

PERCEIVED IMPACT OF INFORMATION TECHNOLOGY ON MANAGEMENT OF LIBRARY RECORDS IN UNIVERSITY LIBRARIES IN BENUE STATE, NIGERIA

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Abstract

The study investigated the perceived impact of information technology (IT) on management of library records in university libraries in Benue State, Nigeria. The study was guided by three research questions. Hypothesis was formulated and tested at 0.05 level of significance. The study adopted survey research design. The population of the study was 245 library staff in the four universities in Benue State. Census sampling techniques was used for the study. The instruments for data collection were observation checklist and a self-developed questionnaire titled: "Perceived Impact of Information Technology on Management of Library Records Questionnaire" (PIITMLRQ). Data collected were analyzed using descriptive statistics of frequency counts, percentages, means and standard deviations to answer the research questions and a non-parametric statistical tool of chi-square was used to test the null hypotheses at 0.05 level of significance. Findings revealed that, information technologies for management of library records were available and had great impact on their management for effective service delivery except for block chain technology and Radio frequency Identification (RFID) which were not available in university libraries in Benue. The study also found that, library records for management in university libraries that ITs have impacted for effective service were also available.

Keywords: *University Library, Information technology, Management, Library Record management, Service delivery.*

Introduction

Information Technology (IT) plays a paramount role in the developmental progress of any organization, nation, agency or information system at all spheres of life including library with the aim of contributing maximally. As a result, necessitated the incorporation of IT in the management of library records. Information technology is one of the most critical factors that would drive the success of effectively managing library records in university libraries. The importance of IT in the management of library records cannot be downplayed owing up to the proliferation of information, increasing demands of library services and the diverse change in the services demanded by users: as such traditional means or method of handling records has to pave way for recent trends in the use of computers and associated technologies to manage records. Akporhonor and Iwhiwhu in Enakrire (2020) points out that, the management of records is not an easy task, hence the incorporation of management programme and tools, such as training and ITs. This entails that; Librarians should adopt IT for effective library management. Aba and Idoko (2016) states that, Librarians and information professionals of the future must be equipped with a wide range of personal and transferable skills in order to manage the environment in which they work. Librarians' possession of information technology (IT), management and interpersonal skills will make them more proactive and effective managers of networked resources and services.

Information Technology (IT) encompasses all the electronic apparatus with computer components such as hardware, software and storage that are used in the

collection, storage, processing and dissemination of information. According to Fagbe et al. (2015) IT in libraries comprises of all the electronic infrastructure and facilities employed by libraries to improve and facilitate the sharing of common resources especially the library network. Deducing from the above submissions, information technology can be defined as all the electronic gadgets and equipment that are eminent in the information handling processes in the library which include: generation, processing, storage and dissemination to facilitate easy retrieval, access and effective services in university libraries.

University libraries are regarded as the major information providing system that are established primarily to supports teaching, learning and research in the university environment to enhance service delivery. Eserada and Okolo (2019) characterized a university library as a system created, run, and supported by a university to support its facilities, staff, and students' informational, academic, and research needs. University libraries are situated in universities whose collections are basically for all the faculties and departments in the university (Anyanwu, 2018). Primarily, university libraries exist to provide varieties of services that will develop users and enable them to be conversant with current trends in the 21st century which has to do with the use of information technologies. University libraries work around the complexity of service delivery systems by developing creative ways to make the clients part of the delivery system as engaged participants in the system itself.

Service delivery systems in university libraries include staff that deals directly with students and those that work in the back office that never directly interact with

students. As such, the structural service delivery mechanisms need to reflect the standards of the libraries and meet the needs of students as much as possible. The service delivery system has to meet the service specification by following the philosophy of the library. Anyanwu (2018) asserts that, improved service delivery in academic library is targeted at: Promotion of research and provide research materials like bibliographies, biographies glossaries and abstracts to students, lecturers and researchers, promotion of learning amongst students and teachers by providing circular and reference materials such as dictionaries, encyclopedias, manuals, atlases, gazetteers, monographs, creation of awareness of latest developments in science and technologies and others fields of learning to the university community, giving orientation, etiquette on how to source for materials in the library which is not common to patrons, especially new students. In university libraries, all the efforts of library staff are directed towards satisfying the needs of the users which calls for effective management of library records.

