ADOPTION OF NEW MEDIA TECHNOLOGIES IN UNIVERSITY LIBRARIES: PATHWAY TO IMPROVING STANDARD OF EDUCATION FOR NATIONAL DEVELOPMENT IN NIGERIA

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Abstract
Nigerian standard of education has been reported to be at its lowest ebb among the comity of nations due to the myriad of challenges bedeviling the nation in recent times. Libraries are the heart of tertiary institutions and the standard of education in these institutions and the nation at large depend to a large extent on the quality and effectiveness of the libraries. New media technologies adopted in libraries in developed climes enable users such as lecturers, students and researchers to access and use current, relevant and reliable information for teaching, learning and research activities, as well as facilitate connectivity, interactivity, communication, collaboration and sharing of information between libraries and the tech-savvy users. Effective teaching and learning as well as implementing the research conducted in tertiary institutions could result to national development of key sectors in the country. This paper review discussed the concepts of new media technologies adoption in university libraries; the standard of university education in Nigeria; research and national development and the role of new media technologies in improving standard of education. The paper also highlighted the challenges of adopting new media technologies in Nigerian university libraries and proffered workable solutions.

Keywords: New Media, Technologies, University Libraries, Standard of Education, National Development, Nigeria.

Introduction
Education can be defined as permanent change in behavior as a result of learning, consists of all efforts (conscious or incidental) made by a society to accomplish set objectives which are considered to be desirable in terms of the individual as well as the societal needs (Labo - Popoola, 2015). Yatai (2017) noted that education which is of greater value in our society can be seen as the art or science of transmitting culture, norms, traditions, values and ethics of a society from one generation to its succeeding generation. The economic, social and political development is determined by the quality of education acquired by the citizen, which culminate into human capital development for ultimate national development. Emphasising the significance of education, President Muhammadu Buhari remarked that one of the primary roles of education is to build and sustain individual and society's development. It renews and improves the economic, social, political and cultural aspects of any nation and that it is effective in promoting the realisation of national objectives, attaining the Sustainable Development Goals (SDGs) and Education For All (EFA) by 2030 (Buhari, 2017).

University libraries are the heart and core organs of universities. They are established to support the universities in achieving their missions and visions through provision of information resources and services for teaching, learning and research activities. The quality of education, academic health and vitality of universities as well as the effectiveness of teaching, learning and research emanating from the universities largely depends on the effectiveness and efficiency of the libraries attached to the institutions. Nnadozie and Onah (2016) opined that university libraries support the university community by delivering services to meet the teaching, research and learning needs of staff and students. They also acquire, process, manage and disseminate information resources through which their parent institutions conduct research and produce high-level manpower. The research emanating from universities result in growth and sustainable development of government, private and corporate organisation, non-governmental organisation and individuals. However, the research sub-sector is grossly neglected in Nigeria and play upon indiscriminately is the basis for the socio economic, political, scientific and technological advancement of our most admired developed nations of the world today (Amannah, & Ahiakwo, 2013).

Traditionally, information resources were in printed formats such as textbooks, printed journals, indexes, abstract, magazines, among others. But, technological advances have led to the development and adoption of electronic information resources such as e-journal, e-books, online databases, CD-ROM databases, internet, e-thesis/dissertations, e-magazines and institutional databases, among others. Access to Global Online Research in Agriculture (AGORA), Health Inter-Network Access Research Initiatives (HINARI), Online Access to Research in Environment, etc, were some of the examples of online databases adopted by university libraries (Ani & Edem, 2012). These resources enable library users to access vast amount of information with minimal time and efforts. Subsequently, new media technologies such as Web 2.0, Wikis, Facebook, Twitter, Instagram, Whatsapp, Blogs and Mobile technology were developed to facilitate connectivity, interactivity, communication, collaboration and sharing of information between librarians and users including lecturers, students and researchers, thereby allowing lecturers, students and researchers to access and use current, relevant and reliable information for teaching, learning and research activities.

