

**USE OF ONLINE CATALOGUING AND CLASSIFICATION TOOLS IN  
PROCESSING INFORMATION RESOURCES IN UNIVERSITY LIBRARIES BY  
LIBRARY STAFF IN NASARAWA STATE, NIGERIA.**

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***Abstract***

*The study investigated the used online cataloguing and classification tools in processing information resources in University Libraries in Nasarawa State, Nigeria. Hence, the main research questions of this study was used of online cataloguing and classification tools in processing information resources in University Libraries in Nasarawa State, Nigeria. The study was guided by 3 research questions with survey research design adopted. The study was conducted in Nasarawa State and the population was one hundred and fifty-nine (159) library staff within the three university libraries under study, which constituted the sample size for the study. Instrument for data collection was self-developed structured questionnaire with face and content validity evaluated by three experts. The reliability coefficient obtained from each of the clusters were .75, .60, .62, .74, .87 while the overall reliability coefficient of the five clusters was .893 which was considered as satisfactory. Descriptive statistics was used in evaluating the research questions. The findings reveal that a variety of online cataloguing and classification tools are available in university libraries in Nasarawa State, with staff showing moderate usage of these tools, although they face significant challenges such as inadequate ICT infrastructure and skills. To enhance tool usage, universities should conduct regular audits and expand their tool offerings. Monitoring tool usage and offering incentives for proficient staff can promote consistent adoption. Finally, universities should prioritize investments in ICT infrastructure and create a supportive environment to address the identified challenges.*

**Keywords:** *Use, Online Cataloguing and Classification Tools, University Libraries, Library staff, Nasarawa State, Nigeria.*

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**Introduction**

University libraries all over the world are a hub of knowledge and information services in their respective institutions and are usually established along with and as an integral part of their mother institutions. University libraries are essential to the university's mission of encouraging research and study. University libraries are academic libraries

established with information resources fundamentally to satisfy the teaching, learning and research desires of their student population, staff and visitors. Consequently, they frequently strive to acquire and store print, non-printed and digital types of materials. University libraries are principally concern with the collection, processing, storage and dissemination of recorded information for use.

Use from the context of this study refers to as the practical and maximum use of online cataloguing and classification tools to manipulate and facilitate processing of information resources in the University Libraries.

University libraries used online cataloguing and classification tools and it is also refer to a process or procedure of consulting the tools for the purposes of processing library information resources. The use of traditional and modern online Cataloguing and classification tools among library staff pertains to their ability to acquire and use corresponding manual and online cataloguing and classification tools for a dynamic and efficient library cataloguing and classification practice.

The library staff who have embraced the use of online cataloguing and classification tools are witnessing the fast extinction of the "backlog syndrome" as it is no longer common, to see newly acquired information resources held up in the cataloguing and classification unit for months. Several computers such as networked computers, internet, online computer library centre, (OCLC),Worldcat, web Dewey, library of congress online classification, Library of congress online catalog and cataloguing calculator just to mention a few are based online cataloguing tools available for used in cataloguing and classification of new arrivals in university libraries generally (Ocholla et al., 2015).

Despites all these benefits, online cataloguing and classification may be affected with power failure, lack of internet services, slow cyber-speed, lack of skill in surfing the internet on the part of library staff, shortage of manpower, inadequate training programmes for cataloguers and classifier and the risk of internet fraud just to mention a few. These may be peculiar to university libraries in the developing countries including Nasarawa state.

### **Statement of the Problem**

The use of online cataloguing and classification tools has dramatically impacted the productivity of processing information resources in university libraries generally and Nasarawa State, Nigeria in particular.

Consequently, the absence of online cataloguing and classification tools hinders effective delivery of library services hence the university library remains in its traditional way of slowly processing of information resources where acquired resources spend weeks, months or years gathering dust on the shelves without being processed, lack of usage of online cataloguing and classification tools, this denies many users' accesses to current information resources at the right time of need. Hence this process is tasking, very difficult, boring and time consuming. Thus, many library staff (librarians and non-librarians) in

university libraries continue to display phobia and apathy towards this innovation leading to inefficiency in processing information resources in university libraries.

