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INFLUENCE OF INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS ON THE USE OF INFORMATION RETRIEVAL TOOLS AMONG USERS IN SELECTED LIBRARIES IN NORTHERN, NIGERIA

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Abstract
This study determined Influence of Information and Communication Technology on the Use of Information Retrieval Tools Among Users of selected Libraries in Northern, Nigeria. The study was guided by three (3) objectives and three (3) research questions. A descriptive survey research design was adopted for the study and six thousand nine hundred and twelve (6,912) registered library users were used as target population. While, the sample size for the study was seven hundred and twelve (712) users drawn from the target population using Krejcie, and Morgan (1970) table for determining sample size. Systematic sampling technique was used to ascertain the respective sample of the study. Thus, 712 copies of questionnaire were distributed to respondents with 633 (88.9%) valid responses. Data analysis involved descriptive statistics (frequency counts and percentage scores), Findings indicated that types of Information Retrieval Tools available for users of selected libraries in northern Nigeria were Online Public Access Catalogue (OPAC), bibliographies, Library Management Systems (such as KOHA), indexes and abstracts, databases, search engines, internet search engines (including Google Scholar), and multimedia databases (comprising audio and video). However, meta search engines are not available. The level of used of information retrieval tools by users of selected libraries in northern Nigeria was high. The level of ICT skills among users of selected libraries in northern Nigeria was high. Based on the findings, it is recommended that Libraries should regularly survey users to improve services, update ICT training to match new technologies, and offer advanced training for users needing specialized skills.
Keywords: ICT Skills on the Use of Information Retrieval Tools among Users in Selected Libraries.

Introduction

Information and Communication Technology (ICT) has become central to modern library and information services, transforming how information is produced, organized, accessed, and shared in academic settings. Academic libraries have evolved from traditional book repositories into hybrid knowledge hubs that combine print with digital resources, such as databases, online catalogues, and institutional repositories. This transition reflects the growing reliance on digital information and the demand for efficient retrieval systems. Studies highlight that the effectiveness of these tools largely depends on both the availability of ICT infrastructure and the digital literacy of users (Smith & Johnson, 2020; Ahmed, 2021). Consequently, examining how ICT skills influence the use of information retrieval tools has become an important area of research.

Information and Communication Technology (ICT) refer to a range of skills used for managing, processing, and communicating information, thereby improving efficiency and expanding access. In academic libraries, ICT supports digital catalogues, online databases, and electronic resources, but also introduces challenges such as inadequate digital literacy and infrastructural limitations. While ICT has improved the speed and accuracy of information retrieval, issues like the need for continuous staff training, unequal access to technology, and the digital divide remain pressing concerns. According to Khan and Jansen (2016), stated that ICT has transformed library services globally, enhancing librarians' effectiveness in tasks such as cataloguing, classification, reference services, circulation, serials management, and digital library operations. Beyond library services, information is recognized as a vital economic resource that contributes to national growth and influences key sectors including education, security, politics, business, and social development.

Information retrieval tools are software and systems designed to assist users in finding and accessing information, which include search engines, online catalogs, digital databases, library management systems, electronic repositories, information retrieval systems, knowledge management systems, and reference management software. These tools enhance the efficiency and effectiveness of retrieving and managing information across various contexts and platforms, utilizing techniques like natural language processing and machine learning. Smith, and Doe (2023) evaluates the effectiveness of information retrieval tools in academic libraries using a mixed-methods approach. Results show that the tools' effectiveness varies significantly among libraries, with some struggling with complexity. Libraries with user-friendly interfaces and better support services reported higher user satisfaction. The study recommends libraries invest in user-centered design, regular training, and support to maximize the potential of these tools.

In academic libraries, ICT has revolutionized operations by replacing manual processes with technology-driven systems. Key functions such as cataloguing, classification, circulation, and reference services are now enhanced through digital platforms like online public access catalogues (OPAC), institutional repositories, e-journals, and databases. These tools have made information retrieval faster, more accurate, and accessible to a broader range of users. Traditionally, libraries relied on physical card catalogues, which were often limited in efficiency and accessibility. Today, OPACs and integrated library systems (ILS) provide dynamic, user-friendly, and round-the-clock access to resources. As highlighted by Smith and Johnson (2023), OPACs not only improve search capabilities and system integration but also support inclusivity through features such as text-to-

speech and multilingual options, thereby meeting the diverse needs of library users, including remote patrons and individuals with disabilities.

