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Information Age and Knowledge Society: Implication for Libraries

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Abstract

The paper highlighted the concepts of information age and knowledge society and their implication for libraries. Basic concepts such as information and knowledge society were defined. A brief historical role of information and knowledge from the pre-historic period to modern concepts or information and knowledge society were examined. The role of libraries as facilitators to information age and knowledge society were also highlighted in the context of information and communication technology (ICT) in the present-day society, the arising need for ICT competencies was advocated. The paper concluded by making some recommendations like developing a workable ICT adequate and functional ICT facilities and services are required, developing a workable ICT policy to regulate library operation and services, regular training and retraining of library staff to equip them with skill and experiences to function maximally.

Keywords: Information age, Knowledge society, Libraries

Introduction

Information age and information society are part of the major themes of discourse in literature in this 21ˢᵗ century. These two concepts are inseparable and have been relating together from time immemorial. From one generation to the other, information and society have been linking each other and making lives worthwhile and productive depending on the information materials available and used. In the pre-historic period, information and communication disseminated through signs, symbols and words. An ancient era witnessed the growth of the art of writings such as the hieroglyphics by the Egyptians, the uniform writings by the Sumerians amongst others. The development of printing proceeded the era of invention of writing during the industrial revolution in Europe. This era could be regarded as the reign of technology. In this era, works that were formally done by human labour could be carried out by machines. This innovation then led the pace for the development of information technology and consequently to the present emergence of information and communication technologies. Information Technology (IT) and Information and Communication Technology (ICT)) are the most recent and modern concepts in information generation, gathering, organization arrangement, retrieval and dissemination through electronic formats. While information technology emphasizes information storing in electronic formats, information and communication technology goes further through some electronic media to create access for information to be transferred remotely to their areas of destination. Information and communication technologies combine the function of information communication and technology to enhance easy information generation, organization and dissemination. It is the researchers' view that the emergence of information and Communication Technologies did not emerge to take over the traditional roles of the library: rather it came to complement and enhance it. The emergence of ICT has changed the way things were done before now in the society which has made the world to be a global

2

village. Every segment of the society; locally, nationally and internationally has been tremendously affected by ICT and its impact. One key area that has so much been transformed by ICT is education. The library as one of the pivotal agents of education has not been left out.

At the moment, there is recognition of the existence of tension between societies including the library on one hand and the new technology for the realization of knowledge society on the other hand. This means that the library as a societal agency must be keyed in to accommodate by putting in place structures and mechanisms that will enable library users and information to develop without limit. This requires total accommodation and adaptation of ICT applications in libraries. This calls for the roles of the library and the librarian to be redesigned, repositioned and readjusted to accommodate ICT library-based information resources and services delivery system in the society as a whole and the library in particular. This paper sets out to examine the concepts of information age, information society and address how these concepts have some implications for the library. This is with the view to repositioning the library and enhancing it to apply ICT in response to the virtue of information age and information society in modem day-library and information science practices.

Information Age and Knowledge Society

The concepts of information age and knowledge society have taken a crucial discourse in library and information science in recent times. These concepts are highlighting the principles that knowledge which is now generated through the absorption, processing and internalization of information is becoming vital and critical for the growth and development of individual and the society. The growth of knowledge, value attached to it, uses and the productivity emanating from it represent a new evolving society characterized by ICT facilitate easier and quicker information generation and dissemination. Salman and Olsa

(2010) observed that our present information society represents a new society, symbolized by laptops, mobile telephony, telecommunication Satellites and technologies, optical fibers and internet as things are now, virtually anyone can produce, record, process and disseminates information, including publishing on the web, optical fiber and the internet

From the above observation, information age can be viewed as the period, time or art of the state at present time where and how knowledge is being used by the application of ICT to bring a change in the society. It could be regarded as times that knowledge is ICT-driven to revolutionize how resources and services are now carried out in the society. Knowledge society on the other hand refers to information-oriented environment resulting from the adoption and application of ICT with its tremendous impact on the society. To relate the impact of ICT and knowledge society, Samassakou (2014) observed that information and communication technology experts accept that the digital medium has become a space in which all forms of knowledge converge. Planetary digital networks are now irrigating the information society, stimulating growth and creating or strengthening the link between human beings, irrespective of their geographic location or social status. Tripathy in Mole (2009) observed that the concept of knowledge society date back to the period after the world war (11) in the 1950s as a society that emerged from the postindustrial society. The concept of information society commonly also referred to as knowledge society is also classified differently by authors across disciplines as knowledge society by library and information science professionals; knowledge economy by economists, sociologists. Saha cited in Mole (2009) opined that knowledge rather than land ownership, money or energy has become the driving force, strategic resource or power base on development, and information and communication technology is the major ingredient. It is a society that relies on knowledge, ideas, competencies and information for human and societal development. It is now obvious to look at knowledge society from the researcher's viewpoint as a knowledge-based

4

community where knowledge and information have permeated communication media with ICT being the major channel. It is a knowledge information-oriented society based on the instrumentality of ICT. Tripathy (2019) observed that a knowledge society from the impact of information technology-based concept is destined as a growing high-technology materially affluent service Society where knowledge and information rather than raw materials or energy is the dominant technology.

