



## **Globalisation of Technology and The Role of Academic Libraries in The Management of Information Resources in Higher Educational Institutions**

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### **Abstract**

This study put forward the perspective that the transformation of academic libraries is hinged on globalisation through applications of technological developments, which have heralded educational, economic and cultural opportunities in Higher Educational Institutions (HEIs) globally. This is a clear departure from the erroneous notion that The effects of globalisation have greatly subjugated Academic Libraries (ALs). The research gap in this study stems from the inadequate replication of ALs and ICTs in rural areas, communities and suburbs. The methodology adopted for this study is a systematic method sought from scholarly works in e-journals, peer-reviewed books, google scholar and other resource articles by different scholars. The study observed the numerous challenges affecting most ALs, particularly in Africa, such as inadequate funding, insufficient resources/ library collections, and the continued proliferation of HEIs despite the global economic downturn. Furthermore, there is a need to ensure the implementation of workable policies for ALs development and ICT education to facilitate the development of ICT-enabled ALs. The review also revealed that many developing economies are replicating the technologies associated with information resources management practised in the technologically-inclined countries by reproducing ICT-enabled ALs in rural areas to bridge the digital divide between developed and developing countries.

**Key words:** Academia; Academic Libraries, Globalisation; Higher Educational, Institutions (HEIs); Information Communications Technologies (ICT), Research Commons.

### **Introduction**

The concept of globalisation is as varyingly debatable as it is highly ambiguous (Bello and Ezeri, 2020). Unfortunately, this article is not set to evaluate globalisation in this regard. The perception that globalisation emerged in the mid-20th century is because there must be establishment and implementation of the systematic approach to information technology transfer which considers the specific activities to be well accessible, arranged and evaluated at any particular period in the academic libraries. According to Dwyer (2015), globalisation fosters mutual awareness and enhances development worldwide in academic, technological, political and economic institutions. Hence, Saleem (2013) opined that globally integrated establishments, such as libraries, require increased utilisation of Information Communications Technology (ICT). This assertion is premised on that ICT is sine-qua-non in decision-making and improves effective networking across national boundaries. From the

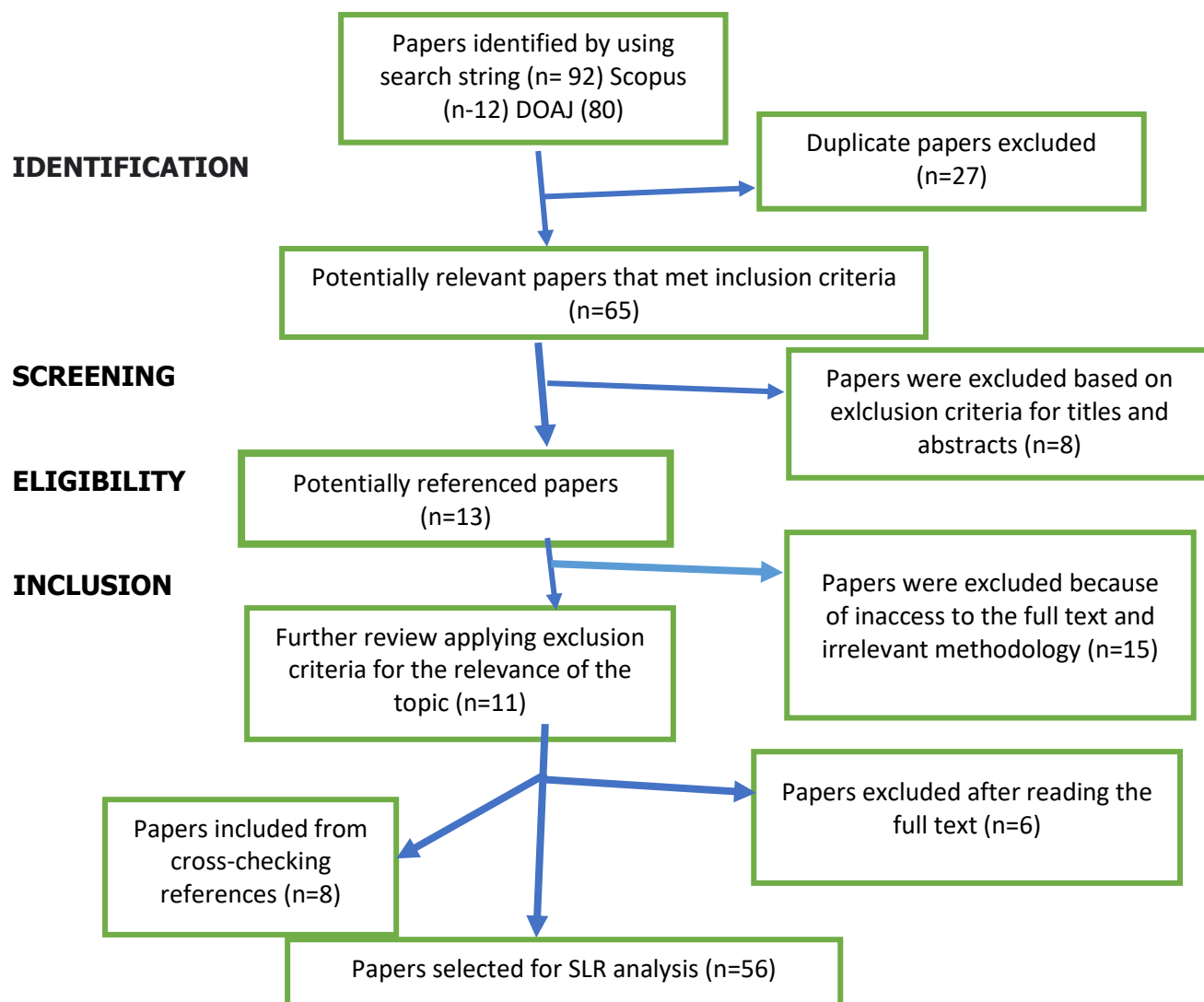
foregoing, the official duties of librarians and other information professionals have significantly been developed because of globalisation.

