Management Education Principles, Information and Communication Technologies and Sustainable Development in Nigeria

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ARTICLE INFO	ABSTRACT
	The convergence of information technology (IT) with those dedicated to communication to create information and communication technologies (ICTs) in the recent centuries and decades has encouraged the application of innovations of technological, social and institutional forms to facilitate socio-economic and ecological development by nations – a process that started with the attainment of Industrial Revolution by Britain between the eighteenth and twentieth centuries. This paper examines the relevance of ICTs for management education principles and socio-economic development in Nigeria. Issues described here include: context for development, management education in Nigeria – including enrolments in business management/administration; global applications of ICTs for development and education. It is recommended that to optimize ICTs applications to achieve principles of responsible management education for attaining the goals of sustainable development within dynamic global/national environments, Nigeria's government must adapt and implement some of the good practices in the ICT4Education programmes that have been implemented in some countries around the world.

1. Introduction

The quest for modern technology and education are among some of the most sought after goods and services by all nations, societies and (sub)regions due to the advantages they bring to the economies, global competitiveness of the nations and (sub)regions in an increasingly advancing world. Education –of various forms was instrumental to the transformation of the wide gamut of the British populations hitherto pre-occupied with traditional cottage and simple crafts industries into modern factory mode of producing goods and services in what has been known as the attainment of the "industrial revolution" in Britain between the eighteenth and twentieth Centuries (Bythell, 1983). The industrial revolution was followed by other programmes concentrating on implementation of social and institutional innovations that culminated in improvement of living standards of the British populations and transformation of the British society into a consumerist one. Thus, it is easy to appreciate how the "industrial revolution" was itself instrumental to the achievement of the domination of the whole world by Britain thus the assumption of the tag: Great Britain. It is even easier to understand why this provided a socio-economic development model replicated, to varying degrees, by most countries including the United States of America, and others in the membership of the Organization of Economic Cooperation and Development (OECD). Recently, there have been expectations from within and outside Developing Countries (DCs) to employ the required strategies and models that are capable of replicating the necessary revolutions –industrial, technological, institutional, among others, to turn around the fortunes of the DCs (Demeny and McNicoll, 2006).

The advanced countries, which have already achieved the known revolutions as well as improved socio-economic conditions, are not satisfied with their conditions; therefore they continue to search for and apply greater innovations that can lift their economies and societies higher. Education, of a general nature and of all sorts, remains a veritable tool for this quest for improvements in all nations- be they advanced or developing. As suggested by the title, this paper, in its original version, expected, as it were, an examination, in a rather global way -instead of contextualizing the issues involved in its various aspects- the relevance of modern technology to the realization of teaching and learning principles in the special area of business education. What is business education? What are the teaching and learning principles of business education? How are modern technologies relevant to the realization (or achievement of) the teaching and learning principles of business education? What is the context of the foregoing issues (business education, relevance of modern technologies to realizing business education's teaching and learning principles) in Nigeria?

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The 2000s have been associated with the recognition by management philosophers and practitioners of the urgency of creating and implementing new standards and codes for educational programmes and courses for students receiving knowledge and skills in the field in preparation for practice and leadership in the future. This is considered urgent because of the increasing global challenges including the global financial –and economic- crisis of the late 2000s; impacts of climate variability and change on sustainable development management/administration; among others. These challenges have provoked management philosophers to insist on preparing students to cope with and address challenges of the present as well as anticipate those of the future. Thus, principles of responsible management education have been formulated to guide ongoing and planned courses/programmes.

