

ANALYSIS OF ICT, POWER SUPPLY AND HUMAN CAPITAL DEVELOPMENT IN NIGERIA AS AN EMERGING MARKET ECONOMY

Anthony Orji*

Department of Economics, University of Nigeria, Nsukka

E-mail: anthony.orji@unn.edu.ng

Jonathan E. Ogbuabor

Department of Economics, University of Nigeria, Nsukka

E-mail: jonathan.ogbuabor@unn.edu.ng

Onyinye I. Anthony-Orji

Department of Economics, University of Nigeria, Nsukka

E-mail: onyinye.anthony-orji@unn.edu.ng

Chinonso Okoro

Department of Psychology, University of Nigeria, Nsukka

E-mail: chinonso.okoro@unn.edu.ng

Daniel Osondu

University of Nigeria, Nsukka

E-mail: osondudaniel32@gmail.com

(Received: June 2020; Accepted: August 2020; Published: October 2020)

Abstract: This paper analyzed the impact of information and communication technology (ICT) and power supply on human capital development in Nigeria as an emerging market economy. The study adopted the Classical Linear Regression Model for the empirical analysis. The result showed that ICT, power supply (proxied by electricity consumption) and population impact positively on human capital development, while infant mortality has a negative impact on human capital development in Nigeria. The impact of ICT on school enrolment suggests that technology is fast evolving and new technologies are preferred to old ones. The study, therefore, recommended that Nigeria should follow in the trend of ICT globally in harnessing her human capital endowments. In conclusion, the Nigerian

*Corresponding author: Anthony Orji. *E-mail: anthony.orji@unn.edu.ng*

Copyright © 2020 The Author(s). Published by VGU Press

This is an Open Access article distributed under the terms of the Creative Commons BY 4.0 license (Creative Commons — Attribution 4.0 International — CC BY 4.0) which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Orji, A., Ogbuabor, J.E., Anthony-Orji, O.I., Okoro, C., Osondu, D. (2020)

Analysis of ICT, power supply and human capital development in Nigeria as an emerging market economy

government should harness her ICT and electric power potentials and develop the human capital available to her to prevent the emigration of her human resource endowment to more resilient and promising economies.

Keywords: Information and Communication Technology, Power Supply, Human Capital

JEL Codes: D83; E24; J24; L94; L96

1. Introduction

The role of innovation, science and technology, as well as the power supply cannot be overemphasized and neglected in this modern era as they have aided in bringing the world together as a global village. The common argument is that information and communication technology (ICT) impacts strongly on efficiency and innovative capacity and has a geometric progressive effect on economic growth (Claudio, Carlo and Elizabeth 2010). ICT has been a frontrunner and a change agent in confronting the interests and needs of different countries as discovered since about three decades ago (Kramer, William, Beth and Katz, 2007; Orji et al, 2016; Ogbuabor, et al 2020).

Information and communication technology and power supply play active roles in every economy and every sector. A lot of people place their focus on the internet and computers when they hear the word, Information and Communication Technology, but it encompasses the processes of innovation and idea generation. Telecommunication was the earliest component of information and communication technology in Nigeria with the advent of telephone service in 1923, and the introduction of VHF radio system showed growth in information and communication technology with five automatic and a hundred and sixteen manual telephone exchange. The Post and Telegraph Department and Nigerian External Telecommunication were in charge of telecommunication management prior to 1984 when they were merged to a limited liability company known as Nigerian Telecommunications Limited (NITEL). The activities of the telecommunication services in Nigeria have contributed to some visible and impressive macroeconomic effects with respect to employment opportunities, reduced transport cost, better and speedy service delivery and higher national income. ICT has gained ground as the major driver of organization competitiveness in the business environment of today. Some of these sectors are the educational and agricultural sectors. The educational sector is the bedrock for sustainable economic growth, whereas, according to Hopestone (2013) the agricultural sector is the largest economic sector in Nigeria as well as in other African countries and it presents the best opportunity for poverty alleviation and economic growth.