Students' Perception toward the Implementation of Librarika Based Digital Library to Ease Student Access to Learning Resources during the Covid-19 Pandemic

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Abstract

E-learning and digital library applications have become increasingly important in addressing the needs of both students and teachers eager to gain fast, accurate, specific, and wide range of knowledge in formal education courses just by the click of a button. It becomes more important since the spread of Covid -19 that forces us apply e-learning to avoid direct contact. Digital Libraries are key to providing opportunities for students to have access to quality assured documentation for studies via the Internet. The aim of this paper is to explore the students' perception toward the implementation of Librarika based Digital Library if it is to play an increasingly active role in providing learning resource for students. Data collected from 100 digital library users are used for data analysis. The overall results suggest that students had positive perceptions toward the use of the digital library and are satisfied with library services**.** The findings of the study further revealed that students find the library to be user-friendly and they use the library to borrow materials. Students who had more prior experience with the Internet had significantly higher positive perceptions toward using the digital library. Implications for practice are discussed and recommendations are made for future research.

Keywords: covid-19 pandemic, communication technology, digital library, e-learning, internet

1. Introduction

The Corona Virus outbreak was unexpected and took everybody aback in the world. According to Huang et al. (2020), a novel Corona Virus worldly known as COVID-19 was discovered in the last month of 2019 calendar year, in a seafood market in Wuhan Province of China. The results from clinical analysis showed that the virus is transmitted from person to person (Li et al, 2020; Paules et al., 2020; Wang, et al. 2020). From China, the virus spread to most parts of the world and following that, the Director General of World Health Organisation (WHO) declared COVID-19 as a Pandemic after assessing the vast spreading and severity of the pandemic in the world. As a result of this declaration,

protocol was devised – wearing of mouth and nose mask, washing of hands constantly with soap under running water, use of hand sanitizer and social distance of at least one metre (WHO, 2020b). Due to fast spread of the virus, schools in China were closed and thereafter, countries in which the virus was detected also declared general lock-down; business organisations, schools, colleges, and universities were all closed down. Many people are not sure presently over how and when the pandemic will be over; the question remains whether things will ever go back to normal or as it was before the emergence of the pandemic and many suspicions remain doubtful (Lee et al., 2020).

The pandemic forced the physical closure of many educational organisations (Massachusetts Department of Higher Education, 2020). Social distancing and regular hand washing are being practiced among people of the world. This brought about increased usage of internet technology to carry out most activities all over the world. The closure of educational institutions around the world could impact many students, lecturers, researchers and other users of libraries negatively (Aung & Khaing, 2015). Likewise, the closure of other organisations around the world could equally adversely affect millions of stakeholders, some even lose their jobs just as educational institutions were equally impacted (Tammaro, 2020). Consequently, managers of educational institutions especially universities had no option than adopting distance learning on an unprecedented scale. With this, educational institutions are racing to shift their teaching and learning activities online; students on the other hand had to resort to the use of digital libraries resources including eBooks, journals, and other electronic resources to supplement the lecture notes made available to them by lecturers; researchers are also drawing chiefly on electronic resources for their research work thus making libraries to change their mode of operations (from physical to electronic), (Tannaro, 2020).

The physical library generally is a place located in a building where books, journals, print and electronic materials are kept for people to come and read and take out information for use. The physical library has its shortcoming and challenges due to the emergence of the internet technology, the notion about library as a physical existence has long been faced out to the increasing simplicity and less expensiveness of digital services. Dynamic trend in the use of digital library services has been now hastened by the recent lockdown caused by the COVID-19 pandemic. Quite a number of crossbreed libraries, with digital and physical collections coexist alongside each other; in some places the physical libraries are still used alongside the digital ones.

The benefits of digital libraries in higher education are many. To list a few, the first one is that students can access an unlimited supply of literature. With unlimited access, students can conduct research and expand their knowledge. Second, digital libraries have eliminated overreliance on physical libraries. Students can conveniently access the digital libraries without physically visiting a schools' library. In other words, digital libraries allow students to access learning materials from the comfort of their schools, homes or anywhere as long as they have personal computers, internet connection, and the password to access the schools' library (Alkoudmani & Elkalmi, 2015). Furthermore, digital libraries

offer universities and colleges a cheaper option of accessing an unlimited supply of e-books, e-journals, and other study materials. Instead of purchasing printed books, universities and colleges are now buying soft copies at significantly lower price.

