

The Role of Information and Communication Technology in Revamping Nigeria's Economy

H. C Ezeokafor¹ & S. J. Ayodele

^{1,2}Department of Computer Engineering Technology, Federal Polytechnic Oko, Anambra State

Correspondence Author: H. C Ezeokafor; E-mail: larrytonnex@yahoo.com

Phone No: 08036037112

Abstract

The world at large is battling with economic problems especially since the outbreak of Corona virus. Production, distribution, and trade, as well as consumption of goods and services have all been affected and their sustainability is not assured. Although information and communication technology (ICT) may have the potential to revamp economy, it's none or partial application in Nigeria opposes this possibility. ICT facilitates a wide range of services and transactions such as online banking and online services. This paper presents a study conducted on the role of ICT in revamping Nigeria's economy. The paper first presents the background information on Nigeria economy and the role ICT will play in revamping Nigeria's economy. These include improvement of decision-making, productivity, financial performance, customer service and aiding of human development. The paper urged that ICT systems be fully used in Nigeria economy in order to revamp and sustain it.

Keywords: *ICT, Nigerian Economy, Economic Problems, Productivity, Financial Performance.*

Introduction

Nigeria is the largest economy in Africa and was ranked the 27th-largest economy in the world in terms of nominal Gross Domestic Product (Nigerian Finder, 2022). Although Nigeria is endowed with abundant natural resources ranging from solid minerals (crude oil, gold, tin, iron ore, coal, lead, zinc, lime stone, salt etc.) to arable land with varieties of agricultural produce (palm oil, groundnut, beans, corns, rice, cocoa, melon etc.) and human resources, her economy depends majorly on crude oil earning. Oil revenue accounts for almost 90% of the nation's gross export revenue while revenue from other sectors such as manufacturing, service, financial, communication, technology and entertainment sector amongst others accounts for paltry 10% as at 2016 (Ikpor, 2016).

The yearly average economic growth of Nigeria is unstable and this is indicative that Nigeria suffers from economic problem. Problems of production, distribution, and trade, as well as consumption of goods and services leads to problem in economy and is recognized by yearly economic growth. Nigeria's economy grows on an average of 2% while the population grows on an average of about 3% and this has led to the low standard of living, alarming rate of poverty, unemployment rate, and the wide disparity in the socio-economic status of the Nigerian population (Nigeria Finder, 2022). Specifically, the main causes of recent economic problems in Nigeria are after effects of COVID-19, over reliance on crude oil (Ikpor, 2016; Obioma, 2006), yearly servicing of foreign and domestic debts

(Gambo & Fasanmi, 2019), corruption and insecurity (Ezetooha & Petercletus, 2022).

Furthermore, Information and Communication Technology (ICT) has the potential to accelerate economic development (Sobhani, 2008). So, ICT could be effectively used in revamping Nigerian economy. Upon this usefulness of ICT in revamping economy, Nigeria is yet to fully use its tools in her economy. It is necessary at this point to understand the role of ICT in revamping national economy.

The aim of this study is to identify and analyze the role of ICT in revamping Nigerian economy.

The Economy of Nigerian

Nigeria is one of the largest countries and the most populous in Africa. It also has the largest economy in Africa. According to the 2006 census, the population of Nigeria stands at 140,431,790 million people; and by 2015 it was estimated at 180 million persons; making it the first in Africa (Ikpor, 2016). Economy is a social domain that emphasizes the practices, discourses, and material expressions associated with the production, use, and management of scarce resources (James, Magee, Scerri, & Steger, 2015). Generally, economy is an area of the production, distribution, and trade, as well as consumption of goods and services. Economic agents can be individuals, businesses, organizations, or governments. Nigeria's economy is ranked as the 27th - largest economy in the world in terms of nominal Gross Domestic Product (Nigerian Finder, 2022). The calculation of nominal Gross Domestic Product (GDP) often reflects the standard of living of the country's population and does not take into account

differences in the cost of living in different countries.

Nigeria is endowed with abundant natural resources ranging from solid minerals (crude oil, gold, tin, iron ore, coal, lead, zinc, lime stone, salt etc.) to arable land with varieties of agricultural produce (palm oil, groundnut, beans, corns, rice, cocoa, melon etc.) and human resources, but her economy depends majorly on crude oil earning. According to Ikpor (2016), oil revenue accounts for almost 90% of the nation's gross export revenue, leaving a paltry 10% to other sectors as at 2016. Nigeria started relying heavy on crude oil revenue from the 1970 (oil boom era in the country). Agriculture was the hub of Nigeria economy before the advent of oil in commercial quantity. Currently, Nigeria has an expanding market in manufacturing, service, financial, communication, technology and entertainment sector amongst others.

