



Use and User Perception of Electronic Information Resources: Experience of Koforidua Polytechnic, Ghana.

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Abstract

This study seeks to assess the use and user perception of electronic information resources with specific exploration of Koforidua Polytechnic in Ghana Sub-Saharan Africa with the intention of addressing the challenges of respondents. Eighty hundred (800) participants were involved in the study. The response rate was 96.3% representing a valid numeral strength of seven hundred and seventy seven (770) copies of questionnaire returned dully filled out of eighty hundred (800) distributed. All the variables tested showed a positive correlation with use of electronic information resources. The study recommended among others that training, infrastructure building and awareness creation must be taken into urgent consideration.

Keywords: educational resources, access to information resources, use of database, online library services, academic libraries

INTRODUCTION

Koforidua Polytechnic started operating since the 1980's until 1997, when it assumed a full Polytechnic status, with the passing of the Polytechnic Law 1992 PNDC Law 321. The Polytechnic currently have four (4) faculties, namely the Faculty of Business and Management Studies (FBMS), Faculty of Applied Science and Technology (FAST), Faculty of Engineering (FOE) as well as Faculty of Build and Natural Environment (FBNE). The total number of courses offered in the Polytechnic has increased from two (2) from inception, to fifteen (15).

Currently the Polytechnic is also offering eighty(8) Bachelor of Technology Courses in Procurement, Automotive, Accounting, Building, Civil & Mechanical Engineering, Renewable Energy Systems, Secretariship and Management Studies. Apart from these courses the Polytechnic also offer Open and Distance Learning as well as Professional courses for busy workers who cannot enroll on the regular school sessions. The student population as at 2013/2014 was estimated at six thousand one hundred and fifty-five (6,151) (Undergraduate Prospectus, 2014).

The question one needs to ask is how the modern library can manage its e-resources effectively and efficiently to benefit the library in the long run. Most libraries are now concern about getting more electronic resources for its libraries but none have critically considers its use and user perception. There are quite a few relevant studies on the information seeking behavior of student's lecturers, and researchers in Polytechnics in Ghana. The present study is to investigate the use and user perception of electronic information resources used by the students and faculty members at Koforidua Polytechnic in Ghana sub-Sahara Africa.

The present study is conducted to find out the awareness and use pattern of library digital information resources and services by students and faculty members of Koforidua Polytechnic in Ghana Sub Sahara-Africa. The specific objectives are as follows

- To observe the use of electronic information resources by the user community
- To examine the frequency of library online resources used
- To study the quantum of time spent for using electronic resources
- To identify the problems faced by respondents while using electronic resources
- To suggest improvement measures based on the findings of the study

The study was guided by the following hypotheses

- H1. There is a correlation between use of electronic resources and perception of user community
- H2. There is a correlation between the frequency of use and perception of online library resources
- H3. There is a correlation between quantum of time spent and perception of using electronic resources
- H4. There is a correlation between problems faced by users and perception of using electronic resource.

This study is justified on the grounds of the provision of electronic information resources to faculty, students as well as other researchers because the finding would help management to ascertain the real situation on the grounds. This is expected to assist the library to know if users are aware and well abreast with the skills of using the electronic resources of the library. Besides results of this study would inform the library on the steps to take to address any difficulties users face or are facing as far as electronic information resources are concern. Finally the outcome would be a measure for the library in terms of lobbying for budgetary allocation for the subscription of more electronics information resources.

LITERATURE REVIEW

According to Dadzie (2005) various studies have been carried out on the use of electronic resources by students, faculty and research staff of institutions of higher learning precisely Universities. On the other hand, online databases have not been equally patronized by clients (Majid and Tan, 2002; Ibrahim, 2004) Some reasons attributed to low patronage of online databases included lack of awareness to electronic resources, lack of time to access and too many passwords to remember.

Studies on usage of other electronic resources such as library OPACs, e-books, and subject gateway projects have revealed differences in use. Waldman (2003) reported high usage of the library's OPAC by students; Falk (2003) reported the rapid growth and use of e-books in school, colleges and universities. Ashcroft and Watts (2004) also mentioned the potential advantages of e-books including easier access, speed of publication, space-saving and lower costs as cited by(Dadzie ,2005).

