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INFLUENCE OF LIBRARY AUTOMATION TOOLS ON THE USAGE OF INFORMATION RESOURCES BY STUDENTS OFFERING ENTREPRENEURSHIP IN PUBLIC UNIVERSITIES IN BENUE STATE, NIGERIA

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Abstract
The study examined the Influence of Library Automation Tools for Enhanced Usage of Information Resources by Students offering Entrepreneurship in Public Universities in Benue State, Nigeria. The study was guided by two objectives and two research questions. The researcher adopted ex-post-facto research design for the study. The study area was two public universities in Benue State- Joseph Sarwua Tarka University (JOSTUM) and Benue State University, now Rev. Fr Moses Orshio Adasu Unviversity. The total population of this study was 1, 078 students made up of 400 level undergraduate students offering entrepreneurship who are registered with the university libraries. A sample of 417 undergraduate students offering entrepreneurship in public universities in Benue State Nigeria. The sampling techniques are purposive and snowball. The instrument for data collection for the study was a self-structured questionnaire titled "Influence of Library Automation Tools Questionnaire" (ILATQ). The instrument for data collection was subjected to face and validation by 3 lecturers of Joseph Sarwuan Tarka University, Makurdi. The instrument was trial tested on 30 respondents in Federal University, Lafia which was not part of the study area but have similar characteristics with that of the study area. Data collected were analyzed using descriptive statistics such as mean and standard deviation to answer the five research questions. The findings of the study reveal that library automation is one of the key means of easing and enhancing information search strategies for entrepreneurship students. Automation helps students acquire the knowledge and skills required for effective information searching. It also improves information retrieval among entrepreneurship students. In addition, the Integrated Library Management System (ILMS) speeds up information search and the retrieval of library resources. Automation tools further enhance storage space management in public

universities in Benue State, Nigeria. The study concluded that library automation is a vital tool in academic libraries for meeting the information needs of students offering entrepreneurship in public universities in Benue State Nigeria.

Keywords: Library Automation Tools, Information Resources, Entrepreneurship, Public Universities,

Introduction

Public university libraries offer a range of resources ranging from traditional, print materials and digital resources, making them vital for students in various fields, including disciplines like entrepreneurship. Echezona and Ugwuanyi (2016), states that public university libraries support the educational mission of their main institutions by providing access to a wealth of information resources. Information resources refer to a wide range of academic materials meant to be used by students, lecturers and researchers. These resources also include online collections of books, e-journals, e-encyclopedias, e-newspapers, and multimedia resources like videos and audio files. They play a central role in research, decision-making and learning across different fields. Gonzalez (2021), stated that libraries aid access to information resources providing students, faculty and researchers the information they need to carry out their work and studies. The development of information resources has been driven by rapid advances in technology. Miller (2017), noted that today, digital platforms make it easy to access a wider variety of materials than ever. Online databases and cloud storage, retrieval for example, have enabled institutions to gather different resources in one place, allowing students to search, store and retrieve information resources at anytime anywhere.

Information resources were almost entirely physical as libraries were known for storing materials like print books, journals, magazines, newspapers, encyclopedias, and archival documents. Students accessed these materials through a manual cataloguing system, such as a card catalogue for books or printed indexes for serial materials, often requiring the help of librarians to locate items within the library. This traditional method posed limitation because students had to be physically present at the library and could only access resources during operating hours which sometimes they experience delays, due to busy periods. Echezona and Ugwuanyi (2016), states that managing these physical collections required significant time and effort from library staff. Tasks like cataloguing, shelving, and updating records were labour-intensive, which not only slowed library operations but also made the whole system somewhat cumbersome. As academic fields grew more, students began to need faster and more flexible way to access information resources, which makes the automation of library necessity. The library shifted from these traditional methods of operation to digital, Information and Communication Technology (ICT) calls for library automation. Library automation involves using computers and other technologies to help manage different tasks, such as cataloguing books, checking out materials, and organizing online journals and magazines, so libraries can deliver the right information to users as efficiently as possible (Oladokun & Kolawole, 2018). Library automation tools are the technologies and software systems that help libraries run their daily operations more smoothly, saving time for both librarians and users. These tools such as Integrated Library Systems

(ILS), digital repositories, and online catalogues streamline daily operations and improve access to resources (Kaur & Kaur, 2020). They also help librarians manage tasks more efficiently, freeing them to focus on guiding students and supporting research (Tella & Oladapo, 2016; Wang and Dawes, 2022). As Rahman and Islam (2023) note, automation now includes advanced features like artificial intelligence and personalized services, which enhance user satisfaction. The International Federation of Library Associations (IFLA, 2022) projects that such innovations will continue to evolve, keeping libraries central to education, research, and community engagement. Effective information use in libraries depends not only on automation but also on search strategies.

