

Information and Communication Technology Skills for Information Science Professionals and its Profitability to Library Services Delivery in Federal Universities in South-South Nigeria

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ABSTRACT

The study examines the various Information and Communication Technology (ICT) skills for information science professional and its profitability to the librarianship profession for service delivery in Federal University in South - South Nigeria. The study was a descriptive survey research. The population for the study was library staff of the federal university in South- South Nigeria. A rating scale was designed to fulfil the stated objectives and was also used to collect data for the study. Analysis for the study was done using mean rating and standard deviation. Findings revealed that information science professionals in Federal University libraries in South-South Nigeria basically lack ICT management skills. The study further reveals that majority of the respondents agrees to a very large extent that the profit derived from ICT skills are enormous. Further findings also reveal that an ICT facility for rendering library services is a welcome development.

KEYWORDS: University Library, Profitability, ICT facilities, Databases Skills and Social Media.

INTRODUCTION

Rendering library services across the globe has been a daily routine activities which enhances the administration of the library to thrive. This daily activities put the academic library at the forefront of its developmental stride in the process of achieving the purpose of its establishment to their various parents institutions. Library services across the world have continue to metamorphose from its traditional analogue method due to the introduction of different ICT facilities to a more advance way of achieving its goals and objectives. According Mayega (2008), library services was defined in two broad categories which are library public user services and library technical user services. He

defined library public user services to refer to the circulation, bibliographic instructions, distance learning, government documentation, reference and special collection, while he defined the library information user services as a service that focuses on procedures and operations of maintaining, developing and supporting library collection and services behind the scene such as acquisition, cataloguing, classification, inter library loan, document delivery and serial systems.

The introduction of digital techniques in library services delivery has gone a long way to improve the administrative effect and efficiency derived from its application. Information and Communication Technology (ICT) which is a major technological advancement tool that has beautify the world method of achieving result within a short space of time have enhanced and produced quality library services. The term ICT has no single accepted definition; this is because the concepts, methods of its applications are constantly changing almost on daily basis. However, for the sake of this study we shall proffer an acceptable definition to enable us achieve results in this study. Information and Communication Technology (ICT) according to UNESCO (2008) as cited by Ratheeswari (2018), it is a scientific, technological and engineering discipline and management technique used in handling information, its application and association with social, economic and cultural matters and according to IGI Global (2021) ICT is an umbrella term that includes all technologies for the communication of information: any medium to record information (whether paper, pen, magnetic disk/ tape, optical disks - CD/DVD, flash memory etc.); and also technology for broadcasting information - radio, television.; any technology for communicating through voice and sound or images- microphone, camera, loudspeaker, telephone to cellular phones. To this end one can say it's a technology that has come to enhance job performances and services delivery.

Statement of problems

Various ICT tools are been introduced to the market on daily bases and skills for its utilization are of paramount importance to achieve efficient services delivery in the library profession, but the impact of these skills coupled with its profitability seems not been felt in information service delivery in federal university libraries in South -South Nigeria. The technical skills to handle these various ICT facilities by information science professionals and the dividends of its applicability seems not perceptible. It is against this framework that it becomes imperative to investigate the ICT skills, for information science professionals and its profitability in library services delivery in federal universities in South -South Nigeria.

OBJECTIVE OF THE STUDY

Specifically the study guided by the following objectives:

- Determine the basic ICT management skills required for library services delivery in federal universities in South-South Nigeria.
- Determine the profitability of ICT skills for information science professional in library services delivery in federal universities in S/S Nigeria.
- Determine the profitability of ICT facilities to library services delivery in federal universities in S/S Nigeria.

Research Questions

The following research questions guided the study

- RQ1. What are the extent of the basic ICT management skills required for library services delivery in federal universities in South-South Nigeria?
- RQ2. What are the extent of the profitability of ICT skills to information science professional in library services delivery in federal universities in south-south Nigeria?
- RQ3. What are the extent of the profitability of ICT facilities in rendering library services delivery in federal universities in south-south Nigeria?

