Prospects of ICT Development to Sustain and Stabilise Nigeria Economy in Post-Recession Era

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ABSTRACT

The advent of information and communication technology (ICT) brought a drastic turnaround of every aspect of human endeavours worldwide. It has become a driving force, which propels Nations, Organisations, Societies and individuals that embraced its' applications, while others remained backward. Nigeria economy is at cross road and the effects of recession are well pronounced. Solution to the problem seems difficult, but correct technological policies have the desired potentials.ICT Development (Microsoft Inc.) in US engaged average of 93,916 employees yearly from 2005 to 2016 and average annual revenue of \$16.9 billion yearly within the same period.Information and communication technology (ICT), mother of all invention, if properly developed, well managed and effectively utilised has more capability to get this Nation of ours out of economic recession and sustain it permanently as it takes in the other developed Countries. Even, if recession occurs, the system put in place will be able to cushion its' effects.

Keywords: Information and Communication Technology (ICT), Economy and Recession

Introduction

This paper examines the impacts of ICT development in the economy of some developed countries, income generated, employment opportunities and sustenance of Industrial activities. Some of these aspects of economy were compared analytically to see where we missed our priority and mismanaged our resources. There have been symptoms of recession in the Nigerian economy, just that it became full blown under the President Muhammadu Buhari regime due to certain drastic actions taken to solve some domestic economic problems. As a result of this, Nigerian economy declined significantly for more than six months, which brought dropping of the following economic indicators: real GDP, income, employment, manufacturing and retail sales. Indebtedness, illiquidity, bankruptcies and unemployment are well pronounced nationwide. The National Bureau of Economic Research (NBER), defines recession as "a significant decline in economic activity spread across the macro economy, lasting more than a few months, normally visible in real gross domestic product (RGDP), real income, employment, industrial production and wholesale-retail sales". These are the experience of our Nation in the last three years and we are still struggling with these traits of economic recession. Unfortunately, the Country has adopted various economic and administrative policies to no avail. But it was discovered that technological innovation policies can go a long way to negate all the negativities of recession and sustain economic stability.

Statement of the problem.

The economic situation of Nigeria after the independence was good and buoyant. The economic recession in which Nigeria found itself was a manifestation of poor economic structure that the country embraced some years ago. The recession has adversely affected socio-political structure, standard of living, imports, production and employment. Fast

developing economies like China, India, Brazil, including Vietnam and Thailand depend on exports to drive their economies. Nigeria cannot afford to do otherwise. 80 percent of Nigerians still lack access to electricity, decent housing, portable water and good healthcare. This figure grew as a result of increasing unemployment caused by the recession.

Virtually all ICT/IT related hardware/software are imported from developed countries and more than 60 percent of ICT/IT services are being managed by expatriates. All these contributed to over dependent of the country on imported good at the expense of local manufacturing industries. Nigeria is faced with reduced volume of exports, especially oil, which eventually reduced country's revenue. The implications are that the federal and state budgets cannot be funded adequately resulting to external borrowing and debt financing. These have negative implications on foreign exchange and imports of raw materials, low absorptive capacity, job losses, increased tax evasion and avoidance, low purchasing power, low standard of living caused by economic recession.

Literature Review

Eneji et al, (2017) concluded that economic recession is a symptom of deeper structural problems inherent in the Nigerian economy, and overdependence on external modern capitalist societies. It recommends that Nigeria needs positive economic change that is caused by structural and fiscal reforms. Nigeria should strive to diversify the economy, be self-reliance and corruption-free, eat what she produces, and mostly use what she makes.

According to Mailafia, (2016), economic recession stagnates wage growth and increases the proportion of people on low pay, as well as swelling unemployment and underemployment. In a research by Bauer, (2009), economic recession and the global financial crisis have interlinkages with poverty incidence in developing countries.

In a study by Oyesiku (2009), economic recession does not just occur, certain factors trigger recession which include; inflation, loss of consumer confidence, excess supply over demand, excess demand over supply, and global economic crisis. Nigeria economy went down flat, standard of living collapsed and unemployment reigns endlessly. ICT products (Hardware/Software) can play significant roles in restoring Nigeria economy.

Kundishora, (2008) reaffirmed that ICT is crosscutting and an enabler for growth and development and for maximum benefit, countries must establish the right policy interventions, resource investments, appropriate networks (partnerships) and enabling environment.

Eneji et al, (2017) added that, at a time of slowed growth and continued volatility, many countries are looking for policies that will stimulate growth and create new jobs. Information and communication technology (ICT) is at the centre of all technology innovations and policies.

Ikenna, Chikala, Anthony (2017) asserted that adoption of new ICT driven model will open doors for social economy and political development in Nigeria. They concluded that ict plays a role in general development of the economy vis a viz its contribution in sectors of the economy (agriculture, education, housing and financial institutions).

