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Adoption, Training and Satisfaction of ICT Usage in Private Academic Libraries in Ghana: A Case of Methodist University Ghana

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Abstract:

This study set out to examine the level of ICT adoption in a private university library in Ghana, and to find out how staff training in ICT has impacted the use of ICT resources in the library. The study further examined the capabilities and competence of both library staff and students in the use of ICT facilities and to find out the level of satisfaction in the use of ICT in the library. The study used the mixed method approach which involved adopting both the quantitative and qualitative approaches. The study used simple random sampling to select the student respondents. The sample size for student respondents was one hundred and six (106). In the case of the library staff the head librarian and 2 professional librarians were used. The research revealed that the University has adapted well to ICT use in the library and that the library staffs are given enough training in handling ICT resources. The student respondents also confirmed that they had knowledge in the use of ICT resources. The study concluded that the services that the students receive from the library help them in accessing electronic resources they need for their research activities. It was also established that the library staff who managed the ICT resources are very knowledgeable in the use of ICT tools. The recommendations given were that management of the university should invest more in ICT facilities for the library. Library staff should be given more training on regular basis.

Key words: Academic libraries, Adoption of ICT, Information Communication Technology, Methodist University Ghana, Training, Usage Satisfaction.

1.1 Introduction: The impact of information communication technology in our lives is so overwhelming that one cannot afford to work in the library without any knowledge of ICT.

Volume-VIII, Issue-V September 2022 65

Adoption, Training and Satisfaction of ICT Usage ... Asmawu Abubakar & Afua Frempong-Kore

Therefore, it is necessary for librarians and library staff to have training in ICT to sharpen their skills in dealing with daily library management, client request and service delivery using the internet. According to Alakpodia (2010), to properly harness ICT, users should possess the needed computer literacy skills, and this has been referred to as a "comfort level someone has with using computer programmes and other applications associated with computers". The question as to whether the staff in the library have knowledge in the use of ICT tools, depends on their readiness to acquire and use ICT facilities. Many library routines and operations that were initially performed manually are now being converted to computerized operation, that means, the applications of ICT techniques to providing better and faster services to the end users (Adebayo, Ahmed, & Adeniran, 2018).

The focus of this study was to find out how librarians use computers aided by the internet to disseminate information and to do their daily library work such as acquisition, accessioning, cataloguing and classification, circulation of library materials and how their use of ICT impacts on service delivery to their users. Krubu & Osawaru, (2011), have noted that "over the past few years, academic libraries have been affected by changes in ICT. The rate of changes is still accelerating in this area. The introduction of various information technology (ICT) trends has led to reorganization, change in work patterns, and demand for new skills, job retraining and reclassification positions".

The library as a service institution provides information for clients. The library's environment is changing greatly as time passes, technology and the electronic information explosion are having a major impact on society as a whole and libraries in particular. The changes in library routine calls for training and development of library staff. Continues training in ICT is needed to cope with the continues demand of users. It is therefore important for heads of institutions to take the education and continuing professional training of its library staff serious in order to ensure quality service delivery (Abban 2018).

1.2 Problem Statement: Human resource development is a crucial part of an organization's success in service delivery. For this reason, library staff in every academic library needs development and training, especially in information technology to be able to provide quality service to their customers. Some challenges to the adoption and use of ICTs are lack of funding, lack of well-trained staff, and poor information literacy skills, among users (Afolabi, & Abidoye, 2002). Due to poor financial support to libraries in the private university, they are not able to get funding for training and development that will enable them to serve their clients well. Even when there is training, it does not address the specific needs of the library staff. According to Okeke, Urhiewhu, & Nwafor, (2015), declining library budget is one challenge faced by most private university libraries.

Lack of confidence by library staff in the use of ICT also poses a challenge to effective service delivery to their clientele. Tanawade (2011) asserts that many librarians lack confidence in the face of increasing information technology. This slows service delivery and retards productivity. Ramzan (2004) as cited in Adeyinka, (2009) posited that, librarians especially those in developing countries like Nigeria need to develop positive

Adoption, Training and Satisfaction of ICT Usage ... Asmawu Abubakar & Afua Frempong-Kore attitude towards the application of ICT to library practices. It is in this vein that this study is carried out to see the kind of training given to the staff of Methodist University Library and the satisfaction users derive from using the ICT facilities of the library.