Management is the art of bringing together human and material resources through planning, organizing, controlling, directing, and coordinating the library service delivery towards accomplishing its institutional objectives. According to Drucker in Mohta (2022) management is defined as "the process by means of which the purpose and objectives of a particular human group are determined, clarified and effectuated". Management is essential in any type of organization, be it church, school or business. Hymavathi, (2016) view management as the use of statistical sampling and combinatorial optimization methods to solve problems in quality control, allocation of

resources, logistics, project scheduling, labor and machine scheduling, to assembly line balancing. Problem solving in the organization has to do with effective record keeping for easy and prompt decision making. If library records are not managed effectively, it may not be possible to render services, to account for the collections the library has, what has happened in the past or to make decisions about the future. Records are vital cooperate asset and are required to provide evidence of actions and decisions and there is great justification for their management.

Record management is crucial to all organizations, including the university libraries. According to Iaana and Ugah (2020) records management is the systemic control of all records from their creation or receipt, through their processing, distribution, organization, storage and retrieval to their ultimate disposition. Record management encompasses all records keeping pre-requisites and policies that allow an organization or university libraries to establish and maintain control over information flow and administrative operations. Hence, the primary function of records management is to facilitate free flow of records throughout an organization, to ensure that information is available rapidly where and when it is needed and for this to be achieved an efficient and effective record management programme is needed (Iaana & Ugah, 2020). This is also applicable in managing library record, management include activities like classifying, storing, retrieving, security, archival presentation or even distribution of such records. The records consist of both those in paper/print and electronic format which can be accessed with the help of technological facilities.

In the view of Ratheeswari (2018), technological tools have improved university libraries in various ways and different types of technological tools have emerged to aid the services rendered. The adoption of IT in the management of records in university libraries is synonymous to putting a round peg in a round hole as IT has impacted library service provision. Provision of effective services requires libraries to continue to undertake the acquisition, storage, and dissemination of information in all forms to users in order to satisfy their needs. Also, effective library service should be timely in delivery, meet identified needs, have ease of use and be courteously delivered (Adegun, Oyewumi, Oladapo & Sobalaje, 2015). If library records are properly managed and utilized by librarians in university libraries for effective decision and policy formulation it will go a long way to enhance the quality of services rendered in universities in Benue State, Nigeria.

Benue State is located in North Central, Nigeria with four universities namely Joseph Sarwuan Tarka University, Makurdi; Federal University of Health Sciences, Otuokpo; Rev. Fr. Moses Orshio Adausu University, Makurdi and University of Mkar, Mkar which are grouped under federal, state and private respectively. These universities have functional IT facilities that often aid in the management of library records to ensure effective service to users. However, the researcher through literatures, Journal articles and personal observation shows that, there is inaccurate generation of records, inadequate storage facilities, delays in information dissemination and inadequate technological facilities to enhance effective service delivery. It is against this background that the researcher is set to find out the perceived impact of

Information Technology on management of library records for effective service delivery in university libraries in Benue state, Nigeria. It is against this backdrop that the study seeks to find out the perceived impact of information technology in managing library records in universities in Benue State.

Research Questions

The study addresses the following research questions:

1. What are the types of ITs available for effective record management in university libraries in Benue state?
2. What are the types of library records that are available for management in university libraries that ITs have impacted in Benue state?
3. What is the perceived impact of ITs available in university libraries on the management of library records in Benue State?

Hypothesis

One null hypothesis was formulated and tested at 0.05 level of significance:

1. Information technology has no significant impact on management of library records in university libraries in Benue state.

Literature Review

Information technology play a crucial role in the management of library records. Chidobi (2015) who examined the extent of application of ICT in management of administrative and personnel records in public universities in Enugu state, Nigeria specifically identified different forms of IT facilities that can be used to manage record to include: websites, internet, scanners and CD ROM. Enakrire (2020) observes that,

through the effort of newer technologies, such as, office systems (computers), scanners, e-mail systems, database management systems, web technology systems, to mention a few, records has been well managed and preserved in contemporary times. In another study by Asogwa, Ezeani and Asogwa (2021) on the “Status of Electronic records management (E-RM) in African universities revealed that ICT facilities were available in Nigerian federal university libraries but the manner and extent of utilization, planning, organizing, re-skilling the staff, budgetary provisions and adoption of international best practices for e-records was low. The availability of information technology has reorganized library routines, library practice that was done by hand is now being handled with ITs (Ubogu, 2019). Similarly, Onuoha and Obialor (2015) agrees that, IT has adequately impacted in library operations and routines, especially in areas of creating digital libraries (be it in virtual format or on CD-ROM) in order to make access to information or document faster and easier for users at lesser cost than it used to be when using the traditional manual system.

Overall, the literature indicates the impact of information technology on the management of records, yet there is limited empirical research in Benue State. While studies acknowledge the application of information technology and the forms of IT facilities, few investigate the impact of IT on the management of library records. This gap underscores the need to examine the impact of information technology on the management of library records in universities.