Audu and Oadunjoye (2014) argued that ICT can increase employment opportunities to the teeming unemployed youths; thereby increasing the rate at which the GDP grows and securing the nation economically and socially. They also recommended that the talent in the youth should be upgraded to fit into the needs of the country.

Conceptual and Empirical Impact ICT development in US and Nigeria

In this section, statistical data of positive impact of ICT development in America were compared with that of Nigeria. Economic performance of an American owned IT-Company (Microsoft Inc.) and some of the leading IT-Company in Nigeria were used.

Table 1. shows the number of Employment and annual revenue of Microsoft Inc.

Table 1: Employment and Annual revenue of Microsoft Inc. from 2005-2016

| MICROSOFT INC. | | | |
|----------------|-------------------|------------------------------|--|
| YEAR | Emp. In thousands | Revenue (billion Dollars) | |
| 2005 | 61 | 12.25 | |
| 2006 | 71 | 12.6 | |
| 2007 | 79 | 14.07 | |
| 2008 | 91 | 17.68 | |
| 2009 | 93 | 14.57 | |
| 2010 | 89 | 18.76 | |
| 2011 | 90 | 23.15 | |
| 2012 | 94 | 16.98 | |
| 2013 | 99 | 21.86 | |
| 2014 | 128 | 22.07 | |
| 2015 | 118 | 12.19 | |
| 2016 | 114 | 16.8 | |

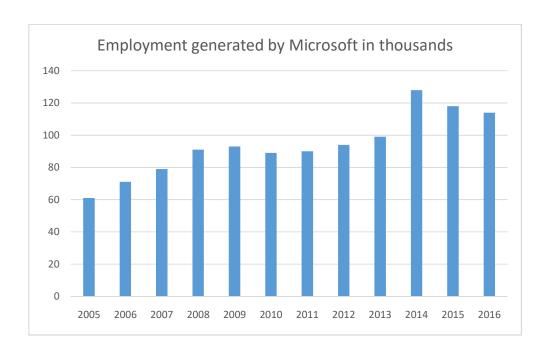


Fig. 1 Employment status of Microsoft Inc. from 2005 to 2016

Figure 1. Above shows the number of employees that Microsoft Inc. engaged yearly since 2005 to 2016, while Figure 2. Combined the number of employees with annual revenue generated.

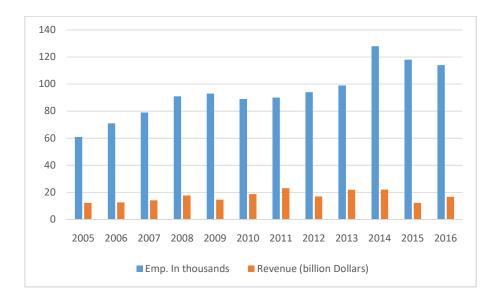


Fig. 2 Relationship between Employments generated annual revenue.

The statistic shows that average of 93,916 People are earning their living yearly and average annual revenue of 16.9 billion Dollars from 2005 to 2016.

Furthermore, some other Information Technology Companies such as AMASON, IBM and APPLE also contribute to the economy of America positively in terms of Employments and Revenue generation. All these, limit imports and increase exports.

In the other hand, Nigeria's leading Information Technology Companies are nowhere to be found in terms of employments and revenue compared to their counterparts in America. The Table 2 below shows top ten Information Technology Companies in Nigeria.

Table 2: Top Ten Information Technology Companies in Nigeria

| S/no | Information Technology Companies in Nigeria | Number of Employees |
|------|---|---------------------|
| 1 | Vmware Nigeria Intl. | 10,000 |
| 2 | CISCO | 10,000 |
| 3 | IBM | 10,000 |
| 4 | НР | 10,000 |
| 5 | Dimension Data | 10,000 |
| 6 | Business Connexion | 10,000 |
| 7 | EMC | 10,000 |
| 8 | Check Point | 5,000 |
| 9 | Weco System | 200 |
| 10 | iFeco | 200 |

Source:www.nigerianfinder.com/IT-Companies

Table 2. shows that the number of employment generated by these top ten Information Technology Companies in Nigeria is not up to what only Microsoft Inc. generated yearly in America. The total number of employees of top ten Information Technology Companies in Nigeria is 79,000.

Different ways in which ICT can Sustain Nigeria Economyin Post- Recession

Direct Job creation: The ICT sector is, and is expected to remain one of the largest employers. Elena, 2013 researched that, in US alone Computer and Information Technology jobs are expected to grow by 22% yearly up to 2020, creating 758,800 new jobs. Thousands of Nigerians will be gainfully employed if a formidable platforms are created for our IT/ICT companies to compete favourably with their counterparts in other countries. The sector offers unlimited opportunities to the teeming army of unemployed youths. Different report has shown that youths when given chance will maximise their potentials to the fullest. Nigeria today, many startups are ICT based, but there is still room for competition amongst them. These opportunities ranges from, web development, computer repairs, gsm repairs, telecommunication mast building amogst many employment opportunities. We should take a cue from Silicon Valley in USA, to see how many jobs created alone in the Zone.