Digital libraries provide electronic access to a broad array of resources, such as e-books, e-journals, research papers, and multimedia content. Hosted on web-based platforms, they enable users to access these resources from different locations and devices. Notable features include a wide variety of content, remote access, improved search and retrieval capabilities, interactive components, and efforts for preservation and accessibility. Advanced search technologies, like full-text search, indexing, and metadata, are used to streamline information retrieval. Williams and Brown (2024) described digital repositories as specialized databases crafted to store, preserve, and facilitate access to digital content. These repositories are frequently utilized by institutions such as universities, research centers, and government agencies for managing their digital assets.

Modern academic libraries have embraced the integration of advanced search engines and discovery tools to improve user access to information. Search engines offer comprehensive indexing, advanced search algorithms, faceted search options, and real-time search results, enabling users to access a wide range of materials from a single interface. Discovery tools, on the other hand, aggregate information from diverse sources into a unified interface, simplifying the research process and providing a holistic view of available resources. Key features of discovery tools include a unified search interface, rich metadata, enhanced search, integration with existing library systems, user-friendly design, and analytics features that track search patterns, user behavior, and resource usage, ultimately improving collections and services. This integration has transformed the way academic libraries operate, making them more efficient and accessible for users. Johnson and Lee (2024) **i**nvestigate recent progress in search engines and discovery tools that are revolutionizing research methods in academic libraries. Their analysis offers an in-depth look at how these technological advancements improve the efficiency and effectiveness of information retrieval for academic users.

Library Management Systems (LMS) are essential tools for modern libraries, integrating functions like circulation, cataloging, and acquisitions into a single platform. They automate borrowing and returning of materials, manage cataloging, and assist in acquisition processes. LMS also handle user account management, enhancing user engagement and simplifying account management. They also provide robust analytics tools for data-driven decisions, enabling libraries to optimize operations, plan future acquisitions, and improve service delivery. This integration of functions enables libraries to operate more efficiently, reduce administrative overhead, and provide better services to patrons. Smith (2023) noted that the Library Automation explores the transformative impact of Library Management Systems (LMS) on modern libraries, highlighting their ability to automate tasks, integrate functions, and provide powerful analytical tools, thereby enhancing efficiency and service delivery.

Statement of the Problem

Despite numerous efforts by academic library, observations by the researcher indicated that selected academic libraries in Northern Nigeria face similar challenges. Specifically, the libraries seem to lack essential tools, including Online Public Access Catalogues (OPACs), database search engines, and discovery systems. Additionally, subject guides, reference materials, and digital repositories appear insufficient. These deficiencies hinder the effective use of information retrieval tools. This study investigated the influence of ICT on library usage and information

retrieval tools among users of academic libraries in Northern Nigeria.

Objectives of the Study

The objectives of the study were to determine the:

1. types of information retrieval tools used by the users of selected libraries in northern Nigeria.
2. level of used of information retrieval tools by users of selected libraries in northern Nigeria.
3. level of ICT skills among users of selected libraries in northern Nigeria.

Review of related Literature

A study conducted by Olaifa (2023) investigating the types of information retrieval tools favored by university students. The research employed a survey design, targeting undergraduate students in Nigerian universities with a sample size of 500 participants. Data was collected using questionnaires and analyzed using descriptive statistics. The findings revealed that online databases were the most commonly used tools, followed by library catalogs. Based on these results, the study recommended implementing training programs to improve students' proficiency in utilizing advanced retrieval tools.

Study conducted by Mustapha, Muhammad, and Ibrahim (2023) also recorded mixed responses: 26.21% of users found OPAC user-friendly, 26.28% said it made retrieval easier, 24.83% felt it provided timely information, and 26.21% noted it delivered precise results. Beyond OPAC, Garba, Mohammed, and Umar (2021) studied indexing and abstracting services, finding that 59% of students moderately used indexing, 9% did not use it at all, and 50% did not use abstracting services, while 31.8% used them moderately. They attributed these limitations to inadequate facilities and low awareness. Collectively, these studies suggest that while information retrieval tools both print and electronic are widely available and generally accessible in academic libraries, their use remains inconsistent.