1.3 Literature Review: According to Ashikuzzman (2018), the impact of ICT on every sphere of academic library activity in the form of the library collection development strategies, library building and consortia, cannot be overemphasised. To him ICT presents an opportunity to provide additional information services and access to a wide variety of digital based information resources to a library's clients. In recent times academic libraries are using modern ICTs to mechanize their core functions and implement efficient and effective library resource sharing networks and implement management information systems.

Owing to ICT enabled products & services, libraries have changed the way they operate, in terms of the provision of information services. These products and services are the integration of computer and communication technologies, which can be applied to store and disseminate the information. Libraries and information centres have embraced ICT more profoundly than many other fields, and most of them are currently using electronic products and services" (Hussain,2015). Chisenga, (2006) supported the views of Hussain and opined that, ICT present an opportunity to provide value-added information services and access to a wide range of digital-based information resources to clients.

Khan (2016) posited that, traditional libraries are changing their role and functions according to the new trends in the society. The library is providing information through the computers and internet. It can be said that without the help of the computers and internet any library information centre cannot satisfy the users. Khan (2016) argued that, to speed-up accurate and reliable data transfer in future is also a danger of non-availability of hard copies of documents, particularly to secondary sources that are available only on CDROM. Knowing this, continuing education about ICT for libraries is essential. Due to the escalation in prices of periodicals and books, which no library can afford to acquire all the publications; resource sharing through networking is the only way to go.

ICT has brought unprecedented changes and transformation to academic library and information services, conventional library services such as Online Public Access Catalogues (OPAC), user services, reference services, bibliographic services, current awareness services, Document delivery, interlibrary loan, Audio visual services and customer relations can be provided more efficiently and effectively using ICT. This is becuse they offer convenient time, place, cost effectiveness, faster and most-up-to-date dissemination and end users involvement in the library and information services process (Ashikuzzaman, 2018). Saleem, Tabusum, and Batcha, (2013) observed that a library is a growing organism. ICT with its tremendous information sources, rapid transmission speed and easy access ensures the satisfaction of the user with complex demand, break down the distance barrier and shorten the time required and ensure the right information to the right reader at the right time. It also increases and solves the library's demand of collection development. Saleem,

Adoption, Training and Satisfaction of ICT Usage ... Asmawu Abubakar & Afua Frempong-Kore

Tabusum and Batcha, (2013) in their study measured academic library users and their attitudes towards ICT information. The study proved how far ICT information makes impact on both professionals and non-professionals and the extent of ICT information being increasingly used rather than print resources.

The librarian as information professional today needs to be ICT competent in order to enhance their job performance and to optimize the use of the libraries resources by users to satisfy their information needs (Sani, Onekutu & Musa, 2016). Khan, Khan, & Khan (2011) contend that training and development is the most important factor in the business world because training and development increase the efficiency and effectiveness of both employees and organization. To them training and development have significant effects on organizational performance and enhances the capabilities of employees.

Nkanu, & Okon (2010) observed that, the obstacles facing the ICT adoption and use in libraries are lack of awareness by students or users, poor attitude of library staff towards adoption of automation. The use of ICT is gaining momentum in university libraries especially now that most universities are adopting ICT in the development and improvement of their services. Therefore, availability of ICT in university libraries will greatly improve accessibility, if proper awareness is created for its use (Oriogu, Ogbuiyiba, Odoaku, & Ogbuiyi, 2014).

Cullen (2001) revealed that, the advent of ICTs has brought with it its own challenges. Key among them is the digital divide which in essence is "the gap that exists in most countries between those with ready access to the tools of information and communication technologies, and the knowledge that they provide access to, and those without such knowledge and skills". Among other things, one needs good computing facilities, reliable and affordable internet, steady supply of electricity, (Harvey Chaputula, 2012). The problem of poor infrastructural facilities especially erratic power supply has been the major cause of setback in the integration of ICT in library services.

