

Information Communication Technology (ICT) and the Challenge of the Nigerian Business Environment

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Article DOI: 10.48028/iiprds/ijaseds.v7.i1.05

Abstract

Information Communication technology has been identified as a driver of growth as it affects every sector of an economy. The innovation has what it takes to enhance the growth and development of the business environment in any society. This study examined the effect of ICT on the Nigerian business environment. Data was obtained from secondary materials such as books, journals, periodicals, newspapers, the internet, etc. The stakeholder theory (Donaldson and Preston, 1995) was adopted as the theoretical framework while content analysis was employed as the mode of analysis. Results showed that information communication technology is facilitating the improvement of the business environment in the country. It was recommended that the authorities evolve policies to improve on ICT to enable greater contribution to a better business environment.

Keywords: *Information Communication Technology (ICT), Business environment, Challenges, Prospects, Innovation*

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Background to the Study

In his nature, man is a businessman as every activity of humans to earn a living and survive culminates to one kind of business activity or the other. Whichever way one looks at it, the start-off line of any business activity never comes easy. A commercial activity becomes easier to embark upon when often there is a conducive and sustainable environment – which depends on the availability of infrastructure emplaced by the government. Unfortunately, the Nigerian business environment in recent years is coloured with fear and uncertainty which has led to the collapse of some business outfits particularly, the small-scale industries. It is also common knowledge and experience to find some big industries leaving the country to relocate to other countries. A firm like Michelin Tyres is believed to have relocated to Ghana as an example of the in conducive business environment.

There is no doubt that the environment in which a business operates helps to nurture the business to success or otherwise. In such business environment, there may be external or internal factors. Thus, a business environment may refer to any institution, individual, group, force, policy, law, action or any of such things that creates opportunities for the effective functioning of the business organization be it directly or indirectly. This means that business is concerned with interactions between the organization its stakeholders rather than the geographical frontiers of such an organization. Business interactions usually run at two levels – micro which comprises of board of directors, employees, customers, suppliers and owners on the one side, and macro which consists of Act-of-God, legal, international, political, economic, sociocultural, technological and demographic. Each of these factors interacts with the business in unique ways and impacts on the operations of the business in similar manner.

So far, it is obvious that no business operates in a vacuum. This is a stark reality which brings to the fore, that there are challenges which must be addressed for business to survive. Hopefully, information communication technology is a contemporary global innovation that has enhanced the activities and performance of man in virtually every sphere of life. Owing to its wide acknowledgement as an inevitable tool for enhancement of various activities, it makes all the sense to conduct a study on its applicability and usefulness in the business environment. Against this background, this study examines the extent to which information communication technology may be applied to enhance the Nigerian business environment. Specifically, the study will:

- (1) Identify the major challenges in the Nigerian Business environment and
- (2) Ascertain the extent to which Information Communication Technology (ICT) may be employed to reduce and solve some of such problems.

Literature Review

Conceptual Literature

Business Environment: The term 'business environment' refers to external forces, factors and institutions that are beyond the control of the business. They affect the functioning of the business organization and include competitors, customers, government, suppliers, as well as the social, political, legal and technological factors, etc. These forces affect the business directly or indirectly. Hence, a business environment may be defined as the total surroundings, which directly or indirectly influence the operations of the business. Wheeler (n.d.) defines a

business environment as, “the total of all things external to firms and industries which affect their organization and operation”. Weimer (n.d.) perceives the business environment as, “encompassing the 'climate' or set of conditions, economic, social, political, institutional in which business operations are conducted.

Challenge: This is something that is new and requires great effort to solve. A challenge literally means an invitation or a call to action. Challenges vary in scope and complexity. When you give students an assignment, it constitutes a challenge to them. When a country is in recession, it is an economic challenge. Hence, Beghetto (2017) simply defines challenge as a “call to action”.

Innovation: This is the successful production, assimilation and exploitation of novelty in the economic and social spheres. It may be defined as the application of new ideas to the products, processes, or other aspects of the activities of a firm that lead to increased “value”. In the context of the Oxford Handbook of innovation, Fagorberg, Mowery and Nelson (2005) view the concept as, “putting into practice of inventions”. A broader approach refers to innovation as the development of new products, new processes, new sources of supply, and also to the exploitation of new markets and the development of new ways to organize business.

