

Journal of Applied Sciences, Information and Computing
Volume 6, Issue 2, Nov - Dec 2025
School of Mathematics and Computing, Kampala International University



ISSN: 3007-8903

<https://doi.org/10.59568/JASIC-2025-6-2-11>

Librarians' information literacy and electronic information management on national development in the 21st century

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Abstract

The 21st century is often referred to as the information and knowledge era, where the ability to generate, organize, and apply information plays a crucial role in determining a nation's competitiveness. In this context, information literacy and effective electronic information management are vital to the functions of libraries and librarians, as they help shape the knowledge economy, enhance education, and encourage democratic participation. This paper presents an in-depth opinion on how the initiatives of librarians in promoting information literacy and their practices in managing electronic information contribute to national development. Utilizing theoretical frameworks such as Human Capital Theory, Knowledge Economy Theory, and Information Society Theory, it posits that librarians are key players in establishing the intellectual infrastructure necessary for sustainable development. Despite facing challenges like inadequate infrastructure, limited opportunities for professional growth, and weak policy support, the roles of librarians remain essential. The paper highlights that failing to recognize and invest in the capabilities of librarians to foster information literacy and manage electronic resources could lead nations to stagnate within the global information landscape. Recommendations include incorporating information literacy into national education curricula, improving ICT infrastructure, enhancing policy frameworks, and transforming libraries into innovation hubs. Ultimately, the expertise of librarians in navigating and managing the digital knowledge environment is essential for achieving sustainable national development in the 21st century.

Keywords: Information literacy, librarianship, electronic information management, knowledge economy, national development, 21st century.

1. Introduction

National development in the twenty-first century is closely linked to how societies can effectively harness, manage, and utilize information for socio-economic transformation. Unlike previous centuries, where natural resources were the primary determinants of wealth and power,

today's global economy is driven by knowledge. The availability of accurate, reliable, and timely information is crucial for fostering innovation, entrepreneurship, governance, and education (Drucker, 1993). This shift positions libraries and librarians as key players in national development.

Traditionally, librarians were seen merely as custodians of books and printed materials. However, the digital revolution has broadened their roles, transforming them into facilitators of access, educators in information literacy, and managers of electronic resources. The merging of technology and information necessitates that librarians develop digital competencies and apply these skills to support national development objectives.

Information literacy, as defined by the American Library Association (2000), is the ability to recognize when information is needed and to locate, evaluate, and effectively use it. This competency is essential for citizens to thrive in knowledge-based societies. Similarly, electronic information management involves the processes of acquiring, organizing, storing, preserving, and disseminating digital resources for easy access and long-term use (Ocholla, 2018). Together, these competencies highlight the evolving role of librarians in empowering individuals and institutions to leverage information for development.

This paper presents a thorough opinion on how librarians' practices in information literacy and electronic information management impact national development in the twenty-first century, particularly in developing contexts like Nigeria. It draws on theoretical perspectives, reviews existing literature, examines challenges, and provides recommendations for policy and practice.

1.1 Conceptual Clarifications

Information Literacy

Information literacy goes beyond just having access to information; it encompasses the critical skills needed to assess and utilize that information effectively in problem-solving scenarios. This skill set is essential for lifelong learning, allowing individuals to navigate and adapt to new challenges and environments (Bruce, 2004).

In today's world, the concept of information literacy has evolved to include digital literacy, media literacy, and data literacy. These components highlight the intricate nature of the modern information landscape, where the ability to discern credible sources and apply information wisely is more important than ever.

Electronic Information Management

Electronic information management involves a range of processes and technologies that focus on the handling of electronic records, databases, and

digital content. This field includes various activities such as acquiring electronic resources, cataloging them, creating metadata, and ensuring proper electronic storage.

Additionally, it covers the retrieval and dissemination of information, as well as the long-term preservation of digital assets (Edewor, Okwilagwe & Emeka-Ukwuoma, 2019). By implementing effective electronic information management practices, organizations can guarantee that essential knowledge remains accessible to researchers, policymakers, and the general public.

National Development

National development is a complex idea that includes various aspects such as economic growth, social progress, political stability, and cultural advancement.

In today's world, particularly in the twenty-first century, development is increasingly associated with the formation of human capital and the production of knowledge.

This connection highlights the importance of education, research, and technology as key factors in achieving sustainable progress, as noted by (Todaro & Smith, 2015).

1.2 Theoretical Framework

Human Capital Theory

Human Capital Theory suggests that investing in education and skill development can significantly boost a nation's productivity and economic growth, as highlighted by Schultz in 1961. One of the key roles librarians play in this context is promoting information literacy. By doing so, they not only enhance learning but also encourage critical thinking and innovation among individuals.