Information search strategies involve defining research questions, identifying keywords, and refining searches through Boolean operators (AND, OR, NOT), truncation, and phrase searching. These approaches increase accuracy and relevance (Olayinka, 2020; & Okafor, 2021). Databases like JSTOR and Google Scholar are excellent for scholarly materials, while government reports and official websites provide credible data for fields such as the social sciences (Agboola & Umeh, 2021). Evaluating sources for usability, and shortest time of information retrieval with reliable information is equally essential. Information retrieval (IR) complements search strategies by focusing on obtaining relevant information from large collections. Retrieval systems such as search engines, catalogues, and databases use algorithms, indexing, and ranking methods to match queries with relevant results (Manning, Raghavan & Schutze, 2021). With the integration of machine learning, these systems have become increasingly personalized and efficient (Okeke & Adeyemi, 2019). Alongside retrieval, information storage plays a critical role. Information Storage involves preserving and organizing data for future use through tools such as databases and cloud solutions. Effective storage uses techniques like compression, encryption, and tagging to ensure secure and quick retrieval (Zeng, 2023). In automated libraries, storage strategies guarantee that digital resources from e-books to archival materials remain accessible to users (Kim & Miller, 2025). Cloud storage, in particular, offers scalability, remote access, and redundancy against hardware failures (Nwogbo & Obasi, 2019). Together, search, retrieval, and storage form a chain of information management skills that are vital for students, including those studying entrepreneurship.

Entrepreneurship students are those admitted into the university to undertake undergraduate programme who offers the course as a general course to build a creative mind in business. Entrepreneurship students today are experiencing a change in how they learn and develop their skills with education moving beyond theory into practice, mindset training, problem-solving skills, and willingness to take risks which in turn increases their intention to start businesses (Ferdousi, Rahman & Qamruzzaman, 2025). For example, Sanchez (2019) found that students who went through structured entrepreneurship programs not only gained technical knowledge but also built stronger motivation and resilience compared to their peers. At the university level, the presence of incubators, mentors, and supportive environments has been shown to significantly shape students' entrepreneurial behaviors (Petrescu & Suciu, 2024). More recently, digital tools like artificial intelligence are being added to entrepreneurship courses to give students tailored guidance while still preserving the value of real-life mentorship and collaboration (Zhu & Luo, 2025). Entrepreneurship education is not limited to universities

secondary school programs in places like Cabo Verde, as well as STEM-based initiatives for girls, have proven that exposing young people to entrepreneurship early on can boost creativity, entrepreneurial attitudes and encourage innovation (Shahin, Ilic, Gonsalvez & Whittle, 2020).

The importance of entrepreneurship education cannot be over emphasized hence the government of Nigerian sees it fit to include entrepreneurship in their curriculums for the obvious reasons of allowing the students to acquire additional knowledge to get more than just a degree and to give them opportunity to create skills to solve problems as well as taking risks. Sanchez, (2019); Ferdousi, Rahman & Qamruzzaman (2025), states that research shows that these students not only gain business knowledge but also develop valuable life skills such as leadership, resilience, and adaptability. Universities that give them space to practice through startup incubators, business competitions, or real-world projects help turn classroom ideas into something tangible (Makai & Dory, 2023). Importantly, students offering entrepreneurship often find themselves surrounded by mentors, peers, and professionals who inspire and support them by giving them the networks and confidence needed to bring their ideas to life (Petrescu & Suciu, 2024). Nabi, Liñán, Fayolle, Krueger and Walmsley (2020), advanced that by the time they graduate many are not only prepared to launch their own ventures but are also equipped to bring an entrepreneurial mindset into any workplace they enter. With the aid of library automation students can access information resources easily and faster to enhance their entrepreneurship skills that will help them in their studies.

In Nigeria, public universities including those in Benue State are increasingly adopting library automation to improve library services (Aina, 2019). The researcher further pointed out that, this development has significant benefits for entrepreneurship students, who rely on timely access to current market research, business models, and case studies. Automated systems empower students by saving time and improving engagement with course materials (Eze & Ugochi, 2022). However, Oladele & Oyewole, (2019); Ogunmodede & Popoola, (2018) mentioned that, some students struggle with limited digital literacy while others face infrastructural issues such as poor internet and unstable power supply. For library automation tools to be fully utilized, universities administration must address barriers confronting them. This context therefore sets the stage for the present study, which investigates how library automation tools influence the usage of information resources by student offering entrepreneurship in public universities in Benue State.