Information Communication Technology (ICT): UNESCO (2006) defines the term 'Information and Communication technologies (ICT) as “forms of technologies that are used to transmit, store, create, share or exchange information”. This includes such technologies as radio, television, video, DVD, telephone (both fixed line and mobile phones), satellite systems, computer and network hardware and software, as well as equipment and services associated with these technologies such as video-conferencing and electronic mail. Sulaiman (2010) opines that the elements of ICTs include – communication – media (e.g. radio, television). Information machine (e.g. computers) and telecommunications technologies and equipment (e.g. satellite, fibre optic cables, phones and facsimile machines).

Empirical Literature

This section reviews past and current works on the subject area in a tabular format.

Table 1: Past and Current Works on ICT and the Nigerian Business Environment

Name of Researcher(s)/Title of Study/year	Geographical and content scope covered	Data source and Analytical tools	Findings/conclusion/recommendations
Nkechi, Okechukwu, Ozurumba, and Okeke (2020). Creation of ICT enabling business environment to enhance entrepreneurship in South east Nigeria.	South-East-Nigeria's ICT, business environment and entrepreneurship	It was a descriptive survey in which structured questionnaire was used to obtain information (data).	Findings of the study showed that regulations, finance and training are utilized to a high extent in the creation of ICT enabling business environment to enhance entrepreneurship in the south-east, Nigeria. It was recommended that government should provide soft loans to entrepreneurs and ensure tax reduction on their business. Such measures will enhance their ability to procure internet resources like computers and computer accessories.
Abolade and Durosinmi (2019). ICT and its impact on national development in Nigeria.	Nigeria: ICT and national development.	Secondary data were employed.	The study concluded that as ICT is the third largest contributor to GDP in Nigeria, as well as second largest labour employer coupled with general improvement in living standards of the people, Nigeria's socioeconomic development can indeed be improved. Information technology should enjoy greater patronage by the government.
Aworanti, O. A. (2016). Information Communication Technology (ICT) in Nigeria Educational Assessment System – Emerging challenges.	Nigeria: Information Communication Technology (ICT) – and Educational Assessment System.	Primary data consisting of questionnaires. A sample of 1200 participants was drawn (300 teachers, 600 students and 300 examination personnel. Descriptive statistics was used to analyse data)	It was found that poor computer literacy level of teachers and students, dearth of ICT skilled personnel, inadequate ICT infrastructures and lack of fund among others are the major challenges of ICT in Nigeria educational assessment system. Adequate funding was recommended among others.
Olatunji (2015). The impact of information communication technology on small and medium scale enterprise productivity in Nigeria.	Nigeria: Information Communication technology and small and medium scale enterprise productivity	Primary data through the use of questionnaire administered on 80 respondents.	Findings reveal that SMEs in Nigeria improve their processes and products through the use of information communication technology.
Okeke (2014) utilization of Information and Communication Technology to enhance entrepreneurship in South-East Nigeria	Nigeria-south East: Information Communication technology (ICT) and Entrepreneurship.	Primary data through the use of structured questionnaire. Mean and standard deviation were used to analyze the data. The respondents consisted of a total of 723 persons.	Findings showed that the utilization of ICT to create enabling business environment were accepted as enhancing marketing of goods and services through ICT. The study recommended that staff of private enterprises should undergo training programmes regularly.

Theoretical Framework

The stakeholders' Theory: The business model to transform Resources holders into stakeholders (Donaldson and Preston, 1995). The Stakeholders' Theory (ST) forms part of a theoretical construction of the firm which is the result of the structuring and establishment of a “corporation”, through which various groups/individuals, pursuing their own goal, reach this one goal notably; thanks to their relationships with the firm (Donaldson and Preston, 1995). This is to say that the firm is described as a constellation of cooperation and diverging interests, sometimes generating problems of governance, and sometimes, moral and philosophical questions concerning the way of behaving in the multiple relationships with the stakeholders involved in the business. In the views of Preston and Sapienza (1990), the ST appeared in the thirties when General Electric identified four categories of major actors of its business: Shareholders, employees, customers and community (in the social meaning of the term). Today, this conception broadens as all the parts/groups contributing to the development of the company are considered. It would be a form of democratization in the

sense that there is a need to move from a “stakeholder view” to a “partnership view” of the firm, which was established within “principles of corporate Governance” of the American Law Institute (Charreux, 1998, Caby and Hirigoyen, 2001).

At the background of the stakeholders' theory, there is the view that the company evolves in an environment composed of individuals or individual groups with whom it maintains relations aiming at making them true partners, i.e., who participate in its evolution. These stakeholders are not only shareholders but include the customers, the employees, the suppliers, etc. with the regard of which the firm has responsibilities. The term “stakeholders” is dedicated to the whole of these partners.