REVIEW OF RELATED LITERATURE

As these era of technological advancement continues to progress and metamorphose, information acquisition and information dissemination which are two relevant concept in the librarianship profession have contributed immensely to national development. The impact of the technological changes in the methods of acquiring information resource materials and how these information resource materials are disseminated to users in the library, calls for total embracement, as no profession is willing to be left lagging behind. To achieve this feat, the professional librarians must be abreast with these digital technology advancement in other to sustain their identity as not just information providers but as ally to national development. The series of thriving stories of ICT application to modern day libraries across the globe goes a long way to depend on the literacy digital skills possess by professional librarians. Claro, Preiss, San Martín, Jara, Hinostrroza, Valenzuela, Cortes and Nussbaum (2012), postulated that ICT skills are those skills that encompasses the entire ability to solve problems of information, communication and knowledge technology in the digital environment. As a professional librarians, possessing these ICT skills for effective library service delivery shall form the crux of this article.

Diverse school of thoughts have categorized ICT skills into operational, formal, strategic, basic, advance, specialist, etc as ways through which the application of ICT skills can be achieved both to users and practitioners. However, in this study, ICT skills shall be highlighted under the following headings: database management skill, networking skills, cloud computing skills, virtual reference services skills, open access resource management skills, metadata skills, web design skills, standard skill for managing library software, such as MARC 21, Z39.50, Dublin Core etc.

Database Management Skills: A database is a collection or grouping of relevant related information designed to describe the activities of an organizations. This processed information serves as the base upon which you can acquire and disseminate services for further process. As a librarian intending to impact the nearest future with modern method of information service delivery, this skill is of paramount importance to the librarianship profession. Techopedia (2020) defines a database management system (DBMS) as a software package designed to define, manipulate, retrieve and manage data in a database. A DBMS generally manipulates the data itself, the data format, field names, record structure and file structure. Utilizing and applying all these database management features by the information professional makes service delivery in modern day librarianship very exceptional.

Networking skills: In this period of borderless professions, with individuals making everyday career moves and demanding to meet up with daily activities, networking is seen as a critical competency. The term 'networks' is indisputably ambiguous and certainly flexible, while its meaning changes extensively, subject to its usage and

application. Pelgrum (2006) define networking skills as the ability to appropriately use digital tools and facility to identify, access, manage, integrate, value, analyze and synthesize digital resources, construct new knowledge, create media expression and communicate with others in the context of specific life situations. However, According to Suzanne and Monica (2008), they defined networking as a key human capital skill that is unique in its ability to increase an individual's social capital. However, networking in this context refers to a group of computers and other devices connected in some ways so as to be able to exchange data. Eze, Okorafor, and Obi (2013) listed familiarity with the etiquette of text messaging, electronic mail and chat rooms as part of the networking skills required by information professional in providing information service delivery. The skills as required by information professional involve the application of basic technological peripherals in the achievement of set objectives in any organization as the case may be for information services delivery.

Cloud Computing Skills: This is another viable information technology area every information professional should be knowledgeable about. Foster, et al (2018), defines cloud computing as services that offers diverse range of scalable and redundant service deployment models, which includes Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), Software-as-a-Service (SaaS), and Containers-as-a-Service (CaaS). This technology involves synchronizing of data and information between all kinds of electronic devices, to co-work with contemporaries, to disseminate information in diverse ways etc. The National Institute for Standards and Technology (NIST) (2011), stated that cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. According to Yordanov, Yordanova, and Yordanova (2015), Working with remote services in Internet, Co-working with different types of documents, Data and files sharing, Screen sharing, Knowledge and skill for usage of digital repositories, acquiring of main terms and concepts of cloud computing are major ICT skills required.