However, experience has shown that the expensive nature of these tools hinders libraries from acquiring and using them, which implies that if these online cataloguing and classification tools are not adequately used by the library staff in the university libraries and if these libraries do not attach importance to the used of online cataloguing and classification tools for processing of its library information resources, it may be attributed to inadequate skills of library staff which does not permit them the use of online cataloguing and classification tools in the Universities libraries in Nasarawa State. It is against this background that this study seeks to carry out a study on the use of Online Cataloguing and Classification Tools for Processing Information Resources in University libraries in Nasarawa State, Nigeria.

### **Research questions**

1. What are the types of online cataloguing and classification tools available for use by Library Staff to facilitate Processing of Information Resources in University Libraries in Nasarawa State Nigeria?
2. To what extent does library staff used Online Cataloguing and Classification Tools to Process Information Resources in University Libraries in Nasarawa State Nigeria?
3. What are the challenges encountered by the library staff in using of Online Cataloguing and Classification tools to Process Information Resources in University Libraries in Nasarawa State Nigeria?

### **Literature Review**

Akidi (2018) views the reasons for non-use of copy cataloguing and classification as lack of adequate infrastructural facilities, incessant power supply, lack of internet facility and inadequate bandwidth, lack of vendor technical support, lack of maintenance culture and lack of adequate training for staff. Ajani, Amzat, James and Sulyman (2022) states that, lack of awareness of cataloguing and classification in the library, and unavailability of e-cataloguing system in the library, among others, were the challenges associated with the cataloguing and classification limiting the use of the library and information resources. Installation and maintenance of computer hardware and software as well as networks are very expensive and unaffordable due to the poor financial state of most libraries in Nigeria Abdul, Hamani, Ibrahim and Mohammed (2020) advances that, cataloguing in library work today is becoming a burdensome activity that took time before it is accomplished and this time-taking effort was a hit- and miss approach and this prompt librarian to look at library of Congress online cataloguing for easy production of catalogues. The researcher's further state that, this made librarians to copy direct bibliographic details and records available from the online catalogue. Professionals and paraprofessional librarians may perhaps use online cataloguing and classification tools to facilitate library operations in university libraries. Musa, Hassan and Asom (2020) avers that, university Library highly applied ICT in the areas of access to online

resources-library databases, reprographic service, online selection, ordering, and acquisition of information resources. ICT has greatly impacted on library systems, services, and operations with regards to many activities of libraries such as cataloguing and classification as well as indexing for quality information services in the library (Akidi & Okezie, 2018).(Idiegbeyan-ose, Ifijeh, Adebayo, & Segun-Adeniran, 2016). In addition. Daniel (2013) posits that lack of funds is the major reason for the underdevelopment of libraries in Nigeria. He further averred that unless the problem of funding is resolved, any attempt to modernize libraries in Nigeria will remain a mirage. Though academic and research libraries appear to be doing better than other libraries, their facilities remain a far cry from what obtains in Europe and America due to poor funding. Bello and Thomson (2013) aver that the lack of Staff with requisite ICT skills was a setback to library automation in Nigeria. Staff training for automation purpose would range from acquiring basic computer skills and competence in the use of library software, to training of systems librarians in the installation and maintenance of computer hardware, library software and other network infrastructure.

#### **Methodology:**

Survey research design was adopted for the study and the area of the study covers three university libraries in two senatorial districts of Nasarawa state, Nigeria. The population of the study is 159 library staff in the three university libraries. A total sampling technique was adopted for the study. According to Bernard (2012) who said that if a population of the study is less than two hundred (200), the entire population can be used for the study. Questionnaire was used as the instrument for data collection. Data was analysed using mean, Standard Deviation, frequency and simple percentage.