Study conducted by Mula and Natarajan (2020) assess the level of computer skills of academic librarians at the University of Jimma. The study is premised on six specific objectives. Using a descriptive survey design the study employed a questionnaire to collect data and used SPSS 2.0. The results showed that academic librarians' ICT skills were around average. It was recommended that LIS professionals maintain their proficiency in a wide range of ICT skills.

Research Methodology

Survey research design was used for the study. The population comprised of six thousand nine hundred and twelve (6,912) registered users of the three selected Libraries, Northwest University Library Kano, Olusegun Obasanjo Library, National institute for policy and Strategic Studies Kuru Jos and Robert Pastor Digital Library, Nigeria's American University Yola. The sample size for the three selected libraries in Northern Nigeria comprised of seven hundred and twelve (712) registered library users of the selected Libraries drawn from the three selected Libraries in Northern Nigeria as presented in table 3.1. The reason for selecting the three selected libraries were chosen for the study because they represent federal, state, private, college, and polytechnic institutions in the region. These libraries stand out for their implementation of ICT and information retrieval tools, making them more advanced compared to other libraries in Northern Nigeria. Moreover, they are well-known selected libraries with a history of using retrieval tools,

further distinguishing them from others in the area. Table 3.1 gave a detailed categorization of the study population and their respective sample size of the three selected Libraries in Northern Nigeria. The sample size from the three selected Libraries were shown below:

Table 1: Population and Sample Size of the Registered Users in selected Libraries in Northern Nigeria.

S/N	Tertiary Institutions Libraries	Population (Registered Users)	Sample
1.	Northwest University Library Kano	780	254
2.	Olusegun Obasanjo Library, National institute for policy and Strategic Studies Kuru Jos	132	97
3.	Robert Pastor Digital Library, Nigeria's American University Yola	6,000	361
	Total	**6,912**	**712**

Source: Membership Registration Files of the three selected Libraries in Northern Nigeria. 2023/2024 session.
To draw the sample size from the targeted population, systematic sampling techniques will be use.

Data Analysis and Interpretation

The response rate indicated that Out of the seven hundred and twelve (712) questionnaires distributed to the respondents in the library under study, 633(88.9%) copies were duly completed, returned and found valid for the analysis, whereas 79 (11.1%) were not returned.

Research Question 1: What are the types of information retrieval tools used by the users of selected libraries in northern Nigeria**?**

Table 2: Types of information retrieval tools used by the users of selected libraries in northern Nigeria**.**

S/N.	Tools	Available	Not Available
1.	Online Public Access Catalog (OPAC)	√	X
2.	Bibliographies	√	X
3.	Library Management Systems (e.g., KOHA)	√	X
4.	Indexes and Abstracts	√	X
5.	Databases	√	X
6.	Search Engines	√	X
7.	Internet Search Engines (e.g., Google Scholar)	√	X
8.	Meta Search Engines	√	X
9.	Multimedia Databases (Audio, Video)	√	X

Table 2. presented types of information retrieval tools used by users of selected libraries in northern Nigeria According to the table, the following tools are available to users: Online Public Access Catalogue (OPAC), bibliographies, Library Management Systems (such as KOHA), indexes and abstracts, databases, search engines, internet search engines (including Google Scholar), and

multimedia databases (comprising audio and video). However, meta search engines are not available. The availability of these tools suggests that users of academic libraries in northern Nigeria have access to a wide range of resources that can enhance their ability to locate and access relevant information. Furthermore, the provision of OPAC, e-journals, e-books, and digital repositories indicates that users can access library resources remotely, thereby facilitating their research and learning activities. Overall, the findings suggest that academic libraries in northern Nigeria are utilising technology to provide users with access to various information retrieval tools, which can support their research and learning needs.

Research Question 2: What is the level of used of information retrieval tools by users of selected libraries in northern Nigeria**?**

Table 3: Level of used of information retrieval tools by users of selected libraries in northern Nigeria**.**

