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Abstract

The study examined Computer Mediated Communication Technologies (CMCT) and Librarian's Interaction with Users for Effective Service Delivery in Delta State University Library. The purpose was to identify the relationship between CMCT and librarian's interaction with users for effective service delivery. The study adopted a descriptive survey design. The population of the study comprised the total of 56 staff working in the university library (library assistant, library officers and librarians). Census sampling was used to sample the entire population because of its manageable size. Questionnaire served as the primary instrument. Out of 56 copies of questionnaire administered 46 copies valid for analysis. Data collected was analyzed using the descriptive statistics of arithmetic mean (X) and standard deviation (SD). The hypothesis was tested using Pearson Product-Moment Correlation Coefficient. The study found out that there is a strong significant relationship between computer mediated communication technologies like (email, instant messaging, whatsapp) and librarian's interaction with users for effective service delivery, only that the use of podcast has not been fully recognized in Delta state university library as it shows a very weak relationship significant at($r=0214$; $p<.05$). Hence, the study recommends adequate recognition and incorporation of CMC technologies like podcast by librarians and they should come up other CMC applications to achieve more effective interactionsand efficient service delivery in the library.

Keywords: Computer mediated technologies, Services delivery, University library

Introduction

Rendering effective library services has always been central to university libraries. Advances in technology are ushering a dynamic environment for the university library which is considered the last fortress of organized and authoritative information. Within the university setting, the library has always been a focal point for faculty, researchers, and students, but changes in technology and its effects on society are diminishing the library's role as an academic focal point. The ubiquitous presence of the Internet and society's reliance on technology are changing information seeking behaviors of university library users. Students are less frequently entering the library. Instead, they are turning to alternative information sources through the use of their personal computer aided devices (Crummett& Perrault, 2008).This realization led to the adoption of Computer Mediated Communication Technologies (CMCT) by librarians to ensure their continuoussurvival and competitiveness in the fast-paced economic environment, to interact and capture these technology savvy users for effective service delivery in the library.

The present age is featured as the era of information and communication revolution as CMCT helps people to create, exchange, and perceive information using networked telecommunications systems that facilitate encoding, transmitting, and decoding messages (Oyeniranetal, 2020).According to Romiszowski& Mason (2004), Computer-mediated communication technologies (CMCT) is a generic term now commonly used for a variety of systems that enable people to communicate with other people by means of computers and networks.Well-known examples of such CMC systems include computer conferencing, electronic mail, discussion lists, instant messaging, blogs, wikis, and podcasts. They had provided new avenues to foster communication and collaboration in the academic library environment. CMCT provides innovative ways to reach new technologically savvy academic library users, highlight library services, and allow the library to remain the intellectual center of

the academic community. It is, thus, central to the success of online education, and more specifically for effective library user communication and services. However, they are seen as being able to support both conversational and instructional procedures. For example, joint cooperation on the analysis and development of a hypertext document satisfies all the basic requirements of a conversation between the participants (Pelgram, 2001).

However, to serve users effectively in this information society, it is therefore necessary for a free flow of multi-dimensional communication between the librarians and the users through the use of available CMC technologies foreffective service delivery in this digital age. This research shall investigate on the computer mediated communication technologies and how they can enhance good interactions with users for effective services delivery especially in university libraries.

Statement of the Problem

Computer software, applications, and networks aid in fostering human communication by diminishing geographical barriers and narrowing the digital divide for users. According to Crummett& Perrault (2008), many CMC tools incorporate and implement activities long associated with libraries and librarians: collecting, categorizing and disseminating information. It is only natural that libraries incorporate new CMC technologies to reinforce fundamental information resource management and retrieval practices. Around the world today, the rapidly escalating access to the internet, increased accessibility of internet ready smartphones and other communication devices, as well as the evolution of web-based new media personal websites, social networking sites, blogs, e-newsletters, etc have redefined methods of communication which is leading to a significant shift towards the use of Communication Technologies in everyday human interaction. The CMCT is an umbrella term for all kinds of interpersonal (private and public) communication carried out on the Internet by e-mail, instant messaging

systems, mailing lists, newsgroups, web discussion boards, Internet Relay Chat, and web chat channels (Herring, 2004).In the library, they can be used to interact with users in terms of sending overdue notices, ascertaining and mailing needed information, facilitating the process of information acquisition and answering queries.

In spite of the numerous benefits of CMC technologies, librarians cannot render effective services if they do not follow the trend by exploring the CMCTechnologies in the university libraries as recent personal observations have shown that due to poor usage the available CMCT, most library services to be enjoyed by users are been underutilized and most users who are technologically savvy do not always wish to be physically present in order to interact with librarians for their basic information need. Therefore, it is expected that librarians explore the various communication technologies to interact, advocate, market and provide relevant services to meet users need. Hence, it is against this backdrop that the study aim to investigate on the relationship between the use ofComputers mediated communication technologies and librarian's interactions with users for effective services delivery in Delta State University Library.

