

Digital Inclusion for the Faculty Members: A Case Study

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ABSTRAK

Bidang informasi mengalami transformasi yang sangat pesat dengan pemanfaatan teknologi informasi dalam setiap aktivitas masyarakat. Namun, kondisi geografis masyarakat yang beragam telah menyebabkan kesenjangan digital dalam aksesibilitas teknologi di masyarakat Indonesia, sedangkan perkembangan teknologi yang pesat menuntut pemerataan kemampuan dan penguasaan teknologi ke seluruh masyarakat luas. Sebagai pusat informasi, perpustakaan sangat penting dalam mendorong masyarakat untuk menggunakan teknologi informasi melalui inklusi digital. Perpustakaan dapat menjalankan peran inklusi digital melalui penyediaan perangkat teknologi, kebebasan akses oleh masyarakat. Studi kasus ini mengkaji tentang peran Perpustakaan UIN Alauddin dalam inklusi digital. Penelitian ini menggunakan pendekatan kuantitatif. Pengumpulan data dilakukan melalui penyebaran angket, untuk mengetahui tanggapan mahasiswa mengenai ketersediaan perangkat teknologi informasi yang disediakan oleh perpustakaan, aksesibilitas dan kemampuan mereka dalam memanfaatkan fasilitas tersebut. Hasil penelitian menemukan bahwa fasilitas teknologi informasi yang disediakan oleh perpustakaan dan kemudahan akses telah membantu mahasiswa untuk mendapatkan sumber informasi dengan mudah dan cepat. Penyediaan fasilitas teknologi informasi yang memadai dan kemudahan akses perpustakaan berperan membantu mahasiswa untuk lebih mengenal perangkat digital sehingga dapat beradaptasi dengan cepat terhadap setiap perkembangan teknologi yang ada.

Kata kunci: Inklusi digital; perpustakaan akademik; teknologi di perpustakaan

ABSTRACT

The field of information is undergoing a very rapid transformation with the use of information technology in every community activity. However, the diverse geographical conditions of society have led to a digital divide in technology accessibility in Indonesian society, while the rapid development of technology demands equal distribution of capabilities and mastery of technology throughout the wider community. As an information center, libraries are very important in encouraging people to use information technology through digital inclusion. Libraries can carry out the role of digital inclusion through the provision of technology tools, freedom of access by the community. This case study examined the role of UIN Alauddin Library in the digital inclusion of UIN Alauddin students. The research used a quantitative approach. The data were gathered through the distribution of questionnaires, to determine student responses regarding the availability of information technology devices provided by the library, their accessibility and ability to utilize these facilities. The study found that the information technology facilities provided by the library and the ease of access have helped students to get information sources easily and quickly. The provision of adequate information technology facilities and easy access to libraries has played a role in helping students to become more familiar with digital devices so that they can adapt quickly to any existing technological developments.

Keywords: Digital inclusion; academic library; technology in library



1. INTRODUCTION

The development of information technology has provided a big change in people's lives, where the internet is no longer exclusive because it can be accessed easily. Digital technology, which has developed in the form of internet technology, has become an important part of information and communication technology. The use of information technology is increasingly friendly in the community because it facilitates work management with effectiveness and efficiency that can accelerate performance. The inclusion of digital technology has shown a very rapid development seen from the growth of internet users ([López-Sintas, J., Lamberti, G., Sukphan, 2020](#)).

Digital inclusion is a concept to address issues related to digital literacy and access to information technology. OCLC WebJunction defines digital inclusion as the ability of individuals and groups to access and use information and communication technologies ([WebJunction, 2014](#)).

Information technology has made digital literacy in all sectors of society very important and urgent. In Indonesia, there is a wide gap between groups of people who have easy access to the internet and those who face technological barriers ([Hadiyat, 2014](#)). This causes a digital divide, while the rapid development of technology requires equal distribution of capabilities and mastery of technology in society.

To reduce technological disparities in the community, it is important to adopt a digital inclusion approach to build an open environment by adapting to the background and conditions of the community group. Through digital inclusion, an institution can take an approach to develop and build a community environment by utilizing existing digital technology devices that provide internet networks. The digital transformation is not only a physical form of digital infrastructure but also about how technology can be an inclusive and humanist capacity building for society ([Afriani, 2021](#)).

