



CHALLENGES OF AUTOMATED POLYTECHNIC LIBRARIES ON THE USE OF INFORMATION RESOURCES BY ENTREPRENEURSHIP STUDENTS IN BENUE STATE

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Abstract

The study assesses the Challenges of Automated Polytechnic Libraries on the Use of Information Resources by Entrepreneurship Students in Benue State Nigeria. The study was guided by two research questions. A survey research design was adopted for the study. The population of the study comprised one hundred and twenty (123). Akparan Orshi Polytechnic, Yandev; Benue State Polytechnic Ugbokolo and Federal Polytechnic Wannune. The data collected was analysed using descriptive statistics Mean Score based on four (4) a point Likert scale rating with options ranging from strongly Agree (4) Agree (3), Strongly Disagree (2) and Disagree (1). The findings of this study reveal that a significant number of entrepreneurship students in public polytechnics in Benue State face technological challenges when using automated information resources. The researchers concluded that, the a need for comprehensive measures to improve the state of automated information resources in public polytechnics. The researchers recommended Regular training sessions and workshops should be organized to improve students' computer literacy and familiarize them with automated information resources. This approach will help reduce the fear of technology and ensure that students can effectively use these tools in their studies.

Keywords: Automation Libraries, Entrepreneurship Students and Information Resources

Introduction

Polytechnic libraries play a key role in tertiary education by providing the right information to a broader audience in the new and changing context of a global village. Smith and Johnson, (2017) view a Polytechnic library as a specialized library associated with a polytechnic institution, which primarily focuses on technical and vocational education. These libraries cater for students and staff in the institution and even extend their services to the community. It provides information resources relevant to all fields of study in the institution to support teaching, learning and research. With the current trend and pace of acquiring knowledge, library

automation become necessary to provide access to e-resources.

Library automation is a direct response to the need to provide timely information resources and offer adequate information services. Library automation can be defined as the utilization of computer and other information communication technologies for the provision of better, wider, immediate and relevant information to users at the right time and place. Library automation allow the management of different information resources and operations such as acquisition, cataloguing, circulation and serials (Oladokun & Kolawole, 2018). Lee and Wang (2022) states that modern libraries transform dynamically as they incorporate digital



media, adapt to technological advancements, and reshape their roles in response to user expectations. This explains the rationale behind the constant growth of any library irrespective of location and origin to be free from extinction. It is in view of this that Olubiyo and Awoyemi (2021) stressed that, automation is vital for academic libraries to remain competitive in an increasingly digital world.

Entrepreneurship, as a general course in polytechnics, is designed to provide students with the skills and mindset needed to tackle real-world problems, foster innovation, and develop sustainable ventures. This course helps students explore creative thinking, problem-solving, and risk management, enabling them to adapt to ever-changing economics. Adewale, Akintoye, and Oladipo, (2019) highlight that entrepreneurship education prepares students for self-employment and equips them with the ability to create value in their chosen fields. By focusing on skill acquisition and practical applications, it enables students to transition from theoretical learning to real-world business operations. The researchers also emphasize that this course empowers students to identify opportunities within their environments and apply strategic thinking to develop innovative solutions. The students are expected to effectively utilize the information resources of the polytechnic libraries for the satisfaction of their information needs in the area of interest. Their use of library and information resources is their ability to identify, search, locate, access and make use of the available library information resources to solve their information problems and satisfy their information needs.

The word utilization according to Nyemezu (2022) the term utilization refers to the effective use of resources to achieve desired goals or outcomes. In the context of academic libraries, utilization involves

accessing and applying information resources to meet educational and research needs. It is the extent to which the available resources of the polytechnic libraries are identified, searched, located, accessed and made use of by the students. The use of information resources and services provided by the polytechnic libraries is important because the resources of the polytechnic libraries need to be effectively accessed and utilized. The use of library information resources by entrepreneurship students can be perceived to have been influenced by the aid of automation of the resources. It is against this background that the study intends to find out the challenges faced by entrepreneurship students while using automated polytechnic libraries.

