

Utilization of ICT Facilities for Effective Current Awareness Services in Libraries

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Abstract

This study examined Utilization of ICT Facilities for Effective Current Awareness Services in Libraries. The study was specifically aimed at examining the concept of information and communication technologies, current awareness services, need for current awareness and identifying ict facilities relevant for cas services, the study identifies the following ICT facilities relevant for current awareness in libraries i.e computers, internet, social media platforms, the study also assess the need acquire ICT handling skills for CAS, the study also examines the following challenges and problems hindering application of ICTs for current awareness in libraries: poor power supply, maintenance, lack of ICT skilled human resources, virus crisis among others. The study concludes that librarians should think of ways to using ICT to make services more effective and efficient. Therefore, librarians must be ready to embrace the assistance that the world of ICT is offering them and be prepared to train and upgrade their skills.

Keywords: Utilization, ICT Facilities, Current Awareness Services, Libraries

Introduction

Every organization, association, or institution exists for a purpose. In other words, if something exists but does not fulfill the purpose for its existence, then its relevance is questionable. However, this analogy is meant to explain the fact that libraries, like any other entity, are meant to fill gaps in the society in which they exist. Solving that problem is the reason for their existence, and if they exist without solving the problem they are meant to solve, then their relevance becomes irrelevant. And we all know that irrelevant things are destined for the waste bin. But could this be said of the noble profession of librarianship? The answer is "yes" if we do not become more proactive, and "no" if we become more proactive in our approach to information gathering, storage, organization, retrieval, and dissemination, which is the hallmark of librarianship and the reason for its existence. One such proactive approach is Current Awareness Services (CAS).

Ranganathan's fourth law emphasizes that libraries must have the objective of saving the time of the reader. The entire journey of librarianship is about designing, devising, and developing methods and systems of organization and dissemination of information to provide the best service to readers in the most efficient, accurate, and effective way, thus saving the reader's time. Saving the reader's time also relates to how we organize information. Therefore, this law plays a great role in information search. Library users want to save their time and achieve more within a short period. This is possible when services are rendered promptly and information is retrieved quickly through services such as SDI, CAS, and digital reference services.

Definition of Concepts

Before delving into the topic of strategies for utilizing Information Communication Technology (ICT) for effective current awareness services in libraries, it is vital to explain some key concepts related to this issue.

Information Communication Technology

Information Communication Technology (ICT) is a term that is very popular in the 21st century. Ezeani (2010) stated that ICT is a medium by which the highest quality of service in the library and information profession can be achieved. The Government of Seychelles (2015) noted the importance of ICT, stating that advances in ICT over the last decades have led to the convergence of broadcasting, telecommunications, computing, and content. ICT has greatly impacted the production, retrieval, and dissemination of information to a very large extent. The introduction of ICT to library services has led to positive changes in work patterns and demand for new skills. Many tertiary institutions around the world are now exploring ways in which ICT can be mainstreamed to give students and stakeholders easy access to a wide range of educational resources and services.

In the view of Okore (2005) the advantages derived from the use of ICT in library services include increased productivity, easy documentation, network enhancement, and control of record management. ICT facilities have taken over most traditional information processes. Ostrow, cited by Eguavoen (2011), observes that the advent of ICT, the internet, and the ability to access library and research materials from remote locations have created dramatic changes in information service delivery. Moghaddam (2009) agrees that information technologies, information systems, and information networks have been developing, stating that this century has witnessed a dramatic change in users' information-seeking patterns. Byamugisha (2010) equally observes that patrons' expectations for distance service delivery across library services have increased; library users have come to expect a wide variety of automated push and pull services from libraries from a distance.

According to Oketunji (2001), the essentials of ICT in library services, including Current Awareness Services (CAS), include:

1. Housekeeping functions, which involve acquisition, cataloging, serial control, and circulation functions.
 2. Information storage and retrieval, which entails SDI and CAS.
- The following are some ICT facilities that are highly relevant in CAS, grouped according to:
- a. Capturing technologies (e.g., keyboard, touch screens, image scanners, and voice recognition systems).
 - b. Storage devices (e.g., floppy discs, flash drives, compact discs).
 - c. Computer systems (e.g., desktop, palm-top, laptop).
 - d. Communication technologies (e.g., telephones, digital broadcasting, electronic bulletin boards).
 - e. Output technologies (e.g., printers, monitors, digital videos, audio CDs).

Libraries, through the introduction of ICT, provide access to databases, electronic journals, books, and other e-resources. This has also facilitated inter-cooperation between libraries using electronic networks to deliver documents and information needed by users. ICT now has a great influence on the way many things are done in scholarship and research. Since information is the

commodity in the hands of information brokers, there is a great need to develop a strong information system that will meet the changing information needs of users.