The role of information technology in libraries has further strengthened the function of libraries in providing information and services for the development of information and knowledge for the community. Digital inclusion in libraries could mean that the use of information and communication technology can be comprehensively used to promote various things that can improve the quality of life, encourage social participation, and social integration in the community. This includes various types of digital integration in society, including digital social inclusion ([Lee Y, 2010](#)). At the social level, digital inclusion can increase engagement and wider community integration because it allows everyone to communicate without being limited by distance and time.

An analysis performed by OCLC Webjunction mentioned that digital inclusion is very important for economic development, encouraging community participation, as well as the development of education and science. To build a digitally inclusive society, all parties related to human resource development policies such as libraries must encourage digital inclusion as a whole ([WebJunction, 2014](#)). A report by [Ellen J. Helsper \(2008\)](#) said that individuals who have access to ICTs, from the telephone to the Internet, tend to have more schooling, higher incomes, and higher status occupations than do those who do not have access.

Digital inclusion aims to reduce the information gap in society over a wide area. To adapt to the development of information technology that continues to grow, everyone must have digital devices and services that can be accessed at any time. Digital devices will allow people to access information sources in an easy way ([Helsper, 2008](#)). This digital inclusion is needed by every individual so that they can have an understanding and motivation in using digital technology, master the skills needed to do so, understand the information needs and services

they have access to and are aware of how to protect themselves from the impact of unlimited information (Hartnett, M.K., Mentis, M., Butler, P., & Carvalho, 2020).

Furthermore, digital inclusion in libraries might encourage people's enthusiasm to access information in libraries. So far, public interest in accessing information in the library is still very low. Many people prefer to come to a place that provides a pleasant atmosphere than to the library. One of the contributing factors is the culture of the Indonesian people in general who are not used to using the library. Digital inclusion not only means increasing access to information and communication through infrastructure and technological innovation but can also provide cost savings in the provision of public services for social progress (Bradshaw, 2011).

Digital inclusion policies in libraries can create a digital society that is not only knowledgeable but also a healthy and socially integrated environment. The inclusion of digital libraries accelerates the process of processing data into information and takes place automatically.

As an agent of change and an agent of development in the community, the library must be able to provide more creative information with a more effective and efficient service system. Therefore, the library must be able to integrate information and communication technology, which is useful for building and empowering the community so that they can compete in the era of globalization. The library is an information system that functions to store sources of knowledge in various forms of library materials and arrangements in such a way that the required information can be found by users quickly and accurately (Qalyubi, 2003).

Traditionally, the role of the library is to provide collection lending services to its users. However, with the changing times and the development of existing technology, the role of the library has also experienced a shift, namely turning into a provider of relationships between users with various types and forms of information available globally. The use of information technology in libraries facilitates the exchange of information and data so that the dissemination of knowledge takes place very quickly. Digital systems in libraries that have the advantage of digital data and computer network media with internet connections, simplify and expand access. Internet technology has made all the information in the world very close and can be found or searched easily, fast and up to date. Internet libraries can also connect users to various information sources or databases that exist in various countries. Especially with the availability of an internet network that can be accessed easily, including the use of wireless network devices, namely WiFi (Wireless Fidelity).

The rapid development of science and the increasing variety of sophisticated technology brings changes to society and individuals. These changes will ultimately affect the guidelines for the condition of the existence of the library (Sa'diyah, I, & Adli, 2019). The indicator of an ideal library that used to be measured by the number of large collections and large buildings, has now changed to the extent to which the library can meet the needs of the community of its users.

The Internet has changed the basic concept and role of libraries (Wibawanto, 2018), from the concept of a print-based information management library to a digital-based information manager. The internet has made the function of the library increasingly developed into a digital library, which offers an alternative to obtaining information in digital form. The collection database system is a digital library, which can be accessed via the internet from various places. A collection of digital materials that are transmitted electronically and called a digital library, its existence is increasingly important in meeting the information needs of users (Supriyanto, W. & Muhsin, 2008). In universities in Indonesia, the availability of this type of material is

increasingly being felt by academics who previously lacked access to the latest publications in their field.

The shift of the library database system from print-based collections to digital collections ultimately forces library users to be able to adapt to changes in the system. Information technology in libraries is often a benchmark for the progress and modernization of a library (Real, B., Bertot, JC & Jaeger, 2013). This certainly cannot be denied considering the demands of the people who are already familiar with all kinds of digital systems. Symptoms and problems as well as this phenomenon that has an impact on the Information Technology-Based Library Service.

