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### Emerging Role of Libraries in Today's Knowledge-Based Economy

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#### **Abstract**

*This paper examines the emerging role of libraries in today's knowledge-based economy. Concept of knowledge-based economy is an input of the mind, ideas and the ability of libraries to provide knowledge that may lead to career advancement and economic growth of nations. It is the application and exploitation of knowledge which play an important role in the wealth creation of individuals, organizations and countries. The paper looks at a knowledge-based economy, knowledge acquisition in a knowledge-driven Nigeria economy, education and roles library played. Also, it identifies the pillars, major structures, the main drivers, the competencies needed, roles of external bodies and barriers to a knowledge-based economy.*

**Keywords:** *Knowledge-Based Economy, Library, Education, Information, and Communication Technology*

#### **1.1 Introduction**

A knowledge-based economy (KBE) is an economy of the new age which cuts across different skills, specializations, innovation, and creativity of the mind. The term 'knowledge-based economy' was coined by the Organization for Economic Cooperation and Development (OECD) in 1996, as an economy solely based on production, distribution, and the use of knowledge and information. The perception behind this concept relies on the input of the mind, ideas rather than physical strength or abilities that bring about the invention and the use of different applications of technology. Asia-Pacific Economic Co-operation (APEC) economic committee identifies that the key drivers of development, capital creation, and employment across all industries in a knowledge-based economy are production, distribution, and knowledge utilization

(APEC, 2000). Through this, knowledge-based economy has brought about a change in the nature of human interactions across a wide range of spheres such as economic, education, political, social, technology and environment which could be seen as a process of integrating the world community into a common system; economic or social.

Knowledge-based economy arises from dual forces "the rise in knowledge intensity of economic activities and the increasing globalization of economic affairs" (Houghton and Sheehan, 2000). It is a driven economy in which the creation, application, and exploitation of knowledge play significant role in wealth creation of individuals, organizations, and countries. The effect of the knowledge-based economy has brought about an increase in learning and acquisition of information and access to knowledge especially through technological

applications that could have a great impact on the economic growth of nations. However, the emergence of recent technology has increased rate at which people seek for information in our today society. Library, which is a fundamental asset for nation building and economy development provides adequate information for research and proffer solutions for survival of economy. Information accessed from the library could be perceived as a commodity that can be traded and acquired in monetary terms. However, the quest for survival in a knowledge-driven economy highly depends on the ability to seek for relevant information and access to knowledge for advancement and economic development.

## 2.1 Review of Related Literature

### 2.2 The four pillars of a knowledge-based economy

To measure and monitor the progress of economies as KBEs, the World Bank developed the Knowledge Economy Index (KEI), using a four-pillar framework (World Bank 2012b). They include:

- i. **An economic incentive and institutional regime:-** to promote the resourceful usage of new and existing knowledge and the flourishing of entrepreneurship through the provision of incentives.
- ii. **An educated and skilled population: -** to generate, share, and utilize knowledge adequately.
- iii. **An efficient innovation and technological adoption system:-** to create innovations through firms, research centers, universities, professionals, and other organizations taking advantage of the increasing global knowledge, and adapting it to local needs,

and creating new technology.

- iv. **Information and communication technology:-** to facilitate the effective creation, dissemination, and processing of information.

### The five major drivers of a knowledge-based economy

Five major structural changes are relevant to knowledge-based economies. They include:

- i. Increasingly global production chains for goods and services, leading to changes in the location of comparative advantages.
- ii. The development of new centers of knowledge and innovative activities.
- iii. Demographic changes, especially increase in the average life span.
- iv. Changes in stocks and flows of skilled workers.
- v. Technological shifts are determined by recent technology or environmental requirements.

Over the next few decades, these aforementioned changes will alter the environment for innovation and competition and consequently the types of indicators needed by European policy makers and academics to evaluate and respond to future challenges effectively.

### 2.3 Competencies needed in today's Knowledge-based Economy

Rychen and Salganik (2001) suggested three categories of competencies that are key to lasting competitive advantage in today's knowledge economy.

They are:

**Acting autonomously:** - Building and exercising a sense of self, making choices and acting in the context of a larger picture, being oriented toward the future, being aware of the environment, understanding how one fits in, exercising one's rights and responsibilities,

determining and executing a life plan, and planning and carrying out personal projects.