Statement of the Problem

Polytechnic libraries are established to serve the entire polytechnic community. To achieve this, polytechnic libraries provide information resources for users. However, when the resources are not timely provided and disseminated to enhanced access and utilization in the 21st century users who are more sophisticated in their quest for information may not be saved properly and this may affect their information-seeking behavior. Hence the need for recognition of the enormous role of library automation in order to meet the information needs of users in polytechnic libraries.

Automation plays a vital role in enhancing the fulfillment of the Ranganathan first, second, third, fourth and fifth law of librarianship in libraries. In polytechnic libraries, it has caused an obvious change in the way libraries provide information resources for use, every reader his information resource, every information resource its reader, save information user's time and library is a growing organism. These could be achieved through opening access to information resources, connecting users with various resources via browsing and linkages to online catalogues and



websites of other libraries, application of classification schemes in knowledge organization as well as creation of library portals and websites for uploading and hosting information subject guides, online catalogues, databases and the likes thereby saving the time of the user in an automated library.

Despite the importance of library automation, users are been faced with a lot of challenges using the automated library.

It is against this background that the research tends to find out what is hindering them from accessing different library information resources to become good entrepreneurs.

Objectives of the Study:

The main objective of this study is to identify the challenges of automated polytechnic libraries on the use of information resources by entrepreneurship students in Benue State, Nigeria. In specific terms, the study will seek to:

1. Identify the challenges faced by entrepreneurship student when using information resources in an automated polytechnic libraries in Benue State, Nigeria.
2. Identify the strategies to enhance the challenges faced by entrepreneurship students on the use of information resources in an automated polytechnic libraries in Benue State, Nigeria.

Research Questions

This study will be guided by two research questions formulated in line with the objectives of the study

1. What are the challenges faced by entrepreneurship students on the use of information resources in an automated polytechnics libraries in Benue State, Nigeria?
2. What strategies are used to enhance the challenges faced by

entrepreneurship students on the use of information resources in an automated polytechnics libraries in Benue State, Nigeria?

LITERATURE REVIEW

Theoretical Framework

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Fred Davis in 1989, is particularly relevant to understanding the challenges faced by automated polytechnic libraries in Benue State regarding the use of information resources by entrepreneurship students. TAM posits that perceived ease of use and perceived usefulness are critical determinants of technology adoption. In the context of automated library systems, if students perceive the technology as complex or difficult to navigate, they may be less likely to engage with the available resources. Conversely, if they recognize the benefits of using these automated systems—such as easy access to relevant information or efficient search capabilities—they may be more inclined to integrate these tools into their academic routines. Thus, analyzing the perceptions of entrepreneurship students through the lens of TAM can shed light on barriers to effective resource utilization and inform strategies for enhancing their engagement with library services.

2. Information Literacy Framework

The Information Literacy Framework, articulated by the Association of College and Research Libraries (ACRL) in 2000, is essential for examining the relationship between entrepreneurship students and the automated resources provided by polytechnic libraries. Information literacy encompasses the skills necessary for recognizing when information is needed and effectively locating, evaluating, and utilizing that information. In an



increasingly digital and automated library environment, students must be equipped with these competencies to navigate and make the most of the resources available to them. A lack of information literacy can lead to underutilization of automated systems and missed opportunities for academic and entrepreneurial growth. By assessing the information literacy levels of entrepreneurship students, libraries can identify gaps and design targeted training programs that empower students to leverage digital resources more effectively, ultimately enhancing their learning experiences and entrepreneurial capabilities.

Conceptual Framework

Concept of Library Automation

Library automation is the use of computers device to perform the traditional library functions in the library to make information resources available to the users of the library. The functioning of automated library operations and management has been highly productive which make it easier for user to process large quantity of data in these computer age. According to Nayana (2019) Library Automation is the process of automating the traditional functions/activities of libraries and services such as acquisition, cataloguing, circulation, serial control system and other related activities. The current information age demands libraries to adapt to automation services in library operations and services for enhancement of effective and efficient services to the user community. Such automation not only provides considerable support for the library staff for their routine work performance, but also provides facilities like easy operations through database connectivity across geographies using internet.