Knowledge societies are characterized by three factors;

- Abundance

- Wide and easy access to them

- Availability of necessary ICTs for their dissemination

Omekwu cited in Mole (2009) opined that today the centre of the society is the knowledge worker, the man or woman who applies for productive work, ideas, concepts and information rather than manual skill. It is a society where the impact of information and knowledge is greatly felt for productive results. Martin (2019) stated that a knowledge society is one where living standards, patterns of work and leisure, the educational system and the marketplace are all influenced and marked by advances in information and knowledge technology. In a knowledge-oriented society, one witness an increasing array of information-intensive products and services communicated through a wide range of media in electronic formats. The need for emphasis for a society to be information and knowledge-based has become obvious for political, economic, social and cultural reasons.

Need for Library and Information Services for Knowledge Society

Library and information services as custodian of national literature is of immense relevance to knowledge society Since Library and information service serve the society and their information needs. The library collects, organize and custody the societal information resources for the future and posterity. In recent times, the argument about the future of

libraries and librarians have emerged, namely, the obsolesce and mastery schools of thought. In the obsolesce school of thought, it is believed that in the future, there will be no need for libraries and librarians as everything will be available on the internet where the users will be able to retrieve the information for themselves. While in the mastery line of thought, it is believed that libraries and librarians will assume a position of prominence as information professionals, information consultants and information brokers in a world dependent on information. Croud (2009) while observing the above schools of thought remarked that librarians are seen as experts with regards to information delivery across the internet. Omekwu in mole (2009) observed that libraries fall within institutions classified as knowledge organizations. It is further stressed that whether it is public, academic, research, special or school libraries the mission of accumulating mankind history, culture, growth development and scientific as well as technological advances remain the speciality of librarians that have the knowledge, technical expertise and relevant license to particular information sources and services

In the researchers' opinion, the advocate of obsolesce school of thought when postulating their theories or assumption did not take cognizance of the fact that library, based on the Ranganathan law of librarianship a library is regarded as a living organism. As a living organism, it will grow in the future to accommodate future inventions such as 1CT among others. Also that the library will grow in structures, contents, scope and be regulated by enactment of laws, rules and regulations that will enhance the establishment of bodies to control the library organization. It was neither envisaged that the library and information science profession will grow to the level of professionalism with all the statutory instruments to control, regulate and be licensed to checkmate any external encroachment into her professional business/traditional practices.

Although, there is a tremendous impact of ICT in the society, trying to justify the prediction by Belt in the 1979s, that in future of the world will become a paperless society. This prediction may be an over-exaggeration of the impact ICT would create on the society. It will be impossible to think in complete exactness that knowledge information generation, organization and dissemination can be carried out by 1CT without other components like the brain, the paper and storage media which is a product of technology. It is obvious that the holistic library and information resources and service provision to guarantee adequate users satisfaction depend on both the traditional and electronic formats of library and information service delivery system

Libraries and information services are in the vanguard position to promote the growth of knowledge society. To accomplish this role, Mole (2009)maintained that, libraries are going to act as nodal points of local information dissemination where information professionals act as agents of change providing means to seek for better future. It was further observed that libraries of the knowledge society will be providing new services and greater access and will remain a nation's cultural inheritance reflecting the values and conflicts of societies (Kant and Jan in Mole, 2009). Knowledge society at present possesses both opportunities and challenges to libraries. This calls to repositioning, redefining, readjusting and integrating libraries into ICT and other areas that have the potentials of promoting liberal knowledge society

In response to these opportunities and challenges, libraries are developing more sophisticated online catalogs that allow users the opportunity to find out required information. With the emergence of ICT with its associated components such as computer, internet and virtual libraries, people can now freely access information through remote access across subject disciplines globally without restrictions.

Additionally, librarians by their changing roles occasioned by the advent of new technology are now recognized by varieties of services, strategies and as well as in approaches relating to their information services delivery system. In recognition of the relevance of ICT in library services for knowledge societies, some libraries and information services providers have adopted a new concept such as "Cybrary" to mean the provision of a combination of online and print services in information delivery processes. Croud (2009) observed that in Australia, the University of Queensland library developed its services into joint online and print services and changed its name to the University of QucenlandCybrary. This title denotes the development of the library and its service in cyber and physical space.