However, complaints were common among the university students when they were having online lectures and accessing the digital libraries. There were shortfalls in almost every aspect of the emergency online teaching and learning for which most students nearly gave up taking lectures online. Given the options many students would not have taken lectures online. Most of them complained of the inability to have stable connection to the internet, lack of books, journals and other resources. Based on the complaints from students during the pandemic, the researchers decided to develop Librarika based Digital Library and conduct this study to ascertain the facts about the access to the digital library and students' perception on the digital library at English Department of Teachers Training and Education Faculty, Sultan Ageng Tirtayasa University. The aim of this study is to find out students' responses toward digital library and academic resources, problems that confronted the students, the extent to which they are satisfied with the usage and problems of the resources accessed by them. Specifically, the objective of the study is to examine: (a) the perceptions of digital library usage during the pandemic; (b.) analyse the satisfaction rate of digital library usage by students and (c.) evaluate the problems encountered during the usage of the digital library.

2. Literature Review

The Digital library system

Traditional libraries in the print-based environment were guided by the objective of linking users who needed information to the sources that had the information. Most of their work was done without the use of information technology and was time consuming depending on the nature of the search. Since the Covid-19 pandemic, the scenario has changed with greater use and application of information and communication technology (ICT) especially in libraries. As more and more information sources become available online, many university libraries are introducing digital service. The aim of these services is to broaden the range of information resources available and to add value to their content by making them accessible through digital means so that students, researchers, and the entire members of the university community can access them anytime and anywhere. Chowdhury and Margariti (2004) further pointed out that the introduction and development of the Internet and its associated Web technologies in the past decade have significantly influenced both the way libraries provide information services to their users and the way users choose to access information. Academic libraries are now trying to meet the needs of the academic and research community by improving their services and enhancing their resources. One of the means is the provision of digital library collection. A successful strategy to enhance exploitation of resources is to ensure users' awareness about the existence of a particular service such as the current technologies in libraries which are meant to promote service efficiency and effectiveness.

The Evolution of Digital library system Computer-based automation was initially incorporated into library operations as a mechanism for handling the routine functions of running a library such as circulation, cataloguing, acquisitions, interlibrary loan and serials control (Fecko, 1997). Since the 1990s, technology has continued to develop, often faster than library professionals can convincingly cope with. Additionally, the availability of the Internet has brought about dramatic changes in libraries, especially institutional libraries, in terms of how they collect, organize and disseminate information. Perceptions of digital libraries vary and evolve over time, and many definitions for digital libraries have been proposed. The concept of a digital library means different things to different people. Even the key players in the development and use of digital libraries have different understanding of digital libraries. To librarians, a digital library is another form of a physical library; to computer scientists, a digital library is a distributed text-based information system or a networked multimedia information system; to end users, digital libraries are similar to the World Wide Web (www) with improvements in performance, organization, functionality, and usability (Fox, Akscyn, Furuta, & Leggett, 1995).

The Role of Digital library in learning and research

The digital revolution has brought dramatic changes to information storage, access, and retrieving processes. The creation of digital libraries has made an essential impact on the teaching and learning process. Digital libraries facilitate information services for students, independent of time and place. This is much needed, especially if active learning styles become a common place (Barnard, 1997; Beagle, 2000; Roes, 2001). The major benefits of digital libraries include storing resources in digital format, which allows online access to students at numerous locations at anytime and anywhere, it can be at home, in the library, in the class, laboratories, to mention among many. Moreover, digital libraries provide various search techniques to access the digitized resources (Wiederhold, 1995). A digital library is a collection of information objects and services that support students in dealing with information objects available directly or indirectly through electronic or digital format (Seadle and Greifeneda 2007). Digital libraries containing representations of original works provide opportunities for students and scholars to conduct research from their personal computers and workstations set in their homes, offices and laboratories. It also facilitates remote research from private and public locations and offers learners' opportunities that are unconstrained either by the limited resources found in particular physical libraries or by their schedules of operation.

The technology that is continuously changing in today's digital age has made academic libraries to update and improve their present services and systems to ensure that their products or services meet the students demand for information. Xia (2003) reported that the introduction of modern information technology and information resources in a dynamic digital format has made libraries to introduce changes in the way they provide access. Information is circulated much more quickly over the Internet and patrons are able to access the latest versions of information resources almost as soon as they become available (Fecko, 1997). One of the results of the application of information technology in libraries is

the coming of the digital library especially in academic environment. Today many university libraries offer electronic information resources to their users in order to satisfy their information needs. However for this effort to be successful the users need to be aware and have access to such collection and services as well.