The problem
It is usually tacitly felt that all disciplines and fields understand the problems that confront nations or societies and by that virtue, know how to generate the required information and knowledge for serving possible solutions. In reality, most fields and disciplines responsible for basic and applied research and knowledge generation frequently get too absorbed in their usual routines to the extent that those so pre-occupied find it difficult to get the "bigger picture" of the most urgent challenges confronting society at various scales (sub-national regions, national, regional and global). This terrible failure by university departments and research programmes to comprehend the real or urgent challenges confronting the British society compelled the government in the 1990s to request researchers to demonstrate the relevance of their research to national challenges as a condition for receiving tax (public) money contributed by citizens (Howard and Sharpe, 1996). The foregoing problem of omission to recognize the relevance of modern technologies and its contributions to the discharge of academic responsibilities (for teaching and learning) in the discipline and/or field of business education could be a challenge to the advancement of the field. This might happen despite the knowledge that we live in the technological age that has undergone more and more improvement in scientific (and of course, technological) progress since the advent of the industrial revolution between the eighteenth and twentieth centuries. Moreover, it is poorly known the extent to which the recently formulated principles of responsible management education for guiding ongoing and planned management education courses/programmes have been related to the Nigerian situation.

Objectives
The objective of this paper is to show how modern technologies (because they are many technologies rather than one monolithic technology) have contributed to teaching and learning in the specific area of business education. Specifically, the relevance of modern technology to realizing teaching and learning principles in the special area of business education, which is the major endeavor here (i.e., in this paper) would be undertaken in the context of Nigeria's current and previous socio-economic and political conditions. Other specific objectives include: To clarify the "teaching and learning principle(s)" of business education (globally and with reference to Nigeria; To elaborate on the relevance of modern technologies to the realization of teaching and learning principles in business education in Nigeria.

Organization of the paper
The rest of this paper is organized into sections. The next section clarifies key concepts and aspects of the paper such as follows: business education; teaching and learning principles in business education; the context for promoting teaching and learning of business education (based on globally accepted principles) in Nigeria. Other sections focus on: elaborating the methods of description and case study as the most suitable for use in implementing this study. This is followed on with discussions of; modern technologies relevant for teaching and learning of business education; another case study (discussion) of information and communication technologies (ICTs) as a representative case of the numerous modern technologies relevant to business education teaching and learning in Nigeria; and, conclusion (summary of major points of the article, recommendations aimed to improve the employment of modern technologies for improving teaching and learning of business education).

2. Key concept and issues in the study
What is business (management) education?
Business education is one of the fields among the wider gamut of other vocational education disciplines that aim at promoting both functionalism and adequate preparation for occupations (Fafunwa, 1991) is concerned with inculcating in students theoretical knowledge, concepts and practical skills required for achieving the objectives of involvement and success in regular employments as well as self-employment endeavours. It is usually offered as programmes that are either formal (i.e. regular educational institutions) and/or non-formal (improvised educational courses sand-witched in other non-educational establishments such as business organizations). In Nigeria, the National Policies on Education that have successively been issued in 1981, 1998, and 2002 have provided for the offer of some the following specific subjects considered relevant to the acquisition of the knowledge and skills required for achieving competence in business

education at the secondary educational level: commerce, shorthand, typewriting, office practice and book-keeping. These subjects have been made compulsory for students of the Junior Secondary Schools (JSS) level in Nigeria. Nigeria's National Policy on Education stipulates that the same (foregoing) business education subjects are also offered at the Senior Secondary Schools (SSS) level but with greater concentration on practical skills inculcation (National Policy on Education, NPE, 2002). The subject has been described as one that is as old as the history of education in Nigeria- subject that has attracted the academic research attention of one of Nigeria's "Fathers of Education", A. Babatunde Fafunwa, who has published at least two books chronicling developments of the nation's education at the global level and at the higher (tertiary) educational levels (Fafunwa, 1991).