The above theory underscores the need for cohesion in the business environment which is quite relevant to this study. Hence, its adoption as the theoretical framework. The applicability of ICT to maintain and sustain this cohesion is the bone of contention in this study.

Research Methodology

In this expository study, the first research question seeks to, identify the major challenges in the Nigeria Business environment.

Research Question One (1): What are the major challenges in in the Nigerian business environment?

A study by Anaekwe, Ndubuisi-Okolo, and Uzoezue (2019), outlined the challenges of the Nigerian business environment to include:

1. Insecurity: Citing Nwogbosa (2012), Okolo asserts that insecurity signifies different meanings such as anxiety, fear, instability, uncertainty, danger, absence of safety, and lack of protection. There is high level of insecurity in the country particularly in the Northern zone where Boko Haram has become a threat to business activities. Ogunro (2014) opines that, “many businesses have stopped operation due to Boko Haran Scourge”.

2. Multiple Taxation: MAN (2010), has lamented that, “Nigerian business environment has come under severe yoke of multiple taxation”. According to the Small and Medium Scale Enterprises Development Agency of Nigeria (SMEDAN), 80% of SMES die before their 5th anniversary. This results from tax-related issues.

3. Power Supply: Experience of poor and epileptic power supply is a major constraint of the Nigerian business environment. This has killed a lot of infant industries and government has not been able to find lasting solutions. Uffot (2009), observes that, “alternative power supply increases overhead cost of doing business which is capable of affecting the overall purpose of doing business”.

4. Poor Transportation Network and Connectivity: The state of the Nigerian roads is another factor that discourages new entities into entrepreneurship and growth of existing ones. According to Anyadike, Emeh and Ukah, (2012), the cost of air transportation in Nigeria is expensive and rail transport is almost non-functional.

5. Lack of enabling Environment and Infrastructure: Onugu (2005) identified infrastructure as one of the ten major challenges facing Nigerian SMEs. Amin, Salau and Pearce (2013) assert that, “not all types of infrastructure are adequately developed in Nigeria. Finally, the study (Anaeke et. al. 2019) recommends that government should create friendly and enabling environment that would be conducive for both business organizations and investors to thrive in other to ensure sustainability and growth of the economy. An earlier study by Ogunro (2014), identified uncertainty, policy instability and lack of necessary infrastructure as major challenges of the Nigerian business environment. These findings have necessitated the next research question on how the ICT can be used to ameliorate the identified challenges.

Research Question Two (2): How can the ICT be employed in tackling some of the challenges of the Nigerian Business Environment? Two challenges are the focused in this section. They include – multiple taxation and power supply.

(a) Multiple Taxation: Business activities and the way people work had been changed by the adoption of information communication technology (ICT). Chatama (2013) in his studies on the impact of application of ICT affected both the design and administration of the tax system. In his contribution, Agusly (2003) is of the opinion that information technology plays vital roles in developing countries where data accuracies are hindrances to effective tax administration. He highlights the benefits to include – speed and improved efficiency, accuracy of tax computation, reliability of data used, consistency in the information generated and improved productivity. Information technology is being applied in intelligence gathering, the issue of unique tax identification number and the use of electronic payment (e-payment). In Nigeria, the new innovation for online tax payment introduced by the Federal Inland Revenue Service is commendable. According to the representative of the acting chairman of the board, the e-payment would not only boost tax revenue but also strengthen the self-assessment regime and improve voluntary tax compliance using the online payment options. Mashi, (2015) believes, “the new system would not only ease compliance for the tax payers, but also enable FIRS to ensure greater transparency in tax operations”. Such transparency will certainly address the issue of multiple taxation with time. The study by Oseni (2016a) on sustenance of tax administration by information and communications technology observes that, “with ICT in use, leakages have been reduced”. Also, there can be no hiding place for tax evasion. The point to note is that the application of ICT to the tax system enhances transparency, speed and accuracy in the system which is the only sure way to checkmate the challenge of multiple taxation in Nigeria.

(b) Power supply: The efficiency and effectiveness of the power sector can also be enhanced by the application of information technology. This is the essence of the innovation and introduction of the smart grid technology. The initiative is a smart or intelligent grid that has been in place for some years now. It is an overhead electrical grid which uses information and communication technology to bring together and act on information, such as “information about the conducts of suppliers and consumers, in a computerized manner so as to improve the efficiency, reliability, economics and sustainability of the generation, transmission and distribution of electricity” (Arihilam, Ithemadu and Onotu, 2014). The

features of the smart grid include: it is interactive with users and markets, adaptive and scalable to varying situations, optimized to make the best use of resources and equipment, pro-active instead of reactive to prevent emergencies, self-healing grids with advanced automation, integrated, merging, monitoring, control, protection; maintenance, EMS, DMS, AMI, etc.; having plug-and-play features for network equipment and ICT solutions secure and reliable and cost efficient, provides real time data and monitoring (Banerjee, Meshram, and Swamy, 2015).