According to Pareek (2016), globalisation has affected library and information science (LIS) development, and all spheres of human endeavour cannot be overemphasised. On this premise, unlike before, LIS services can now be delivered promptly and everywhere. Further, Okonedo (2014) exemplified that globalisation has redefined LIS operations from being location-bound to endless possibilities and eradicating the unfair privilege and deprivation of providing required information to library users. "Unfair privilege" relates to the uniqueness of the knowledge/information provider position as opportunistic with the power to give out or not to, while "Unfair deprivation" refers to a situation where the information beneficiary is prevented from accessing or utilising such information. These practices have resulted in the creation of gaps between the user and the information provider. Fascinatingly, globalisation has helped in the removal of these barriers. Thus, LIS professionals no longer have the monopoly of time or total access to information because users are in control; hence, it is evident that the application of ICT paves the way for unhindered accessibility to LIS services and resources, in addition to removing barriers associated with geographical location, and time to accessing of LIS services (Mi, 2018) who emphasised that the advent of ICT has driven globalisation and empowered LIS professionals in their production, processing, and dissemination of information on global scales.

It is also imperative to state that the technological revolution of ICT is a central driving force for globalisation that has widened the imagination and capabilities of library and information professionals for the production, accessibility and effective utilisation of information in their various institutions (Ali, 2020). ICT has increased the possibility of accessing multiple knowledge and information sources in more straightforward, accessible ways, with greater independence regarding place, time, and subject discipline. Additionally, globalisation has enhanced the shrinking of space, time, speed and volume of access to information globally. ICT has taken centre stage by transforming the world into a global village, with a globalised economy hinged on the creative utilisation of knowledge in academic libraries, which have long been acknowledged as an essential component in the actualisation of the vision and mission statements of HEIs. Cox (2018), who opined that academic libraries support their parent institutions' research, learning, teaching, and cultural development, further corroborates this assertion. Therefore, it behoves libraries to improve the quality of information resources and service delivery in its fastest, easiest, and most comprehensive ways.