Recent increases in enrolment in Nigeria's vocational schools in the mid-1990s reveal that huge potentials exist for employing both management education principles and innovation –especially information and communication technologies (ICTs) for managing sustainable development in Nigeria. Official statistics show that in a section of Nigeria's tertiary educational institutions (TEIs) recent enrolment in vocational schools rose as follows: From 40352 (1996); 43,320 (1997); 46,906 (1998); 62,651 (1999) to 72,246 (2,000) (Nigeria, 2006: 199-200). Similarly, increasing enrolments have been recorded in other various categories of national and higher national diploma courses in business management/administration in Nigeria's polytechnics and monotechnics around the country recently. For example, in 1996 and 1997 respectively in the nation's polytechnics were as follows: 9598/6725 (1996); 11,325/6387 (in 1997); 12,896/6267 (1997); 13,892/5810 (1998); 12,896/6267 (2000); 24,654/11,109 (2001); 14490/6219 (2002) (Nigeria, 2006: 211-219). Undergraduate students enrolment in business administration and managerial sciences in Nigerian universities in the early 2000s by gender (male and female) was: 56,217/28,586 (2003/2004); while postgraduate diplomas completed in business administration, by gender, were; 3830/1431 (2001); 3430/1071 (2002); 2420/1375 (2003); 2207/1092 (2004); 1931/844 (2005) and Masters degrees completed were: 7714/3106 (2001); 10994/4157 (2002); 10748/3308 (2003); 8529/3963 (2004) and 6352/2033 (2005) (Nigeria, 2006: 235-242). For the past two decades, the National Universities Commission, the official agency for regulating university education in Nigeria has enforced the inculcation of ICTs-based education in all academic and professional courses –including business administration and managerial programmes- in the country. This involves the registration of undergraduate students in at least one or more courses concentrating on the theory and practice of ICTs.

3. The principles of management education

The terms business education and management education have been used interchangeably in the literature of management and education. Therefore, their principles of are the same and have been presented that way in this article. The clarification of the principles of responsible management education has been the major themes and sub-themes of the work –including publications- of international governmental organizations (IGOs) due to its significance in directing specialists and professionals in the field how to invest their energies most profitably as an effective strategy of achieving goals set out. For example, in an important project culminating in the publication of a book entitled "Principles of responsible management education", the United Nations Global Compact (2007) –with support from AACSB International; The ASPEN Institute Business & Society Program; EFMD; GRLI; NI Net Impact- outlines the following six (sub)themes and principles:

"Principle 1 (**Purpose**): We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy;

Principle 2 (**Values**): We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact;

Principle 3 (**Method**): We will create educational frameworks, materials, processes, and environments that enable effective learning experiences for responsible leadership;

Principle 4 (**Research**): We will engage in conceptual and empirical research that advances our understanding about the role, dynamics and impact of corporations in the creation of sustainable social, environmental and economic value;

Principle 5 (**Partnership**): We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges;

Principle 6 (**Dialogue**): We will facilitate and support dialogue and debate among educators, business, government, consumers, media, civil society organizations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability".

We understand that our own organizational practices should serve as example of the values and attitudes we convey to our students" (United Nations Global Compact, 2007).

The 2010 reaffirmation and up-scaling and endorsement of the political declaration of principles of responsible (business) management education (PRME)

The same (foregoing) set of "Principles of Responsible Management Education (PRME)", were affirmed, endorsed and published after the 16th World Forum of the International Association of Jesuit Business Schools, held at Ateno de Manila University, from 18-21 July, 2010, under the auspices of the same UN Global Compact. Apart from the foregoing principles (as well as its Declaration) attracting the endorsement of 320 signatories –as at the time of its publication (United Nations Global Compact, 2007; www.unprme.org), the Forum considered the question and need to rethink existing business education as well as considered reports of two major Foundations on the subject: the Ford Foundation and the Carnegie Foundation. The Forum recognized that from 1959 to the time of its convention (and perhaps up to the present), business operations generally (and by extension, business education) had within the past two decades been affected by the following profound changes: globalization –including financial, trade, economic, migration and information flows-; constant information technology (IT) revolution; governance challenges – in form of the inability of nation-states to resolve major or pressing problems. Finally, it was resolved that the key aspects of rethinking business education should be concerned with: global changes in the world of business affecting corporations; globalization; IT revolution; growth in the era of -and arising from- innovation. Another significant and specific consideration was the dynamic and emerging role of business in society, in connection with global sustainability, human rights, labour standards, environmental care – including climate change-, anti-corruption, and contribution to development.