The availability of information sources as well as mechanisms to facilitate information constitutes key and basic elements of all information infrastructures. New technological developments can now facilitate information handling and processing, and the revolutionary and technological changes occurring in information processing and communication have had an impact on information. Therefore, the introduction of ICT has greatly impacted different aspects of library services, bringing about great changes in library services.

Current Awareness Services

Current awareness services as defined by Kent (2010) as a service that assist library clientele in keeping up to date with current literature in their particular subject area. In line with this, Theealoniki International Library (2009) defined current awareness service as an alerting service which enables the library users to be informed about the latest information resources available in their specific area and a regular update on recently published materials. Current Awareness Services (CAS) technologies evolved in response to the recognized need for advances in disciplines, which are due to the accumulation of facts, but perhaps more importantly, the transmission of ideas between workers in related fields. Therefore, CAS arose from the need to keep up-to-date with progress within a field. It also serves the purpose of making people aware of new information that will most likely contribute to better performance as a worker, researcher, or student.

The CAS process also involves gathering title pages of relevant information of a specific nature for an individual or group of individuals within a specific field. However, the advent of ICT has facilitated CAS, enabling information to be sent to end-users at their own domain with speed and efficiency.

Due to the information explosion, CAS has assumed a vital role in information dissemination. An ideal CAS should be:

- Current, timely, and novel
- Comprehensive
- Relevant
- Accessible

The idea behind CAS is to keep information users informed about advances in their field. According to Shafique (2009), important computer-based CAS includes:

- SDI in relevant research areas
- CA services
- Document delivery
- Blog development
- E-mail alerts

As part of CAS, new materials added to library collections are brought to the attention of users. For more effective service, libraries abstract and index these information resources according to users' interest profiles. Currency of information is vital for successful information service delivery. CAS provides information on the latest developments within subject areas of specific interest to users. Good CAS is based on four major factors:

1. Knowing what topics to cover
2. Knowing who wants what (user profiles)
3. Knowing the sources for obtaining the latest information
4. Supplying that information regularly and reliably

Therefore, CAS aims to provide information seekers with current developments in their areas of specialization. This can be achieved by providing seekers with relevant information from journals or other information sources on specific subjects that suit their needs. CAS supplies accurate, timely information and saves information seekers the time of searching the literature for that information themselves. Therefore, CAS is an excellent way for information professionals to keep themselves up-to-date in the subjects of interest to their users.

Need for Current Awareness Services

Brophy (2004) observed that there has been increasing interest in recent years on the different approaches that focus on user's expectation and need in attempt to improve the quality of library collection and services and CAS is one of such approach which is aimed at providing quality services that will enhance user's satisfaction by providing quality services. Singh (2001) further stated that to provide right information to the right reader, at the right time in the right amount and in the right form should be the major aim of libraries and librarians. Therefore, through CAS available current information does not just exist, but get to the hand of those who need it, at the time they need it. It aims at keeping users abreast of current and new information resources available. The need of bringing information to the door step of those who need it is the rationale behind the introduction of CAS. Knowing that the measure of how valued information is depends on how relevant it is to problem solving. However, Ogugua (2017) observed that selective dissemination of information (SDI), current awareness services (CAS), indexing and abstracting services, referral services, photocopying services, readers' advisory services, inter-library loan services, consultancy services, extension services, internet services, etc, are not largely available in some libraries.

Identifying ICT Facilities Relevant for CAS Services

The application of ICT in CAS and other aspects of library services has produced a wonderful affect in the world of knowledge and in other spheres of life. ICT has brought reduction in the cost of manpower, brought a lot of excitement and enhancement of general information services. The rationale behind the application of ICT in CAS is to achieve efficiency, speed up information processing, enhance accuracy and relevancy of information provision.

So many litterateurs have been written on the application of ICT to library services such as the application of ICT to circulation, serial control, technical services, acquisition etc. However, the aim of application of these facilities is to generally enhance library services. Therefore, to produce an efficient and effective CAS; some of these ICT facilities have been identified to be relevant:

Computers

The application of computer as an electronic device for acquiring, storing processing, retrieval and dissemination of information (Ugwu, 2010) is very relevant in current awareness services. By the use of computer CAS will be more efficient because it processes information very quick and enhances greater precision and relevance. With the computer, large volume of data can be manipulated with a higher degree of accuracy. Therefore, a computerized information system will

go a long way to facilitate CAS. The value of computerized in current awareness services is the wide range of such services that can derived from one data base, thus making it possible to deliver services which suit a large number of different approaches to information gathering and current awareness and make services available. A computerized information system opens a number of possibilities with CAS.