Social media/virtual reference services skills: This is a service that allows librarians and other information professionals to communicate with information seekers across the globe in real time through online facilities such as Facebook, e-mail, g-mail and other instant messaging. Virtual Reference Services according to ALA and RUSA, 2008 includes reference transactions and other activities that involve the creation, management, and assessment of information or research resources, tools, and services that patrons can use independently, in-house or remotely, to satisfy their information needs. Moran (2010), defined visual reference services as any service provided to users that can be accessed remotely, that it encompasses e-mail and chat reference, library websites, and web 2.0 technologies and they are the provision of Internet resources for end-users searching. This service type delivery in librarianship has render tremendous progressive impact on the clientele as provision is given for almost immediate feedback as the case may be.

Open access resource management skills: This tool is another developmental stride in this era of information technological advancement that tends to put library services delivery at the forefront as information emanate either from the publishing houses, governmental congresses, etc across the globe on daily bases. The technical skill of managing this technology enable the information professional to adjust to the information needs of today's society, and meet the needs of future patrons understanding the social situation and studying the historical experience of the

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current social development, and play a role in inheriting national and human culture. Suber (20012) define open access as literatures that are digital, online, free of charge, free of most copyright and licensing restrictions. Understanding the terms and conditions of this initiative by the information professionals makes it another unique platform of achieving great impact in the librarianship profession.

Metadata skills: In simple words, PDF metadata is data about a PDF document. It provides additional information about a PDF document, including but not limited to, file name of the document, its title, date of creation, author, title, copyright information and what application was used to create the file.

This information communication technology skill enables the information professional to provide detail information about a document. In rendering this service, the information professional can retrieve any information irrespective of its location on the World Wide Web (www), this is because all the information about such document are provided to enable easy retrieval. Dashrath, (2014) defines metadata as data about data, a surrogate, representation of the content, context, structure, quality, province, condition and other characteristics of document for the purpose of representing the document to a potential user for discovery, evaluation, and fitness for use, access, transfer, and citation. Possessing this skill in librarianship makes the information provider a better information disseminator. It makes the librarian very broad in resources acquisition and disseminator, as the librarian have detail information about the content of any document at any point in time.

Web design skills: This is another essential skill which every information professional should possess. It involves the ability of information science professional to be well conversant with the ability to manipulate data on the Internet to the benefits of users. Almeiro & Omnterio, (2017) defines website design as a crucial point in a website development process, which involves the arrangement of content into graphical models that can be used as a bases for coding a site.

Profitability is the ability of an organization to earn gains, it can be said to be what is left of the revenue an organization generates after it pays all expenses directly related to the generation of the revenue. According to Nguyen & Nguyen (2020), profitability is one of the vital elements for performance evaluation, showing the proportion of profit in comparison with asset investment, equity, or sales. In this study the profitability of ICT skills for information science professionals are the dividends that accrues to librarians as a result of their knowledge-ability in the use of Information and Communication Technology in library services delivery. Tamilselvan, Sivakumar and Sevukan (2012), stated that in the past few decades, information and communication technologies (ICT) have provided society with a vast array of new communication capabilities. For example, people can communicate in real-time with others in different countries using technologies such as instant messaging, voice over IP (VoIP), and video-conferencing. According to Ashikuzzaman (2014), ICT facilities provides speedy and easy access to information, provides remote and round the clock access to users, provides access to unlimited information from different sources, enable easier, faster, cheaper and more effective library operations, helps to manage information overload as information retrieval is made easier in computerized systems, and computerization helps the library to save space and reduce paper. Devi and Verma (2016), stated that professional librarians with good ICT skills and expertise will not only have ample opportunities in the future but will be crucial to the management of

modern libraries in the dynamic digital environment. They further stated that automation of libraries has made information to be recognized as an important source for personal and professional development of individuals at all levels, and without ICT skills the library professionals will face difficulty in implementing new technologies in the libraries. Ugwuanyi, (2011) postulated that ICT enhances librarians need to quick access to suppliers of books, journal and electronic publications, and in respect to that, internet is a simple and efficient method of accessing and updating documentation and a seamless interface to catalogue of all libraries