Concept of Information Resources

Information resources refer to the range of materials and tools available in a library that provide access to information and

knowledge. These resources can include physical items such as books, encyclopedias, dictionaries, newspapers, journals, and other printed materials, as well as electronic resources like databases, e-books, e-journals, multimedia materials, and other digital content. The success of any library depends on its resources and the utilization of its resources (Nwosu & Opara, 2019). Thus, for any polytechnic library to function effectively, there has to be a well-equipped library with vital information resources to meet the needs of library users aimed towards the realization of the overall goals of the parent institution. Information resources exist in several formats such as print and electronic formats. The importance of the use of library information resource e.g. electronic information resources by library users cannot be underestimated. This is because it helps them to access a wide range of information across the globe that can improve their knowledge of entrepreneurship.

Concept of Entrepreneurship

The concept of entrepreneurship students refers to individuals enrolled in academic programs focused on developing the skills, knowledge, and mindsets necessary for initiating and managing new business ventures. These students typically engage in coursework covering topics like business planning, innovation, finance, marketing, and leadership, often complemented by practical experiences such as internships and startup incubators (O'Connor, 2016). Harrison and Leitch, (2019) views the education of entrepreneurship students is designed to foster creativity and critical thinking, encouraging them to identify business opportunities and devise solutions to address market needs. This practical approach is often aligned with experiential learning methodologies, where students apply theoretical knowledge to real-world scenarios, enhancing their problem-solving capabilities. Fayolle and Gailly, (2015) asserts that entrepreneurship education



aims to instill an entrepreneurial mindset, which encompasses qualities such as resilience, adaptability, and risk-taking. Pittaway and Thorpe, 2017 agreed that this mindset is crucial in today's rapidly changing economic landscape, where traditional employment pathways may be more volatile. Hence, the polytechnic library's collection help student to achieve technical and vocational education.

Polytechnic Libraries

A polytechnic library is a specialize library that primarily serve an institution, which focuses on providing education and training in technical and vocational fields. These library support students and faculty members by offering a range of resources tailored to the specific needs. Hernandez, (2020) states that a key characteristic of polytechnic libraries is their emphasis on practical knowledge and real-world applications, which distinguishes them from traditional academic libraries. They frequently collaborate with industry partners to ensure their collections remain relevant and up-to-date, thereby preparing students for the demands of the workforce. Nguyen, (2021) notes that polytechnic libraries utilize modern technologies and digital resources to enhance accessibility and improve user experience. This includes the use of online catalogs, e-books, and digital repositories, which facilitate easier access to information needed for both academic and applied learning. Kumar and Patel, (2023) opines that polytechnic libraries play a crucial role in supporting the educational and research missions of polytechnic institutions by providing targeted resources and services designed to meet the specific needs of technical education.

Challenges Faced by Entrepreneurship Students on the Use of Automated Library Information Resources

Polytechnic libraries importance in education and skill acquisition cannot be

over emphasizes but often confronted with several challenges when using automated information resources. One significant issue is the lack of proper orientation/training, which hinders their ability to effectively utilize these resources. Jones and Brown, (2022) states that many students struggle with navigating complex systems due to inadequate instruction, leading to underutilization of available tools. Doe (2023) additionally, states that technical difficulties such as software malfunctions or system incompatibilities can disrupt access and usage, exacerbating frustrations. Limited access to high-quality resources and databases also impedes their research and learning experiences. Furthermore, the user interfaces of many automated systems can be non-intuitive, making it challenging for students to find and use information efficiently (Taylor, 2019). Lee, (2021) notes that addressing these issues requires comprehensive strategies to improve training, system reliability, and user interface design.

Mishra, Thakur and Singh (2015) views that one of the most difficult challenges for library automation is fund. The limited resources are the most significant barrier to any innovation in poor countries. Most companies and institutions cannot afford the early costs of setting up adequate and relevant computer system. In general, a stronger financial resource is needed for purchasing hardware, software and other necessities to run every successful and operating operation. For a successful automation process, the responsibility of library automation committee is to consider the cost of library automation and development costs in yearly maintenance plans.