Objectives

1. To establish the relationship between the use of Electronic mail and librarian's interactions with users for effective services delivery in Delta State University Library.

2. To establish the relationship between the use of Podcasts and librarian's interactions with users for effective services delivery in Delta State University Library

3. To establish the relationship between the use of Instant massaging (IM) and librarian's interactions with users for effective services delivery in Delta State University Library

4. To establish the relationship between the use of Whatsapp and librarian's interactions with users for effective services delivery in Delta State University Library

Research Questions

1. What is the relationship between the use of Electronic mail and librarian's interactions with users for effective services delivery in Delta State University Library?

2. What is the relationship between the use of Podcasts and librarian's interactions with users for effective services delivery in Delta State University Library?

3. What is the relationship between the use of Instant massaging (IM) and librarian's interactions with users for effective services delivery in Delta State University Library?

4. What is the relationship between the use of Whatsapp and librarian's interactions with users for effective services delivery in Delta State University Library?

Hypothesis

There is no significant relationship between the use of Computer mediated communication technologies (Electronic mail, Podcasts, Instant messaging, Whatsapp) and librarian's interactions with users for effective service delivery in Delta State University Library

Review of related literature

Ouetal (2013) indicate that one of the most important of human activities is communication. Quan-Haaseetal (2005) cited by Ouet al (2013) describes that one of the core values of information systems is the utilisation of technologies to facilitate communication. These technologies today are now serving as Computer mediated communication technologies (CMCT)Romiszowski& Mason (2004) defines Computer-mediated communication as any form of communication that utilises two or more computer aided devices. The computer combines the permanent nature of written communication with the speed and to some extent the dynamicism of spoken telephone communication. Unlike the limited interactivity available in other forms of computer-based learning, the possibilities for interaction and feedback are almost limitless, being a function of the creativity and personal involvement of the participants in the on-line discussion. According to Romiszowski& Mason (2004), Computer-mediated communication technologies

(CMCT) is a generic term now commonly used for a variety of systems that enable people to communicate with other people by means of computers and networks. Examples of CMC include email, video conferencing, text messaging and chat rooms (Steyn, 2014). The feedback messages of these technologies do not have to be preprepared and stored. Also, the participants are able to some extent to express within their messages not only the bare content but also their personal viewpoints and, to a limited extent, the emotional overtones that may be present. Thus, the potential for interaction in a CMC system is both more flexible and potentially richer than in other forms of computer-based education.Most of these forms of social media could be accessed from mobile devices, allowing sending and receiving of information even quicker than traditional electronic messaging such as email. Blogs and wikis are also being used in the capturing and dissemination of information and knowledge (Razmeritaetal, 2009).

Steyn (2014) vindicated that to ensure survival and competitiveness in the fast-paced economic environment, library and information centres are under pressure to develop products and services at a faster pace and bringing their products and services faster to the targeted users. More especially, libraries are now relying more on CMCT to improve the delivery of their services.Ou et al (2013) also state that "under the larger umbrella of computer-mediated communication (CMC), social networking tools are designed to facilitate interlocutors' communication so as to strengthen their social relationships."Strategic Direction (2009) stated that improving communication between widely dispersed personnel is one the key functions of any communication device. They facilitate information sharing and interactions between two or more persons, and can be used to render wide range of services to patrons in the library.

The Internet has revolutionised the way librariescommunicate with its users. Cormode& Krishnamurthy (2008) explain that Internet users are no longer just consumers of content, but now have the ability to contribute content. They also stated that Web 2.0 brought a democratic dimension to the Internet, where users can create groups and share content, such as text, photos

and videos, amongst themselves using emails, podcasts, chat forum and others.The Electronic mail (email or e-mail) is a method of exchanging messages ("mail") between people using electronic devices. Podcast as a CMCT is used to exchange and share audio programmes among patrons over the Internet. Landis (2007) noted that libraries can share pictures, events, and instructions by podcast. Podcast is a catchy tool to market library services and attract new users (Lee, 2006). Audio streams of lectures and book readings may be beneficial for students who are visually challenged or have poor reading and comprehension competencies. Podcasts are frequently used to broadcast speeches and interviews of important personalities. Libraries use podcasts mainly for offering tips, using the audio format. This format provides potential benefits for delivering library instruction in a medium that will supplement traditional methods and also provides a useful alternative for the increasing number of online courses and distance students. Podcasts and videocasts have been successfully used in delivering library web-based services.

