



The Quality of Digital Library Services at Alma Ata University, Yogyakarta

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ABSTRACT

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Digital library is a type of library that uses information and communication technology in its services. This is to meet the high level of public needs in accessing information in the globalization era. Digital libraries generally provide both online and offline services. Due to their strategic functions, it is crucial to know how digital libraries, especially those in universities, provide quality services so that educational goals can be achieved. This research examined the quality of digital library services using the LibQUAL+™ method with 4 measurement dimensions, namely Service Affect-SA, Library as Place-LP, Personal Control-PC, and Information Access-IA. The research was carried out with a qualitative descriptive method through interviews, observations, and documentation. The key respondents were selected using the purposive sampling technique, and the data were analyzed through 3 stages, namely data reduction, data presentation, and conclusion. The results of the study conclude that the dimensions of Service Affect-SA and Personal Control-PC are good, while the dimensions of Library as Place-LP and Information Access-IA have not been optimal. This shows that the capability to provide optimal services in a digital library does not only require competent human resources and high use of information technology but also requires the provision of facilities, especially adequate collections of digital collections, and also adequate facilities and infrastructure.

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1. INTRODUCTION

Library is an important facility to support the efforts to educate the nation. Library becomes one of the main supporting elements in education as the center of information and the source of science and technology. Libraries in universities are required to improve their

accessibility to references and knowledge for the institution in particular and the academic community in general to meet the Three Principle of Higher Education, Purwono [1].

Through Law No. 43 of 2007, especially article 24 paragraphs 3 and 4, the government requires every university to develop library services based on information and communication technology to meet the national education standards and national library standards. To adapt to current developments, the mandate in these regulations can be realized through digital libraries. The application of digital libraries can improve the quality and speed of services for library users to facilitate the teaching and learning processes in the campus. In addition, this system can help library management to improve the effectiveness and efficiency of library operations; T. Dana et.al [2]. Library services must also pay attention to changes from either the behavior, characters, and needs of the users. The current era is the digital era where the dominant users are the digital natives; E. Maryani[3].

Digital library is the service provided by a library to its users by utilizing information technology. There are special staffs who manage digital library. Mulyadi[4]: ... “special information is collected, stored, processed, preserved, and disseminated in digital format and can be accessed via the internet at any time”. Therefore, A.R. Saleh[5]: ... “digital library is basically an integrated digital-based library service system whose collections are wholly or mostly in a digital format”.

The library of Alma Ata University, Yogyakarta has been developed into a digital library in order to provide services to its stakeholders in terms of online educational media facilities that support the academic activities. During the COVID-19 pandemic, which requires academic activities to be carried out online, the digital library has surprisingly not been employed by students. The number of visitors to the website of the library, including the visits to the portals and repositories from January to May 2021 is low. The number is considered small when it is compared to 2,917 active students in 2021.

Tabel 1. The Data Of Visits To The Digital Library

Platform	The Number of Visits
Website	1,247
Repository	3,152
Portal	1,525

The small number of visits shows that the library of Alma Ata University, Yogyakarta has not become a destination for students to find references and literature they need. At the same time, this also indicates that the quality of services of the digital library of Alma Ata University, Yogyakarta is not optimal. This study aimed to obtain a broader and deeper picture of how the service quality of the digital library of Alma Ata University, Yogyakarta worked and to find out what factors that support and hinder the operation of the digital library so that the service quality can be improved.

Various secondary education and higher education institutions have developed their libraries into digital libraries, some of which have been researched. A research by T.S. Kartikawati et al[6] with the aim of developing a digital library in the Accounting Department of Pontianak State Polytechnic was carried out using a qualitative descriptive method. This research has in provided inputs for improvements in its information management system, human resource competence, and facilities and infrastructure. Another study by L. D. Prasojo[7] has also been conducted to describe the Library Technical Implementation Unit of the Yogyakarta State University (which was still managed by local internet). The study used participatory interviews, documentation, data collection by electronic means, and a data validity test. Although the research has not measured the quality of service as a whole, it has provided an overview of hardware and brainware support in supporting the operations of the digital library of the Yogyakarta State

University (UNY). Another piece of research on Measuring the Service Quality of Digital Library at the Bandung State Polytechnic by S. Mukaromah and I. S. Sarah[8]; combined 2 dimensions, namely Libqual to measure the library quality and webqual to measure the website quality. These two dimensions were expected to complement each other. This way, a more comprehensive picture of the digital library services could be obtained. The webqual dimension covered the ease of use, information quality, and interaction and service quality. Meanwhile, the libqual dimension was measured by the attitude of the staffs in providing services and instructions, access, facilities, and library room. The research was carried out using a quantitative method by distributing questionnaires with random sampling to get 125 respondents. The data were then analyzed with descriptive statistics to determine the factors affecting the quality of digital library services.