**Using tools interactively:-** Awareness of new tools and its application in active dialogue; ability to use language, text, symbols, information, knowledge, and technology interactively to accomplish goals.

**Functioning in socially heterogeneous groups:-** Being able to interact effectively with others irrespective of their backgrounds; ability to maintain healthy relationships with others, cooperate, and manage and resolve conflict; recognize the social embeddedness of individuals and creating social capital

#### **2.4 Knowledge Acquisition in a Knowledge-driven Economy**

Knowledge is perceived as a commodity that is produced and bought. Lyotard (1984) believed that knowledge is produced to be sold and be consumed to expand production. It has become a means of exchange where those who have the means to buy it will have it. Tony Blair, speaking at the e-summit in November 2002, stated:

“The fundamental challenge is to create a knowledge-driven economy that serves out long-term goals of first-class public services and economic prosperity for all. To do so we need to innovate. We need to use ideas and intelligence in new ways that create higher value-added products and better-quality services and we must extend the opportunities of the information age to all.”

Knowledge is essential in achieving the invention of science and technology and in analyzing and reaching a conclusion on the political and economic development of any nation. This depends on the level of advancement in knowledge acquisition of the citizens which is the basic foundation for any nation to develop. According to Okebukola (2004) knowledge is the prime mover of

prosperity. Knowledge is a powerful weapon a nation can use to eliminate ignorance, deficiency, and lack of manpower. Also, Babalola (2008) was of the opinion that “the provider of knowledge is an indispensable fuel for the engine of development”.

However, Mabogunje (2004) in a study on knowledge society and technology in Nigeria, identifies that Nigeria must focus on knowledge acquisition. According to him, a nation which does not identify and meditate about money is misplaced. He further opined that the nation should not only return to a knowledge society but also regard information communication technology and not money bags.

In recent times, the addition of knowledge has changed both in value and in use, Mohammed (2006), explains the concepts of knowledge in this era as follows:

- i. Knowledge is a global commodity of trade which can be used by individuals, corporations, and government to gain an advantage.
- ii. Knowledge is a confidential commodity for National organization and personal security.
- iii. Knowledge is a patent commodity with rights and privileges of ownership and access.
- iv. Knowledge is a commodity that requires marketing and recognizes the role of the supplier and consumer in the production chain.

However, Development Program Report (2004) identifies Nigeria as one of poorest nations of the world in terms of human development based on the report, the criteria used in their judgment is the level of knowledge and adult literacy skills. To improve on the level of knowledge acquisition, libraries most especially public and academic libraries are needed for the acquiring of information and knowledge

delivery. Furthermore, Popoola (2005) reiterate the fact that the survival of man in a given society such as Nigeria and other African countries depends on information availability, accessibility, and utilization for problem solving, planning, decision-making, and control.

### **2.5 Education as a Tool for a Knowledge-based Economy**

In the knowledge world, education is a source of economic development. Mohasi and Lephoto (2007) have rightly acknowledged that for any substantial economic development to take place, human resources need to be skilled and trained through continuous '*education*' and '*training*'. Education is the source of all developed societies for eradicating poverty and inequality, improving the health of the citizen and the use of technologies and computer applications. The emergence of knowledge-based economy has put a premium on learning throughout the world. Ideas and expertise, the application of new technologies are sources of economic growth and development, which have significant implications on how individuals learn and apply knowledge throughout their lives (World Bank, 2003). These and many more have brought an increase in the knowledge-driven of our citizens.

However, the focus has been directed to helping citizens to invent and develop a critical and analytical mode of thinking and ultimately create a sufficient pool of well-educated, highly skilled and innovated workforce (Economic Research Services Department, 2000). According to New Growth Economics, a country's education and how quickly a nation can become a 'learning economy' depends on its ability to take advantage of the knowledge economy. Learning economy is characterized not only with accessing global knowledge via the use of new technologies but communicating with

others about innovation. In the "learning economy" individuals, organizations, and Nations will be able to create wealth in proportion to their capacity to learn and share innovation (Lundvall and Johnson, 1994).

### **2.6 Role of Libraries in a Knowledge-based Economy**

The library is an institution and is established to support education, research, policies, and decision making. Through this, libraries have brought their services closer to their client through the usage of the internet and other ICT applications. According to Rajkoomar (2012), library is a treasure-house of knowledge hence, the preservation, and maintenance of valuable knowledge and information content of books and documents are paramount in preserving knowledge and wisdom for coming generations.