Statement of the Problem

In recent years, library automation has been introduced in public universities in Benue State as a means to enhance the accessibility, efficiency and retrieval of information resources. This shift from traditional to digital aligns with global trends, restructuring tasks like cataloging and resource retrieval while offering advanced search tools and digital access. Automation allows libraries to manage collections more effectively, enabling staff to focus on student support and curation. Students benefit from expanded access to digital materials, enhancing their research and learning opportunities.

However, there may be lack of comprehensive understanding regarding the influence of library automation tools on the utilization of these resources by entrepreneurship students.

Despite the potential benefits of automated systems, such as increased access to diverse information formats and improved user experience, various factors may affect students' offering entrepreneurship and limit the usage of information resources effectively. Although library automation tools are increasingly adopted in public universities, students' use of these technologies varies due to challenges such as limited digital literacy, resistance to new technologies, and poor internet connectivity. Moreover, there is limited empirical evidence on the influence of library automation tools on students' research skills, satisfaction, and academic performance, particularly among entrepreneurship students. This study seeks to address this gap. This study aims to investigate the influence of library automation tools enhaces the usage of information resources by students offering entrepreneurship in public universities in Benue State.

Objectives of the Study

The study examined the influence of library automation tools on the usage of information resources by students offering entrepreneurship in public universities in Benue State, Nigeria. Specifically, the study is determined to:

1. find out influence of library automation on information search strategies of student offering entrepreneurship in public universities in Benue state, Nigeria.
2. find out influence of library automation on information retrieval by student offering entrepreneurship in public universities in Benue state, Nigeria.

Research Questions

The study was guided by two research questions as follow:

1. What is the influence of library automation on information search strategies of student offering entrepreneurship in public universities in Benue state, Nigeria?
2. What is the influence of library automation on information retrieval by student offering entrepreneurship in public universities in Benue state, Nigeria?

Research Methodology

The researcher design adopted for the study is descriptive survey research design. The study area is two public universities in Benue State. The total population of this study was 1, 078 made up of 400 level undergraduate students offering entrepreneurship who are registered with the respective university libraries. A sample of 417 undergraduate students offering entrepreneurship in public universities in Benue State Nigeria was used. The sampling techniques are purposive and snowball. The instrument for data collection for the study was a self-structured questionnaire titled “Influence of Library Automation Tools for Questionnaire” (ILATQ). The instrument for data collection was subjected to face and validation by 3 lecturers of Joseph Sarwuan Tarka University, Makurdi. The instrument was trial tested on 30 respondents in Federal University, Lafia which was not part of the study area but have similar characteristics with that of the study area. Data collected were analyzed using descriptive statistics such as mean and standard deviation to answer the two research questions.

Research Question 1: What is the influence of library automation on information search strategies of student offering entrepreneurship in public universities in Benue state, Nigeria?

Table 1: Mean and Standard Deviation of Information Search Strategies of Student Offering Entrepreneurship in Public Universities

S/N	Information Search Strategies	Number	*X*	SD	Decision
1.	Automation speeds up information search.	403	3.16	.874	A
2.	Improves accuracy in locating relevant resources	403	3.33	.962	A
3.	Enhances user independence in conducting information searches	403	3.16	.910	A
4.	Facilitates access to a wide range of electronic resources	403	2.65	.863	A
5.	Filtering options enhance search results	403	2.77	.978	A
6.	Increases accessibility of remote resources	403	2.65	.833	A
7.	Reduces time spent searching for information	403	3.70	.534	A
8.	Supports advanced search capabilities (e.g., Boolean search, filters).	403	3.73	.672	A
	Cluster Mean		**3.14**	**.830**	**A**

Note: X= Mean, SD= Standard Deviation, A=Agree, D= Disagree

The results in table 2 reveal the mean and standard deviation on the influence of library automation on information search strategies of student offering entrepreneurship in public universities in Benue state, Nigeria from items 1-8. The results show that student offering entrepreneurship in public universities agreed that library automation influences information search strategies. This is due to the fact that the mean values of the item statements ranging from 2.65-3.73 are greater than the criterion mean of 2.50. The cluster mean of 3.14 shows that the entrepreneurship students agreed that library automation tools influence information search strategies. Hence, the item statements are the influence of library automation on information search strategies of student offering entrepreneurship in public universities in Benue state, Nigeria. Moreover, the standard deviation values of the item statements reveal closeness in the responses of the entrepreneurship students due to the nearness of the values and the cluster standard deviation value of 0.83 reveal less dispersion in the mean responses of the students offering entrepreurship education.