Another challenge is phobia among staffs and students working in an automated environment on the new software and hardware. Some staff were afraid of working with computers due to lack of competence in computer skills. While students on the other hand due to anxieties



students may experience (1) technophobia—that is fear of computers, self-checkout machines or digital catalogues. (2) infophobia: fear of online databases, digital resources or library website. (3) cyberphobia: fear of online database, digital resources or library websites.

Strategies Use to Enhance the Challenges Faced by Entrepreneurship Students on the Use of Automated Library Information Resources

Address the challenges faced by entrepreneurship students in using automated library information resources, several strategies can be employed

1. **Training and Familiarization:** One of the most impactful ways to improve student use of automated libraries is to implement continuous training programs. These should begin early in the academic year and continue periodically, helping students become comfortable with the technology. Providing both technical skill-building workshops and guidance on how to effectively use library resources will ensure that students feel confident in navigating these systems (Smith and Johnson, 2019; Ahmad and Ibrahim, 2021).
2. **Ongoing System Maintenance and Updates:** Automated systems need regular maintenance to function smoothly. Frequent updates to both hardware and software ensure that the library technology remains user-friendly and efficient. Addressing these technical challenges proactively can minimize downtime and provide students with uninterrupted access to important resources (Brown and Lee, 2020).
3. **Simplifying the User Experience:** An intuitive and user-friendly interface is crucial to making sure that students can quickly and easily

find the information they need. By redesigning systems with simplicity in mind, students will be less likely to feel overwhelmed and more likely to use library resources confidently (Miller, 2021).

4. **Relevant and Accessible Resources:** Libraries should work closely with faculty to ensure that the resources offered are directly aligned with students' academic and research needs, especially for entrepreneurship students. Curating a collection of relevant, high-quality materials can help students access the best resources more efficiently (Chukwu and Bello, 2024; Fish and Gorman, 2023).
5. **Support and Assistance:** Having support readily available is key to addressing any technical issues students encounter. Libraries should provide easy access to help through dedicated helpdesks, live chat support, and staff who are trained to assist with common challenges. This kind of assistance can make students feel more comfortable using automated systems, knowing they have guidance when needed (Lee and Zhang, 2023; Nicolas and Opoku, 2023).
6. **Embedding Library Use in the Curriculum:** One effective way to encourage library resource usage is by integrating these tools into the coursework. By incorporating library databases into assignments and encouraging students to use automated systems for their research, instructors can increase engagement with these resources and familiarize students with the tools they'll need to succeed (Thomas, Davies, Smith, and Williams 2024).
7. **Increasing Funding for Library Services:** Adequate funding is necessary to keep library



technology up-to-date and to improve services. Increased financial support can help ensure that the library has the latest tools, better resources, and the infrastructure needed to provide a seamless learning experience for students (Davis, 2023).

By implementing these strategies, polytechnics can create a more effective and user-friendly library experience, helping students overcome technological challenges and better utilize automated resources for their studies and future entrepreneurial ventures.

Methodology

This work employs the used of Survey design. Purposive technique was used to select students from three polytechnics in Benue state. The selection of these institutions was based on the fact that they were public polytechnics and Federal Government of Nigeria are making more Response Rate

emphasis on entrepreneurship education for Skill acquisition so that graduating students will be self-reliance than depending on white collar job. The instrument used for collection of data was the questionnaire which was administered by the researcher and research assistant. Simple random Sampling technique was used to administered one hundred and fifth (150) copies of the questionnaire with fifty copies each for the representative institution. One hundred and twenty-two (123) questionnaire were duly completed and returned. The date collected was analysed using descriptive statistics Mean Score based on four (4) point Likert scale scale rating with option ranging from strongly Agree (4) Agree (3), Strongly Disagree (2) and Disagree (1). The benchmark used was SA=4, A=3, D=2, SD=1 therefore the decision was calculated as: $4 + 3 + 2 + 1 / 4 = 2.5$. Hence any Mean of 2.5 and above is "agreed while these below 2.5 were considered 'disagree'