### **Methodology**

The systematic review of related empirical literature is the methodology different scholars adopt regarding the study. This literature survey examines the globalisation of technology and the role of academic libraries in managing information resources in higher educational institutions. The methodology for selecting appropriate resources was approached by searching through sources such as e-journals, peer-reviewed books, google scholar and other resource articles. Several vital terms were explored primarily in academic databases. Searches were done first with the terms globalisation of technology and management of information resources in higher educational institutions. This literature survey reports on the globalisation of technology and management of information resources in higher educational institutions by examining the following questions: Firstly, what are the benefits of globalisation in optimum library services delivery? Secondly, how has globalisation influenced the professionalism of academic libraries? Thirdly, how have academic libraries evolved to meet up with advanced practices despite the daunting challenges bedevilling the industry, especially in developing economies? Lastly, what are the prospects and problems associated with academic libraries? Conceptualising the influence of globalisation on ALs in information resources management at HEIs provides a platform for actualising professional service delivery among librarians and information science professionals. Figure 1 below depicts the flow diagram, which portrays the flow of information through the different phases of a systematic review. It maps out the number of records identified, included and excluded and the reasons for exclusions.



**Figure 1:** Flow diagram for systematic literature review (SLR) adopted for the study.

### Literature Review

#### Benefits of Globalisation in Optimum Library Services Delivery

The influence of globalisation in transforming the global library system is conspicuously evident through eradicating the age-long confinement of information service delivery and the utilisation of library services (Araslanova, 2015). When observed in the light of globalisation benefits, which involves the reduction of the world into a small entity, the enormous merits of the LIS profession are worthy of note. These include the total overhauling traditional libraries to technologically advanced formats, which are responses to the challenges faced in educational research, such as HEIs in their acquisition, processing, management, dissemination and communication of knowledge through electronic means with the utilisation of new ICTs. According to Osunkoya and Arilesere (2016), other benefits of globalisation in LIS management include the prompt and appropriate exchange of information, improved access to skilled professionals in diverse fields, enhanced access to regular updates on research topics of interest, improvement of teamwork across geographical divides, accessibility to archived information, data transfer between institutions, etc. In addition, the internet enhances access to research and Academic Libraries (ALs), as well as bibliographic records and details of the holdings of millions of books worldwide. The availability of e-journals and newsletters are available regularly, and librarians can adequately select and order the required books needed for their institutions without going from one publisher or bookshop to another.

Furthermore, Igwe and Onah (2013) agree that globalisation merits LIS services, including improved access to information, enrichment of educational development, improved status of academic libraries, conservation of library space, and digitisation of local content, among others. In the same vein, Mogali and Bagalkoti (2017) elucidated that globalisation and (hence ICT) are irrevocable global trends which have greatly benefitted academia. Consequently, efforts must be made by academic libraries to adopt them wholly. Thus, ALs can also improve digitising their local content from sources like dissertations, theses, rare books, unique manuscripts (such as Arabic), newspapers, etc., to the global information pool. In a bid to globalise ALs and reap the merits of ICT, HEIs register and make payment for online databases such as HINARY, ELSEVIER, CAB, SCIRUS, AGORA, SPRINGER, JSTOR, INFORMIT, AGRIS, EMERALD, SAGE, AORE, LANTEEAL, BLACKWELL, INTUTE, EBSCOHost, etc. These online databases provide access to a wide array of information resources to researchers across the globe.

HEIs are incubators for innovations and discoveries that directly impact their local communities, precisely, the global information society. To this end, it is imperative that HEIs wholly require full support from their institutional ALs for them to serve their local communities and the global landscape. Hence, it is right to state that whatever affects HEIs will concomitantly affect ALs. Magoi, and Gani (2014), opined that ALs contribute to the assessment work in HEIs by creating approaches, practices and strategies that document the importance of ALs in actualising their institutional vision and mission statements. Hence, ALs are expected to align their services with innovations geared towards addressing the teaching, learning, research and information requirements of students, faculty, research and administration (Bello and Ezeri, 2020). Hence, globalisation and the adoption of ICTs in ALs have aided the transition of ALs from being mere providers of traditional services (i.e. location bound) to being providers of current services (i.e. across borders). Because of this, Hussain (2019) elucidated that there has been a paradigm shift, which has metamorphosed ALs from being stand-alone libraries to being library information networks and transiting from being printed publishers to digital resource providers from ownership to access. Also, Julien et al. (2018) disclosed that ALs are teachers of information literacy, harbingers of creative metadata, providers of quality learning spaces, maintain digital repositories, manage resource licences and virtual reference services, as well as collecting and digitising archival resources (among others), within the confines of 21st-century modern library practice. In a similar view, Allen (2017) stated that AL users in this digital era are more interested in utilising computerised content, digital finding aids, digital article repositories, and daily access to online newspapers. Also, Henkel (2015) urged ALs to ensure that their provision of LIS services to the users transcends geographical boundaries. As regards their mandate to their parent HEIs, ALs are domiciled in Higher HEIs such as universities, polytechnics and colleges (Shahmoradi et al., (2018). Le (2015) labelled ALs as the heart of the HEIs, which are sufficiently equipped with both information and human resources for the enhancement of research, teaching and learning, as well as being custodians of innovation and knowledge. From the mandate viewpoint, Okudo (2019) defined ALs as the heart of HEIs, which are saddled with supporting institutional goals.