New media technologies adoption in university libraries
There are numerous new media technologies adopted in libraries. However, this study dwelled on Social media, Web 2.0, Wikis, Blogs and Mobile technologies which ultimately improved teaching, learning and research activities among lecturers, students and research activities.
Social media: Social media has been defined by many scholars in different studies. Dhiraj (2013) defined social media as inexpensive and widely accessed tools that allow people to access and share information as well as enable collaboration and establish relationships, support participation and information exchange among the user community. To Kaplan and Haenlein (2010), they are powerful technological tools used for communication and also facilitate interaction and exchange of information which are developed based on

the technological platforms of Web 2.0 technology. Example of social media tools used in libraries include Facebook, Twitter, Instagram, WhatsApp, Hi5, LinkedIn, Skype and YouTube. These technologies have been adopted and integrated into university library system in developing countries. Ezeani and Igwesi (2012) revealed that both librarians and users in Nigerian academic libraries are increasingly using Facebook, Twitter, Myspace and etcetera, to deliver and receive variety of library services. It has been reported that Nigerians were among the highest social media users in Africa and indeed the world over. Statistics had shown that there were over 67 million Internet users in Nigeria as at 2015, and Facebook users accounted for over 46.6 million users (Internet world stats, 2015).

A library could create a social media page or group and allow users to join or like the page. These pages can be updated regularly and would enable the libraries to promote and market their information products and services. Moreover, libraries can use YouTube to provide instructional videos and upload on the social media, which can be viewed by the users to aid their information searching and navigation in complex information environment as well as provide interactive reference services as a frequently asked questions (FAQs). Taylor and Francis (2014) maintained that social media were used by professional librarians to fulfill library objectives ranging from direct communication with users, marketing library information services and ultimately enhancing teaching and learning processes. Moreover, these social media tools can serve as outreach tools for promotion of library and information services as well as connect library with the wider community. Semode, Ejitagha and Baro (2017) expressed their views that, librarians could read tweets and Blogs in order to become active participants so as to advice patrons when the need arises. Ezeani, and Eke (2011) maintained that, librarians could use social media tools to interact with users and provide feedbacks to their request timely and efficiently. They can also use Photosharing to provide archival pictures and post the images on the library's websites for users to view.

Web 2.0: Web 2.0 is one of the major innovations that had made unprecedented impact in university libraries in recent times. Webopaedia (2016) described the term as second generation tools of World Wide Web which enable people to collaborate and share or exchange information online. Madu, Idoko, Dirisu and Emerole (2017) viewed Web 2.0 as new ways of collaborating, creating, editing as well as displaying contents or information online. Web 2.0 tools are applied and adopted into libraries in order to improve information gathering and dissemination to users. They are very helpful for libraries and library personnel as they can be used to provide attractive services without spending much financial resources for online hosting and storage. Dickson and Holley (2010) highlighted that, libraries had for long embraced these tools and had used them for marketing and promotion of library and information services and resources to the user community. They maintained further that these tools could facilitate communication and interaction with faculty and students as well as other users in different ways. Adekumisi and Odunewu (2016) opined that, libraries could attract users to patronise the libraries through the adoption and use of Web 2.0 tools, disseminate library news and events, carry out marketing of library's new products and services, teach information literacy to the users through the use of web based resources such as YouTube and other media technologies.

Wikis: Wikis is another new media technology used in providing effective information services in libraries. It could facilitate internal communication among library personnel, help in creating knowledge base and committee work as well as assist in teaching information literacy skills to users in the library (Singha & Sarmah, 2015). Wikis could be used for creating knowledge base as Frequently Asked Questions (FAQs), which could be used by reference librarians in responding to user queries in a timely fashion. Okonedo, Azubuike and Adeyoyin (2013) maintained that it could be used for staff and students training on information literacy and also allow users to publish, edit and update contents online in the process of collaboration. The authors mentioned lack of peer review and editorship of Wikis as one of the barriers affecting its use by library personnel.

Blogs: Blogs are new media tools or technologies created in order to serve library patrons better. Dictionary.com (2014) defined blog as website created by an individual or group of individuals where observations, opinions and experiences of the individual or group of individuals are posted with images and links to other websites. Singha and Sarmah (2015) described Blogs as websites which could provide links to other sources, used for promotion, entertainment, listing book reviews as well as initiate book discussions in order to encourage community development. Blogs had found relevance in university libraries as mentioned

by many scholars and researchers. Libraries could create Blog platforms in order to provide information such as authors' personal profiles, newly acquired materials, marketing and promotion, building library image, dissemination of relevant information as well as facilitate external communication. In addition to that, libraries could use Blogs to announce operation hours as well as facilitate fruitful discussions with users which could promote collaboration between librarians and users. Mahmood and Richardson (2013) in their contributions indicated that Blogs could be used in disseminating general information about library, information about newly subscribed databases and acquired materials, provide book reviews, announce system downtimes, provide research aids as well as announce changes in the operation hours of the library. They could also allow posting of thoughts provoking updates about libraries information services on the web. They could also share information on particular subjects or contents and allow users to comment or contribute.