The use of the internet in libraries has an impact on its services, namely: (1) ease of browsing, (2) real-time information, (3) speed to access or targeted information sources, (4) multimedia entertainment media, (5) time efficiency in searching for information, (6) being able to motivate students in smooth learning assignments, and (7) economical costs and even free use of the internet on campus (Soenhadji, I. M., & Susiloatmadja, 2011). Therefore, this study took place in Universitas Islam Negeri Alauddin Library in examining how this library could participate in the digital inclusion of the information user community by utilizing information technology.

2. METHODS

To be able to measure the contribution of the library to digital inclusion, a questionnaire was distributed to the faculty members. In this case study, the community sampling was students at the university who are the most active group in utilizing library facilities in obtaining scientific information needed relating to the learning process in higher education. The data sources in this study were students of UIN Alauddin Makassar who actively interacted with the library. A total of 125 students were actively involved in this study to answer the questions given listed on the questionnaire. The questions asked in the questionnaire are related to the level of information technology and infrastructure provided by the library and accessible to users. The data were analyzed by looking at the correlation of the readiness of information technology and library infrastructure with the ability of users to access information resources in the library with existing information technology tools.

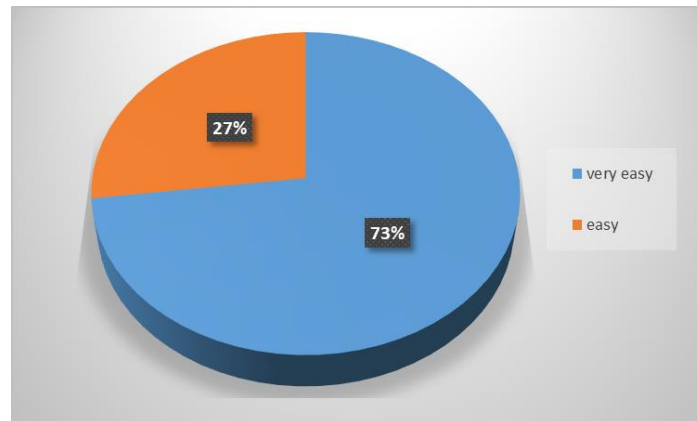
3. RESULTS AND FINDING ANALYSIS

The readiness of the library in carrying out the digitization system is largely determined by the readiness of the available infrastructure and the information technology system that can be used. At the UIN Alauddin Makassar Library, information systems and technology continue to experience improvements and improvements to facilities and infrastructure to facilitate service to users. Ease of access by utilizing information technology devices is important in every technology device used in the library.

Ease of access

The rapid development of technology and its application in many ways has helped many fields because of this technology. The application of technology in various fields can provide benefits and convenience for its users. With the technology, library collections can be presented in digital form that can be used easily because there are devices that can be used by library users when searching for collections.

The use of technological facilities in the UIN Alauddin Makassar library is very important to support the services provided by the library to its users. Based on the survey results, it can be seen that access to information sources in the library is very good, where out of 125 respondents of which 73% said access was very easy and the remaining said it was quite easy. In other words, the users do not experience obstacles in accessing information sources provided by the library. This shows that the users are very helpful and easy to find information collection materials from the library when they need them.



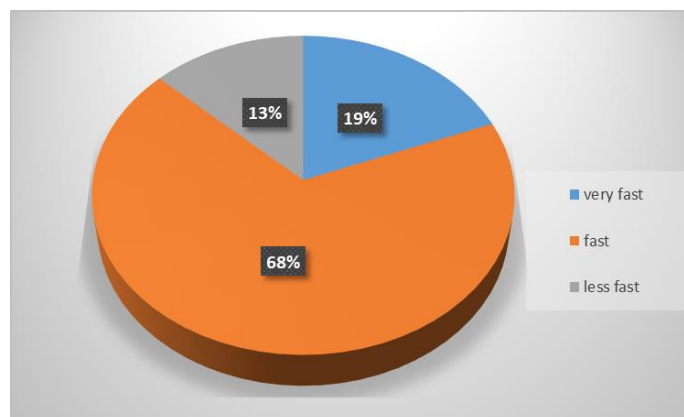
(Data processed in 2021)

Figure 1. levels of ease in accessing a source of information

Internet access speed

Services to digital collections provided by the library can generally be accessed using the internet network. The availability of internet devices makes services to information sources in the form of library collections very easy to find using only keywords. In accessing information sources using technology tools at the UIN Alauddin Makassar library, respondents stated that the available information tools can have fast access. Although there are still those who say that access to these technological devices is still not fast enough.

Access to information technology equipment at the library is described in Figure 2. Where out of 125 respondents, 19% said access was very fast, 68% said it was fast enough and 13% said it was still not fast (figure 2).