The internet

Computer opened the door to the world of internet. The Internet is a global network of so many computers networked all over the globe. It is computers network connected together to share information and resources across different geographical areas. The internet makes it possible for an information seeker to have access to information from any part of the globe, just by a click of the button. The World Wide Web is an internet function that allows one navigate through different information services available on the internet. Information that is available for users are complied in a web page on the server's to be accessed by users. Having gathered the user's profile, current information can be directly sent to the users no matter the distance. The Web is not the internet itself, but designed software programs like book pages that are introduced in the network to facilitate a multimedia view of graphics, sound/audio-video/animation, pictures, photos, artwork and other graphics on the internet are made possible by the web page. Today the World Wide Web (WWW) is a major tool for accessing variety of information.

Social media platforms

Social media is used in connecting people with information. The introduction of web 2.0 technologies in libraries has brought new roles for library professionals. Web 2.0 tools such as twitter, facebook, blogs, online groups which are also known as social media have made it possible for people to actually connect to one another through the internet. Khan and Bhatti (2012) put it thus; social media provides better and more opportunity to reach the community, target specific audiences, and give them a chance to interact with your library. Mobile devices like cell phones have improved communication and enhanced the way information is being created, delivered and accessed. Librarians can provide effective CAS through mobile telephones like the GSM (Global Systems for Mobile Communication). SMS (Short Message Services) can be employed to answer reference queries, and alert users on current arrivals and upcoming events e.g. Public holidays, university matriculation, lecture free week etc. This could be flashed through a facility called —broadcast where one text message is sent to all the library contacts listed in the address book on the mobile phone at once (Iwhiwhu, Ruteyan and Eghwubare, 2010). Through the social media, libraries can engage their users on issues of interest and enable them make suggestions, especially as it affects library services which can improve the library's image.

Need to Acquire ICT Handling Skills for (CAS)

In the view of Ostrow cited by Eguavoen (2011), the advent of the ICT, internet, and the ability to access library and research materials from remote locations have also created dramatic changes. On this note, Moghaddam (2009) agrees that information technologies, information systems and information networks have been developing, stating that this century has witnessed a dramatic change in users' information seeking pattern. The new information paradigm has made it very imperative for libraries to acquire new skills and adequate knowledge in the effective and efficient use of modern information technologies. Librarians that acquire ICT skills and expertise are often regarded with very high esteem and are seen as information specialist and are expected to use these basic ICT tools to provide relevant current information to those who need it at the time and place they need it. The task of transforming libraries and information services and enhancing efficiency

in information handling requires strong skill in electronic resources, and digital technological development; since ICT do not work on itself but are manipulated in library services to achievement result. However, Tanawade (2011) asserts that many librarians lack confidence in the face of increasing information technology. This however poses a great challenge to the librarians as information agents making them loose their position as information mediators because users can be pass him and with a click of the mouse, and at the comfort of their homes access all the information her or she needs.

Therefore to confront these challenges, it becomes very paramount that librarians need to acquire necessary expertise and skill in the use of modern ICT facilities. There is need to acquire skills on how to navigate the web, knowing basic search strategies, and adequate knowledge of search engines available especially those that are not commonly used and that are relevant for a specific field of study. With the adequate skills and expertise in navigating through these engines a librarian can easily provide information that are current, and that will specifically suit the end users and with such search skills, a librarian will be well able to guide users on how best to access the information available in the web thereby maintaining their relevance and position as information gurus and specialists. This however call for a re-evaluation of skills in the use of ICT facilities. Accessing information from an electronic database requires a strong knowledge of how to manipulate electronic information facilities. Therefore information professionals should be trained on the use of these facilities for information services such as CAS. These will help them maintain their relevance and serve their clients better, faster, and more efficient.

For an effective CAS services, the following processes should be put into consideration:

What are their information needs: You identify what kind of information they need; in what subject field, or discipline, and for what purpose? Therefore you analyze the information requirement of the users.

Channel of communication: Designing an adequate storage and dissemination medium; do they have e-mail address, website where you can send current information or should it be copied on CD and printed out in a paper?

Access to current information: What makes CAS relevant is how current the information provided is. A strong alert system should be in place to know the availability of such needed information and make it accessible.

User identification/profile: There is strong need to have and adequate and accurate information about the users, their interest needs, what they are working on, understanding users profile will help to serve them better.