Research Question 2: What is the influence of library automation on information retrieval by student offering entrepreneurship in public universities in Benue state, Nigeria?

To answer this research question, data were collected on the influence of library automation on information retrieval by student offering entrepreneurship in public universities and analyzed with mean and standard deviation as shown in table 3

Table 2: Mean and Standard Deviation of Library Automation on Information Retrieval of Student Offering Entrepreneurship in Public Universities

S/N	Automation on Information	Number	*X*	SD	Decision
9.	Speeds up the retrieval process for library resources	403	3.16	.948	A
10.	Enhances the accuracy of retrieved information	403	3.22	.846	A
11.	Improves access to digital and electronic resources	403	2.70	.950	A
12.	Tags and filters help find information.	403	3.16	.903	A
13.	Reduces time needed to locate specific information	403	3.11	.734	A
14.	Reduces reliance on library staff for assistance in retrieving information	403	2.93	.895	A
15.	Supports retrieval of interdisciplinary resources	403	3.75	.458	A
16.	Supports retrieval of archival and historical materials	403	3.77	.951	A
	Cluster Mean		**3.23**	**.84**	**A**

Note: X=Mean, SD= Standard Deviation, A=Agree, D= Disagree

The results in table 3 show the mean and standard deviation on the influence of library automation on information retrieval by student offering entrepreneurship in public universities in Benue state, Nigeria in items 9-16. The results indicate that student offering entrepreneurship in public universities agreed that library automation influences information retrieval. This decision was reached because the mean values of the item statements ranging from 2.70-3.77 are greater than the criterion mean of 2.50. The cluster mean of 3.23 reveals that the students offering entrepreneurship agreed that library automation influence information retrieval of students. Consequently, the item statements are the perceived influence of library automation on information retrieval by student offering entrepreneurship in public universities in Benue state, Nigeria. Additionally, the standard deviation values of the item statements show that the responses of the entrepreneurship students are very near due to the closeness of the values. The cluster standard deviation of 0.84 reveals small scatter in the responses of the entrepreneurship students.

Discussion of Findings

In line with the findings of the study, the following

The finding of the study revealed that library automation tools influence information search strategies of students offering entrepreneurship in public universities in Benue state, Nigeria. Automation tools are the means to ease and enhance information search strategies for students in entrepreneurship in terms of knowledge and skills required. This agrees with Okiy, (2018) that automation tools are the way to advance database information search strategies in university library and that it is important to enhance students' information search strategies for literacy skills. This disagrees with Aina and Ojo, (2018) who found that many students lacked the advanced search skills needed to fully benefit from the available information resources in library automation. This means that both categories of students agreed that library automation significantly influence information search strategies. In the same vein, Afolabi and Ojo, (2020) discovered that library

automation significantly improves students' information search capability and academic performance. It is true because, through the library automation, students have access to any information resources they seek thereby influencing their information search strategies.

Secondly the study discovered that library automation influence information retrieval among the entrepreneurship students in public university in Benue State Nigeria. This is based on how library automation is used to organize library resources for easy retrieval when needed for use. Aina and Ojo, (2018) found that library automation for information retrieval had influence entrepreneurship students academic achievement outcome. The case of entrepreneurship students in public university is not different, as the study has found that library automation influenced their information retrieval system.

Conclusion

The study found that library automation significantly improves how entrepreneurship students in public universities in Benue State access and use information resources. Automated tools enhance both information searching and retrieval by making access faster, more accurate, and more efficient. Although benefits are clear, challenges such as poor internet, unreliable power supply, and limited digital skills still limit full usage. Addressing these issues will further improve students' learning and research experiences.

Recommendations

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

1. There is also a need to strengthen how students, particularly those studying entrepreneurship, use library automation in their search for information. Regular training sessions, workshops, and awareness programs should be organized to help students understand how to navigate these tools effectively. Librarians can also create simple guides whether in print, video, or online formats that make searching less intimidating and more productive. This will not only build students' confidence but also improve their research and learning outcomes.
2. Another area that deserves attention is information retrieval. Libraries should work towards improving retrieval systems by adopting better cataloguing practices and using indexing methods that make searches more precise and reliable. Universities in Benue State could also consider integrating their systems to ensure that students can access information seamlessly across institutions. This will make the process of retrieving information more efficient and less frustrating for students.

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