Table 1. This indicates the response rate of each of the institution

S/N	INSTITUTION	RESPONDENT
1	Akparan Orshi Polytechnic, Yandev	41 (33.3%)
2	Benue state Polytechnic Ugbokolo	39 (31.7%)
3	Federal Polytechnic wannune	43 (31.9%)

Table 1, show the population of the study which was randomly Pick among the students of institution of study. Akparan Orshi polytechnic Yandev had 41 respondents, Banue state Polytechnic, Ugbokolo had 39 respondent and Federal polytechnic Wannune has 43 respondents respectively, all these total one hundred, and twenty-three (123)

Data Presentation and Analysis

Table 1: Challenges faced by entrepreneurship students on the use of information resources in an automated library

S/N	ITEMS	SA	A	D	SD	MEAN
1	Most of the students are in experience with computers operation	43	40	25	15	2.9
2	Inadequate instruction to guide the students	50	31	20	22	2.8
3	Lack of orientation and training for the users	32	51	19	21	2.7
4	Inbuilt fear of technology or automated system by student	28	31	33	21	2.4



5	The library technology/ computers are outdated	40	30	25	28	2.6
6	Always experience electric power fluctuation	51	40	22	10	3.1
7	The rate of fast pace of change in technology affect the students	49	44	21	9	3.1
8	Student fear for information overload or navigating complex database	29	54	30	10	2.8
9	There is inadequate computers terminal for students	46	57	12	7	3.1
10	Poor design workshop	22	30	41	30	2.3
11	Lack of proper policy guiding the use of library	36	40	37	10	2.8
12	Poor funding of the library	41	43	30	9	2.9

Table 1 above identifies twelve (12) items on the challenges faced by entrepreneurship students using automated library information resources. Observation from the table showed the respondents were clearly of the opinions that student’s inexperience with computers couple with inadequate instruction to guide, lack of orientation and training for the students (user) of the library. This is indicated in items 1,2 and 3 which was represented with mean of 2.9, 2.8 and 2.7 respectively. Item did not agree that inbuilt fear of technology or automated System by students in a challenge the indication show mean of 2.4 which a less. Item 5, 6 and 7 showed that most of the library Computers are outdated, also experience electric power fluctuation and fast pace of change in technology, this was indicated by mean of 2.6, 3.1 and 3.1 respectively.

Item 8 and 9 shows that students fear for information overload or navigating complex database and inadequate Computers terminal for students this was represented by mean of 2.8 and 3.1 respectively Item 10 indicated that poor design workshop have less mean of 2.3 which means they are satisfied with the workshop design. While item 11 and 12 indicated that there is no proper policy in place for guiding the use of automated library, also poor funding is another challenge for libraries, this was indicated with mean of 2.8 and 2.9 respectively.



Table 2: Strategies for enhancing the challenges faced by entrepreneurship students on the use of information resources in automated libraries in Benue State, Nigeria.

S/N	Items	SA	A	D	SD	Mean
1.	The provision of more comprehensive training on automated information resources would improve usage.	35	48	26	14	2.8
2.	Upgrading software and hardware in the library would enhance the effectiveness of automated information resources.	27	49	38	9	2.9
3.	Increasing the availability of online support and resources would help students overcome challenges with automated systems.	30	43	29	21	2.6
4.	Providing personalized assistance from library staff would address most issues faced by students.	26	37	40	40	2.5
5.	Regular updates and maintenance of the automated systems would improve their usability.	40	42	21	20	2.8
6.	Integration of automated resources with the curriculum would make these tools more relevant and useful.	28	36	31	28	2.5
7.	Establishing regular feedback mechanisms for students to report issues and suggest improvements would be beneficial.	35	37	28	23	2.6
8.	Enhancing the user interface of automated systems would make them more accessible to students.	36	39	21	27	2.6
9.	Increasing funding and resources allocated for automated systems would lead to better support and improvements.	31	47	30	15	2.7
10.	Conducting workshops and seminars to educate students about the effective use of automated resources would be effective.	42	42	19	20	2.8

Table 2 Opinion of respondent on strategies for enhancing the challenges forced by entrepreneurship students on the use of automated library information resources.

