Chapter 2

An Empirical Study of Information and Communications Technology (ICT) in the Nigerian Health Sector

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ABSTRACT

This study focuses on the assessment of different ICT tools used by Nigerian health workers. Structured questionnaires were used to collect information from 106 respondents. The questionnaire consists of 5 sections, namely: demographics, extent of use of ICT, tasks and activities carried out with ICT, the year of adoption of ICT. Descriptive statistics tools were used for data summarization and visualization. The results showed that the ICT devices were more commonly used among females than male medical personnel which were most common among the age group of 26-30 years and were nurses and doctors with less than 5 years’ experience. The earliest ICT tool adopted was the PC in 1994 followed by mobile phones and search engines in 1996 and the projector in 2001. A majority of the health workers used ICT for administrative functions followed by research and personal work. ICT majorly impacted ICT by promoting collaboration among physicians, quicker medical diagnoses of diseases, increased efficiency and facilitated remote consultation, diagnoses and treatment.

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INTRODUCTION

It is no longer news that Information and Communication Technology (ICT) is arguably the most rapidly growing segment of the world ecosystem (Toyo, 2016). The development in the sector permeates every human activity: social, economic, cultural, religious, political or health care (Idowu et al., 2008). The huge networking possibilities afforded by ICT has significantly transformed the health care systems in the world; dispersing health care information with comparative ease, bringing patients closers to caregivers, making access to the best health care technology and expertise available to the remotest parts of the world (Akadiri et al., 2009). ICT has been integrated into business operation and management for decades. Investments in ICT have become crucial organizational strategies for survival and competitive advantage (Melville et al., 2004). One of the most common questions when utilizing ICT in business operation is when the business is considered to be successful at using ICT or what determines the stage of success (Ekene, 2014).

ICTs with their gathering, processing and retrieval abilities can simplify the numerous information and communication needs required for such collaboration. Shittu et al. (2008), list the information and communication requirements of the health institution to include information and research tasks, interacting and gathering information daily from several patients, cross-checking patients’ histories, discussing with colleagues to examine and share experiences as well as updating knowledge on diseases and drugs (Udousoro, 2014). Networking was the ground-breaking digital innovation which altogether modified the landscape for the use of ICTs (Kundi et al., 2013). Computer is no more the central feature of computer-based systems rather it is just a node on the network. Internet is one of the convenient and cheapest sources that save time for searching information by the healthcare professionals. This is supported by (Mittman and Cain, 1999) they found that availability of online health care information save time, efforts and make the access easier. As according to Griffiths et al. (2006) one of the most common functions of internet is that it provides all sorts of health-related information through use of different websites.

According to Idowu et al. (2006), the last 20 years has witnessed incredible swift and dynamic execution of information technology (IT) which has turned the world into a global village. Nations have also enjoyed an unparalleled increase in productivity as well as sustainable economic growth and development due to this evolving trend. However, this laudable development has not been evenly spread. In particular, the health sector was relatively slower than other industries in the adoption and use of information technology based solutions for its services where the use of computers, mobile phones, multimedia projectors, video conferencing, audio conferencing and internet for the improvement of individual and collective
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