A similar research by E.R. Wulandari et al[9] has also been conducted at the Central Library of Padjadjaran University to determine the influences of the quality of the Kandaga website (which is presented as a form of digital library) on user's satisfaction. The research design involved 5 variables of influence, namely: usability, information quality, service interaction quality, interface quality, and digital library service quality on the library user satisfaction. The study employed a quantitative method with SPSS. This study used the quality of digital library services as one of the variables that affected library user's satisfaction. A case study on Digital Library System Design at Bandar Lampung Vocational School by F. Siyasih[10], I was conducted to improve the performance of the existing library services. The study used a qualitative descriptive method with interviews and observations as the methods of data collection. The analyses involved indicators of Performance, Information, Economy, Control, Efficiency, and Service (PIECES). A research at the Soeman HS Library in Pekanbaru, Riau Province by S. Restuti[11], was carried out using variables of affect of service, information control, and library as place, with a sample of 168 and the Importance Performance Analysis (IPA). Affect of service, information control, and library as place methods are part of Libqual +TM. The Libqual+TM method, which covers 4 dimensions, has also been used in a research by D. N. Aliza and Ardoni[12] to measure the service quality of the Library Technical Implementation Unit of Padang State University Library with quantitative method. The data were analyzed to measure the User Satisfaction Index (USI).

This study also employed the LibQUAL+TM method which was pioneered by Collen Cook and Fred Heath (1999). The LibQUAL+TM is the latest tool or method in the library to collect, search, understand, and respond to user's perceptions of the services that have been provided; Fatmawati[13]. This method is offered to the library community by the Association of Research Libraries (ARL). The LibQUAL+TM can identify strengths and weaknesses from the users' perspectives. Through the LibQUAL+TM method, libraries can solve various problems, identify what is right or wrong, and improve library services. The LibQUAL+TM method involves 4 dimensions in the measurement, namely the Capability and Attitude of Librarians in Providing Services (Service Affect-SA), Library Facilities and Room Atmosphere (Library as Place-LP), Instructions and Access to Facilities (Personal Control -PC), and Access to Information (Information Access -IA). Therefore, this study used the LibQUAL+TM method which has been specifically designed to measure the quality of library services

2. RESEARCH METHOD

This research was a descriptive study ... "that was not intended to test hypotheses but to collect information to describe an indication as what it is" ...; S. Arikunto[14]. This study used a qualitative approach so that the social phenomena from the participants' point of view could be understood. ... "With a qualitative approach, the researchers acted as key instruments" ...; I. Gunawan[15]. Therefore, the research objectives, namely getting a

comprehensive description of the quality of library services at Alma Ata University, Yogyakarta can be achieved.

The data were collected through observations, interviews, and documentation. The observations were carried out to identify the attitudes of the librarians in providing services, facilities, and infrastructure supporting the library services, as well as to determine the attitudes of the users towards the services they have received. The interviews were conducted based on the interview guidelines to facilitate the interviewers in obtaining information according to the research focus. Through interviews, the researchers dug up information from the key respondents about their perceptions of the quality of digital library services and the availability of resources, as well as the supporting and inhibiting factors. The primary data obtained through observations and interviews were accompanied by documents to make it more reliable. Using the documentation technique, the records about the condition of the library room, portal/website/repository features, the data of the loan and return, and library archive could be obtained. The key respondents in this study were 2 librarians and 5 students representing their faculties of Alma Ata University, Yogyakarta. The key respondents were determined based on the purposive sampling technique, namely the sampling technique of data sources with certain considerations; Sugiyono[16].

According to Miles and Huberman, in a qualitative descriptive research, the analyses should be carried out through three main steps, namely: data reduction, data presentation, and conclusion drawing; Sugiyono[17]. The data reduction included the process of selecting, focusing, simplifying, and organizing data in such a way to obtain an abstraction of the phenomenon under study. The conclusion was drawn by verifying the data collected in the field, repeatedly confirming the data through either observations or interviews from various key respondents and the information gathered through the documentation, and then discussing them. Finally, the important findings for this research could be obtained.