Knowledge Economy Theory

The Knowledge Economy Theory posits that the creation and utilization of knowledge are vital for driving economic growth and enhancing competitiveness (World Bank, 2003). Libraries act as essential knowledge centers, and effective electronic information management plays a crucial role in ensuring that intellectual capital is both preserved and made accessible for various economic and social applications.

Information Society Theory

Information Society Theory highlights the importance of information and communication technologies in contemporary societies (Castells, 1996). In this context, librarians emerge as key information professionals, equipping individuals

with the necessary skills and resources to engage actively in the digital economy.

Together, these theories lay a solid groundwork for examining how librarianship, information management, and national development are interconnected.

2. Methodology

2.1 Global Perspectives

The role of librarians around the world has changed dramatically over the years. In many developed nations, librarians are now integral to teaching, providing research support, and advocating for policies that benefit their communities. For instance, universities in North America and Europe have incorporated information literacy into their curricula, where librarians play a crucial role in helping students learn how to critically assess digital resources (Julien & Genuis, 2011). Additionally, the management of electronic repositories by librarians has significantly improved the visibility of scholarly research, which in turn aids in the global sharing of knowledge.

African Context

In Africa, the journey towards progress has been quite varied. For instance, South Africa has made significant advancements in incorporating information literacy into its higher education system. Meanwhile, Kenya has focused on enhancing its digital library infrastructure, which is crucial for improving access to information. However, numerous countries, including Nigeria, face substantial challenges. Issues such as insufficient ICT infrastructure and limited funding are major obstacles that impede progress in these regions (Ocholla, 2018).

Despite these hurdles, African librarians are demonstrating remarkable resilience and creativity. They are increasingly adopting mobile technologies and open-source software, which play a vital role in broadening access to information for their communities.

Nigerian Context

In Nigeria, libraries encounter a variety of challenges that hinder their effectiveness. These include issues such as insufficient funding, outdated infrastructure, and a lack of opportunities for professional development. Despite these obstacles, librarians in Nigeria have made significant strides in enhancing research visibility. They have done this through the establishment of institutional repositories and the

promotion of open access initiatives, as highlighted by Adegboire in 2020.

One notable effort in this regard is the Nigerian Research and Education Network (NgREN). This initiative aims to incorporate electronic information management into the broader national knowledge economy, thereby improving access to information and resources for researchers and educators across the country.

2.2 Information Literacy and National Development

Education and Human Capital Development

Information literacy plays a crucial role in improving educational outcomes. Students equipped with information literacy skills are able to perform effective research, assess the quality of resources, and drive innovation in various fields.

When information literacy is woven into the educational framework, librarians help cultivate critical thinking and problem-solving abilities among students. These skills are not only vital for personal growth but also contribute significantly to the development of the nation (Bruce, 2004).

Research and Innovation

Information literacy plays a vital role in enhancing research productivity. Researchers equipped with the ability to effectively navigate electronic databases and critically evaluate scholarly content are more likely to produce knowledge that tackles pressing national issues. Librarians contribute significantly to this process by providing instruction on advanced research skills. They also manage access to a variety of electronic resources, ensuring that researchers have the tools they need to succeed.

Civic Engagement and Governance

Information-literate citizens possess the skills necessary to engage effectively in democratic governance. They are equipped to critically assess political information, discern misinformation, and hold leaders accountable for their actions.

Librarians are essential in fostering civic information literacy. Through community outreach and public education initiatives, they help individuals develop the skills needed to navigate the complex landscape of political information.

3. Electronic Information Management and National Development Digital

Repositories and Knowledge Preservation

Electronic information management plays a crucial role in preserving scholarly works, government documents, and cultural heritage in digital formats. By doing so, it significantly enhances the national memory and provides a solid foundation for evidence-based policy-making, as highlighted by Ocholla in 2018.

3.1 Research Visibility and Scholarly Communication

Institutional repositories, overseen by librarians, play a crucial role in amplifying the visibility of national research outputs. By making these outputs more accessible, they foster global collaboration among researchers and institutions. This increased visibility not only enhances a country's intellectual profile but also contributes significantly to innovation and knowledge transfer. As researchers from different parts of the world engage with these resources, they can share insights and collaborate on projects, leading to advancements in various fields.

3.2 ICT Infrastructure and E-Governance Support

Libraries that manage electronic resources play a crucial role in developing ICT infrastructure. They facilitate access to a wide range of digital materials, which is essential for modern information dissemination.