ICT has provided new media, new modes of storing and communicating information. ICT brought many services to library to speed up their activities. It helps to remove barrier of communication, distance and time. The advances in technology will continue to improve the effectiveness of libraries. Help to transfer data to communication network like internet anywhere. It provides enormous search speed and facilities. It helps to strengthen communication and collaboration among research, government and educational institutions. The worldwide librarians made their catalogues available online which have Online Public Catalogues (OPAC) generally available free of cost these are useful for finding books not available locally to identify and select books for local acquisition, bibliography data verification and to search holding of periodical and monographs. Khan, (2016) states that the use of ICT makes library work easier, help to manage overload as information retrieval is made easier, remote access is enabled through networked system and that computerization saves space and reduces paper. Ahmed & Adeniran (2018), listed the following as the benefits of ICT services to the libraries: provision of web access to OPAC, electronic document delivery, online instruction/user education, online readers advisory services, networked information resources, reprographic technology, libraries are providing access to web-based online, indexing and abstracting services, institutional repositories, document scanning services. According to Ifijeh (2013), ICT has significantly transformed reference services especially with the availability of communication channels and electronic information resources. Sokari, et al (2017) stated that ICT facilities such as computers and their peripherals, such as mouse, monitors, keyboards etc; laptops; GSM phones; printers; barcodes; internet and; staplers are used boost library services delivery. Yakubu (2014) asserted that Machine Readable Catalogue (MARC), an online cataloguing ICT facility have embedded bibliographic information/description such as, statement of responsibility, ISBN or ISSN , title, edition, publication description, classification type, call mark, series, target audience/location of materials, barcode number, which are used to build up OPAC.

METHODOLOGY

The study was a descriptive survey research. The population of the study was all library staff from the Seven (7) Federal Universities in South- South Nigeria. The instrument for this study is rating scale. It was designed to gather data from 594 library staff of the institutions under investigation. These institutions were visited at different days for the distribution of the questionnaire and retrieval was done within 3 weeks. The research rating scale were made of 16 items, which was distributed among the 594 respondents out of which only 501 was retrieved. These items was weighed on a 4 point Likert-like scale of Very High Extent (VHE), High Extent (HE), Low Extent (LE), and No Extent (NE), representing 4, 3, 2 and 1. A midpoint mean score of 2.5 of the respondents' scores was accepted, while a mean score below 2.5 was rejected. The data collected was analyzed using mean rating and standard deviation.

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DATA ANALYSIS

Table 1: Distribution and returned questionnaire items by institutions under investigation

Name of Institution	FUO	FUPRE	NMU	UNIBEN	UNICAL	UNIPOINT	UNIUYO	
Number items Distribute	47	43	18	230	80	55	121	594
Number items Returned	39	38	15	208	61	49	99	501
Percentage (%) Returned	82.98	88.37	83.33	90.43	76.25	81.81	82.57	

DISCUSSION OF FINDINGS

Research Question1: What are the extent of the basic ICT management skills required for library services delivery in Federal universities in South -South Nigeria?

Table 2: Mean extent of basic ICT management skills possess by information science professionals for library services delivery in Federal Universities in South -South Nigeria.

S/ N	ITEMS	FUO (N=39)		FUPRE (N=38)		NMU (N=15)		UNIBEN (N=130)		UNICAL (N=61)		UNIPOR T (N=49)		UNIUYO (N=99)	
		X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD
1.	Database management skills	2.26	0.68	2.28	0.86	2.20	0.86	2.25	0.92	2.46	0.89	2.00	0.96	2.16	0.92
		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R	
		Cluster Mean = 2.23													
2.	Networking / social media skills	2.23	0.66	2.32	0.84	2.27	0.88	2.18	0.87	2.39	0.89	1.97	0.94	2.11	0.92
		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R	
		Cluster Mean = 2.21													
3.	Cloud computing skills	2.13	0.80	2.32	0.84	2.20	0.94	2.14	0.88	2.34	0.91	1.98	0.99	2.17	0.94
		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R	
		Cluster Mean = 2.18													
4.	Social media/Virtual reference services skills	1.64	0.94	2.34	0.88	2.33	0.97	2.18	0.89	2.28	0.97	2.06	0.98	2.05	0.95
		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R	
		Cluster Mean = 2.13													
5.	Open access resource management skills	2.00	0.92	2.16	0.95	2.20	1.21	1.95	0.90	2.16	0.89	2.04	0.98	2.07	0.95
		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R	
		Cluster Mean = 2.08													
6.	Metadata skills	2.07	0.98	2.39	0.94	2.33	1.11	2.19	0.92	2.20	0.98	2.06	0.98	2.08	0.99
		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R		Dec = R	