Mobile technology: With mobile devices becoming more popular and acceptable than personal computers, it has become imperative for libraries to devise means of delivering effective and efficient information services through mobile phones, tablets, smart devices, Mobile Apps and other mobile platforms and devices. In examining the impact of Short Message Service (SMS) technology to library services using GSM, Kumar and Chitra (2008) revealed that, mobile technology could be used to reach large number of users at lower cost. The study identified other advantages of SMS in library services, which include quick and easy access to information services, opportunity to send overdue notices to users, opportunity to renew without physical presence in the library, as well as reservations of materials. Other benefits include responding to reference queries easier and quicker as well as announcing library events and activities to the large local community. Amuni, Adetoro and Olatunji (2014) found that users of libraries possessed Internet enabled mobile devices which they used in searching information through various means. The researchers recommended that, libraries should consider integrating and using mobile technology for providing library services since library users have preference to use mobile technology for information search.

The standard of university education in Nigeria

The Nigerian standard of university education has been at decline in recent times due to lack of adherence to educational and technological policies, inadequate funding, inadequate modern library and laboratory facilities, lecturers' incompetence, inadequate infrastructure, poor management and frequent strikes, among others. There are also social vices ranging from cultism, examination malpractices, student's protests, prostitution/sexual promiscuity and corruption. Universities are closed for months as a result of disagreement between unions and the governments and the government could not put any effort to resolve the impasse. This lackadaisical and selfish attitude of those at the helm of affairs could be attributed to the fact that their children are sent abroad to study (Information Palour, 2017). These could be the reason why Nigerian universities produce graduates with low level of competence and skills in work environment and could not compete with their counterparts from other parts of the world. These challenges pose great consequences to the socio-economic growth and national development of the country.

The United Nations, Educational, Social and Cultural Organisation (UNESCO) (2015) had recommended governments of all countries to allocate 15 to 20 percent of their total budget to education sector and that should be the international benchmark. However, since 1999 when Nigeria returned to democracy, the annual budgetary allocation to education in Nigeria has been between 4 and 10 per cent (Adamu, 2017). The 2018 budget allocated only 7.04 of the total budget to education. These had caused collapse in the education sector. Even the allocated budget is being embezzled by those at the helm of affairs. UNESCO initiated the Education For All (EFA) global monitoring reports to monitor progress, highlight remaining gaps and provide recommendation for the global sustainable development agenda to follow in 2015. Nigeria was ranked 103 out of 118 countries in UNESCO's EFA Development index in 2015 and called for significant increase in financial commitment by national governments and donors to the education sector to accelerate progress toward the EFA goals.

Research and National Development

Research plays an important role in the growth and development of a nation. The quality of education of a nation is measured by the quality of researches emanating from its universities. Research provide avenues

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for overcoming professional problems; develop the means for analysis of organisations, services and behaviour. Highlighting the significance of research productivity to national development, Ugwuona and Dike (2015) maintained that, research provides translation of knowledge into technologies, interventions as well as strategies effectively and appropriately delivered to those who need it. Lecturers carry out researches in order to solve problems in their areas of specialisation. It is also the means through which ideas are generated that help in solving practical problems in various aspects of the society, ranging from educational, economical, medical, technological, financial, social, cultural, and political, among others.

Valantin cited in Sobalaje and Ogunmodede (2015) notes that the ability of governments to develop effective policies and plans depends on their capacity to interpret information relevant to the country's economic, social, cultural, and financial situation. According to the author, a strong national information centres such as libraries and Information infrastructure allows access to information at all sectors and provides the basis for competent planning and decision-making. Such libraries however, requires sound policies to provide the necessary framework for the development of information and communication systems and services to meet developmental needs. Human knowledge is invariably enriched by information; hence, the collective intellectual abilities of a nation that is; human capital, which will also depend on access to information through well-equipped university library.

The university library serves as a tool for developed nation so also for developing countries, a tool for intellectuals' freedom and economic development; a gate-way to political, economic and social happiness and survival. It has also become over the years a dynamic centre for research for development. University library is central to the provision of information resources that empowers the educational institutions to produce highly resourceful people to impact positively on national development. (Sobalaje & Ogunmodede, 2015).