According to Odongo (2011), in an attempt to ensure that libraries remain forecast in their objectives in this era of ICT development, commission for higher education recommended that libraries shall adopt and maintain new ICT as they develop, and that every university library shall adopt the new opportunities created by ICT in teaching, learning and research. Afolabi & Abidoye (2002), postulated that, even though ICT is applicable to library services, high cost of ICT equipment could not make it to be widely utilized by most libraries. Findings by Akporhonor & Lucky (2016) revealed that, poor internet connectivity, erratic power supply, information overload and high cost of access, download delay and difficulty in assessing some websites are some of the factors affecting the use of online resources by post graduate students.

Haliso (2011) submits that, the use of information technology gives significant benefits in work measurement, cost reduction, productivity improvement and better services to customers and clients. Actually, it is availability of information which makes use of information possible and its use that makes performance achievable. The combined effect of

Adoption, Training and Satisfaction of ICT Usage ... Asmawu Abubakar & Afua Frempong-Kore availability of information and communication technologies can enhance the job performance of the academic librarian.

The globalization of ICTs has posed challenges to the library professionals' collections, and the radical change in the expectations and needs of the users. In digital environment, library professional's competence lies in: speeding up access to information, speeding up spread of information, filtering material chosen by users, organizing user information sources in standardized keyword and classification schemes, is an unnerving task to most library professional (Shukla, & Sialai, 2018). Jeliyang (2016) identified four major problems facing librarians in the use of ICT in their work. In the study, most librarians suggested that insufficient staff training in ICT application is the main problem librarians have in ICT application. Though all library professionals are well qualified, Jeliyang observed that, a basic knowledge of ICT applications is essential to provide services in the contemporary ICT environment.

Innovative use of information and communication technologies in libraries is not widespread and it is made difficult, by several challenges, including lack of funds to sustain the ICT infrastructure, inability by librarians or libraries to keep up with the pace of developments in ICTs, inadequate ICT facilities in the libraries, lack of staff with appropriate skills to manage ICTs both at the managerial and operational levels, absence of institutional policies and strategies to support and guide the use of ICTs, and lack of adequate knowledge and skills to manage digital information resources and to deal with issues relating to copyright intellectual property rights in a digital information environment (Chisenga, 2006).

1.4 Objectives of the Study: The objectives of the study were:

- 1. Assess the level of adoption of ICT in the university library.
- 2. Find out the level of training of the library staff in ICT and how skilful and knowledgeable both staff and students are in the use of ICT tools.
- 3. Find out how satisfied students are in the use of ICT in the library.
- **2.0 Methodology:** This study employed the sequential explanatory design. A sequential explanatory design implies collecting and analysing quantitative data and then qualitative data in two consecutive phases within one study. The study also used the mixed method approach which involved adopting both the quantitative and qualitative approach. This helped to avoid any form of biases with the use of a single approach. The target population included the graduate students and the library staff of the university. The population of graduate students was one hundred and nine (109). The researchers used all the population of the graduate students as the sample. This is because the target population was not too large. Therefore, sample size of the student respondents was one hundred and nine (109). In the case of the library staff, the Head librarian and two (2) other professional librarians were selected for the study. Thus, the researchers used purposive sampling to select library participants.

Adoption, Training and Satisfaction of ICT Usage ... Asmawu Abubakar & Afua Frempong-Kore

3.0 Findings and Analysis: The category of users who took part in the study were the head librarian, professional librarians, and students. The questionnaire was administered to elicit information about whether students get the satisfaction from services provided to them by the library staff using ICT tools. It also looked at how ICT is enhancing the work of library staff, and to ascertain whether the ICT infrastructure was enhancing students learning and research.

The gender distribution for the library staff was one (1) male and two (2) females. This implies that majority of library staff were females while most student respondents were male. Primo, (2003), ascertained that, women represent the main economic force in most developing countries therefore, the issue of women access to, and use of ICT is growing in importance for both developed and developing countries. In all 109 copies of questionnaire were distributed to students and 102 were returned. This represents 93% of response rate.