It was realized that there was an urgent need to question the questions regarding some major recent changes and challenges (some are yet to run their full cycles) that exert impacts on the worlds of business and business education. More specifically, there was the recognition of the need to rethink business management and operations as well as the teaching of business education with regards to the following: First, the collapse of the global credit and financial system leading to the world financial melt-down or crisis and also the excesses of the global financial system; Second, the challenges –including poor governance- of natural resource management systems –including food (security), energy, inadequacy of water, climate variability and change as well as the impacts on all bio-physical (sub)systems. within the latter, it was thought that there was need to worry about the adequacy –or otherwise- of the size of public and private investment in the education system and the degree of commensuration with the challenges enumerated here. Third, is the concern about the nature and character of the global politico-economic order regarding whether the global politico-economic architecture or configuration was becoming multi-polar or apolar, or otherwise, (and devoid of multi-lateralism) and the adequacy of what has been occurring in reality for sustainable development. Arising from the foregoing was the questioning of what strategy could address the existing global challenges in the next two decades: whether a global governance framework or an alliance of fragmentary parties or interest groups?

The adequacy –or otherwise- of the response of global business education sector and/or its specific communities formed a distinct set of concern(s). Were international conferences of business schools paying adequate attention to sustainability challenges –as major focal point of their responsibilities? What has been the disposition of new –and emerging Deans of Business (Management) Schools towards sustainability challenges? What new initiatives for promoting sustainable development are emerging from, within, and among business schools? Is it feasible to transmit or universalize the proposed "Principles of Responsible Management Education (PRME)" through the global business schools' system? (UN Global Compact, 2010).

4. Context for promoting teaching and learning of business education (based on globally accepted principles) in Nigeria

With a population projected at 161 million in 2011 (BussinessDay, 2011: 21), Nigeria is regarded as Africa's most populous country. Nigeria's 2006 population of over 140 million was nearly 20% of Sub-Saharan Africa (SSA)'s total population of 732.5 million in 2005 (Nigeria, 2007a, 2007b; WRI, et al., 2005: 177). Therefore, the projection that Nigeria's population will increase shortly to over 206.7 million (WRI, et al., 2005: 177) indicates the necessity of planning towards improving human life quality generally as well as meeting the education needs in future.
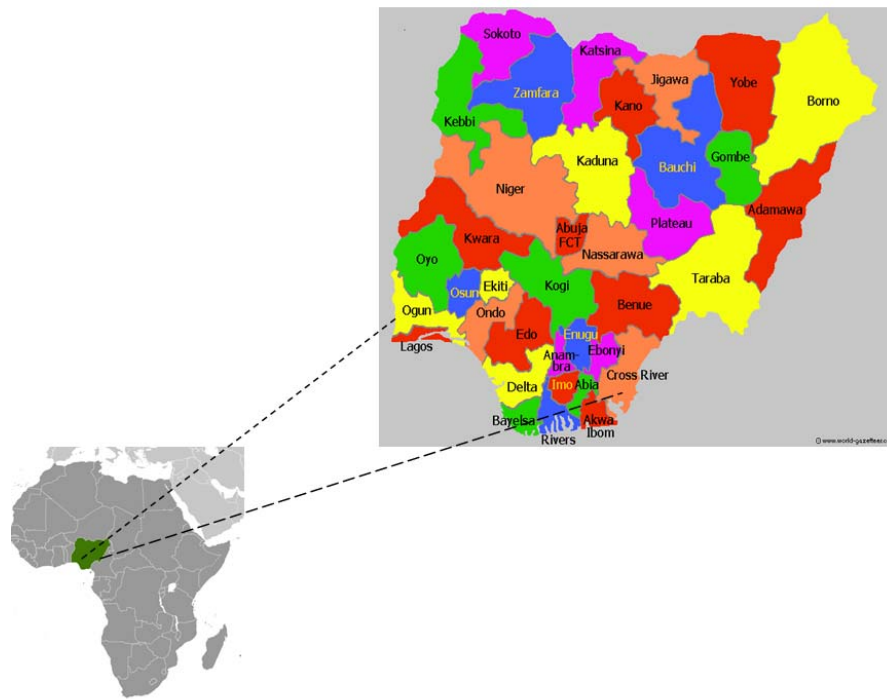
Figure 1: Nigeria projected from Africa