3. RESULTS AND DISCUSSIONS

The data obtained in the field were then processed, summarized, simplified, and presented as follows.

Tabel 1. The Dimension Of Capability And Attitude Of The Librarians In Providing Services (Service Affect-Sa)

Indicators	RESULTS	Met/ Unmet
Empathy	The librarians understand the needs of the users and care in providing digital library services.	Met
	The librarians show their understanding by providing a recommendation link for books proposed on http://bit.ly/usul_koleksi and a link for the SapaKampus library service assistance program on http://bit.ly/sapakapus	Met
Response	The librarians are responsive and provide quick responses to student complaints and are willing to help students who are having difficulties.	Met
	Students can provide inputs/criticism/ suggestions on digital library services via the link http://bit.ly/survei_perlibatan .	
Guarantee/ Assurance	The librarians are always polite, friendly, humorous, and trustworthy in serving students.	Met
		Met

<i>Reliability</i>	60% of students stated that the librarians had knowledge and competence in serving students.	Met
	The librarians seek to increase knowledge and competence through training organized by FPPTI and by joining seminars/webinars in the field of libraries.	
	The digital library services can be accessed 24 hours as promised, and the offline library services are provided according to the specified time.	Met
	There are no unrealized digital library services.	Met
	The librarians inform the students about the use of digital library service features according to the information given.	Met

The data show that the dimensions of Capability and Attitude of the Librarians in Providing Services (Service Affect-SA) are good. This is indicated by students' acknowledgment of the capability and attitude of the librarians in providing services. The librarians care and understand the needs of students, always help students if they have difficulties, are friendly, and provide services according to the time that has been scheduled. The librarians are reliable because they have the skills, knowledge, and competence in the field of libraries that they have gained by participating in training and competency development programs.

Tabel 3. The Dimension Of Library Facilities And Room Atmosphere
(Library As Place - Lp)

Indicators	RESULTS	Met/ Unmet
Tangible/ Physical Evidence	The number of available digital book collections is not sufficient so that it cannot help students complete assignments. Weaknesses: Not all books available in the library have the pdf form that can be uploaded on the portal/website.	Unmet
	Sixty percent (60%) of students stated that the facilities and space for accessing/tracing digital collections in the library were not adequate. Weaknesses: The number of computers is limited. There are 6 computers for searching, 2 librarian computers, 1 library server computer.	Unmet
	The library has adequate communication facilities (email with the domain name of @almaata.ac.id, telephone, cellphone, and Instagram).	Met
Useful space	As many as 60% of students stated that the library room had not provided a quiet space to access digital books so that students could not focus on searching for books and studying in the library. Weaknesses: The available library space has not been adequate.	Unmet
	Eighty percent (80%) of students stated that the design of the library space to browse digital collections had not attracted students' to access the digital collections in the library. The library room is equipped with AC and Wifi. Weaknesses: The room is not spacious enough to accommodatemany bookshelves.	Unmet

Multiple Meanings (Symbol)	The digital library services of Alma Ata University (UAA) are open to the UAA academic community and the outside community.	Met
	The library cannot fully inspire the users to search for digital books. Weaknesses: The room is not spacious, and many visitors come.	Unmet
A comfortable space to study (refuge)	The library room has not provided a comfortable space to access digital services because sometimes the library looks messy. Weaknesses: There are collections that have not been stored on the bookshelves.	Unmet
	The cleanliness of the library room is always maintained.	Met

The dimension of Library Facilities and Room Atmosphere (Library as Place-LP) has not been fully optimal. Although the library is always kept clean and provides adequate communication facilities, such as telephone, cellphone, social media (E-mail, Instagram, and Whatsapp), students are still not satisfied because of the limited availability of digital book collections and the inadequate facilities and infrastructures. The library services can be accessed by the entire academic community of Alma Ata University, Yogyakarta and also by the public, but the limited facilities and infrastructures make students uneasy and uncomfortable. This condition also cannot foster inspiration and creativity for the users to browse digital collections and attract students to access the services directly.

