

Full Length Research

Information Literacy and visibility of Library Professionals in the 5th Industrial Revolution in NRCRI Library

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This study examines the information literacy and visibility of library professionals in NRCRI library Umudike. The study has the following three objectives: (1) to identify challenges faced by library professions in NRCRI library Umudike in the digital era, (2) to explore innovative strategies to enhance library visibility, (3) to identify the role of technology in increasing library usage and engagement. The complete census method was used as the sampling technique Questionnaire was used for collecting data from the library staff. The population comprised 15 library staff all from NRCRI library Umudike. Method of data analysis is Mean Findings of the study indicate that Identified limited information literacy skills among researchers, insufficient access to relevant information resources, difficulty in keeping up with emerging trends and technologies in agricultural research, inability to support diverse research needs and preferences, and inability of the library to demonstrate value and impact of the library as challenges faced by library professionals in agricultural research libraries in terms of information literacy and research support for agricultural researchers, the study identified Utilization of social media and digital channels, developing mobile friendly library services and resources, hosting events workshops and training sessions, collaborating with agricultural research institutes and organizations, and offering data-driven services and resources as innovative marketing strategies agricultural research libraries employ to increase visibility and attract new users among agricultural researchers., and the study also identified Increased global visibility, advanced discoverability, improved usage and citation, improved collaboration and knowledge sharing and better preservation and conservation as extent at which digital repository and open access platforms increase the visibility and usage of agricultural research library collections The study therefore recommends that: NRCRI library should ensure that researchers are allowed sufficient access to relevant information resources to enhance their research activities. NRCRI library should increase their collaboration with agricultural research institutions and organizations so as to be in tune with innovative marketing strategies in agricultural research libraries to increase visibility and attract new users among agricultural researchers More emphasis should be placed on digital repository and open access platforms so as to increase the visibility and usage of NRCRI agricultural research library collections resources.

Keywords: Information Literacy, visibility of Library, Library Professionals and 5th, Industrial Revolution

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INTRODUCTION

The Industrial Revolution (IR) emerged in 18th-century Britain due to technological innovations like the steam engine, mechanized textile production, and improved iron-making processes (Mokyr, 2016). These advancements were fueled by Britain's access to capital, colonial resources, and a stable political climate. The IR spread to Europe and North America, transforming economies from agrarian to industrial. Key drivers included urbanization, trade expansion, and institutional reforms, such as patent laws protecting inventors (Allen, 2015). This period marked a shift from manual labor to machine-based manufacturing, laying the foundation for modern capitalism. The IR reshaped social structures, creating a wage-labor system and widening inequality (Clark, 2016). Urban centers grew rapidly, but poor working conditions in factories sparked labor movements. Innovations like railroads and telegraphs accelerated globalization, linking distant markets (Beckert, 2015). Environmental degradation also intensified due to coal dependence. While productivity soared, debates persist about whether living standards improved immediately (Humphries, 2017). The IR's legacy includes both economic growth and enduring disparities, influencing later industrializing nations.

Nigeria's industrial trajectory began under British colonial rule (1890s–1960s), which prioritized raw material extraction over local manufacturing (Falola & Heaton, 2018). Infrastructure like railways was built to export cash crops (e.g., palm oil), but indigenous industries were stifled. Post-independence, Nigeria adopted import-substitution policies, yet reliance on oil revenues hindered diversification (Adejugbe, 2015). Colonial legacies, including uneven infrastructure and weak institutions, persist as barriers to industrialization, contrasting sharply with Britain's endogenous IR. After 1960, Nigeria's industrial growth was hampered by political instability, corruption, and overdependence on oil (Lewis, 2016). The 1970s oil boom funded state-owned enterprises, but inefficiencies and mismanagement led to their collapse by the 1980s (Forrest, 2018). Structural adjustment programs (SAPs) in the 1990s further reindustrialized the economy by exposing local firms to foreign competition (Oyejide, 2015). Unlike the IR's organic innovation, Nigeria's industrialization was externally driven and unsustainable, reflecting broader African developmental struggles.

Nigeria's industrial lag stems from limited adoption of advanced technologies compared to IR pioneers (Oyeyinka, 2017). While Britain innovated textiles and steam power, Nigeria's manufacturing sector remains reliant on imported machinery and spare parts (Adeoti, 2019). Informal sectors dominate, with less than 10% of GDP from manufacturing (World Bank, 2020). Efforts to leapfrog via digital technologies (e.g., fintech) show promise but lack the systemic support seen in 18th-century Britain. Britain's IR benefited from endogenous factors like scientific culture and property rights, absent in colonial Nigeria (Acemoglu & Robinson, 2016). Nigeria's extractive institutions, modeled by colonial rulers, discouraged innovation. While Britain's IR was labor-intensive, Nigeria's oil economy created capital-intensive enclaves with few jobs (Watts, 2015). This contrast underscores how institutional frameworks shape industrial outcomes, with Nigeria's path reflecting external imposition rather than organic growth.