Methodology

The study adopted survey research design. The population of the study was 245 library staff in the study area. The research employed census sampling technique thereby sampling all the population since it was small and could be relatively handled by the researcher. The instrument employed for data collection was a self-structured questionnaire. The instrument for data collection was submitted to three experts for validation and their comments and suggestions were used to restructure the instrument. The instrument was also trial tested and Cronbach Alpha method was used to determine the internal consistency of the questionnaire items. A reliability coefficient of 0.83 was obtained. Data for the study was collected with the help of 4 research assistants who were staff of the libraries of the four institutions sampled. Data collected were analysed using frequency count, percentages, mean and standard deviation to answer the research questions. Chi-square was further be used to test the hypothesis at 0.05 level of significance.

Results and Discussion

The results of the study are presented according to research questions answered below:

Research Question 1: What are the types of ITs available for effective record management in university libraries in Benue state?

Table 1
Frequency and Percentages of the types of ITs available for effective record management in university libraries in Benue State

S/N	Item	Available	% Available	Not available	% not available
1	Printing technology	200	90.1	22	9.9
2	Radio Frequency	80	36	142	64

	Identification (RFID)				
3	Reprographic machine	122	55	100	45
4	E-mail	220	99.1	2	0.9
5	Compact Disk-Read Only Memory (CD-ROM)	221	99.5	1	0.5
6	Websites	195	88	27	12
7	Scanner	220	99.1	2	0.9
8	Computer	219	99	3	1
9	Internet	200	90.1	22	9.9
10	Block Chain technology	33	15	189	85
	Total	187	85	35	15

Source: Field Survey (2025).

Table 1 shows the types of Information Technologies available for record management for effective service delivery in university libraries in Benue state, Nigeria in frequencies and percentages. The table revealed that, 8 items (printing technology, reprographic machine, E-mail, CD-ROM, websites, scanner, computer and internet) have percentages that were above 50% and considered as Information Technologies available for effective record management for effective service delivery in these university libraries while 2 items (RFID and block chain technology) with percentages less than 50% were considered as Information Technologies that are not available for effective record management for effective service delivery in these university libraries. This finding agrees with the findings of Chidobi (2015) who examined the 'extent of application of ICT in management of administrative and personnel records in public universities in Enugu state, Nigeria' and specifically identified different forms of IT facilities that can be used to manage record to include: websites, internet, scanners and CD ROM. The findings also conforms with the findings of Enakrire (2020) who observes that, through the effort of newer technologies, such as, office systems (computers), scanners, e-mail systems, database management systems, web technology systems, to

mention a few, records has been well managed and preserved in contemporary times. In the same vein, Idris (2017) enumerated IT facilities that are used for electronic records creation, management and preservation to include computers, software, printers, scanners, photocopiers, digital cameras, air conditioners, telephones, Internet connectivity, cassette and tape recorders, Decision support system (DSS)

Research Question 2: What are the types of library records that are available for management in university libraries that ITs have impacted for effective service delivery in Benue state?

Table 2

Frequency and Percentages of library records that are available for management in university libraries in Benue State

S/N	Item	Available	% Available	Not available	% not available
11	Registration of library users' records	222	100	0	0
12	Library information resources statistics records	199	90	23	10
13	Library Staff/Students daily statistic records	219	99	3	1
14	Charging and discharging of information resources	209	94	13	6
15	Records acquisition of information resources	220	99.1	2	0.9
16	Memos and correspondence	217	98	5	2
17	Selection and ordering of library resources records	216	97	6	3
18	Accession records	210	94	12	6
19	Inter-library loan records	215	97	7	3
20	Records concerning library development, policy e.g proposals, proceedings of library	202	91	20	9

committee meetings, annual reports etc				
Total	213	96	9	4

Source: Field Survey (2025).

Table 2 shows the types of library records that are available for management in university libraries that ITs have impacted for effective service delivery in Benue state, Nigeria in frequencies and percentages. The table above revealed that, 10 of the items (items 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10) have percentages that were above 50% and considered as types of library records available for management in university libraries that ITs have impacted for effective service delivery. The result indicates that 100% of library records are available specifically library records such as registration of library users’ records, library information resources statistics records, library Staff/Students daily statistic records, charging and discharging of information resources, records acquisition of information resources and Inter-library loan records are available, reflecting the robust provision for an automated library system. Records concerning library development, policy e.g proposals, proceedings of library committee meetings, annual reports considered available for management in university libraries that ITs have impacted for effective service delivery. This finding agrees with the findings of Galadima (2023) which submits that, university libraries generate library records for effective management purposes.