Arising Need for Information and Communication Technology Competencies

The knowledge society arising from the emergence of sophisticated information technology resources especially computer, internet, telecommunication networks among others have provided a lot of opportunities and challenges This development has created new ways of information generation, organization, storage, retrieval and dissemination. Consequently, the role of the library has been redefined, repositioned and given a new direction. The meaning is that equally the role of the librarian and other information professionals also has to change, the librarians have to assume the role of educators to teach their users how to find information both in libraries and through other electronic networks, providing local community information through publicly assessable computing system. Libraries role have shifted from a mere storehouse of knowledge and information to gateways of information (Kant and Jain cited in Mole, 2009). This implies also that no responsibilities have been added to the role of libraries in modern time Omekwu (2001) observed that, with the emergence of ICT, librarians' role will become more prominent as educators (including user instruction in online use), information managers, information management consultants, custodians of information, information providers, publishers and change agents.

The implication for librarians is that, for them to carry out their responsibilities effectively and efficiently, they require a wide range and variety of skills especially in the area of ICT. In addition to the professional training of library and information science professionals, the librarians must acquire computer and internet literacy. Furthermore, Omekwu (2001) opined that Librarians require knowledge of the following areas:

- Sources of information and have access to them as required

- Strategies (that will yield optimal results in less time)

- Librarians require knowledge and skills in electronic manipulation of information resources to gain access to knowledge embedded in the document (Ayo, 2001)

- Services that could attract and retain customers including multimedia and multi-format knowledge

- Distillation and dissemination based services

- System use, that is, using both technology and information to provides access to knowledge

- System administration, that is, to be able to manage networks connectivity and provisions in the libraries without relying on computer science trained system analyst and administrator

- System maintenance, that is, to be able to detect and fix basic computer hardware and software problems so as to able to communicate on the same frequency with the system supplier

- System networking for optimal access and utilization of network resources.

- System development including knowledge of web design and web management.

The works of librarians now need to shift outside the wall of the library to other information allied industries as salesman and women, designers of new information system, researchers and information analyst. Also, it will be of note to point out the fact that the work of library and information professionals has been extended to that of corporate information

systems in which they add value to information for users. They perform different tasks such as pruning, providing contact, enhancing and choosing the right presentation medium, management of internal information resources and also manage those obtained externally from other organization

Implication of Knowledge Society to Library and Information Services

The challenge of the knowledge society has much implication to librarians and information professionals at large which need to be contented with in order to bring the desired impact to the library management in general and the users in particular. One of the fundamental issues involved in meeting the needs of the knowledge society is the critical review of library school curriculum development that should be rich in content and reflected in practical aspects of students learning and skill acquisition. The content of the curriculum and quality of teaching and learning is required to prepare would-be professionals with ability characterized by creative response to the challenge of the technology, institutional and societal changes that result from the transition from a manufacturing centered economy (OECD, 2016). The library and information science education should be able to prepare and equip students with the capability to demonstrate in-depth and up-to-date knowledge of relevant fields and current technology (Giesecke in Mole 2009). The need to sensitize the entire ICT- library-based environment on the enormous benefits of ICT and how people/library workforce will be greatly and positively affected should be emphasized.

The development of library policy to accommodate various areas of needs such as the provision for training and retraining, the provision of 1CT resources and services, reconversion of library resources to electronic-format, user education and general management and technical problems need be addressed.

The problem of funding is a major problem of 1CT in the library mostly in this era of Single Treasury Account (STA) in the general university system need serious attention,

couple with poor internet access, inadequate power supply and availability of basic infrastructure are parts of implication for the library

A way forward

The provision of adequate and functional 1CT facilitates and services are basic for an ideal knowledge society. The development of a good library policy that will serve as a working document with well-articulated guidelines is necessary to guide the library management. Regular training retraining of staff to equip them with basic skills and necessary experience on ICT competencies is essential, much attention should be given to supply of power and creation of access to ICT resources and services. Libraries should provide appointment opportunities to library and information science graduates to enhance proper and rapid personal professional and library development.

Conclusion

A knowledge society is very essential to the growth and development of the society. It is a gateway to a new and enlightened society where library and information professionals have to take the initiative and challenges to provide the means for a better society. The advent of new information technology has ushered in an easier, quicker and cheap means of information generation, storage and dissemination across the segments of the society. The major focus should be centered on training and retraining of staff and user's as to become familiar with the uses of these ICT resources while the role of the librarians and other information professionals include information, the main area of emphasis remains on information content. If the library fails to provide the necessary resources and services to satisfy the needs of the society, it would be perceived as to had detailed in its responsibility to the society. There is a need for total re-engineering of the library and information science profession by reviewing library policies and programmes that will be reflected in the contents

and method of library and information science education. This will have a positive bearing on the user's community as well as on the library and information science profession.

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