Recent initiatives like the "Nigeria Industrial Revolution Plan" (2014) aim to revive manufacturing through tariffs and FDI incentives (FGN, 2015). However, power shortages and poor infrastructure replicate pre-IR bottlenecks (Okafor, 2018). Lessons from Britain's IR highlight the need for stable energy, education, and R&D investment—areas where Nigeria still lags (Adegbite, 2020). Without addressing these gaps, industrialization efforts risk repeating past failures. Nigeria's industrial future hinges on learning from the IR's balance of innovation and equity (Chang, 2019). Renewable energy and agro-processing could mirror Britain's early-stage industries, leveraging local resources (Adesina, 2021). However, success requires dismantling colonial-era extractive practices and fostering inclusive institutions—a challenge the IR's pioneers did not face. Global partnerships and technology transfer may offer pathways, but endogenous solutions are critical for sustainable growth.

In the rapidly evolving landscape of the 5th industrial revolution (Industry 5.0), information literacy has emerged as a crucial skill (Sivadasan et al., 2017). With the proliferation of vast amounts of digital information, individuals must possess the ability to navigate, evaluate, and utilize information effectively (Facer, 2018). Library professionals play a pivotal role in fostering information literacy by providing guidance and instruction to users, empowering them to make informed decisions in an information-rich environment (Bruce, 2016).

As Industry 5.0 blurs the lines between physical and digital realms, the visibility of library professionals becomes increasingly crucial (Bostick, 2020). By actively engaging with stakeholders, participating in industry events, and disseminating research, library professionals can demonstrate their expertise and contribute to the advancement of information-driven industries (IFLA, 2017). Moreover, collaboration with other professionals, such as data scientists and information architects, can enhance the visibility and impact of library professionals in the evolving technological landscape (Cochrane & McKemmish, 2019).

The 5th industrial revolution presents both challenges and opportunities for library professionals. By embracing information literacy and enhancing their visibility, library professionals can ensure their continued relevance and contribute significantly to the development of an information-literate society. However, it is essential to explore the potential impact of technology on the visibility of library professionals and address any emerging gaps to ensure that their expertise remains recognized and valued in the years to come.

Information Literacy in the 5th Industrial Revolution

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visibility of Library in the 5th Industrial Revolution

The 5th Industrial Revolution (5IR) is characterized by the convergence of digital, physical, and biological technologies, creating unprecedented opportunities and challenges for libraries. In this context, the visibility of libraries is crucial for ensuring their relevance and impact.

Studies have highlighted the importance of a strong online presence for libraries in the 5IR. By leveraging social media, websites, and search engine optimization (SEO) techniques, libraries can increase their visibility and reach a wider audience (IFLA, 2015). Furthermore, libraries should embrace emerging technologies such as augmented reality (AR) and virtual reality (VR) to enhance user engagement and create immersive experiences (Bawden, 2020).

In addition to digital platforms, physical spaces can also contribute to library visibility. By offering innovative services, creating welcoming environments, and fostering community partnerships, libraries can attract users and showcase their value. Collaboration with educational institutions, research organizations, and local businesses can further extend library reach and enhance its reputation (CILIP, 2022).

Library Professionals and 5th Industrial Revolution

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The general objective of this study is to examine the information literacy and visibility of library professionals in NRCRI library Umudike. Specific objectives are:

- 1) To identify challenges faced by library professionals in Agric research library
- 2) to explore innovative strategies to enhance library visibility
- 3) to identify the role of technology in increasing library usage and engagement

The Following Research Questions Quidde The Study:

- 1) What are the major challenges faced by library professionals in agricultural research libraries in terms of information literacy and research support for agricultural researchers?
- 2) What innovative marketing strategies can agricultural research libraries employ to increase visibility and attract new users among agricultural researchers?
- 3) to what extent can digital repository and open access platforms increase the visibility and usage of agric research library collections and resources?

METHODOLOY

Research Question 1: What are the major challenges faced by library professionals in agricultural research libraries in terms of information literacy and research support for agricultural researchers?

Table 1: Mean Responses of Librarians on challenges faced by library professionals in agricultural research libraries in terms of information literacy and research support for agricultural researchers N = 15

S/N	Items	SA	A	SD	D	Mean
1	Limited information literacy skills among researchers	10	3	2	0	3.53
2	Insufficient access to relevant information resources	9	2	3	1	3.27
3	Difficulty in keeping up with emerging trends and technologies in in agricultural research	11	2	1	1	3.53
4	Inability to support diverse research needs and preferences	10	3	2	0	3.53
5	Inability of the library to demonstrate value and impact of the library	10	2	3	0	3.47
Cluster Mean						2.76

Cluster Mean = 2.76.