By supporting e-governance initiatives, these libraries provide access to important government documents, policy reports, and open data platforms. This access is vital for citizens who seek to understand governmental processes and decisions.

Moreover, the availability of such resources enhances transparency and accountability within government operations. When citizens can easily access information, they are better equipped to engage with their government and hold it accountable.

3.3 Challenges Affecting Librarians' Contributions

Many libraries in developing countries face significant ICT infrastructure gaps, as they often lack reliable internet connectivity and access to modern digital tools. This limitation hinders their ability to provide essential services and resources to their communities.

Funding inadequacies present another major challenge. Budgetary allocations for libraries are frequently insufficient, which restricts their capacity to adopt and implement electronic

information management systems that could enhance their operations and user experience.

Additionally, there are notable skill gaps among librarians. Continuous professional development in digital librarianship is often lacking, leaving many librarians ill-equipped to effectively manage and utilize emerging technologies that are crucial for modern library services.

Policy neglect further exacerbates these issues. Librarianship is frequently overlooked in national policy frameworks related to education and ICT, which can lead to a lack of support and resources necessary for libraries to thrive.

Lastly, the undervaluation of librarians contributes to their marginalization. They are often perceived as peripheral to development efforts, rather than being recognized as central actors in fostering knowledge economies and supporting community growth.

Opinion of the Author

In my view, the roles of librarians in promoting information literacy and managing electronic information are crucial for national development in the 21st century. A nation cannot thrive without informed citizens, and librarians are uniquely positioned to nurture this essential capacity.

While governments often prioritize physical infrastructure, such as roads and industries, they frequently overlook the importance of intellectual infrastructure. However, without a solid foundation of knowledge, physical development cannot be sustained over the long term.

I believe that it is vital for policymakers to intentionally include librarians in development planning. Their contributions to enhancing information literacy, safeguarding national knowledge, and overseeing digital resources should be recognized as a top national priority. Failing to acknowledge this could lead to information poverty, digital exclusion, and a position of marginalization on the global stage.

3.4 Policy Implications and Way Forward

Integration into National Curricula: It's essential to incorporate information literacy into educational programs across all levels. Librarians can play a crucial role as instructors, guiding students in navigating the vast world of information.

National Information Policy: Governments need to create comprehensive policies that acknowledge the vital role libraries play in the

knowledge economy. By doing so, they can ensure that libraries are recognized as key players in fostering access to information.

Investment in ICT Infrastructure: To enhance learning experiences, there must be a focus on improving internet connectivity, establishing digital repositories, and supporting e-learning platforms. These advancements will facilitate better access to information and resources.

Professional Development: Ongoing training for librarians in digital skills and emerging technologies is vital. Prioritizing this development will equip librarians to better serve their communities and adapt to the rapidly changing information landscape.

Rebranding Libraries: It's important to reposition libraries as innovation hubs. By supporting research, entrepreneurship, and civic engagement, libraries can transform into dynamic spaces that foster creativity and collaboration.

4. Conclusion & Recommendations

In the twenty-first century, we find ourselves in an era characterized by the rapid flow of information, the pursuit of knowledge, and the drive for innovation. Within this landscape, librarians play a crucial role in fostering information literacy and managing electronic resources, making them vital contributors to national development. Their impact extends across various sectors, including education, research, governance, and the preservation of cultural heritage. Despite this, the value of librarians is often overlooked in many national development agendas.

This paper has highlighted the pressing need for governments and institutions to acknowledge and invest in the skills and capacities of librarians. Without such recognition, the goal of sustainable development may remain out of reach. National development encompasses more than just physical infrastructure and industrial growth; it fundamentally relies on the presence of informed, literate, and empowered citizens. Therefore, it is imperative that librarians are repositioned as key players in the pursuit of national development, especially in our increasingly digital world.

Recommendations

Governments should consider boosting funding for library services, especially in areas like ICT infrastructure and the management of electronic resources. This investment can enhance access to

information and improve the overall quality of library services.

Library associations need to advocate more strongly for the inclusion of librarians in national development agendas. By doing so, they can ensure that the vital role of librarians in society is recognized and supported.

Universities and schools ought to integrate librarians into teaching and research support roles. This collaboration can enrich the educational experience and provide students with essential research skills.

Pursuing international collaboration and partnerships is crucial for strengthening capacity in digital librarianship. Such efforts can lead to shared resources, knowledge exchange, and improved practices across borders.

Public awareness campaigns should emphasize the significance of librarians as facilitators of information literacy and digital citizenship. Highlighting their contributions can help the community understand the value of these professionals in navigating the digital landscape.

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