Librarika

The use of Librarika integrated library software is of great importance in the management of both physical and virtual resources of a library. Application of Librarika LMS supports acquisition, cataloguing, circulation and Online Public Access Catalogue (OPAC) functions of the library. Librarika also provide reports to monitor library daily activities such as tracking library materials, members, fines and library patrons can view their status, fines incurred, notifications, reserve book and also support patron authentication (Yuvaraj, 2016). Cataloguing module allows library staff to prepare and store bibliographic record of library materials thereby enabling the items catalogued to be view from OPAC. The circulation module enables library staff to create and manage patron's record, issue or return item borrowed, reserve book(s), renew borrowed book(s) and calculate fine incurred. Therefore, it becomes paramount to develop user friendly cataloguing and circulation modules that allow library staff to effectively and efficiently perform cataloguing and circulation activities. With the increase in the use of LMS in university libraries, librarians and library staff expectation are centred on usefulness and usable intergraded library management software. While usefulness deals with the feature necessary to carry out library task, usability describes how easy it is for library staff to accomplish library functions using LMS.

Nielson (2012) defined usability as a quality attribute that assesses how easy users' interfaces are used. Neilson further identified five elements which described usability to include ease of learning, efficiency of use, memorability, errors and satisfaction. Usability relates to the effectiveness, efficiency and satisfaction with which users achieve goals using a software (International Standard for Organisation (ISO) 9241-11, 2018). Therefore, an LMS should support its user to achieve intended goal and enrich the users' experience throughout the interaction process with the software. Alshehri et al. (2019) stated that the effective and efficient use of a software system depends on the appropriateness of the designs and how easily users interact with the system to fulfil their expectation and needs. Therefore, the user has become an important part of evaluation and development process that can be used to measured user interface of LMS.

3. Methodology

The aim of this study was to survey students' perceptions of the Librarika digital library collection. This involved gathering data from the research population. Thus quantitative Survey method was adjudged as the best method for this type of research. A sample size of 100 undergraduate students of the English Education Department was randomly selected and the questionnaires personally

administered and collected from them by the researcher. The data collected were analysed using descriptive statistical tools such as tables, charts, percentages and frequency distribution.

4. Data analysis and interpretation of result

Perceptions of students on the Digital Library services and usage

The following table indicated the perceptions of English Education Department students regarding the Librarika digital library services and usage. The result shows that most of the students perceived the digital library positively. This is because when the students where asked whether search options are helpful, about 47% of the students agreed that the digital collection was helpful to their studies, while only 38% accepted that it encouraged indecency in searching. Furthermore, in the case of the authenticity of the digital content, 46% of the students agreed to this statement which sheared equal popularity with the view of students regarding the statements as to whether the services also help in terms of improving their performance. On the other hands students showed less satisfaction regarding the update ness of the past examination question papers with 17% response rate. There is also a clear indication that students do not agree that boost independent reading because only 3% of the students agreed with the statement which is equally not encouraging.

Table 1. Frequency Distribution of perceptions of students on the
Digital Library services and usage

Perceptions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Search Options are Helpful	5%	11%	23%	47%	14%
It boosts independency in resources searching and use	4%	10%	45%	38%	3%
Digital collection is authentic information system	2%	8%	21%	46%	23%
Past examination question papers are not up to date	6%	12%	32%	33%	17%
Digital library helps to improve your performance	1%	4%	43%	21%	31%

Satisfaction regarding Using the Digital Library services and collection

Figure 1. shows the Information on the Satisfaction level of students regarding the use of Librarika Digital Library services and collection. Almost half of the students 43% accepted that they are satisfied with the Online Database because it is easy to use the resources in the digital format, they are satisfied with the Librarika digital library services in terms of its contents except in the case of the browsing options where al they are satisfied with it or not. Based on the above result we can conclude that the English Department Librarika digital content format and contents has satisfied the students' academic purpose although with few weaknesses in terms of inadequate up to date supply of past question papers.