#### **Finding and Discussions**

**Table 1: Mean and Standard Deviation of types of online cataloguing and classification tools available for use by Library Staff in Processing of Information Resources in the University libraries in Nasarawa State, Nigeria**

S/N	Questionnaire Item	Mean	SD	Remark
1	Cataloguing internet resources	3.33	0.70	Available
2	Classification web	3.40	0.65	Available
3	Dewey Decimal Classification Web (DDCW)	3.38	0.70	Available
4	Library of Congress Classification Web (LCCW)	3.31	0.63	Available
5	World cat	3.33	0.63	Available
6	Marc21 concise format Bibliographic data	3.40	0.62	Available
7	Resources Description Access	3.21	0.73	Available
8	Online Computer Library Center (OCLC)	3.36	0.74	Available

9	Online Library of Congress Subject Heading(LCSH)	3.17	0.82	Available
10	Bibliographic Formats and Standards	3.25	0.75	Available
11	Online Cutter Sanborn	3.39	0.67	Available
<b>Cluster mean</b>		<b>3.32</b>	<b>0.69</b>	<b>Available</b>

**Key: A= Available Not Available**

## Discussion of Findings

### Research Objective One

The study's findings indicate that a variety of online cataloguing and classification tools are available to library staff in Nasarawa State's university libraries, which is a positive development. However, the mere availability of these tools does not necessarily equate to their effective use. The tools listed, such as Dewey Decimal Classification Web (DDCW) and the Library of Congress Classification Web (LCCW), are standard in many libraries, but their utility can be compromised if staff are not adequately trained or if the tools are not integrated into a cohesive digital infrastructure.

Additionally, the relatively close mean scores across different tools (ranging from 3.17 to 3.40) suggest that while these tools are available, there might be a lack of variety or innovation in the tools being used. The low standard deviations suggest consistency in responses, but this could also indicate that staff are uniformly exposed to only a limited set of tools. This raises questions about whether the libraries are keeping pace with technological advancements in library science, particularly with the rise of artificial intelligence and machine learning in information retrieval and processing.

Moreover, the availability of these tools might be more symbolic than practical. For instance, tools like MARC21 and OCLC are foundational, but if they are not part of a larger, well-maintained system that includes regular updates and integrations with other library technologies, their effectiveness could be severely limited. This brings into focus the importance of not just the availability of tools, but also their relevance, currency, and the ecosystem within which they operate.

**Table 2: Mean and Standard deviation of Extent of Usage of Online Cataloging and Classification Tools among Library Staff in University Libraries in Nasarawa State**

S/No	Items	Mean	SD	Remark
12	Cataloguing internet resources	3.33	0.67	Agreed
13	Classification web	3.35	0.56	Agreed
14	Dewey Decimal Classification Web (DDCW)	3.40	0.55	Agreed

15	Library of Congress Classification Web (LCCW)	3.31	0.73	Agreed
16	World cat	3.23	0.62	Agreed
17	Marc21 concise format Bibliographic data	3.27	0.66	Agreed
18	Resources Description Access	3.35	0.67	Agreed
19	Online Computer Library Center (OCLC)	3.33	0.61	Agreed
20	Online Library of Congress Subject Heading (LCSH)	3.59	0.56	Agreed
21	Bibliographic Formats and Standards	3.21	0.66	Agreed
22	Online Cutter Sanborn	3.27	0.60	Agreed
	<b>Cluster Mean</b>	<b>3.33</b>	<b>0.62</b>	<b>Agreed</b>

**Key: A=Agree NA=Not Agree**

### Research Objective two:

While the mean scores indicate that staff generally agree that they use online cataloguing and classification tools, this usage appears to be at a baseline level, suggesting that these tools may not be fully integrated into library operations. The relatively narrow range of mean scores (3.21 to 3.59) across different tools suggests that while there is some use of these tools, it may be superficial or inconsistent. This could be due to a lack of deep engagement with the tools, possibly because of inadequate training, resistance to change, or the tools themselves being difficult to use or poorly integrated into the library's broader systems.