Libraries have been placed and acknowledged by nations as an institution that brings development into their economy. They acknowledged and value the high quality of materials housed by their libraries for research purposes, analysis, and infrastructural development. These materials are systematically arranged and made available by the librarians in charge. When the library is well managed, knowledge can be used to improve the performance of an institution, securing and sustaining a competitive advantage and viability (Milian, 2009). It has also helped individuals, organizations and nations to broaden their knowledge and sharpen the level of understanding as well as skills upgrade. According to Leheman (2011), the future of the library will be as a dynamic knowledge center, where all stakeholders including librarians and library users engage in exchange of ideas and the library building acts as a healthy "space" where ideas can flourish, live, grow and even be protected.

However, the mechanism for developing knowledge and skill as a

commodity is to establish a well-equipped information center that can cater for the immediate information need of the citizens. To achieve this, Aguolu and Aguolu (2002), explained that libraries are social institutions, created to conserve knowledge; preserve the cultural heritage; provide information, and; to serve a fountain of recreation; undergird and underpin education and research. Also, quoting P. F. Wilmot a well noted sociologist, Aguolu and Aguolu (2002) emphasized that libraries as repositories of intellectual production, play a fundamental role in a well-functioning society, and, when tied to global development priorities, can promote sustainable development solutions. In other words, library serves as a knowledge repository by selecting, acquiring, processing, and providing essential information needed for citizens to contribute massively to the advancement of their nation. These and many more would enable libraries to have up to date information that can meet the user's needs and also enable them to engage in knowledge sharing and information in different sectors of the economy.

Professor John Harris in his fundamental attestation on the importance of libraries in the development of a nation observed that: *“Libraries are the instrument of power, potent with force of human intellectual thought and should be handled with caution, understanding, and respect”*

In recognizing that power in the libraries, they are used to promote socio-economic and political development thus:

The education of the masses is very important in the development of any society. Libraries are an extension of the academic environment or schools. Students, academicians, workers, market women, and artisans use libraries to further their formal education. When people are educated, they contribute to meaningful development in the society.

Conable (2007) pointed out that

American public libraries flourish out of a commitment to the principle that knowledge and access to information empower individuals. Libraries uphold the firm belief that information should be widely and freely made available to all and not only for a privileged few.

Some of the key enablers for access to knowledge through libraries are (Tise, 2009):

- Libraries must become more user-oriented by bringing resources closer to the user, enabling access to information, enabling participation of citizens in societal activities and also empowering users through information literacy, social networking skills.

- Advocacy and active promotion of libraries, through effective communications with stakeholders on library and society matters, facilitating and supporting open access to all, and becoming innovative information agent

- Build partnerships and foster opportunities for convergence with commercial /private enterprises, cultural institution, societal stakeholders such as health workers, teachers, etc.

- The library should foster information for all; create safe and trusted community knowledge space; be gate-openers to information in various formats that appeal to young and other discrete library user groups.

## 2.7 Barriers in a Knowledge-based Economy

Organization's greatest investment is in people; their expertise, knowledge and creativity. However, even in sophisticated organizations, there are barriers to the utilization of knowledge. While economic and social barriers are significant in underdeveloped nations, the four major barriers to effective use of knowledge in most developed nations are:

- i. **Content overload:** - In a connected world there is information overload that needs to be identified, managed, and tailored to

individual and group requirements.

**ii. Connectivity:** - Technical challenges also impair access to information and knowledge

**iii. Competence:** - Skills and capabilities are required by individuals for the evaluation and use of information

**iv. Collaboration:** - Unwillingness to share knowledge and contribute to the collective wisdom within institutions and the society at large remains a barrier to the effective use of knowledge.

### Conclusion

The library has played a crucial role in the advancement of nations from human history and the emergence of technologies has made it easy for the citizenry to obtain the necessary knowledge for national development. Information and communication technology has also made knowledge affordable for the proper use and the advancement of economic growth in our nations. However, libraries have become significant tools for improving the present and future worlds in a KBE. In other words, libraries have reshaped the world to a KBE society whereby it is perceived as a commodity that can be traded and bought in the market place at a given price.

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