Figure 1. Information on Satisfaction regarding Using
the Digital Library services and collection
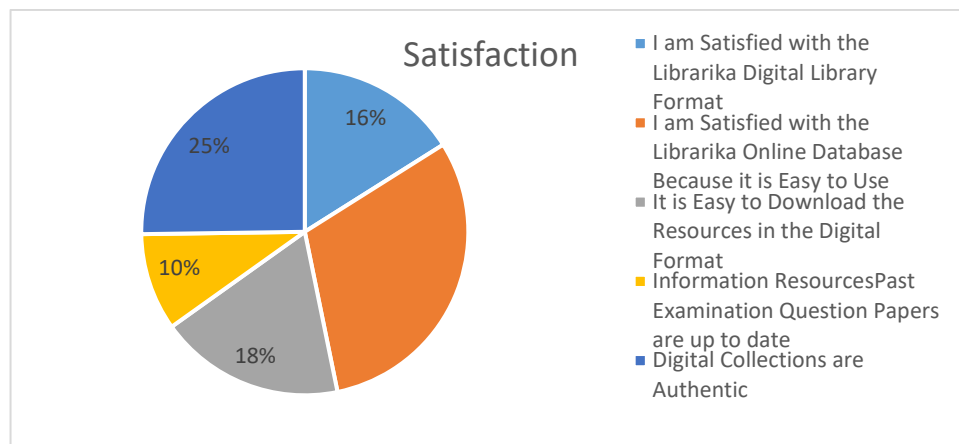
Problems Faced When Using the Digital Library Resources

We can see from table 2. that majority of the English department students pointed out that they have no problem with accessing the Librarika based Digital Library (59%) and the online database (61%) respectively. However, the highest problem of students is in dealing with e-manuscripts which has about 54% responses, which indicated that more than half of the students are involved. Another area of concern is the case of accessing the past examination question papers which sheared equal proportion 50% between the students that responded they do not have problem with those that pointed out they encounter problem when accessing the digital contents of the past examination question papers. This shows that an improvement is required in the digital preservation of this content so as to make it more easily accessible to students.

Table 2. Frequency distribution identifying the problems faced by Students when using
the Librarika based Digital Library

Statements	Responses	
	Yes	**No**
Accessing the Content Pages of the Unpublished Journals	34%	66%
Accessing the Past Examination Question Papers	53%	47%
Accessing the Publication	41%	59%
Accessing the e-manuscripts	54%	46%
Accessing the Video Collections	45%	55%
Using the Online Database	39%	61%
Using the Open Access Resources	43%	57%
Using the Institutional Repository	42%	58%
Using the Library Online Catalogue	28%	72%

5. Discussion

The main objective of the study is to examine students' perceptions of the Librarika Digital library services and usage, with emphasis on the English Education Department students. The findings clearly revealed that the students are aware of the existing Librarika based digital library services but the usage appeared to be very weak among students. Matusiak, K., K. (2012) assert that the users, especially students do not perceive academic libraries as a useful source of digital images and used search engines when searching for visual resources. This however shows that although efforts are made to improve services some users do not see libraries as suitable ventures for disseminating these electronic services as in the findings of Matusiak (2012). In fact, students spends less time to really utilize the digital library resources and this has also made some students to have less knowledge about some of the resources that are also available in digital contents. The findings equally indicated that students' experiences difficulties especially in accessing update past examinations question papers (53%) as well as other digital contents of the Librarika based digital library. Lombardi, J., Y. (2000) pointed out that "Helping users to find resources in a digitally disordered world supposed to be the first priority of the librarian in today's digital age before even considering the digitizing the collection which might come as the second priority.

6. Conclusion and Recommendations

The study basically based its self on examining how students perceive the Librarika based digital library services and how the students make effective use of it. The study went further to examine the means through to which search and used the digital resources provided by digital library. And the data collected was analyzed and revealed some existing shortcomings on the side of both the students and digital library as well which includes the law utilization of the digital library resources by English Education students as well as unavailability of some past questions papers and inability of student to access the full contents of Untirtas' publications which are very important tools that assist them in writing their research, because it serve as guide to students in the cause of undertaking research work and even other leaning activities.

Based on the findings and conclusion of this study, the following recommendations are therefore made. (1) The department management should strive to make an effort to upgrade the digital library system to be more user friendly so that it will be easier to use by students; (2) The institution can also organize a kind of training workshop at least once in a semester for the students in order to enable them effectively utilize and benefit from this new library technology; (3) The library should put more step forward in the digitization of up-to-date past question papers because they serve as guides for students on how to go about confronting their end of semester examinations; (4) The library management should

provide a feedback stock which will serve as a means for users' responses on the performance of each digital item or content and the level of satisfaction derived.

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