Research Question 3: what is the perceived impact of ITs available in university libraries on the management of library records for effective service delivery in Benue state?

Table 3

Mean and Standard Deviation of perceived impact of ITs available on the management of library records

S/N	Item	VHI	HI	LI	NI	\bar{x}	Σ	Decision
21	IT has impact on generation of library records	100	102	12	8	3.39	0.61	HI
22	IT has impact on creation of library records	95	110	3	14	3.28	0.78	HI
23	IT has impact on preservation of library records	144	50	20	8	3.48	0.80	HI
24	IT has impact on conservation of library records	150	60	6	6	3.59	0.67	HI
25	IT has impact on organization of library records	125	80	7	10	2.95	0.78	HI
26	IT has impact on processing of library records	95	80	27	20	3.21	0.88	HI
27	IT has impact on acquisition of library records	110	85	17	10	3.32	0.80	HI
28	IT has impact on keeping of library user statistics	107	97	9	9	3.31	0.73	HI
29	IT has impact on dissemination of library records	112	90	9	11	3.33	0.81	HI
30	IT has impact on speedily registration of library users	122	85	11	4	3.46	0.67	HI
	Cluster Mean					3.37	0.75	High Impact

Source: Field Survey (2025).

Table 3 shows the perceived impact of ITs available in university libraries on the management of library records for effective service delivery in Benue state. The result as indicated on the table revealed that all the 10 items (generation of library records,

creation of library records, preservation of library records, conservation of library records, organization of library records, processing of library records, acquisition, keeping of library user statistics, dissemination and registration of library users) with mean scores ranging from 3.21 – 3.59 which were above the bench mark of 2.50 were agreed that, ITs have impacted the management of library records for effective service delivery in university libraries. The table also revealed high standard deviation values ranging from 0.67– 0.88 which shows that, respondents were homogenous in their responses. The grand mean of all the items was revealed to be 3.37 and SD 0.75. This implies that, all the items agreed that, ITs have impacted the management of library records for effective service delivery in university libraries in Benue State. This finding agrees with the findings of Ubogu (2019) which the findings affirms that, these days information technology has reorganized library routines, library practice that was done by hand is now being handled with ITs. The researcher further reveals that, ITs have change the system of acquisition, technical processing and circulation activities in library in a way that library patrons can get entry to their information requirement with no great effort. The study is also in consonance with Onuoha and Obialor (2015) which the findings discloses that, IT has adequately impacted in library operations and routines, especially in areas of creating digital libraries (be it in virtual format or on CD-ROM) in order to make access to information or document faster and easier for users at lesser cost than it used to be when using the traditional manual system.

Hypothesis: Information technology has no significant impact on management of library records for effective service delivery in university libraries in Benue state.

Table 4

Chi-Square Analysis of respondent's ratings on Information technology and its impact on management of library records for effective service delivery in university libraries in Benue state

Items	Fo	Fe	x ² Cal.	x ² Crit.	Df	Level of sign.	P	Decision
NI	10	222.0						
LI	13	222.0	1052.104 ^a	9.3	23	0.05	.00	Sign.
HI	83	222.0						
VHI	116	222.0						

Source: Fieldwork (2025).

Table 4 shows that the calculated value is greater than the table value: [x^2 cal.(23), 1052.106 > 9.3; $P < .05$]. This analysis shows that the null hypothesis which states that, Information technology has no significant impact on management of library records for effective service delivery in university libraries in Benue state is not accepted. This result implies that availability of Information technology has a significant impact on the management of library records for effective service delivery in university libraries in Benue state.

Availability of Information technology has no significant impact on management of library records for effective service delivery in university libraries in Benue state was not accepted. This result implies that availability of Information technology has a significant impact on management of library records for effective service delivery in university libraries in Benue state.

Recommendations

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

1. University Management should continue providing adequate and relevant information technologies that would enhance the management of library records for effective service delivery such as block chain technology and Radio Frequency Identification (RFID).
2. Library staffs should critically analyze the traditional method of handling records and the use of ITs to ascertain the one best way of managing records.
3. The University Management should provide high-speed band width internet services, continuous training programmes on newer information technologies skills such as block chain, cloud computing, institutional support, research grant/funds, periodic research training for library staff on data analysis and cyber security.

Conclusion

This study concluded that, the availability of information technologies to a high extent impacts record management for effective service delivery in universities in Benue State. However, there were challenges that encountered and strategies advanced to counter such challenges. The findings of this study revealed that, Library staff in Universities in Benue State, Nigeria highly utilized the available information technologies for record management to enhance service delivery was considered high to some extent. This was due to the fact that, university libraries in Benue incorporates the available information technologies for record management for effective service delivery.

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