Problems of production, distribution, and trade, as well as consumption of goods and services leads to problem in economy and is recognized by yearly economic growth. The yearly average economic growth of Nigeria is poor and does not match the population growth. According to African Development Bank Group (2022), Nigeria's economy grew by 3.6% in 2021 from a 1.8% contraction in 2020, underpinned on the supply side by 4.4% expansion in the non-oil sector against 8.3% contraction in the oil sector; non-oil growth was driven by agriculture (2.1%) and services (5.6%). Per capita income grew by 1.0% in 2021 and the fiscal deficit narrowed to 4.8% of GDP in 2021 from 5.4% in 2020, due to a modest uptick in revenues, and was financed by borrowing. Public debt stood at \$95.8 billion (about 22.5% of GDP) in 2021 while annual average inflation stood at 17.0%

in 2021 against 13.2% the previous year and above the central bank's 6–9% target.

More so, it is predicted that economic growth will decelerate, averaging 3.2% during 2022–2023, due to persistent low oil production and rising insecurity; inflation is projected to remain elevated at 16.9% in 2022 and to stay above pre-pandemic levels in 2023, fueled mainly by rising food, diesel, and gas prices and persistent supply disruptions amplified by the Russia–Ukraine conflict (African Development Bank Group, 2022). Similarly, capital inflows are projected to recovery, while oil exports are projected to increase slightly.

Causes of Economic Problems in Nigeria

The causes of economic problems (poor and unstable economy) in Nigeria include:

- Unstable and unsuitable policies and initiatives
- Over dependence on crude oil
- Poor human development
- Corruption
- Insecurity
- Lack of infrastructure
- Untimely implementation of the nation's budget
- Lack of cooperation between the government and private sector

Unstable and Unsuitable Policies and Initiatives

Nigeria has had different governments (military and civilian) since its independence in 1960. Each of these government comes on board with its own policy and initiative, abandoning the previous policies set up by the previous government. Hence, the country

is left with a long trail of poorly executed policies and non-continuity of government projects and these are a major hindrance to economic growth.

Similarly, unsuitable policies and initiatives cause economic decline. Lack of robust economic policy directions on the part of government can lead to development of unsuitable policies. Absence of robust economic policy halts economic activities, scare investors, affect the GDP, the Gross National Product (GNP), Per Capita Income, inflationary trend, interest rate, exchange rate, Balance of Trade and Balance of Payment (Ikpor, 2016). For example, the huge budget earmarked for servicing foreign and domestic debts yearly cause decline in Nigeria's economy (Gambo & Fasanmi, 2019).

Over-reliance on Crude Oil

Over dependence on crude oil as a major source of revenue for the government is another major cause of Nigeria's economic problems (Obioma, 2006). Nigeria largely depends on oil for the bulk of its revenue; the oil revenue accounts for almost 90% of the nation's gross export revenue. There has been rise and fall in expected revenue in Nigeria due to instability in crude oil prices (Akpan, 2009; Aliyu, 2009). The decline in projected revenue always affects the funding of the country's plans and projects (Okonju, 2009). So, with the fall in the prices of crude oil, it becomes very difficult for government to finance the nation's budget comfortably and to live up to expectations of the masses.

Over dependence on crude oil has also caused decline in production in other sectors of

economy (non-oil sectors) such as agriculture and subsequent low revenue generation from these sectors especially export earnings (Nigerian Finder, 2022). Cash crops such as palm oil, peanuts (groundnuts), and cotton are no longer significant export commodities for the Nigerian economy. Nigeria is now forced to import basic food commodities such as rice, cassava and tomato which can be grown locally.

Poor Human Development

Most of the problems facing Nigeria's economy reflect the poor state of human development. Human resources play a significant role in the success or failure of the economy and development of any nation or organization. Nigeria has very poor human development and is evident in poor educational systems, poor remuneration and unemployment rate (Nigerian Finder, 2022).

Corruption

Corruption is another cause of Nigeria's economic problems. It has eaten deep into the nation's fabric such that Nigeria has been rated as one of the most corrupt country in the world at various times. Nigeria has profited a huge sum of money from crude oil and this money which is supposed to be used for the development of the nation's economy have gone down the drain due to corruption. Leaders and other public officials heap up stolen public funds for themselves and families. There have been cases of corruption in the National House of Assembly and Senate by high profile officers including forgery, padding of budgets and embezzling

of constituency development fund to name a few.

Other corrupt practices include non-remittance and poor accounting of generated revenue from oil, markets and tax. In the banking sector, insider abuses, non-adherence to corporate governance code, too many non-performing loans, fictitious assets in the balance sheet, extensive disclosure of business risk areas, creative accounting and other related corrupt practices have been the problem to national development (Ikpor, 2016). In the capital market, there has been evidence of round tripping and other corrupt practices which have led to crashes of share prices and the economic meltdown.