Benefits of Smart Grid Technology

Nigerians will certainly benefit from the smart grid technology in several ways.

- (a) The smart grid will absolutely fuse many types of electrical generation and storage systems with an easier interconnection process that is equivalent to “plug-and-play” technology of the retail computer industry and accommodate all generation and storage options.
- (b) Since the smart grid used the latest technology to optimize assets, it will optimize the efficiency.
- (c) Given the data side management of the smart grid, it will be able to supply varying grades (and prices) of power and ensure the level of power quality desired to consumers.
- (d) The modernized smart card can also do self-healing, performing self-assessment so as to respond and restore the grid in case of fault, to maintain reliability.
- (e) The grid will prevent attacks and reduce physical and cyber vulnerabilities on the power system because of its design operation.
- (f) The grid technologies enable consumers to have choices which prompt different purchasing patterns and behaviour. The consumers help balance both supply and demand on electricity because they have new information about their electricity use, and new structure of electricity pricing and incentives (Vincent and Yusuf, 2014).

Against the background of the features and benefits of the Smart Grid Technology, the Nigerian power supply will receive an immense boost through the new approach. This view is buttressed by the study conducted on Smart Grid Technology potentials in Nigeria: an overview by the trio of Amuta, Samuel, Ayoade and Simeon (2018). This study in its finding revealed that Nigeria stands to enjoy great boost in its power supply through the introduction of the new emerging technology hitherto referred to as 'Smart Grid Technology'.

Findings

The following were revealed in the course of this study:

- (1) The business environment is bedeviled with a number of challenges ranging from - insecurity, multiple taxation, inadequate power supply, poor transportation network and connectivity, lack of enabling environment and infrastructure, to mention a few.
- (2) There are instances (e.g. Tanzania), where business activities and the way people work have been changed by the adoption of information communication technology.
- (3) Information technology plays vital role in developing countries where data inaccuracies are hindrances to effective tax administration.

- (4) In tax administration, the benefits of information communication technology are numerous. They include, speed and improved efficiency, accuracy of tax computation, reliability of data used, consistency in the information generated, and improved productivity.
- (5) The effectiveness and efficiency of the power supply system can also be enhanced by the application of information technology via the introduction of the smart grid technology.
- (6) The Smart Grid Technology has a number of features and benefits. One such benefit lies in its ability to prevent attacks and reduce physical and cyber vulnerabilities on the power system.

Conclusion

In this paper, a business environment is viewed as those factors (internal and external) which influence the direction and operations of business. For many, the definition is restricted to external forces. However, the bottom line is that such factors influence the direction of the business. The factors include – any institution, individual, group, force, policy, law, action or any of such things that creates opportunities for the effective functioning of the business organization directly or indirectly. When these factors influence the organization adversely, they constitute challenges.

In Nigeria, it is common knowledge that many business enterprises (especially the small and medium scale), hardly survive after five years. This is a clear indication of the manifestation of serious challenges in the business environment - which this study has examined. In the course of this examination, some major challenges have been identified and ways of either curbing or circumventing such challenges exposed. Thus, the benefits of the Smart Grid Technology (a variant of information communication technology) and its applicability to some major challenges in the Nigerian business environment were also exposed. Therefore, this paper in its analysis of secondary data obtained from books, journals, the internet, periodicals and newspapers, employed the technique of content analysis to reveal that there are obvious challenges in the Nigerian business environment. Information – technology which has been identified as a veritable instrument of development in many aspects of human endeavour, can also be as useful in surmounting the challenges in the Nigerian business environment.

Suggestions

Against the background of the findings of this investigation, the following suggestions may be advanced:

- (1) Government must learn to articulate and incorporate the major challenges of the Nigerian business environment into its annual budget and plans. This is the only way to accord priority attention that could adequately tackle these problems.
- (2) In planning the business environment, Nigeria must learn to borrow from the experience of other nations e.g. Tanzania.
- (3) Nigeria must adopt information technology to address the challenge of data inaccuracy to ensure effective tax administration.
- (4) The power authority in Nigeria must embrace the adoption of latest innovation in power generation and supply known as the Smart Grid Technology. This will ensure the effectiveness and overall efficiency of the power supply system in the country.

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