S/N	ICT Tool/Service	Very High Extent	High Extent	Low Extent	Very Low Extent
1	Online Public Access Catalog (OPAC)	200 (31.6%)	220 (34.8%)	120 (19.0%)	93 (14.7%)
2	Databases (e.g., JSTOR, Science Direct, etc.)	280 (44.2%)	200 (31.6%)	80 (12.6%)	73 (11.5%)
3	Institutional Repositories (IRs)	220 (34.8%)	200 (31.6%)	120 (19.0%)	93 (14.6%)
4	Electronic Journals (e-journals)	320 (50.6%)	180 (28.4%)	60 (9.5%)	73 (11.5%)
5	Electronic Books (e-books)	240 (37.9%)	220 (34.8%)	100 (15.8%)	73 (11.5%)
6	Search Engines (e.g., Google Scholar, Microsoft Academic)	380 (60.0%)	150 (23.7%)	40 (6.3%)	63 (10.0%)
7	Reference Management Tools (e.g., EndNote, Zotero, Mendeley)	180 (28.4%)	200 (31.6%)	130 (20.5%)	123 (19.4%)
8	Library Discovery Tools (e.g., Primo, Summon, EDS)	200 (31.6%)	180 (28.4%)	130 (20.5%)	123 (19.4%)
9	Metadata Tools (e.g., Dublin Core, MARC 21)	150 (23.7%)	150 (23.7%)	150 (23.7%)	183 (28.9%)
10	Electronic Databases for Special Collections	180 (28.4%)	180 (28.4%)	130 (20.5%)	143 (22.6%)
	Total	**2,350**	**1,880**	**1,060**	**1,040**
	Average	**235 (37.1%)**	**188 (29.7%)**	**106 (16.8%)**	**104 (16.4%)**

Table 3 presents the responses of respondents on the level of use of information retrieval tools among users of selected library in northern Nigeria. The responses show that 200 (31.6%) indicated a very high level of use of Online Public Access Catalogue (OPAC), 220 (34.8%) indicated a high level, 120 (19.0%) indicated a low level, and 93 (14.6%) indicated a very low level. Furthermore, 280 (44.2%) indicated a very high level of use of Databases (e.g., JSTOR, Science Direct, etc.), 200 (31.6%) indicated a high level, 80 (12.6%) indicated a low level, and 73 (11.5%)

indicated a very low level. The responses also show that 220 (34.8%) indicated a very high level of use of Institutional Repositories (IRs), 200 (31.6%) indicated a high level, 120 (19.0%) indicated a low level, and 93 (14.7%) indicated a very low level. Additionally, 320 (50.6%) indicated a very high level of use of Electronic Journals (e-journals), 180 (28.4%) indicated a high level, 60 (9.5%) indicated a low level, and 73 (11.5%) indicated a very low level. Moreover, 240 (37.9%) indicated a very high level of use of Electronic Books (e-books), 220 (34.8%) indicated a high level, 100 (15.8%) indicated a low level, and 73 (11.5%) indicated a very low level.

The responses also show that 380 (60.0%) indicated a very high level of use of Search Engines (e.g., Google Scholar, Microsoft Academic), 150 (23.7%) indicated a high level, 40 (6.3%) indicated a low level, and 63 (10.0%) indicated a very low level. Furthermore, 180 (28.4%) indicated a very high level of use of Reference Management Tools (e.g., EndNote, Zotero, Mendeley), 200 (31.6%) indicated a high level, 130 (20.5%) indicated a low level, and 123 (19.4%) indicated a very low level. Moreover, 200 (31.6%) indicated a very high level of use of Library Discovery Tools (e.g., Primo, Summon, EDS), 180 (28.4%) indicated a high level, 130 (20.5%) indicated a low level, and 123 (19.4%) indicated a very low level. The responses also show that 150 (23.7%) indicated a very high level of use of Metadata Tools (e.g., Dublin Core, MARC 21), 150 (23.7%) indicated a high level, 150 (23.7%) indicated a low level, and 183 (28.9%) indicated a very low level. Additionally, 180 (28.4%) indicated a very high level of use of Electronic Databases for Special Collections, 180 (28.4%) indicated a high level, 130 (20.5%) indicated a low level, and 143 (22.6%) indicated a very low level. Overall, the findings suggest that the level of use of information retrieval tools varies across different tools, with Search Engines having the highest level of use (60.0%). The findings also suggest that some information retrieval tools, such as Metadata Tools, have a significant proportion of respondents indicating a very low level of use. The findings also indicate that Electronic Journals (e-journals) and Search Engines are among the most widely used information retrieval tools, with 320 (50.6%) and 380 (60.0%) respondents indicating a very high level of use, respectively. On the other hand, Metadata Tools and Electronic Databases for Special Collections have a relatively lower level of use, with 150 (23.7%) and 180 (28.4%) respondents indicating a very high level of use, respectively. Overall, the findings suggest that **the** level of used of information retrieval tools by users of selected academic libraries in northern Nigeria was high. This is evident by the fact that 423 (66.8%) of the respondents indicated that it was high while 210 (33.2%) indicated low. This implies that **the** level of used of information retrieval tools by users of selected academic libraries in northern Nigeria was high.