The strategies for enhancing the challenges faced by user on using information resources in an automated library indicated nine (9) items in table 2. Item 1, 2 and 3 in table 2 stipulated that provision for more entrepreneurship orientation and training of user, also upgrading software and hardware in the library and increasing the availability of online support and resources, they have the mean of 2.8, 2.9 and 2.6 respectively. Item 4, 5 and 6 shows that there is need for library staff to provide personal assistance to users when they are faced with challenge of using the library. It shows that regular update and

maintenance of the automated system improve their usability, it also considered that integrations of customized resources with the curriculum would make these tools more relevant and useful, this was indicated by mean of 2.5, 2.8 and 2.5 respectively. In the strategies Table 2, item 7 and 8 shows that establishing regular feedback mechanisms for students to report issues and suggest improvements would be beneficial, and enhancing the user interface of automated systems would make them accessible to students. The mean for the above shows 2.6 and 2.6 respectively. Lastly, item 9 and 10 shows



that increase in funding and resources allocation for automated system would sustain the services render, also conducting workshop and seminars to educate students about the effective use of automated resources would improve their knowledge to automated library. These was represented by means of 2.7 and 2.8.

Discussions

The finding of this study was based on two questions formulated.

Research Question 1 investigated about the challenges faced by entrepreneurship students when using information resources in an automated library. From the analysis of the research question, it was observed that student's inexperience with computers couple with inadequate instruction to guide, lack of orientation and training of students (users) to use the library. Jone and Brown (2022) state that many students struggle with navigating complex System due to inadequate instruction, leading to underutilization of available tools. The findings of this study also revealed that many students have inbuilt fear of technology which limit their ability to engage with the system effectively. In addition, outdated library technology and frequent power fluctuations further hinder their learning experience. Doe (2023) posited those technical difficulties such as software malfunctions or system incompatibilities can disrupt access and usage, exacerbating frustrations. From the analysis it can be seen that another challenge is lack of adequate funding of the libraries. Adesina (2023) opines that library management of automated library is fund intensive. Without the support of management, it is difficult to obtain funding for maintenance and operation.

Research Question 2 is on the strategies for enhancing the challenges faced by entrepreneurship students in an automated library. Among the strategies it well stipulated provision of orientation and

instruction enable the students use the library information resources. Smith and Johnson (2019) noted that enhancing orientation, instruction and training programme is crucial, as comprehensive instruction on using these systems can significantly improve students of proficiency and confidence. Also, the data analysis indicated that user interface, personalize assistance, regular updates and maintenance of automated system and regular funding of library would improve usability, Miller (2021) stated that improving user interface design to make systems more intuitive can help students navigate these took more effective. Additionally Increasing the availability of high-quality, relevant resources within the systems can enrich the research experience entrepreneurship students

Conclusions

This study highlights the significant problem that entrepreneurship students in Benue State polytechnics face when engaging with automated library systems. Many students struggle with limited experience in using computer systems, insufficient training, and outdated technology. While these challenges pose barriers, the findings suggest that students are eager for improvements, particularly in terms of comprehensive training, up-to-date technology, and more user-centered support from library staff. Addressing these issues is essential, as they align with the broader goal of empowering students with the skills and knowledge necessary for self-reliance in an increasingly digital world.

Recommendations

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

Comprehensive Training and Orientation: Polytechnics should implement ongoing training programs to enhance student's



computer literacy and ensure they are comfortable using automated library systems. Regular workshops and orientation sessions will help students stay proficient in utilizing these resources.

Upgrading Technology and Infrastructure: Polytechnics should prioritize the modernization of their library systems, including upgrading hardware and increasing the number of terminals. Stable internet connectivity should also be ensured to support the increasing demand for online resources.

Increased Funding for Libraries: There should be a focus on increasing financial support for libraries. This funding will enable libraries to acquire necessary tools, improve infrastructure, and maintain automated systems, ensuring a more seamless and effective learning experience for students.

These recommendations directly address the key challenges faced by students and have the potential to significantly improve their ability to use automated information resources effectively.

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