Large proportions of Nigeria's proven deposits of fossil fuel -including 4,635 million metric tones of oil equivalent (*mtoe*) and 4,497 mtoe of natural gas (WRI, et al., 2005: 201) among other energy resources (Adekeye, 2008: 18-23), have been extracted for export to earn an average of US$ 20 billion annually since the 1970s (Adams, 1991). Unfortunately, disproportionately large parts of these earnings have been stolen by Nigeria's elite (less than 1% of the population). For example, Nigeria's public treasury lost US$ 1 billion in 1978 under the ruling military dictatorship between 1976 and 1979. Between US$ 5 billion and US$ 50 billion was reportedly stolen by the Sani Abacha dictatorship that ruled Nigeria between 1993 and 1997 (Adams, 1991 citing Lombardi, 1986; Omojola, 2007: 20-35; Ribadu, 2009). The consequence of this high level of corruption on Nigeria's education sector is gross under-funding and poor performance. About 70.2% and 90.8% of the nation's population lived on less than US$ 1/day and US$ 2/day respectively in 1997 (WRI, et al. 2005; Ingwe, 2009). Nigeria's ranking on the human development index (where the most developed country was represented as '1') was only 0.47. The nation's human poverty index (100 = highest rate of poverty) was only 35.1 in 2002. Although the nation's gross domestic product (GDP) was US$ 32,953 million in 2002 and was the second largest in SSA, its GDP per capita -purchasing power parity (PPP)- in 2002 was only US$ 919 (12th largest in SSA) (WRI, et al, 2005: 189-193).

Surveys in the 1980s-90s revealed that 70.2% and 90.8% of Nigeria's population were poor (unable to earn/spend US$1/day and US$2/day (WRI, UNDP, UNEP, World Bank, 2005). There has been a high level of inequality (index of 50.6) indicating a problematic situation whereby other people will strive to achieve equality. The Human Development index, (UNDP measure of "average achievement in three basic dimensions of human development including a long and healthy life, knowledge and a decent standard of living for Nigeria in 2002 was 0.47 compared to 0.67 in South Africa; 0.59 in Botswana & 0.65 in Gabon. The human poverty index, in which the highest degree of poverty is scored 100, in 2002 scored Nigeria 35.1 compared to better conditions elsewhere such as South Africa (31.7), Ghana (26.0); and Equatorial Guinea (32.7). Despite possessing second largest total gross domestic product (GDP) in Sub-Saharan Africa (SSA) in 2002, Nigeria presented one of the least (37th) per capita government spending on health care in the rather poor region. While South Africa's government per capita spending of US $270 on health care was the largest (i.e. corresponding to her first position on the size of her total and per capita GDPs, Nigeria's performance on this human capital building activity was surpassed by Botswana and about 35 other SSA nations (WRI, UNDP, UNEP, and World Bank, 2005: 189). Economic mismanagement and corruption have contributed immensely towards the dwindling of public funds that ought to have been used for improving the welfare of citizens through infrastructural development in various parts of the country (Ogwuma, in: Ojo, Awoseyila et., el., 1997).

5. **Methods and data: Improving understanding of the relevance of modern technologies for leveraging principle-based teaching and learning of Business (Management) Education through description**

The methods of description and case study were used here to highlight potentials of modern technologies for realizing the teaching and learning principles of business globally and in Nigeria, in

particular. Qualitative techniques were applied to interpret data on various dimensions of education and business education as permitted by data availability. Description was preferred because experienced or previous researchers have profusely commended the method for assisting them by yielding profitable research results. The method of description is suitable and beneficial for this type of study for several reasons. It has proved to be suitable for: investigating the status of things (in this case, the relevance of modern technologies for realizing teaching and learning principles of business education globally and in Nigeria); highlighting the relationship between this subject matter and the aspiration to achieve sustainable development in Nigeria; investigating and understanding (the context for promoting business education in Nigeria; and application of modern technology for realizing teaching and learning principles in the discipline in Nigeria).