The role of new media technologies in improving standard of education

Standard of education in Nigeria could be enhanced when lecturers, students and researchers have unrestricted access to information that could improve teaching, learning and research activities. Abdulsalami, Okezie and Agbo (2013) opined that availability and free flow of information bring about knowledge which had great potentials to provide impetus for the educational, social, cultural, spiritual, political, economic, scientific and technological advancement of a nation. New media technologies facilitate connectivity, interactivity, communication, collaboration and sharing of information between librarians and library users. Okoro and Nwafor (2013) shared the same view that new media were interactive web-based platforms that offer digital citizens opportunity and place to connect, share opinions, experiences, views, contacts, knowledge and expertise. They also provide platforms upon which lecturers, students and researchers access and utilise current, relevant and reliable information for their teaching, learning and research activities. Udoudo and Ojo (2016) states that new media brings the world closer to the learner faster than it would have been with the traditional method of learning by making information available, facilitate easy learning, and the essence of learning is basically cognitive development. DeNoyelles (2013) noted that if educators knew which characteristics to identify, they could take advantage of the technologies promises, remove barriers before they are created, and design powerful instructions to support learners. Social media, Web 2.0, Wikis, Blogs and Mobile technologies are new media tools that could be used for instruction and learning. Highley and Seo (2013) explained that these tools had the potential to enhance literacy and learning across diverse student populations.

The information acquired through new media technologies could assist students carry out academic assignments, acquire current, relevant and reliable information that could aid their learning thereby resulting in improved academic performance and become innovative in the society. Lecturers and researchers could use new media for connectivity, interactivity, communication, collaboration and share information with colleagues for the ultimate aim of conducting quality research and teaching activities, thereby improving standard of education. Chu and Du (2013) opined that through the use of new media, library users had been able to establish a level of engagement with their colleagues. This had ensured that they are updated with the latest news and new trends within their profession.

The challenges of adopting new media technologies in Nigerian libraries
Despite the huge benefits derived as a result of integration and use of new media in university libraries, studies have shown that university libraries in Nigeria still lag behind their counterparts in the developed world in terms of utilisation of new media in delivering effective and efficient information services. This is because; new media technologies are non-existence in most of the Nigerian university libraries. Ezeani and Igwesi (2012) identified lack of awareness about the social media, lack of maintenance culture among librarians and users, inadequate trained staff, lack of government seriousness, low bandwidth, epileptic power supply, technophobia and copyright issues associated with Web 2.0 adoption. The authors further acknowledged that most library staff in developing countries lacked requisite ICTs skills required for adopting and integrating social media tools in providing effective library services. Taylor and Francis (2014) highlighted increased demand on time, technical expertise requirements among librarians, limited funding from management and lower Internet bandwidth affecting connectivity as challenges associated with using social media in university libraries. Taylor and Francis noted further that libraries in developing countries faced inadequate funding making it difficult for them to train their staff to effectively use social media tools. Akporhonor and Olise (2015) revealed that network issues, low social media skills as well as lack of awareness were the major challenges affecting the use of new media for promoting library and information services in South-South university libraries. Furthermore, Okonedo, Azubuike and Adeyoyin (2013) reported low bandwidth, lack of time and lack of training as challenges affecting the use of Web 2.0 tools by library and information professionals in selected libraries in South West Nigeria.

Conclusion and Recommendation
This study has established that new media technologies facilitate connectivity, interactivity, communication, collaboration and sharing of current, relevant and reliable information between librarians and library users in order to assist them in carrying out academic activities ranging from teaching, learning and research activities, thereby improving the standard of education. However, despite the significance of the new media technologies in today's educational sector, most Nigerian university libraries are yet to harness the opportunities availed by the technologies as a result of challenges highlighted. Therefore, the following are recommended as workable solutions toward adoption of new media technologies for the ultimate aim of improving standard of education in Nigeria:

1. Management of university libraries in Nigeria need to enlighten and encourage library personnel as well as library users to be in tune with technological development so as to be aware of subsequent development of new media technologies that could be adopted in libraries.
2. Management of university libraries in Nigeria should provide latest digital devices such as Smart Phones, Ipads, Laptops and other facilities so as to increase library personnel's proficiency and facilitate access of new media for information service delivery to library users.
3. University libraries in North Eastern Nigeria should have good Internet connectivity and increase Internet bandwidth by providing more subscription funds to the libraries as this would go a long way in enhancing the use of new media for information service delivery in the libraries.

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