Instant Messaging as a CMCT refers to chat or text chat, according to Sani (2014) is a versatile, accessible, and almost universally available tool that supports collaboration in multiple ways. Many chat/ IM client applications support audio chat, video chat, file transfer, and even desktop sharing in addition to simple text chat. Perhaps the greatest feature of IM is the number of people who use it and know how to use it. . Academic libraries use IM to provide virtual reference services, improve access of other services and provide the latest information to students. Therefore, Instant messaging also acts as an additional medium to facilitate interactions with patrons(Sani, 2014).The whatsapp is also a wide range of internet based services that enhence online exchange of ideas, thought, it is a major means to facilitate exchange of goods and services. The whatsappcontents are user generated, with it one can create, share and exchange information and resources using a computer or other hand held devices such as handsets, iPad, and others.To Byrd (2014), interaction between two or more persons is very easy on whatsap. It has great education uses since it allow teachers and learners to socialize, share

resources, ideas and work collaboratively.Byrd (2014) definedWhatsapp as an internet aided applicationused by students, workmates and teachers to connect; interact and share needed information with their friends and colleagues.

Methodology

The study examined Computer Mediated Communication Technologies (CMCT) and Librarian's Interaction with Users for Effective Service Delivery in Delta State University Library. The objective was to identify the relationship between CMCT andlibrarian's interaction with users for effective service delivery. The study adopted a descriptive survey design. The population of the study comprised the total of 56staff working in the university library (library assistant, library officers and librarians). Census sampling was used to sample the entire population because of its manageable size. The instrument used was a 4 point Likert-type scale Questionnaire divided into sections A and B. Section A sought demographic information while section B elicit on the research data. Out of 56 copies of questionnaire administered, 46 copies valid for analysis. Data collected was analyzed using the descriptive statistics of arithmetic mean (X) and standard deviation (SD).The decision rule for the mean was calculated at $4+3+2+1/4 = 2.5$. Therefore, responses from section B question with mean scores above 2.5 were rated positive while those below were rated negative. The hypothesis was tested using Pearson Product-Moment Correlation Coefficient.

Analysis and Discussion of findings

Table 1: Use of Electronic mail and librarian's interaction with users

RQ1: What is the relationship between the use of Electronic mail and librarian's interactions with users for effective services delivery in Delta State University Library?

Email and librarian's interaction with users	$\bar{x}$	±	Decision

	$\bar{x}$	$\pm$	Decision
Email helps me to inform library users of materials available in the collection	3.61	.932	Accept
Email helps me to get feedbacks from users on their needed information	3.03	.912	Accept
I answer users queries effectively on emails	3.42	.951	Accept
Email helps me to remind users of overdue books in their custody	3.21	.991	Accept
Email communication helps to offer extension services to distant learners effectively	3.04	.901	Accept

Table 1 above shows the mediation between the use of Electronic mail and librarian's interactions with users for effective services delivery in Delta State University Library. According to the respondents, email technology helps to inform library users of materials available in the collection ($\bar{x}$=3.61); answer users queries effectively on emails ($\bar{x}$=3.42); remind users of overdue books in their custody ($\bar{x}$=3.21); offer extension services to distant learners effectively ($\bar{x}$=3.04); and get feedbacks from users on their needed information ($\bar{x}$=3.03). Based this finding, it shows that the use of email communication enhances effective collaboration and interactions with user as was confirmed by the study of Ou et al (2013) titled: Computer-mediated communication and social networking tolls at workpalces.

Table 2: Use of Podcasts and librarian's interaction with users

RQ2: What is the relationship between the use of Podcasts and librarian's interactions with users for effective services delivery in Delta State University Library?

Podcasts and librarian's interaction with users	$\bar{x}$	$\pm$	Decision
I use podcast to showcase library products and services to users	2.21	.432	Reject
Podcast helps to provide instructions to library users either through video or audio.	1.93	.242	Reject
I get immediate feedback or comments from users on every podcast	2.42	.351	Reject
I feel connected to library users using podcast	1.91	.291	Reject
I use podcast to interact and answer users queries	2.04	.201	Reject

Table 2 above showsthe mediation between the use of Podcasts and librarian's interactions with users for effective services delivery in Delta State University Library, according to the respondents, rejected the use of podcast to interact with users as the mean scores are below 2.5.

Therefore, this finding indicates that staff in Delta state university library have not realized the need for the use of podcast to interact and provide effective services to users in this digital age.

Table 1: Use of Instant Messaging (IM) and librarian's interaction with users

RQ3: What is the relationship between the use of Instant Messaging (IM) and librarian's interactions with users for effective services delivery in Delta State University Library?