Insecurity

Insecurity of lives and property present another unique economic challenge in the country. **There has been a prevalent rate of insecurity and this is made obvious by the alarming trend of crimes against humanity prevalent in the nation (Wali, 2012). According to Ojobah, Amiriheobu, Agim, & Owunari (2021), the crimes against humanity (indicators of insecurity) include terrorism by the Boko Haram Islamic sect and other Islamic sects and bandits, kidnapping, marginalization, robbery, and killings amongst others. Conflicts have also contributed to insecurity in Nigeria and they include herders and farmers' conflicts, political crises between parties or politicians and violent ethno-religious conflicts.** The lack of security affects the economy as economic activities are drastically halted and investors lose confidence in the nation. Insecurity may

increase the poverty rate, suffering, pain, sickness and death of the people and underdevelopment of any nation.

Similarly, properties such as electricity (Oseni, 2011), oil facilities and telecommunication equipment are vandalized regularly in Nigeria and this causes low or no supply of the corresponding services and subsequent negative effect on economy. The cost of replacing the vandalized facilities also affects economy negatively.

Lack of Infrastructure

Nigeria suffer from lack of basic amenities and infrastructures that help businesses thrive. Nigeria suffer from inadequate electric power supply (Etim, Oyebode, & Adeniran, 2019; Power Nigeria, 2019) and water. Those in the manufacturing sector find production very difficult due to inadequate electric power supply and other basic amenities. Foreign companies also find it hard to invest in Nigeria due to lack of basic amenities.

Untimely Implementation of the Nation's Budget

There have been delays in approval and implementation of the nation's budget since 2015. The delay in approval of budget may be because of its unsuitability or padding by national assembly members. The delay in implementation of the nation's budget causes extra budgetary spending which may not match with income (Ikpor, 2016) and this affects the economy negatively. Since budget is like a monetary plan of actions, its improper implementation leads to failure in the economy.

Lack of Cooperation between the Government and Private Sector

Lack of cooperation between the government and private sector is another cause of economic problem in Nigeria. Since individuals, businesses, organizations or governments can be agents of economy, the contribution of the private sector is crucial to building a lasting economy. Government rarely makes policies and applies mechanisms for citizens and private organizations to articulate their interests and work together with the government and this hinders proper development of the economy (Ohaneme, 2020).

Information and Communication Technology

Information and Communication Technology (ICT) comprises all the technology that simplifies the processing, transfer and exchange of information and communication services (Laudon & Laudon, 2007). According to Murray (2011), ICT is a specific term that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information (Free On-line Dictionary of Computer, 2008). ICT is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications

associated with them, such as video conferencing and distance learning (Blurton, 2002). So, ICT covers any product that will store, retrieve, manipulate, transmit, or receive information electronically in a digital form (e.g., personal computers, digital television, email, or robots).

The list of ICT components is exhaustive, and it continues to grow. So, the term ICT includes hardware, software and networks. People should be united by inter-linking each one to the other in a systematic process to create the necessary information that helps the decision makers, producing products, offering services, promotion, controlling and for achieving business aims and goals

Role of ICT in Revamping Nigeria's Economy

ICT is used for improving productivity and cost efficiency, and to present high quality products and services to customers (Linton, 2018). ICT has the potential to accelerate economic development (Sobhani, 2008) and therefore, can be used in revamping Nigerian economy. The specific roles ICT will play in revamping Nigeria's economy are:

- Improvement of decision-making
- Improvement of productivity
- Improvement of financial performance
- Aiding of human development
- Improvement of customer service

Improvement of Decision-making

ICT systems enable storing, processing, analyzing and sharing of vast amounts of data. The information available from corporate data enables government, managers and employees to make decisions

quickly and accurately. ICT systems such as communication networks enable decision-makers in different locations to work together easily when they need to take joint decisions. So, government can make stable and suitable policies and initiatives, develop and implement the nation's budget on time with the help of ICT. Managers and individuals can manage operations effectively and respond rapidly to business opportunities or threats with the help of ICT. Decision made with the help ICTs can help businesses to keep up with competition, increase staff satisfaction, increase operational efficiency, and enhance joint working in collaborative venture (Kuffour, 2017).

On the other hand, communication networks enable project teams or government and private sector to collaborate effectively in making decisions. By using video conferencing or web conferencing over the Internet, teams can hold virtual meetings that bring together members from different locations, or different organizations, such as suppliers or business partners.