Similarly, Okonedo et al. (2014) discussed that ALs existed mainly to support the educational goals of their parent HEIs, by preserving and improving access to information and knowledge. Additionally, Hussain (2019) opined that there has been a shift from the traditional functions of ALs as agencies in the preservation, dissemination and organisation of information and have become an essential component in business development. Because of these, ALs and ICT are closely inter-related because they are potent tools for retrieval, research, preservation, and dissemination of information in various formats through print and electronic form, as a strong catalyst for the advancement of education, culture, agriculture, health, decision-making, economy and security (Kadiri, 2012).

Spring (2014) narrated that education is integral to globalisation involving intellectual, social, psychological, religious, vocational, or moral development. According to Eggoh et al. (2015), education involves formal training from basic to tertiary levels for acquiring knowledge and skills and subsequently specialising in specific fields of study in HEIs, to contribute meaningfully to national development. On this premise, educational policies in many African countries underscore qualitative and quantitative education rights for children. Similarly, Geo-JaJa and Zajda (2015) indicated that global development transforms all facets of society, such as the human, social, intellectual, cultural, material and political well-being of the people, to eradicate disease, poverty and short life expectancy

rates. Hence, global development fosters modernisation, economic growth, equitable distribution of revenue, natural resources, and socio-economic transformation geared toward improving people's living standards through properly utilising human, institutional and natural resources (Azomahou and Yitbarek, (2016).

### **The Role of Libraries**

In today's world, library development is hinged on the quality of service delivery and the provision of user-orientation services. Hence, libraries perform new roles in modern knowledge societies. These include traditional libraries as memory institutions, research and learning centres, communication/cultural centres, e-libraries, digital libraries, and virtual libraries without walls. Libraries have performed several significant roles in the past industrial and agricultural societies, although the functions were limited in scope. The advancement of ICT enables ALs to accomplish their tasks through exchange and storage. Various systems and methods have been developed for exchanging and sharing knowledge records. For instance, two critical programs for knowledge exchange carried out by the International Federation of Library Associations (IFLA) for libraries worldwide include the Universal Availability of Publications and the Universal Bibliographic Control. Hence, information seekers worldwide can retrieve any information they require by visiting library websites on the internet, such as the Library of Congress (LOC).

### **The Evolution of Academic Libraries (ALs)**

According to Bandyopadhyay and Boyd-Byrnes, (2016), the 21<sup>st</sup>-century ALs are characterised by a preponderance of modern ICT applications, state-of-the-art e-resources, and changing updated research, learning and teaching methods. Further, Dempsey and Malpas (2018) stated that more specific approaches had been adopted by ALs, such as installing cybercafés, developing information commons and expanding group study spaces. As exemplified by Tenopir (2014), ALs have tested new ways of optimising the utilisation of library sources, research and technology, and some HEIs have redesigned their services and reorganised their physical spaces to meet up new challenges by embracing the concept of the central location or information commons, through the delivery of information resources in various formats, provision of computers, sockets for staff usage as well as for the use of mobile devices. The Research Commons (RCs) is a research-intensive environment utilised by researchers, academics and postgraduate students, which consists of seminar rooms, ICT resources and areas for relaxation and discussion. The RCs are meant to enhance the contribution of ALs to academics' research output by offering services that directly support their research endeavours (Yamaguchi and Richardson, 2017). Also, Connaway et al. (2017) explained that learning commons (which is also referred to as scholars' commons, digital commons, academic commons or information commons) is an educational space comparable to ALs that share space for remote or online education, ICT, meetings, reading, tutoring, creation of content, collaboration, and for study purposes. Dedeurwaerdere and Melindi-Ghidi, (2016), stated that RCs fosters communication and learning. Sheikh (2015) claims that 21<sup>st</sup>-century ALs provide common spaces that inspire innovation, collaboration and exploration among the academia in HEI communities.

