be accessed by the targeted audience (variety of users) (Ukanwa & Eze, 2019).

**Non-availability of skilled personnel:** The use of ICT in business organization management is still faced with a significant problem in situations where there are provisions for enough ICT badges with good acceptable supply but a lack of the requisite human ability and expertise to adequately handle them. To manage the installation of ICT equipment, business companies must have staff that are highly qualified, talented, and adaptable in the field of ICT. The use of ICT in business organization management and administration is greatly hampered by the fact that in many business organizations in some developing nations, personnel responsible for the usage and management of the computer receive little to no training, if any training at all (Ukanwa & Eze, 2019).

# Methodology

The paper used the qualitative approach applying survey design. The study purposively selects fifty (50) entrepreneurs and business owners to form the sampled subjects. The instrument for data collection used for this study was the close ended questionnaire with question items measured with the 4-likerts "Extent Format" (VHE, HE, LE, VLE) that covers information technology tools and several challenges affecting effective utilization of information technology in business. The reliability status of the instrument was ensured and used by Olelewe and Amaka (2011). The data collected were analyzed descriptively using mean score.

#### **Analysis and Results**

Extent to which information technology tools are utilized to maximizing efficiency in business organizations

S/N	Question Items	VHE	HE	LE	VLE	Mean	Decisions
		(4)	(3)	(2)	(1)	Х	
1	We utilize computer for	25	9	10	6	3.1	High extent
	effective business practice.						
2	We use mobile phones to	25	17	5	3	3.3	High extent
	communicate with						
	customers and suppliers.						
3	We utilize the internet	15	13	14	8	2.7	High extent
	service in acquiring						
	information on about the						
	market trends.						
4	The use of computer/phone	23	13	9	5	3.1	High extent
	software (WhatsApp) for						
	integrating our employees						
	and customers.						
	Grand mean response Score	3.1	High extent				

The table shows the result on the extent to which information technology tools are utilized to maximizing efficiency in business organizations. From the results presented question items 1,2,3 and 4 have a mean score above the criterion score of 2.5. Also, the grand mean response score of 3.1 was also above the criterion score of 2.50. This implies that computers, mobile phone, computer software and internet are utilized for maximizing efficiency of business organizations to a high extent.

#### Explore the challenges affecting the utilization of information technology

S/N	Question Items	VHE (4)	HE (3)	LE (2)	VLE (1)	Mean X	Decisions
1	Infrastructural	15	8	22	5	2.7	High extent

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	deficiencies						
2	Lack of maintenance	21	17	8	4	3.1	High extent
	culture						
3	Poor/no access to the	16	17	6	11	2.8	High extent
	internet						
4	Lack of skilled and	17	19	10	4	3.0	High extent
	competent ICT personnel						
	Grand mean response Score						High extent

The results presented in table above on the challenges affecting the utilization of information technology. From the results, items 1,2,3 and 4 had a mean response above scores above 2.5 criterion score. In addition, the grand mean response score of 2.9 was also above the criterion score of 2.50. This implies that challenges such infrastructural deficiencies, lack of maintenance culture, poor/no access to the internet and lack of skilled and competent ICT personnel has affected the utilization of information technology to a high extent.

## Conclusion

This study has been able to justify the notion that the utilization of information technology is a elixir to maximizing efficiency of business organization. Information technologies are influencing all aspects of human existence from our communication to business. Information technology has been seen as a required tool for every form of business enterprise both profitable and non-profitable, private or public firms and above all sector of the economy. I.T tools are upgrading the business from the traditional paper-based system to a more effective electronic management system to support effective communication among customers and business owners, speedy processing and storage of information, integrating of management and employees, and maximizing the efficiency of the overall business administration.

Conclusively, it was found that computers, mobile phone, computer software and internet are utilized for maximizing efficiency of business organizations to a high extent. Also, it was revealed that challenges such infrastructural deficiencies, lack of maintenance culture, poor/no access to the internet and lack of skilled and competent ICT personnel has affected the utilization of information technology to a high extent

However, despite the limitations found to be a militating against for full utilization of information technology especially businesses developed in rural settings, many has still pushing towards full utilization to achieve business goals and objectives.

#### Recommendations

Business owners should embrace training policy to upgrade the knowledge and skills of their employees on ICT.

Presently, being a computer literate is a most criteria for most job employment, management and business owners should encourage the policy of employing only computer-skilled workers.

In terms of infrastructural efficiency, business owners should ensure to put in place a standard ICT structure that will support effective and full utilization of information technology.

Customers and clients should also be encouraged to develop interest in information technology because it will improve business transactions and support swift communication via social media and other electronic platforms.

#### References

- 1. Afshari, M., Ghavifekr. S., Saedah S. & Rahniad S. (2012). Transformational Leadership Role of Principals in Implementing Informational and Communication Technologies in Schools. *Life Science Journal*, 9(1), 281-284.
- Ahsan, H., Shuvankar, D., & Mostafa, M. (2017). Introducing ICT as a tool of reducing unethical activities in Bangladeshi education domain. ICEGOV '17: Proceedings of the 10th International Conference on Theory and Practice of Electronic Governance: 518-519. doi: http://dx.doi.org/10.1145/3047273.3047286

- 3. Ajah, I. A. & Chigozie-Okwum, A. C. (2019). ICT And Administrative Effectiveness Of University In Nigeria: A Connect Between Leadership And Knowledge. *International Journal of Science and Technology (STECH)*, 8(2), 64-85; DOI: <u>http://dx.doi.org/10.4314/stech.v8i2.5</u>
- 4. Barineme, B. F. (2015). ICT and education transformation in Nigeria. *The Tide*, October 7, 2015. Accessed 01 March 2017. http://www.thetidenewsonline.com/2015/10/07/ictand-education-transformation-in-nigeria/
- 5. Kalaivani, S. (2013). ICT application for administration and management: a conceptual review. 13th International Educational Technology Conference Procedia Social and Behavioral Sciences, 103, 1344-1351.
- 6. Kazi, J. (2012). Usage of ICT for information administration in higher education institutions A study. *International Journal of Environmental* Science *and Development*, 1(3), 55-61.
- 7. Nwankwoala, H. N. (2015). An investigation of lecturers' and students' use of ICTs in Nigerian University education as a panacea for national development. *Research on Humanities and Social Sciences*, 5(2), 67-99.
- Olelewe, C. J. & Amaka, E. N. (2011). Effective Utilization of Information and Communication Technology (ICT) For Sustainable Manpower Development among Computer Educators in Colleges of Education in South East Geo-Political Zone Of Nigeria. A Paper Presented at the 24th National Association of Technology Teachers (NATT) on Technical Vocational Education and Training (TVET) For Sustainable Industrial Development in Nigeria Between 17th – 21st October 2011 at Umunze, Anambra State, Nigeria
- 9. Susmita E. (2017). ICT tools in school a practical guide. ttp://www.irresistibleproject.eu/data\_storage/resources/IRRESISTIBLE\_ICTTools\_Practical\_Guide\_2016.pdf.
- Ukanwa. G. U. & Eze C. C. (2019). Utilization of Ict for Management and Administration in Education Sector. International Journal of Advances in Engineering and Management (IJAEM), 3(3), 915-920.