They also highlighted some change implications for e-books in terms of collection development, marketing and evaluation, user education, technological and communication skills. The integrated access to all electronic resources is also an important issue discussed by Kennedy (2004) and Cohen and Calsada (2003). With the proliferation of these resources especially for libraries with large subscriptions, Cohen and Calsada (2003) raised pertinent issues such as the management of web site lists, the provision of a unified search interface to the library's research databases and e-journals and the inclusion of URL's web sites in the library's catalog. Kennedy (2004) also proposed the inclusion of web pages to the Library Catalogue as a solution to the maintenance of increasing web sites links. Campbell (2000) discussed the key political and strategic issues needed for the future development of Australian subject gateways.

According to Davidson (2001), it is an essential part of a library's function to provide its users with an effective and efficient means of accessing electronic resources, as with print resources. In order to accomplish this, a library must be able to efficiently publish and maintain web links to online resources so that they may be easily located and utilized. In an era where many libraries are moving from manual to electronic as a result of Information Technology revolution and its associated benefits.

Adebayo (2013) examined the challenges associated with cataloguing electronic resources in six randomly selected University Libraries in Southwest Nigeria and highlighted some challenges

associated with cataloguing electronic resources such as lack of adequate physical description of some electronic resources, inadequate workflow in cataloguing sections, copyright issues among others.

In another development, Carlson and Reidy (2004) conducted a study on the effective access of lecturers to digital resources and found that 84% spend less than 50% of their time using web-based resources during instructions. Elavazhagan and Udayakumar (2013) examined the exposure and measure the extent use of resources by the faculty members and research scholars of BITS, Pilani - Hyderabad Campus" and confirmed that, the e-resources are time saving, easy to use and handle, more informative, preferred, flexible and effective.

In addition, Nallathamb and Kanakaraj (2012) in a previous study found that, the majority of the respondent in the engineering colleges use electronic resources daily. Sivasubramaniyan and Batcha (2012) discovered that the uses of e-resources are very common among the faculty members of Pondicherry University as well as to the faculty members who are in affiliated colleges. It was clear that majority of faculty members were dependent on e-resources to get desired and relevant information by (Dhanavandan & Nagarajan 2012).

Similarly, Kalbande, Shinde, and Ingle (2013) surveyed 108 faculty members at the Mahatma Phule Agricultural University, India and observed that, the impact of e-resources was visible from the decrease in number of printed documents in comparison to the increase in number of electronic resources'. Bidyut, Bajpai, and Chakraborty (2013) observed that e- resources have posed new challenges for library professionals to manage properly as cited by (Dhanavandan & Nagarajan 2012).

METHODOLOGY

This is the first phase of a study on the use and user perception of electronic information resources since the Polytechnic Library join the Consortium of Academic and Research Libraries in Ghana (CARLIGH). The present study is mainly based on the primary data collected from the faculty members, students as well as other researchers of Koforidua Polytechnic in Ghana precisely in the Eastern Region. Besides, the secondary data have been collected from the sources available from Koforidua Polytechnic Library. A well-structured questionnaire was designed and distributed to selected eighty hundred (800) students, staff members from the various facilities and departments.

A pilot study was conducted to test the reliability of questionnaire. Simple random sampling of fifty (50) respondents with similar characteristics from neighboring Polytechnic was given samples of the questionnaire to fill. Pilot test is desirable because it provide a testing ground for final administration of the instrument. After collecting data from the pilot test, a reliability test was done to check if the questionnaire scale and structure needed to be modified. Six hundred (770) copies of the questionnaire were returned dully filled. The overall response rate was 96.3%. The questionnaire contained both open- and close-ended questions. The SPSS (Statistical Package for the Social Science) for Windows is probably one of the most widely used computer software for

analysis of quantitative data for social scientists. The SPSS has been in existence over years, and has undergone much revision particularly since the introduction of personal computers. Data collected was process by sorting, editing, coding, classification as well as tabulation to present a clearer view of the analysis.

Descriptive Statistics

Table 1: Descriptive Statistics

Variable	N	Mean	Std. Deviation
Use of Electronic Resources(UES)	770	4.1386	.61539
Frequency of Using Electronic Resources(FUE)	770	4.0248	.72234
Quantum of Time Spent (QTS)	770	4.0050	.76943
Problems Encountered During Use(PEU)	770	4.1040	.80674
Time of Using Electronic Information	770	3.4167	.50000

Source: field data, 2014

Observing Table 1, it could be reported that almost all the mean are in the same range except one thus time of using the electronic information. The highest mean was 4.1386 indicating the use of the electronic information resources (UES) whiles the lowest mean was 3.4167 depicting time of accessing the electronic information resources. This study relies on only four (4) dimension of user perception of electronic information resources.