Instant Messaging (IM) and Librarian's interactions with users	x̄	±	Decision
I use simple text chart to send messages and interact with users effectively	2.91	.832	Accept
I use voice chart to receive all users complains in the library	2.93	.842	Accept
It promotes awareness and access to library services	3.02	.901	Accept
It helps me to keep track of users information need	2.61	.791	Accept
It enhances mutual collaboration with librarians and users	3.04	.851	Accept

Table 3 above shows the mediation between the use of Instant Messaging (IM) and librarian's interactions with users for effective services delivery in Delta State University Library. According to the table, the respondents accepted that Instant Messaging enhances mutual collaboration with librarians and users (x̄=3.04);promotes awareness and access to library services(x̄=3.02); helps to send messages and interact with users effectively (x̄=2.91); helps to receive all users complains in the library (x̄=2.93); and to keep track of users information need (x̄=2.61). This finding indicates that there is link between the use of instant messaging and librarian's interactions with users. This is in line with the study of Sani, (2014) where he stated that Instant messaging acts as an additional medium to facilitate interactions with patrons.

Table 1: Use of Whatsapp and librarian's interaction with users

RQ 4: What is the relationship between the use of Whatsapp media and librarian's interactions with users for effective services delivery in Delta State University Library?

Whatsapp media and librarian's interactions with users	x̄	±	Decision
I use whatsapp to receive needed information from library users	3.01	.832	Accept

It helps me to relate with distant users effectively	3.93	.942	Accept
It helps me to selectively disseminate informationto distant users	2.92	.791	Accept
I use whatsapp to collect user profiles for documentation	2.91	.891	Accept
It promotes mutual relationship for prompt service delivery in the library	3.04	.901	Accept

Table 4 above shows the mediation between the use of Whatsapp media and librarian's interactions with users for effective services delivery in Delta State University Library. The table shows that the respondents accepted that whatsapp media helps to relate with distant users effectively ($\bar{x}$=3.93); promotes mutual relationship for prompt service delivery in the library ($\bar{x}$=3.04); helps to receive needed information from library users ($\bar{x}$=3.01); helps me to selectively disseminate information to distant users ($\bar{x}$=2.92); and to collect user profiles for documentation($\bar{x}$=2.91). Therefore, the finding shows that whatsapp media is highly effective between librarians and users communication. According to Byrd (2014),It has great education uses since it allow teachers and learners to socialize, share resources, ideas and work collaboratively.

Table 5:HO: There is no significant relationship between the use of Computer mediated communication technologies (Electronic mail, Podcasts, Instant messaging, Whatsapp) and librarian's interactions with users for effective service delivery in Delta State University Library

Table 5: Pearson correlation ofElectronic mail, Podcasts, Instant messaging,Whatsapp and librarian's interactions with users for effective service delivery

Variable	N	Mean	Std. Dev	r	Df	Sig	Remark
Email	46	12.01	4.64	0.842	45	0.000*	Significant
Podcasts	46	8.13	3.96	0.214	45	0.000*	Significant
Instant Messaging	46	10.08	4.14	0.853	45	0.000*	Significant
Whatsapp media	46	11.07	4.75	0.754	45	0.000*	Significant

*Significant at $p < .05$

It is assumed that there is no significant relationship between the use of Computer mediated communication technologies (Electronic mail, Podcasts, Instant messaging, Whatsapp) and librarian's interactions with users for effective service delivery in Delta State University Library. The study attempted to find out the strength of this assumption. It was found, as presented in table 5, (1a) that there is a strong relationship between the use of email communication and librarians interactions with users significant at (r-0842; p<.05); (1c) there is a positive relationship between Instant messaging and librarian's interaction with user significant at (r=0.853; p<.05); and (1d) there is a moderate relationship between the use of whatsapp media and librarian's interaction with users which is significant at (r=0.754; p<.05). The table however excluded the use of Podcast technology which shows a weak relationship between the use of Podcast and librarian's interactions with users which is significant at (r=0214; p<.05). Hence, HO 1a,1c& 1d is rejected, while H0 1b is accepted. Therefore, there is no significant relationship between the use of Podcast and librarian's interactions with users in Delta State University Library.

Conclusion and Recommendations

The use of computer mediated communication technologies to render effective services to users cannot be over-emphasize as they allow users at different level to interact, such that users with android device can simultaneously communicate with a library staff using desktop or laptop computer on the platform of applet or window application. However, the study found out that there is a significant relationship between computer mediated communication technologies like (email, instant messaging, whatsapp) and librarian's interaction with users for effective service delivery, only that the use of podcast has not been fully recognized in Delta state university library as it shows a very weak relationship. Hence, the study recommends adequate recognition and incorporation of CMC technologies like podcast and can also come up other CMC applications to achieve more effective and efficient service delivery in the library.

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