Evaluation: simply means weighing performance and analyzing services, aimed at finding out how far and how well. Areas to be covered in evaluation include:

- (a) How timely or current is the information provided.
- (b) How efficient is the format of information made available to users.
- (c) The cost effect of CAS
- (d) The level of information coverage.
- (e) Feedback information

Application of ICT in Current Awareness Services: Challenges and Problems

It is often said failure to plan is a calculated plan to fail; and I add that unprepared man is a perpetual failure. Despite the benefit accruing from the introduction of ICT in library services such

as CAS we should not lose sight of the challenges it bring along. Knowing your challenges will enable one prepare adequately to handle such. Most libraries are faced with the problem of unrealistic and insufficient infrastructural facilities, constant computer breakdown, low level of electricity supply, lack of skilled system engineers etc.

Poor Power Supply

Most of the modern ICT facilities need electricity to function and the erratic power supply experienced in this country constitutes a serious challenge to the effective and efficient utilization of modern ICT tools for CAS. Therefore Gbaje, (2007) stated that the erratic nature of electricity supply will not support the successful implementation of effective CAS in this age of modernization. Therefore, since power is a vital factor in the user of most ICT facilities, it is important that the government should increase effort in ensuring a stable power supply. Those that rely heavily on these ICT facilities for its operations should think of ways of providing alternative source of power supply .

Maintenance

In a study conducted by Fara (2013), he observes that the provision of a conducive environment and the fostering of professionalism in libraries must take a prime position. However, the maintenance of ICT facility for effective service is a serious challenge on the path of libraries toward achieving a library environment that is ICT friendly. These ICT facilities at one point or the other brakes down, and they need to be properly maintained to avoid unnecessary break down and be repaired when such occurs. However, most libraries lack component personnel to handle this, and so this facilities break down constantly and the repair practically impossible or takes donkey years. For this reason, competent ICT personnel should be employed and trained to handle repairs effectively.

Lack of ICT skilled human resources

Ashcroft and Watts (2005) stated that lack of skilled human resources to install and manage technology and networks constitute a strong problem to utilization of ICT skills .ICT does not function on its own; rather it is managed and operated by human beings. Whether it be automation or computerization, some elements of human resources is need. Librarians need to automate their resources in order to make them accessible and available online. Net-based resources need to be manipulated by librarians that are skillful in working in a digitized environment. However, some librarians are still very slow in embracing this new challenge, thereby being strangers in their own environment

Virus Crisis

Computer virus has been a treat to ICT facilities, especially the computer and its related components. It is developed by virus data invaders or perpetrators. A virus is usually designed to execute when it is loaded in a computer's memory, the virus instructs its host program to copy the viral code into any number of other programs and files stored in the computer. The infection can then transfer itself to files and code on other computers through magnetic disks and other memory storage devices. Its effect can range from slowing down computer program on your computer to deleting or modifying information or programs on your computer. Therefore, it is very essential that precautions must be taken to protect the computer system from these viruses through the following methods (Ugwu, 2010)

- (a) Scanning your computer system regularly.
- (b) Keep windows updated by the security update released periodically by Microsoft.
- (c) Using an alerting firewall- this can help alert you if a virus attempt to enter the computer..
- (d) Install an anti-virus program

- (e) Use of firewall
- (f) Not opening an e-mail attachment whose sender you do not trust.

These will help to avoid unnecessary computer breakdown and enhance information delivery.

Funding

It is no longer news that fund and funding has continuously been a problem to library services. Most especially now that ICT is needed for efficient services. As we all know that the procurement of these ICT facilities is not easy to come by; its maintenance and repairing are cost effective. It is worth knowing according to Anyakoha (2005) that some libraries do not receive grant from the government or raise enough fund internally. And this will affect greatly the level of performance. Chisenga (2004) equally stated that the introduction of ICT in libraries has not made the situation better; money is required to maintain and upgrade the ICT equipment and software, license fees, pay for online databases, electronic journals, internet connections etc.

Therefore the problem of budget cut or diversion, insufficient funding and high prices of information materials should be paramount concern to the government by providing adequate funding and financial support for the procurement of these ICT facilities in order to ensure maximum service delivery.

Furthermore, on these challenges, Oketunji (2000) summarized the general problems facing the effective utilization of technologies in libraries as follows:

1. A large exploitative local computer market
2. An inadequate pool of relevant technical staff and problems of recruitment and retention.
3. The potential of library staff resistance to the introduction of computer technology.
4. The potentials of user's resistance and failure to adapt to use of on-line information.
5. The database conversion problems.
6. Frequent changes in technology.

Conclusion

Since we have observed that Current Awareness Services (CAS) are an essential aspect of library services, we as librarians should think of ways to using it to make our services more effective and efficient. Therefore, libraries must be ready to embrace the assistance that the world of ICT is offering them and be prepared to train and upgrade their skills. The days are gone when librarians could sit back in their seats and say, 'As it was, so shall it be now and forever.'

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