H1. There is a correlation between use of electronic resources and user community

Table 2: Chi-Square analysis

	Chi-Square	Correlation	df	Sig.
Pearson	3.806	0.99	8	.034

Source: field data, 2014

From Table 2 there is a strong positive correlation (.99) observed between use of electronic resources and user perception. It was statistically significant at ($P > 0.05$). Therefore the hypothesis is accepted.

H2. There is a correlation between the frequency of use and perception of online library resources

Table 3: Chi-Square analysis

	Chi-Square	Correlation	df	Sig.
Pearson	2.806	0.87	4	.001

Source: field data, 2014

Displaying Table 3 it shows that, there is a strong positive correlation (.87) observed between frequency of use and perception of online library resources. It was statistically significant at ($P > 0.05$). Therefore the hypothesis is accepted.

H3. There is a correlation between quantum of time spent and perception of using electronic resources.

Table 4. Chi -Square analysis

	Chi-Square	Correlation	df	Sig.
Pearson	3.020	0.95	2	.003

Source: field data, 2014

In Table 4 there is a strong positive correlation (.95) observed between quantum of time spent and perception of using electronic resources, however it was not statistically significant at ($P > 0.05$). Therefore the hypothesis is accepted.

H4. There is a correlation between problems faced by users and perception of using electronic resources.

Table 5 Chi Square analysis

	Chi-Square	Correlation	df	Sig.
Pearson	3.406	0.91	2	.002

Source: field data, 2014

Observing Table 5 it was found that there is a strong positive correlation (.91) found between problems faced by users and perception of using electronic resources. However, it was not statistically significant ($P > 0.05$). Therefore the hypothesis is accepted.

DISCUSSION

The empirical results support all the four hypotheses H1, H2, H3 and H4. The empirical results also revealed a significant positive relationship between the variables of use namely, the user community, frequency of use, quantum of time spent, problems face. Chandran (2013) Dadzie (2005) (Oyewusi & Oyeboade, 2009) all asserted in their previous studies that use of electronic information resources among faculty members, students and other researchers in tertiary institutions is a vital issue with respect to the variables this study measured thus the user community, frequency of use, quantum of time spent, problems face. Most of the studies have reported high usage of internet resources (de Vicente *et al.*, 2004; Falk, 2003). Some of the reasons attributed to the high usage were the freely available access, the ease of use, and its currency.

In another development, Waldman (2003) Falk (2003) Ashcroft and Watts (2004) were among the previous writers whose findings justify the need to integrate the use of electronic information resources in libraries. In a similar situation, Kennedy (2004) Calsada (2003) and Campbell (2000) in their previous research call for a holistic implementation of electronic information resources in all tertiary institutions because of their relevance.

Adebayo (2013) Elavazhagan and Udayakumar (2013) Nallathamb and Kanakaraj (2012) Davidson (2001), all assert to the fact of challenges in the implementation of E-resources but added that there are benefits with respect to time saving, cost effective, easy to use and handle, more flexible and effective.

CONCLUSION

The present study was to assess the use and user perception of electronic information resources regarding the experience of Koforidua Polytechnic in Ghana, the Sub-Sahara Africa. All the four (4) variables tested showed a positive relationship at ($P > 0.05$). The implication is that it is very vital for academic libraries to critically examine the key factors namely user community, frequency of use, purpose, quantum of time spent and problems face with respect to electronic information resources and services of the library.

RECOMMENDATION

Since use of electronic information resources form a core element in supporting teaching, learning and research in tertiary institutions this study recommends among others that the management of the tertiary institutions should see to the following;

Awareness creation should be the business that, management of the library must consider using all avenues available such as meeting times, durbars, conferences, seminars and workshops, institutes website, official circulars, library notices, institute's Fm station, congregation, matriculation, and the library staff. There should also be the organization of training for the users thus faculty members, students and all researchers. This should be regular and systematic. The management should also improve upon the entire infrastructure concerning the process of accessing the electronic information resources in terms of internet connectivity as well as expansion of the E-library facilities.

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