The gender distribution of students was shown using frequency and percentages as displayed in table 1 below.

 Gender
 Frequency
 Percentage

 Male
 61
 59.8%

 Female
 41
 40.1%

 Total
 102
 100

Table 1: Gender Distribution

Source: Field data 2020.

The first objective of this research was to assess the level of adoption of ICT by the university, therefore, library staffs were asked to indicate the library's level of adoption and use of ICT.

The head librarian opined, "Our library's adoption rate is high".

The first respondent said, "ICT adoption is high".

The second respondent also indicated that, "our library has adopted ICT".

This finding supports Odongo (2011) assertion that in an attempt to ensure that libraries remain forecast in their objectives in this era of ICT development, commission for higher education recommended that libraries shall adopt and maintain ICT as they develop, and that every university library shall adopt the new opportunities created by ICT in teaching, learning and research

Level of Training in ICT and ICT Based Library Facilities: This objective was to ascertain the level of training in ICT and how library staff use ICT tools to deliver services to their users, both the library staff and students were asked whether they were able to use ICT efficiently to do their work and to conduct research.

- 1. The head librarian indicated that, "because of high level of training, I am confident in using ICT for my Job". "I am good at web applications".
- 2. The first respondent also said, "I have high level of training in ICT and for which reason I feel very comfortable using it for my day-to-day duties in the library. "I also have average knowledge in the use of web applications".

3. The second respondent said, "I have adequate training in ICT". "I am happy to use ICT for my work". "I am good at using the web applications but don't use the barcodes technology".

Table 2. Usefulness of ICT in searching for needed materials

	Frequency	Percentage
don't agree	0	0
Moderately agree	5	5%
Agree	44	43%
Strongly agree	53	52%
Total	102	100

Source: field Data 2020.

The results proved that all respondents both staff and students have the knowledge, skill, and competence in using technology related equipment in their work. This finding contradicts Nkanu & Okon (2010) observation that, the obstacles facing the ICT adoption and use in libraries are lack of awareness by staff and students or users.

The third objective sought to find out whether students were satisfied with service delivery using ICT in the library. The responses from the students indicated that they were satisfied with the services they received from the library. This finding is in agreement with Haruna, Kiran, & Tahira, (2017), that the greatest goal of every library is to maintain library user loyalty because loyal library users provide word-of-mouth and referrals to the library, thus, increasing patronage and use. A substantial justification for the interest in service quality outcome by practitioners is that it has a beneficial influence on the bottom-line performance for the organization and creates a better understanding of the influence of service quality, user satisfaction and service value.

Table 3. User Satisfaction of Library ICT Services.

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	Percentage	Frequency
Not satisfied	1	0.9%
Moderately satisfied	7	6.8%
Satisfied	73	71.5%
very satisfied	21	20.5%
Total	102	100%

Source: field data 2020

4.0 Conclusion: This study investigated the impact of ICT training in private university libraries in Ghana: the case of Methodist University Ghana. The study findings proved that there is a high level of adoption of ICT at the Methodist University library. The study also proved that there is adequate training of staff, and this has resulted in high level of satisfaction by students with the services provided by the library using ICT tools. It was also established that the library staff who managed the ICT resources are very knowledgeable in the use of ICT. Assessing the students also proved that students are knowledgeable in the use of ICT. The students again revealed that the services that they receive from the library help them in obtaining electronic resources they need for their research activities. The use

Adoption, Training and Satisfaction of ICT Usage ... Asmawu Abubakar & Afua Frempong-Kore of ICT has added great value in library activities, and this has brought satisfaction to the unique needs of students, lecturers and researchers. ICT has brought tremendous change in libraries so much that users of a library do not need to be physically present in the library to be able to use the services of that library.

- **5.0 Recommendations:** Based on the outcome of this research the following recommendations were made to the management of university and the library to improve its services.
 - 1. There is the need for the university management to improve on the number of ICT facilities in the library to enable more students get access to ICT resources.
 - 2. Management of the university should invest in more regular training of library staff to enable them keep up with the trends in library ICT resource management.
 - 3. Library staff should avail themselves for training and development to enable them stay relevant in their job.

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