Keys: VHA-Very High Awareness, HA-High Awareness, LA-Low Awareness, VLA-Very Low Awareness, VHE-Very High Extent, HE-High Extent, LE-Low Extent, VLE-Very Low Extent, SA-Strongly Agree, A-Agree, D-Disagree, SD-Strongly Disagree,

The data presented in Table 1 above showed that cluster mean of the responses of librarians in NRCRI library in Umudike of all the 5 items is 2.76(cluster mean), which is greater than the criterion mean of 2.50 on 4-point rating scale. This indicates that librarians in NRCRI library in Umudike agreed that all the items listed in the table above are challenges faced by library professionals in agricultural research libraries in terms of information literacy and research support for agricultural researchers

Research Question 2: What innovative marketing strategies can agricultural research libraries employ to increase visibility and attract new users among agricultural researchers

Table 2: Mean Responses of Librarians on innovative marketing strategies agricultural research libraries employ to increase visibility and attract new users among agricultural researchers. N = 15

S/N	Items	SA	A	SD	D	Mean
6	Utilize social media and digital channels	10	3	2	0	3.53
7	Develop mobile-friendly library services and resources	9	3	2	1	3.33
8	Host events workshops and training sessions	8	4	2	1	3.27
9	Collaboration with agricultural research institutions and organizations	7	3	3	2	3.00
10	Offer Data-driven services and resources	6	7	2	0	3.27
Cluster Mean						3.28

Cluster Mean = 3.28.

The data presented in Table 2 above showed that cluster mean of the responses of librarians in NRCRI library in Umudike of all the 5 items is 3.28 (cluster mean), which is greater than the criterion mean of 2.50 on 4-point rating scale. This indicates that librarians in NRCRI library in Umudike agreed that all the items listed in the table above are innovative marketing strategies agricultural research libraries employ to increase visibility and attract new users among agricultural researchers

Table 3: Mean Responses of Librarians on extent at which digital repository and open access platforms increase the visibility and usage of agricultural research library collections resources. **N = 138**

S/N	Items	VHE	HE	LE	VLE	Mean
11	Increase global visibility	8	4	3	0	3.33
12	Enhanced discoverability	7	4	2	2	3.07
13	Improved usage and citation	4	7	3	1	2.87
14	Increased collaboration and knowledge sharing	5	7	3	0	3.13
15	Better preservation and conservation	4	5	4	2	2.73
Cluster Mean						3.03

Cluster Mean = 3.03.

The data presented in Table 3 above showed that cluster mean of the responses of librarians in NRCRI library in Umudike of all the 5 items is 3.03 (cluster mean), which is greater than the criterion mean of 2.50 on 4-point rating scale. This indicates that digital repository and open access platforms increase the visibility and usage of agricultural research library collections at high extent.

Summary of Findings of the Study

Specifically, based on the data analyzed, the study:

- 1) Identified limited information literacy skills among researchers, insufficient access to relevant information resources, difficulty in keeping up with emerging trends and technologies in agricultural research, inability to support diverse research needs and preferences, and inability of the library to demonstrate value and impact of the library as challenges faced by library professionals in agricultural research libraries in terms of information literacy and research support for agricultural researchers
- 2) The study identified Utilization of social media and digital channels, developing mobile friendly library services and resources, hosting events workshops and training sessions, collaborating with agricultural research institutes and organizations, and offering data-driven services and resources as innovative marketing strategies agricultural research libraries employ to increase visibility and attract new users among agricultural researchers.
- 3) The study also identified Increased global visibility, advanced discoverability, improved usage and citation, improved collaboration and knowledge sharing and better preservation and conservation as extent at which digital repository and open access platforms increase the visibility and usage of agricultural research library collections

CONCLUSION

From the results and findings obtained in this study, the following major conclusions were drawn:

- (1) The main challenges faced by library professionals in agricultural research libraries in terms of information literacy and research support for agricultural researchers in NRCRI library are limited information literacy skills among researchers, difficulty in keeping up with emerging trends and technologies in agricultural research, inability to support diverse research needs and preferences, and inability of the library to demonstrate value and impact of the library
- (2) The greatest innovative marketing strategies agricultural research libraries employ to increase visibility and attract new users among agricultural researchers is utilize social media and digital channels
- (3) Increase global visibility increased the visibility and usage of agricultural research library collections resources in NRCRI library.

RECOMMENDATIONS

The following recommendations have been made based on the findings, of the study:

1. NRCRI library should ensure that researchers are allowed sufficient access to relevant information resources \to enhance their research activities.
2. NRCRI library should increase their collaboration with agricultural research institutions and organizations so as to be in tune with innovative marketing strategies in agricultural research libraries to increase visibility and attract new users among agricultural researchers
3. More emphasis should be placed on digital repository and open access platforms so as to increase the visibility and usage of NRCRI agricultural research library collections resources.

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