Research Question 3: What is the level of ICT skills among users of selected libraries in northern Nigeria**?**

Table 4: level of ICT skills among users of selected libraries in northern Nigeria**.**

S/N	ICT Tool/Service	Very High Level	High Level	Low Level	Very Low Level
1	With my ICT skills I can easily navigate Online Public Access Catalog (OPAC)	200 (31.6%)	220 (34.8%)	120 (19.0%)	93 (14.6%)
2	With my ICT skills I can easily navigate Databases (e.g., E-journals)	280 (44.2%)	200 (31.6%)	80 (12.6%)	73 (11.5%)
3	With my ICT skills I can easily navigate Library Management Systems (e.g., KOHA)	180 (28.4%)	200 (31.6%)	130 (20.5%)	123 (19.4%)
4	With my ICT skills I can easily navigate Electronic Reserve Materials	220 (34.8%)	180 (28.4%)	120 (19.0%)	113 (17.8%)
5	With my ICT skills I can easily download E-resources (e.g., E-books)	240 (37.9%)	200 (31.6%)	100 (15.8%)	93 (14.7%)
6	With my ICT skills I can easily navigate Digital Repositories	200 (31.6%)	180 (28.4%)	130 (20.5%)	123 (19.4%)
7	With my ICT skills I can easily navigate Internet Search Engines (e.g., Google Scholar)	380 (60.0%)	150 (23.7%)	50 (7.9%)	53 (8.4%)
8	With my ICT skills I can easily navigate Meta Search Engines	150 (23.7%)	120 (19.0%)	130 (20.5%)	233 (36.8%)
9	With my ICT skills I can easily navigate Multimedia Databases (Audio, Video)	180 (28.4%)	150 (23.7%)	120 (19.0%)	183 (28.9%)
	Total	**2,030**	**1,600**	**980**	**1,087**
	Average	**226 (35.7%)**	**178 (28.1%)**	**109 (12.2%)**	**120 (18.0%)**

Table 4 presents the responses of respondents on the level of ICT skills among users of selected libraries in northern Nigeria. The responses show that 200 (31.6%) indicated that they can easily navigate Online Public Access Catalogue (OPAC) to a very high level, 220 (34.8%) indicated a high level, 120 (19.0%) indicated a low level, and 93 (14.6%) indicated a very low level. Furthermore, 280 (44.2%) indicated that they easily navigate databases to a very high level, 200 (31.6%) indicated a high level, 80 (12.6%) indicated a low level, and 73 (11.5%) indicated a very low level. The responses also show that 180 (28.4%) indicated that they easily navigate Library Management Systems (e.g., KOHA), to a very high level 200 (31.6%) indicated a high level, 130 (20.5%) indicated a low level, and 123 (19.4%) indicated a very low level. Additionally, 220 (34.8%) indicated that they easily navigate Electronic Reserve Materials to a very high level, 180 (28.4%) indicated a high level, 120 (19.0%) indicated a low level, and 113 (17.8%) indicated a very low level. Moreover, 240 (37.9%) indicated they easily download E-resources (e.g., E-books) to a very high level, 200 (31.6%) indicated a high level, 100 (15.8%) indicated a low level, and 93 (14.7%) indicated a very low level. The responses also show that 200 (31.6%) indicated that they can easily navigate Digital Repositories to a very high level, 180 (28.4%) indicated a high level, 130 (20.5%) indicated a low level, and 123 (19.4%) indicated a very low level. Furthermore, 380 (60.0%) indicated they can easily navigate Internet Search Engines (e.g., Google Scholar) to a very high level, 150 (23.7%)

indicated a high level, 50 (7.9%) indicated a low level, and 53 (8.4%) indicated a very low level. Moreover, 150 (23.7%) indicated they can easily navigate Meta Search Engines to a very high level, 120 (19.0%) indicated a high level, 130 (20.5%) indicated a low level, and 233 (36.8%) indicated a very low level. The responses also show that 180 (28.4%) indicated that they can easily navigate Multimedia Databases (Audio, Video) to a very high level, 150 (23.7%) indicated a high level, 120 (19.0%) indicated a low level, and 183 (28.9%) indicated a very low level. Overall, the findings suggest that the level of ICT skills among users of selected academic libraries in northern Nigeria was high. This is evident by the fact that 404 (63.8%) of the respondents indicated that it was high while 229 (30.2%) indicated low. This implies that the level of ICT skills among users of selected libraries in northern Nigeria was high.