These are essentially issues that have been ignored and downplayed by academic researchers globally but especially in Nigeria because attention has been directed at other challenges considered more important than this. Owing to its capability of highlighting factors that underlie most societal conditions thereby exposing clues, and hunches from which hypotheses could be framed for conducting further studies on the same or related themes and topics, description has been applied here because it was considered suitable, for highlighting clues about factors underlying the relevance of modern technologies for realizing the teaching and learning principles of business education in Nigeria as well as provide a foundation for facilitating the creation of hypotheses for further studies that might be amenable to the application of more sophisticated experimental research methods.

The case study method was the specific type of description used. Owing to the existence of numerous academic disciplines and fields in Nigeria (and elsewhere) to which modern technologies could be applied to realize their principles for many purposes, the case study method had to be applied here. This involved being purposefully directed by the lecturer-in-charge to discuss the relevance of modern technologies to realizing teaching and learning principles in business education; thus ignoring many other disciplines to which the same exercise could have been applied. This case study is justified because the latter possesses characteristics that are representative of the huge population of academic disciplines and fields in Nigeria. The redemptive-cosmological approach of case study was adopted here because of its suitability for operationalising the sympathetic and empathetic research commitment which aims to contribute solutions to the problem of inadequacy of health care in urban Nigeria. The data analysis under description involves simple interpretation (Ogunniyi, 1992: 65-66). Description involves a set of essential activities that form the initial steps in the development of most academic disciplinary fragments (including business education analysis). Therefore, having accomplished the identification of a topic (relevance of modern technologies to realizing teaching and learning principles in business education in Nigeria) that is yet to be well known and convincing readers about the significance of the topic, the author proceeded to collect, record and analyse data based on simple interpretation and the creation of concepts and methods of classification designed to impose some structural refinement on the data (Howard and Sharp, 1983: 106).

6. Modern technologies relevant to the realization (or achievement of) the teaching and learning principles of business education

To answer this question, it is useful to draw from the seventh "Jesuit Advantage" in the implementation of the "Principles of Responsible Management Education (PRME)". The second point of that seventh "Jesuit Advantage" states as follows:

> "(b). The Jesuit underlying philosophy of leadership, steaming from the Ignatian tradition could be summarized as "(T)o innovate with confidence, and to adapt to a changing world" (Chris Lowney, "Leadership in the Jesuit Style"). Jesuit leadership based on the spirit of innovation is an advantage in this changing world". (United Nations Global Compact, 2007)

Owing to constraints (space, time and resources), this section will concentrate on briefly discussing the relevance of information and communication technologies (ICTs) out of the wide gamut of modern technologies that are relevant for realizing the teaching and learning principles of business education in Nigeria.

6.1. Information and communications technology or information and communication technology (ICT)

To enhance clarity, owing to their enormous width and variety, ICTs deserve to be presented below in a discriminatory way: those that might be viewed as relevant to development in a general manner; and those that are specially designed to facilitate the achievement of the goals of the education sector, again generally and then those of business education, in particular. The ICTs are frequently used to refer to "an extended synonym for information technology (IT), but also represent a more 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. The phrase *ICT* had been used by academic researchers since the 1980s, but it became popular after it was used in a report to the UK government by Dennis Stevenson in 1997 and in the revised National Curriculum for England, Wales and Northern Ireland in

2000. The term *ICT* is now also used to refer to the convergence of audio-visual and telephone networks with computer networks through a single cabling or link system. There are large economic incentives (huge cost savings due to elimination of the telephone network) to network system using a single unified system of cabling, signal distribution and management" (Wikipedia, 2012).

6.2. ICTs for education and business (management) education

Innovations of the technological and socio-economic nature have been created and applied to advance the education sector programmes in several parts of the world. Some of these ICT-based education development programmes of various kinds have been documented in the literature. Such ICT-based programmes are being managed and promoted by some international development organizations (IGOs) under the name of ICTs4E –for those concentrating on the education sector and smaller than the following- and ICT4D (for those focusing on the wider field of development).