		Cluster Mean = 2.19													
7.	Computer appreciation skills	2.21	1.10	2.68	0.89	2.53	1.13	2.49	0.87	2.39	1.05	2.22	1.00	2.15	1.04
		Dec = R		Dec = A		Dec = A		Dec = R		Dec = R		Dec = R		Dec = R	
		Cluster Mean = 2.38													

Note: X = Mean; SD = Standard Deviation; Dec = Decision; A= Accept; R= Reject; FUIO = Federal University Otuoke, Bayelsa State; FUPRE = Federal University of Petroleum Resources, Effurun, Delta State; NMU = Nigeria Maritime University, Delta State; UNIBEN = University of Benin, Edo State; UNICAL = University of Calabar, Cross Rivers State; UNIPORT = University of Port Harcourt, Rivers State and UNIUYO = University of Uyo, Akwa Ibom State.

In response to the above research question, lists of items were presented to the respondents from the seven university libraries under investigation and they were requested to indicate their extent of acceptance or rejection.

The result from table 2, shows that all the items from 1-7 with scores of 2.49 below were rejected, which indicate the extent of ICT management skills possess by information science professional in Federal Universities in south-South Nigeria. Open access resource management skills and social media/ virtual reference services skills were mostly affected with a cluster mean of 2.08 and 2.13 respectively. Followed in quick sequences are cloud computing, metadata, networking, database and computer appreciation skills with cluster mean of 2.18, 2.19, 2.21, 2.23 and 2.38 respectively. This shows that a number of information science professional in the South-South federal university libraries lack ICT management skills in information services delivery.

Research Question 2: What are the extent of the profitability of ICT skills to information science professional in library services delivery in federal universities in South- South Nigeria?

Table 3: Mean extent of the profitability of ICT skills to information science professionals in library services delivery in federal universities in South-South Nigeria.

S/ N	ITEMS	FUIO (N=39)		FUPRE (N=38)		NMU (N=15)		UNIBEN (N=130)		UNICAL (N=61)		UNIPOR T (N=49)		UNIUYO (N=99)	
		X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD
1.	Librarians are opportune to communicate on real time	3.46	0.60	3.21	0.81	3.06	1.10	3.22	0.76	3.34	0.79	3.31	0.89	3.59	0.77
		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A	
		Cluster Mean = 3.31													
2.	It provides speedy services delivery	3.59	0.59	3.24	0.79	3.27	0.88	3.36	0.79	3.51	0.80	3.39	0.88	3.70	0.57
		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A	
		Cluster Mean = 3.44													
3.	Provide ample opportunities to	3.44	0.94	3.29	0.80	3.13	0.92	3.38	0.69	3.39	0.89	3.41	0.87	3.68	0.60

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	librarians with modern digital environment														
		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A	
		Cluster Mean = 3.39													
4.	It provide quick access to information resource acquisition	3.18	1.02	3.18	0.83	3.13	0.99	3.42	0.73	3.31	0.91	3.29	0.74	3.54	0.75
		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A	
		Cluster Mean = 3.29													

In answering research question 2, a list of ICT profitabilities were presented to information science professionals in the seven institutions under investigation and were requested to indicate their extent level of acceptance or rejection. The results above shows that all the items from 1-4 with means scores of 2.50 and above were accepted. The result indicate that speedy services delivery has the highest cluster mean of 3.44, followed by ample opportunities to librarians with modern digital environment with cluster mean of 3.39. Communication on real time was next with a cluster mean of 3.31 and finally quick access to information resource acquisition have a cluster mean of 2.29. With these responses on the high extent of acceptance level, it shows that information science professionals in Federal University libraries in south- South Nigeria, agrees that ICT profitability enhances library services delivery.