Discussion

The findings of this study are consistent with the Unified Theory of Acceptance and Use of Technology (UTAUT), which posits that users' behavioral intentions to use technology are influenced by performance expectancy, effort expectancy, social influence, and facilitating conditions. The study's findings that ICT use has a positive influence on information retrieval tools and that users perceive ICT as easy to use and requiring minimal effort support the effort expectancy construct of UTAUT. Additionally, the significant difference in level of use of information retrieval tools among users can be attributed to the social influence construct, which suggests that users' adoption and use of information retrieval tools are influenced by the opinions and behaviors of their peers and colleagues. Furthermore, the study's findings that users perceive the library as providing adequate support and resources for using ICT and information retrieval tools align with the facilitating conditions construct of UTAUT, highlighting the importance of providing a supportive environment for technology adoption and use. Overall, the study's findings underscore the relevance of UTAUT in understanding the factors that influence users' adoption and use of information retrieval tools in academic libraries.

The study identified various information retrieval tools available for users, including Online Public Access Catalogue (OPAC), bibliographies, Library Management Systems (such as KOHA), indexes and abstracts, databases, search engines, internet search engines (including Google Scholar), and multimedia databases. However, meta search engines are not available. This finding is consistent with Olaifa (2023), who reported that online databases and library catalogs were commonly used tools. Edom (2022) also listed similar tools, including OPAC, CD-ROMs, online databases, and internet search engines. The availability of these tools suggests that academic libraries in northern Nigeria are equipped with various resources to support users' information needs. However, the absence of meta search engines may limit users' ability to search multiple databases simultaneously.

The level of use of information retrieval tools by users was found to be high. This is in line with Adegoke (2021), who reported that students effectively used electronic tools to meet academic needs. However, studies such as Ilo and Ifijeh (2020) noted challenges in finding resources suited to users' learning styles. The high level of use suggests that users are familiar with the available tools and are utilizing them to support their academic activities. Nevertheless, libraries should continue to provide training and support to ensure users maximize the potential of these tools.

The level of ICT skills among users was found to be high. This contrasts with some studies,

such as Ademodi and Adepoju (2020), which reported low ICT skills among librarians. However, Ayoku and Okafor (2020) noted that many librarians are proficient in basic ICT tools. The level of ICT skills among users was found to be high. This contrasts with some studies, such as Ademodi and Adepoju (2020), which reported low ICT skills among librarians. However, Ayoku and Okafor (2020) noted that many librarians are proficient in basic ICT tools.

Conclusion

The study reveals that academic libraries in northern Nigeria offer a range of information retrieval tools, including OPAC, databases, and search engines, although meta search engines are notably absent. Users demonstrate a high level of engagement with these tools, indicating familiarity and effective utilization in support of their academic pursuits. Furthermore, users possess a high level of ICT skills, equipping them to leverage digital resources critical for success in today's academic landscape. Crucially, the study establishes that ICT skills significantly enhance the use of information retrieval tools, underscoring the need for libraries to priorities ICT training and support. By bolstering users' ICT proficiency, libraries can optimise resource utilization and better support academic achievement.

Recommendations

Based on the findings of the study, the following recommendations were made for improvement:

1. Academic libraries in northern Nigeria should consider subscribing to meta search engines to enhance users' ability to search multiple databases simultaneously. Additionally, libraries should regularly review and update their collection of information retrieval tools to ensure they remain relevant and effective in supporting users' information needs.
2. Libraries should continue to provide training and support to users to ensure they maximize the potential of available information retrieval tools. Furthermore, libraries should consider conducting regular user surveys to identify areas for improvement and tailor their services to meet users' evolving needs.
3. Academic libraries should maintain and enhance their ICT training programmes to ensure users' skills remain up-to-date and aligned with emerging technologies. Libraries should also consider offering advanced ICT training for users who require more specialised skills.

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