The findings raise critical questions about the effectiveness of these tools in practice. If staff are using these tools only to a limited extent, it could indicate that they do not fully understand their capabilities or that the tools are not well-suited to their needs. This might result in inefficiencies and missed opportunities to enhance library services, particularly in areas like digital cataloguing, where precise and efficient classification is crucial. Moreover, the reliance on self-reported data about tool usage could be problematic. Staff might overestimate their use of these tools, leading to a false sense of security about the library's digital capabilities. This suggests the need for more objective measures of tool usage, such as usage logs or performance audits, to get a clearer picture of how these tools are being employed in practice.

The findings negate the result of Alabi (2018) who found out that cataloguers have embraced the use of diverse library software and utilize online cataloguing, secondly, Nigerian cataloguers have positive attitude towards ICT application in performing cataloguing and classification activities. Similarly, the study supports the findings of Akidi and Okezie (2018) revealed that the NLN highly adopts various forms of cataloguing

practices like quality, original, copy and centralized cataloguing, while online cataloguing and outsourcing are not adopted.

Table 3 Mean and Standard Deviation of Respondents on the Difficulties Encountered by Library Staff in the Usage of Online Cataloguing and Classification Tools in University Libraries in Nasarawa State

S/No	Items	Mean	SD	Decision
23	Lack if ICT	3.23	0.69	Agreed
24	Lack of network connectivity	3.30	0.63	Agreed
25	Lack of online cataloguing and classification tool	3.56	0.72	Agreed
26	Inadequate power supply	3.26	0.55	Agreed
27	High subscription rate of cataloguing and classification tool	3.28	0.69	Agreed
28	Lack of technical known how	3.14	0.63	Agreed
29	Technophobia	3.18	0.51	Agreed
30	Insufficient skilled personnel to trained library staff in the university	3.64	0.63	Strongly Agreed
31	Lack of awareness on the existing tools of online cataloguing	3.31	0.53	Agreed
32	Inadequate fund	3.36	0.55	Agreed
33	Lack of expensive software and hardware package for cataloguing and classification	3.23	0.52	Agreed
34	Low bandwidth	3.26	0.62	Agreed
35	Lack of conducive atmosphere environment	3.59	0.62	Agreed
36	Ignorance and apathy	3.20	0.68	Agreed
37	Lack of enough computer facilities	3.30	0.55	Agreed
38	Nonchalant attitude	3.26	0.49	Agreed
40	Limited training opportunities	3.27	0.62	Agreed
41	Lack of motivation	3.52	0.77	Agreed
<b>Cluster Mean</b>		<b>3.33</b>	<b>0.61</b>	<b>Agreed</b>

**Key:** A= Agree NA= Not Agree

### Research Objective three:

The challenges identified in the study, such as lack of ICT infrastructure, inadequate network connectivity, and insufficient skilled personnel, are significant barriers that hinder the effective use of online cataloguing and classification tools. These issues highlight systemic problems that go beyond individual libraries and point to broader institutional and infrastructural challenges that need to be addressed.

The high mean scores for these difficulties, particularly the lack of skilled personnel (mean of 3.64), suggest that there is a critical need for capacity building and professional development. Without addressing these foundational issues, the potential benefits of online tools will remain unrealized. The presence of technophobia and nonchalant attitudes among staff further complicates efforts to modernize library practices. These attitudes may stem from a lack of familiarity with digital tools, fear of obsolescence, or resistance to change. Addressing these psychological barriers is as important as resolving technical issues, as they can significantly impact the adoption and effective use of new technologies.

Additionally, the study highlights the issue of inadequate funding, which affects the ability to purchase and maintain the necessary software and hardware for cataloguing and classification. This financial constraint is a significant barrier to digital transformation in libraries, as it limits the ability to invest in the latest tools and technologies. The issue of low bandwidth and inadequate power supply further exacerbates these challenges, particularly in a region like Nasarawa State, where infrastructural issues are prevalent.