Improvement of Productivity

ICTs are used for the dissemination of information about new businesses/products, market prices, businesses opportunities and technologies that will help them in decision-making (Lokeswari, 2016) and improvement of productivity. Nigerian economic problem caused by total dependence on crude oil and gas can be solved by diversifying the economy through large scale production of other goods and services such as agricultural products (rice, palm oil, groundnut and cocoa) and increasing local refining of crude oil and export of refined oil. These can be achieved through information available in ICT systems.

On the other hand, Studies have shown that ICT improves the productive capacity of enterprise (Ansah, Blankson, & Kontoh, 2012). According to Beirut Arab University (2020), ICT can assist enterprise improve its productivity via design, manufacturing, distribution and sales and feedback. A study (Greenberg, 2008) has proven that ICTs were dynamic input factors and that their use improved labour productivity for informal as well as formal businesses. Ease access to manufacturing and production data brought about by ICT enables managers to plan production more effectively, making better use of resources and reducing lead times. For example, ICTs are used for the dissemination of agricultural technologies and relay of weather information to farmers to help them in decision-making for improvement of productivity.

Improvement of Financial Performance

ICT solutions can help in improving financial performance by reducing expenditure, increasing revenue and improving profitability. Corruption which is one of the causes of poor financial performance of a nation can be minimized through ICT. Nigerian government can institute strong laws against corruption through various anti-graft agencies in Nigeria such as the Economic and Financial Crime Commission (EFCC), and Independent Corrupt Practices and other Related Offences Commission (ICPC) and monitor citizens' corrupt practices using ICT tools such as CTV, watchdogs and financial transactions and frauds via e-commerce systems. Use of ICT tools in fighting corruption can reduce misappropriation of funds thereby improving financial performance.

Insecurity is another cause of poor financial performance of a nation. Economic prosperity triumphs more in peaceful environment. ICT tools such as CTV and trackers are used in monitoring insecurity caused by bandits (Ezetoha & Ezeokafor, 2022) while insecurity caused by ethno religious conflicts and disputes can be minimized through conflict resolution methods applied online such as online dispute resolution.

Alternative to basic amenities and infrastructures such as electricity that help businesses thrive can also be sort for through ICT research tools. In addition, ICT solutions can help an enterprise improve its financial performance by reducing costs, increasing revenue and improving profitability (Sobhani, 2008). Investment in ICT greatly reduces travel costs for sector workers of various businesses. For example, using video conferencing to host meetings between members in different locations, for example, reduces travel costs. On the other hand, production data accessed from ICT system can help staff identify quality problems, reducing waste and reworking costs. In addition, call center agents can use information available on their customer databases to increase revenue by identifying opportunities for selling additional products or services. Enterprises also use e-mail to communicate with their customers and this brings about sales growth (UK Essays, 2018). Cost reductions and revenue gains make an important contribution to overall profitability and will aid sustainability of businesses. So, the use of ICT represents the basis for survival in today's global market; ICT plays a crucial role in providing economic stability.

Aiding of Human Development

ICT aids human development needed for success of the economy and development of any nation or organization. According to Sobhani (2008), ICT has the potential to accelerate economic development by: promoting economic growth through facilitating the generation of new income sources, new job creation as well as the expansion of existing jobs to accommodate new employees and promoting work efficiency, and these lead to sustainability of business.

ICT provides vast research materials needed for learning (Kurtz and Sponder, 2010). Adequate knowledge and skills needed for human development that are not acquired because of poor educational system in Nigeria can be acquired from ICT systems. ICT also provides support for business opportunities (Ansah, Blankson,. & Kontoh, 2012). Nigerians poor remunerated can supplement their earnings through online business.

Improvement of Customer Service

Quality of customer service is very important for achieving productivity and sustaining businesses. Government company or an enterprise can use ICT solutions to offer faster response to and higher standards of service to its customers (Linton, 2018). For an enterprise running a call center, for example, her agents can access databases that

provide comprehensive customer information, including purchase history and product preferences. With the information, they can deal quickly and efficiently with inquiries, boosting customer satisfaction. Customer, service and product databases can be accessed by service personnel working in the field using smart phones with secure Internet connections and this enables them to fix problems quickly and effectively, again improving customer service. So, ICT makes a business more efficient, effective and promptly respond to customers (BAU, 2020), and these are important in revamping businesses.

Conclusion

This work has established that ICT plays the role of improvement of decision-making, productivity, customer service and financial performance and aiding human development in revamping Nigerian economy.

The study initially revealed that Nigeria is suffering from economic problems mainly as a result of COVID-D 19, over reliance on crude oil, yearly servicing of foreign and domestic debts, corruption and insecurity.

Recommendation

It is recommended that ICT should be fully applied in Nigeria's economy in order to revamp and sustain it.

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