Tabel 3. Dimensi Of Instructions And Access To Facilities (Personal Control - Pc)

Indicators	RESULTS	Met/ Unmet
Ease of access	The features of the digital library services are simple, clear, and easy to understand by students.	Met
	The match between the titles of the uploaded pdf files that and the physical bookshelves helps students find information on the digital books.	Met
The convenience of the users	Students can access information without having to come to the library, and the digital library service instructions are easy to understand.	Met
	The digital catalog is very helpful for students in finding information on the digital collections.	Met
Modern utilities	The library has a sufficient number of computers for browsing digital collections.	Met
	The internet network available in the library is very adequate.	Met
	The service for repository collections has its own server.	Met
Confidence	Students can search information in the online catalog (OPAC) independently based on the instructions.	Met
	Students can use the digital library facilities/features independently.	Met

The dimension of Instructions and Access to Facilities (Personal Control - PC) has been optimal. Students can search collections in the digital library services independently

without the help of the librarians. Students can search for information and digital collections easily because the titles of the books match the pdf files on the website/portal/repository services. Students feel comfortable in accessing digital services because the services can be accessed 24 hours a day without having to come directly to the library. With an integrated service system, there are facilities/features for the library services that are simple and easy to understand as they are supported by adequate computer servers and internet connections. Students believe that they can access the digital library services independently by following the instructions provided in the dissemination sessions.

Tabel 4. The Dimension Of Access To Information (Information Access – Ia)

Indicators	RESULTS	Met/ Unmet
The content/the scope	The availability of library materials is not sufficient to provide references for students.	Unmet
	The notifications of the latest digital collections are sent via Instagram	Met
	Weaknesses: Many students have not had an Instagram account yet.	Unmet
	There is digital library guidance related to user service guidance.	
The speed of access	Students can easily find relevant and accurate digital collections if the internet connection is good.	Met
	The online catalog is easy to use. Students do not take a long time to access the digital services.	Met

The dimension of Access to Information (Information Access-IA) in the quality of library services has not been optimally met because the scope of the content or the availability of the library materials is not yet adequate and has not met the needs of the users. This is closely related to the limited availability of collections. In addition, many students have not had an Instagram account. Consequently, they could not obtain information about the latest digital collections. Students also feel that the speed of access for searching relevant and accurate digital collections depends on the internet connection strength when accessing the digital library services. Alma Ata University Library provides guidance for the users (students), but until now it has not been regularly scheduled which makes the use of the digital library less understood.

4. CONCLUSION

The results of this study indicate that the quality of digital library services at Alma Ata University, Yogyakarta has not been optimal because not all dimensions have been met. There are 2 dimensions that have been met, namely the Capability and Attitude of the Librarians in Providing Services (Service Affect-SA) and the Instructions and Access to Facilities (Personal Control -PC). Meanwhile, the other 2 dimensions, namely Library Facilities and Room Atmosphere (Library as Place-LP) and Access to Information (IA) have not been fully met.

The digital library of Alma Ata University, Yogyakarta has indicated its quality services because it is supported by human resources with adequate skills, knowledge, and competencies in their job and understands how to provide good services to the users. This is also supported by the availability of good access to the facilities so that the users can independently access the services. The digital library of Alma Ata University, Yogyakarta has not been optimal in providing services to the users because it is hindered by the limited

facilities and condition of the library. The limited availability of digital book collections and the limited facilities and infrastructures (place/building) of the library decrease the interest of the users to visit it both online and offline. Optimal quality services in a digital library do not only require competent human resources and high use of information technology but also demands the provision of facilities, especially an adequate collection of digital books. Converting prints to digital books is not simple. In addition, Adequate library facilities and infrastructures also determine the quality of services. Providing building and spaces for various purposes/activities for the visitors can create a comfortable atmosphere for learning and increase creativity and innovation. This requires careful campus spatial planning and adequate funds.

The findings of this study can serve as inputs for the administration of the digital library of Alma Ata University, Yogyakarta in its efforts to improve the quality of services. For other universities, the results of this research provides information about important things necessary to prepare when building and developing digital libraries to provide quality services to the entire academic community.

This study is an overview of the quality of digital library services provided by Alma Ata University, Yogyakarta conducted using the measurement of LibQual +TM dimensions with a qualitative descriptive method. This research is open to be re-examined or re-researched by other researchers, even if the other research uses different measuring instruments and methods.

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