### **Prospects and Problems Associated With Academic Libraries**

The services provided by LIS are pertinent to actualising HEIs goals for creating an enabling environment for all-inclusive development. Despite this, Ameh (2010) specified that the expansion of library infrastructure has significantly been hampered due to a shortage of funds, thereby resulting in the non-replacement of obsolete information resources and the non-maintenance of library facilities' existing services. Most ALs and information centres are so poor that they hinder rather than promote knowledge acquisition. Similarly, Li (2019) itemised the following problems hampering the growth and development of ALs and information centres: underfunding, unimplemented information policies, colonial model librarianship, insufficient professionals, lack of needs analysis, ICT challenges, inappropriate buildings, and among others. These sordid states of LIS facilities in ALs are further exacerbated by the absence of global library activism and advocacy (Fernández-Ramos, 2019).

### **Academic Libraries (ALs) and the Emergence of Technological Globalization**

ALs have transited through four transformational stages of development, with the most radical stage commencing at the end of the 20th century. The introduction of ICTs during this era has resulted in a never-ending revolution, principally with unprecedented developments that have intensely affected the social structure of societies. However, information societies seek to make information with the required ICTs obtainable, as the knowledge society's purpose of creating a culture of sharing and knowledge generation, as well as developing online applications that operate through the internet. The knowledge society is empowered to fulfil societal needs, create wealth, and sustainably enhance life. For instance, the Government of India is funding ICT to ensure that the country is fully developed in their utilisation of ICT. India constituted an ICT and Software Development Task Force in 1998 for articulating long-term ICT policies which will transform the country into a superpower in ICT and software development, thereby transiting from being an economy of goods to a knowledge-based economy. Today, India ranks among the world's top exporters of knowledge workers.

### **Conclusion**

This article reviewed the globalisation of technology and the role of Academic Libraries (ALs) in managing information resources in Higher Educational Institutions (HEIs). Further, this study advocated the empowerment of information in its entire ramification, as the world is powered by information and exponential growth in the ICT industry, which is an imperative characteristic of the 21st century. From the foregoing, it is reasonable for governments across the world to adopt the Malaysian, Ghanaian, South African and Singaporean methods of technologically inclined countries through the continuous and gradual replication of ALs and ICTs to rural communities and suburbs to bridge the digital divide between developed and developing countries. Thus, national governments should encourage and support the implementation of a workable policy framework for ALs development and ICT education. This is mandatory because education is the only process through which people can receive formal and informal training to acquire skills and knowledge to facilitate national and global development in general.

### **Recommendations for the Improvement of Academic Libraries in the Advancement of Technological Globalisation**

From the foregoing, the following recommendations are made:

No meaningful development can be achieved without peace in any society. There is a need to foster unity and harmony among the academia in HEIs. They should work harmoniously towards progress, as this is necessary for education and global development worldwide. Additionally, the government should encourage the establishment of Community Information Centres (CICs) in local government councils and villages throughout the country as it is done in other more technologically minded countries, like Ghana, China, South Africa and Singapore etc. This can be done by establishing libraries, cyber café, info Kiosks, internet and other online resource centres in rural and urban communities. From the foregoing, the government should provide reading resources and space for teaching and research activities as a matter of urgent necessity.

The current romance of democracy will be sustained if there is enlightened leadership and followership. There is a need for free access to education at all levels of our educational system. Additionally, there is a need for the government and other stakeholders to raise awareness of the impact of ICT to develop complete confidence in offering satisfying services to users globally. Libraries and ICTs globalisation to the rural areas and suburbs to bridge the digital divide between developing and developed countries is necessary. Governments should support and encourage a coherent policy framework for comprehensive and encompassing education. This is necessary because education, as we have seen, is the only process through which people can be formally and informally trained and transformed to acquire knowledge and skills that facilitate national development.

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