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❖ Contribution to GDP growth: Countries that have policies to develop ICT import less ICT products and export more IT related products to boost their economy, improve standard of living and GDP growth will be sustained. Nigeria will experience the same, if right technological policies to develop IT/ICT are put in place. Developed Countries majorly increased there GDP using the ICT advantage. Looking at Korean and American giants, i.e. Apple and Samsung, the taxes these two companies pay is what some state budget is in the country.

- ❖ Emergence of new services and industries: Numerous public services have become available online and through mobile phones. ICT has enabled the emergence of a completely new sectors, such as "App" industries, game industries, health information systems e.t.c.
- ❖ Workforce transformation: ICT has contributed to the rise of entrepreneurship, making it much easier for self-starters to access best practices, legal and regulatory information, marketing and investment resources. It also contributes to efficiency and effectiveness of workforce in the industries.

& E-Government

E-governance can be defined as the use of emerging information and communication technologies to facilitate the processes of government and public administration (Moon 2002). This definition focuses on the use of ICT to assist in the administration or management of government. Nigeria as a whole need re strategize its modus operandi in the running of day-day operations by its agencies, MDAs and Ministries. This make business easy and prevent loss of revenue.

❖ Agriculture

The current president of AFDB, Dr. Akinwunmi Adesina, in his interview granted to him by punch newspaper, he vividly said that ICT has helped farmers in Nigeria using the E Wallet format. This helps farmers to get notification on different programs, incentives, loans being directly sent to their mobile phone. The wallet program connects farmers and product buyers (retailers and wholesalers) meet in a common exchange market by giving notification to both sides. Satellite imaging has also helped farmers determine weather calculation and to determine new farming season.

Recommendations

Nigerian economy is a mono-economy; any crash on the price of oil internationally will cripple our economy. So it is a matter of urgency for the Nigerian economy to divest into information technology and other technological innovations that can catalyse value added entrepreneurship to reposition our economy. As a matter of urgency, there should be an educational and technology policies to fast track the development of IT/ICT products in Nigeria. Similarly, proper and correct application of IT/ICT has a way of reducing cost of governance, enhances planning and facilitate good decision making.

Conclusion

The economic recession in Nigeria is caused by wrong economic policies and some other factors. There have been symptoms of a recession in the Nigerian economy, just that it became full-blown under the President Mohammadu Buhari's civilian regime due to certain drastic actions taken to solve some domesticeconomic problems. The major cause of recession in Nigeria is over dependent on crude oil, and to a large extent, Nigeria feeds on imported food, lives on foreign finished household electronics and communication manufactures, military gadgets, transport and electricity, infrastructure inputs, cloth in imported textiles and garments and drives in 100 percent imported cars. If we look inward to develop our information technology being the mover of administration, business and research in the whole wide world, we can become the largest exporter of IT/ICT products in Africa and Nigeria we be great again.

References

- Eneji Mathias Agri, Dimis Mailafia, and Dr Mrs Rose Ijeoma Umejiaku, (2017). "Impact of Economic Recession on Macroeconomic Stability and Sustainable Development in Nigeria", *Science Journal of Economics*, Volume 2017, Article ID sje-130, 12 Pages,
- Kundishora, S M. (2010)"The Role of Information and Communication Technology ICT) in Enhancing Local Economic Development and Poverty Reduction". Zimbabwe Academic and Research Network.
- Bauer.A. (2009). "The Social Impacts of the Global Financial Crisis on the Poor and Vulnerable People in Asia". Paper Present during the Policy Forum on Labor Market Policy. Bonn, Germany, May 6.
- Mailafia.D.I. (2016). The Structural Economic Dimensions of Unemployment: Associated Factors and Imperatives for Sustainable Development in Nigeria. Being Inaugural Lecture, University of Jos.
- Oyesiku A..(2009). "The Implication of Global Economic Recession on Sustainable Housing in Lagos Megacity". *Journal of International Business Research*, Vol.4 (1).Pp1-9.
- Oladunjoye Idowu Michael& Audu Joel Samson (2014). "The Impact of Information and Communication Technology on Youth and its Vocational Opportunities in Nigeria". Journal of Good Governance and Sustainable Development in Africa, Vol. 2, No 1, Jan., 2014.
- Otuonye Anthony I,. Nwaimo Chilaka E, Udunwa Ikenna A (2017)' "Remedy to Economic Recession in Nigeria: an ICT-Driven Model for a Sustainable Economic Growth".

 International Journal of Science and research methodology. June 2017 Vol.:6, Issue:4
- Moon, M. J. (2002). "The Evolution of E-governance Among Municipalities: Rhetoric or Reality?" *Public Administration Review*, 62(4).