Some of the advantages credited to ICTs pertains to their great potentials for facilitating both the acquisition as well of absorption of knowledge. Moreover, ICTs offer developing countries, including Nigeria, unprecedented opportunities for enhancing educational systems (programmes and projects), by improving policy formulation and implementation (execution), and widening the vast range of opportunities for business –this is particularly significant for this paper- and contributing to improving the chances available to the poor to experience positive changes in their socio-economic and psychological circumstances. It is noteworthy to point out at this juncture that one of the most debilitating challenges endured by poor people, and by many others living in the poorest countries of the world, is their sense of isolation- a psychologically traumatizing situation. It is claimed that the new communications technologies (CTs) promise to reduce that sense of isolation, and open access to knowledge in ways unimaginable not long ago. (Wikipedia, no date). However, it is uncertain whether this claim has been put to empirical research and testing.

Good practices in information and communication technologies for education (ICT4E) implementation

However, some notable and successful ICT4E programmes around the world of developing countries include the following: Chile, the Chilean experience; Costa Rica, The Ministry of Education and Fundación Omar Dengo's partnership: India (Kerala), IT@school; Jordan Education Initiative: Macedonia's Primary Education Project (PEP): Malaysia, Smart School: and Namibia's ICTs in Education Initiative, TECH/NA. others are: Russia E-Learning Support Project: Singapore's Masterplan for ICT in Education (now in its third edition): South Korea, first aid beneficiary now donor; the Korea Education Research and Information Service (KERIS); and Uruguay -small South American country, Plan Ceibal (Wikipedia, 2012/ICT4E).

ICTs are recognized as veritable mechanisms for offering the society alternate solutions for providing access and equity, and for collaborative practices to optimize costs and effectively use resources generally and in the education sector. This assertion draws from existing knowledge that education is recognized as a vital input to addressing a wide gamut of development challenges: these problems range from poverty, gender equality and health in the MDGs to exclusion and inadequate access to educational opportunities. ICTs implementation or provision has led to an expansion of demand for education at all levels. Owing to the frequent claims that education budgets are limited, conflicting demand for increased investment in the education sector against widespread scarcity of resources puts intolerable pressure on educational systems of many countries. ICTs have offered alternative opportunities or means to meeting these conflicting demands for traditional expansion of education systems (goods and services), such as building schools, hiring teachers and equipping schools with adequate educational resources will be impossible in a conventional system of education (Wikipedia, no date).

7. Conclusion

An examination of the scenarios of the implementation (or otherwise) of management education principles and ICTs in Nigeria's education system has been undertaken in this study. It was observed that Nigeria has recorded considerable increases in enrolments in vocational and management/administration courses and/or institutions on the eve of the global launching of the (responsible) management education principles. Although Nigeria's economy and society has been plagued by enormous poverty, unemployment, and socio-economic adversities; these adversities present prompts that beckon for the promotion and incorporation management education principles into the curriculums of business education, among other forms of vocational education to provide panacea for the aforementioned challenges. The implementation of ICTs (which is one of the myriad forms of innovation required for implementing management education principles) presents veritable means of enhancing the capabilities of business education to deliver on the expected improvements in capacities to serve either employers or self-employment in the country. To achieve this goal, as well as optimize the employment of ICTs for leveraging sustainable development management in Nigeria generally and the general education sector and business education–in particular, Nigeria's government as well as civil society must strive to understand and adopt some of the documented/reported good practices in ICTs applications for both development generally and for

educational advancement in particular from other countries (these are listed above) that have reportedly employed well designed programmes of socio-economic innovation to complement the strictly technological innovation under which category ICTs belong. In adapting and adopting one of the aforementioned good practices in ICT4E, what Nigeria's development planners and managers in the relevant sectors need to consider is the extent to which the circumstances and experiences of those foreign countries generally and ICTs/education sectors particularly match those of Nigeria. It is only after this step has been successfully taken that fitting adaptation and adoption programming and management could following in ways that guarantee success.

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