Research Question3: What are the extent of the profitability of ICT facilities in rendering library services delivery in federal universities in South-South Nigeria?

Table 4: Mean extent of the profitability of ICT facilities in rendering library services delivery in federal universities in South-South Nigeria.

S/ N	ITEMS	FUO (N=39)		FUPRE (N=38)		NMU (N=15)		UNIBEN (N=130)		UNICAL (N=61)		UNIPOR T (N=49)		UNIUYO (N=99)	
		X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD
1.	Provide new method of job execution	3.38	0.84	3.26	0.98	3.13	1.06	3.60	0.75	3.43	0.71	3.47	0.79	3.36	0.84
		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A	
		Cluster Mean = 3.38													
2.	It boost operations of library services delivery	3.74	0.50	3.68	0.57	3.60	0.63	3.85	0.39	3.43	0.71	3.43	0.84	3.52	0.72
		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A	
		Cluster Mean = 3.61													
3.	Provide web access to electronic	3.53	0.79	3.79	0.41	3.67	0.62	3.83	0.48	3.57	0.80	3.49	0.77	3.63	0.75

	documents														
		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A	
		Cluster Mean = 3.64													
4.	Used to produce, store, retrieve, process information	3-18	1.01	3.26	1.03	3.20	0.93	3.28	0.85	3.41	0.76	3.22	0.96	3.35	0.87
		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A	
		Cluster Mean = 3.27													
5.	It transform library traditional routine services	3.74	0.50	3.79	0.41	3.67	0.49	3.81	0.51	3.79	0.48	3.76	0.52	3.72	0.54
		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A		Dec = A	
		Cluster Mean = 3.75													

To answer research question 3, a list of items were presented to the respondents from the seven university libraries under investigation on the profitability of ICT facilities in rendering library services and they were requested to indicate their extent level of acceptance or rejection.

The resultant effect of the responses of the respondents indicates that all the items listed were accepted as the benefits derived from ICT facilities usage in rendering library services with means scores of 2.50 and above. The cluster mean of 3.75 indicate that the application of ICT facilities have transform the traditional library routine services which came highest. This was closely followed with the cluster mean of 3.64, showing that ICT facilities provide web access to electronic documents. Cluster mean of 3.61, 3.38 and 3.27, representing the boosting operations of library services delivery, new method of job execution, production, storage, retrievals and information process respectively, were all highly accepted as the profit of ICT facilities of rendering library services in Federal university libraries in South South Nigeria.

CONCLUSION AND RECOMMENDATIONS

The purpose of this research have been achieved. The survey have been able to established that information science professionals in Federal University Libraries in South- South Nigeria lack the major ICT management skills highly required for effective job performances in service delivery in their various divisions and units of the libraries. The study further established that the benefits derived from possessing ICT skills includes the following among others; speedy service delivery, provision of ample opportunity for librarians to communicate on real time and also work and perform their duties on digital environment, provision of quick access to information resource acquisition. Inclusively, the study established that ICT facilities provides new method of job execution, boost library services delivery operation, create information and storage as well, retrieve and process information services. This findings is line with Verma (2013), when he stated that ICT are basically information handling tools that are used to produce, store, retrieve, deliver, process, organize, distribute, preserve, search, exchange and update of information.

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

- Knowing the relevance of the information science professionals as the key players in information services delivery agent, there is need to acquire ICT management skills through necessary awareness programmes.

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- There is need for constant on-time training and retraining programmes to enable them to be abreast and function maximally in the application and skillful handling of the ICT facilities.
- Parent institutions should be on the go for constant procurement of current services delivery ICT facilities.
- Heads of library and library schools should endeavour to always make sure their staff attend seminars, workshops and conferences on ICT related programmes. This effort will in return enhance libraries job performances.
- The provision of Internet facilities and providing an enabling environment with constant power supply will be added profit abilities to library service delivery.

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