The result is in consonance with findings of Ihekwoaba, Ngozi and Mole (2017) whose various finding reveal that, inappropriate cataloguing tools, poor information and communication technology skills, and poor interest in conventional cataloguing were some of the issues in acquisition and application of conventional and online complementary cataloguing amongst cataloguers in Nigerian University libraries. Similarly, the study also agrees with the findings of Soakari, Gana, Haliru, Olayemi and Yemi-Peters (2017) who revealed that inadequate training of staff on ICT application to technical services; poor electricity supply and insufficient fund were some of the challenges plaguing the application of ICT facilities to technical unit of the library.

However, the study negated the findings of Akidi and Okezie (2018) who revealed that the NLN highly adopts various forms of cataloguing practices like quality, original, copy and centralized cataloguing, while online cataloguing and outsourcing are not adopted. Similarly, the findings did not support the work of Soakari, Gana, Haliru, Olayemi and Yemi-Peters (2017) who revealed that inadequate training of staff on ICT application to technical services; poor electricity supply and insufficient fund were some of the challenges plaguing the application of ICT facilities to technical unit of the library.

The study's findings indicate that a variety of online cataloguing and classification tools are available to library staff in Nasarawa State's university libraries, which is a positive development. However, the mere availability of these tools does not necessarily equate to their effective use. The tools listed, such as Dewey Decimal Classification Web (DDCW) and the Library of Congress Classification Web (LCCW), are standard in many libraries, but their utility can be compromised if staff are not adequately trained or if the tools are not integrated into a cohesive digital infrastructure.

Additionally, the relatively close mean scores across different tools (ranging from 3.17 to 3.40) suggest that while these tools are available, there might be a lack of variety or innovation in the tools being used. The low standard deviations suggest consistency in responses, but this could also indicate that staff are uniformly exposed to only a limited set of tools. This raises questions about whether the libraries are keeping pace with technological advancements in library science, particularly with the rise of artificial intelligence and machine learning in information retrieval and processing.

This finding agreed with the study of Jibril, Amidu and Adamu (2021) and Omosekejimi, Nweke and Omodoni (2022) whose findings reveal that librarians were aware of OCLC bibliographic formats and standards, cataloging internet resources.

### **Conclusion:**

The study highlighted the current state of used of online cataloguing and classification tools in university libraries across Nasarawa State, Nigeria. While there is a broad availability of essential online tools such as the Dewey Decimal Classification Web, Library of Congress Classification Web, RDA, KOHA and MARC21, their usage and integration into library operations appear to be limited. Moreover, the overall ICT proficiency of the staff, while adequate, is not sufficiently advanced to fully exploit the potential of these tools, indicating a need for targeted training and development programs. The findings also reveal substantial challenges that hinder the effective use of online cataloguing and classification tools. These include infrastructural deficiencies, such as poor network connectivity and inadequate power supply, as well as a lack of technical expertise and financial resources. Additionally, psychological barriers like technophobia and a nonchalant attitude towards digital adoption exacerbated these issues.

### **Recommendations**

Based on these findings, the following recommendations were made. The study recommended that universities conduct a thorough audit of their current tools. This audit should assess the relevance, usability, and scope of existing systems to ensure they meet the libraries' needs. In addition, libraries should develop systems for monitoring and evaluating tool usage. This could involve tracking usage patterns, gathering staff feedback, and identifying obstacles that hinder effective utilization. Encouraging usage through integration into daily workflows and offering incentives for staff who demonstrate proficiency and frequent use can also help promote a culture of consistent and effective adoption of these tools.

Finally, in response to the third research objective, which examined the difficulties encountered by library staff in using online cataloguing and classification tools, universities should prioritize investments in their ICT infrastructure. This includes ensuring stable network connectivity, a reliable power supply, and access to necessary hardware and software. Additionally, creating a supportive environment where staff can openly discuss the challenges they face is essential. This can be achieved through regular feedback sessions, and

the establishment of a dedicated helpdesk or technical support team focused on resolving issues related to online cataloguing and classification tools.

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