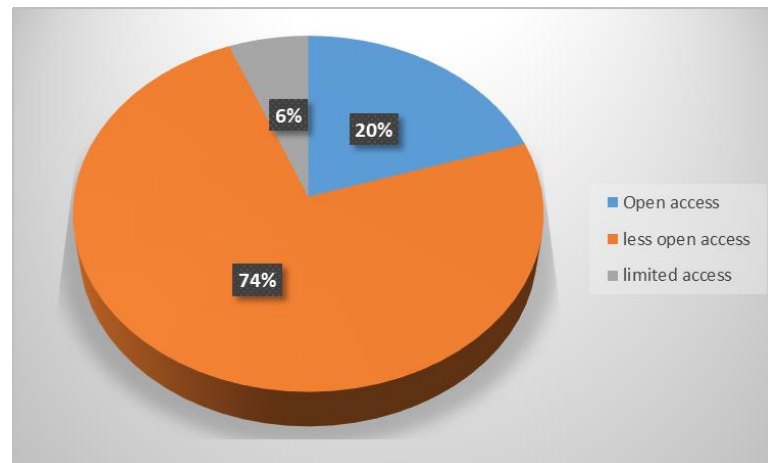


(Data processed in 2021)

Figure 2. Internet access speed

Open access to information

The library has a large number of digitalized collections. To be able to take advantage of the collections, the library provided limitations that can be accessed. Not all collections can be freely accessed by the library users as expressed by respondents. Figure 3 explains that as many as 74% of respondents stated that the information available at the UIN Alauddin library was closed-access and another 6% stated that there was information that could only be accessed by a limited group of people.



(Data processed 2021)

Figure 3. Access openness to the source of information

Currently, the library has 22,954 public collections that can be used by users. The collection in digital form can only be read through the application available on the *playstore* and installed on the user's device. Although this collection of information can be read freely, the material cannot be downloaded. In the sense that the information collection script file cannot be freely owned by the user.

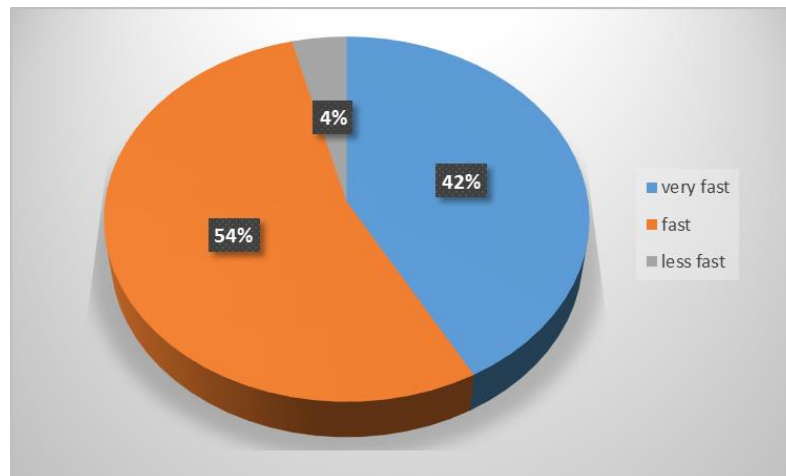
For some other collections such as reference collections, it is a closed service that cannot be borrowed. In other words, this collection can only be read in the reference space. This reference collection consists of dictionaries, general encyclopedias, Islamic encyclopedias, proceedings, research reports, theses, theses, dissertations, and so on.

However, there are several digital collections provided by the UIN Alauddin library that can be downloaded freely as reference material. The collection is the works of lecturers and students that have been converted into electronic forms, such as theses, theses, dissertations, proceedings, and research reports that can be accessed through the link <http://repository.uin-alauddin.org/>. Likewise, the collection of scientific journals published within the scope of UIN Alauddin can be accessed through the UIN Alauddin E-Journal.

WiFi Speed

In addition to providing an internet network to access information sources, the library also provides access points that can be accessed by users for free. The students only need an internal account to be able to access the network freely. Regarding WiFi speed, respondents generally stated that the WiFi network available at the library was quite fast, although some still thought it was not fast enough. Of the 125 student respondents who became the data

source, as many as 42% stated that the WiFi speed in the library was very fast, 54% said it was fast and there were still 4% who said it was not fast enough.



(Data processed in 2021)

Figure 4. Wifi speed

4. DISCUSSION

Libraries have a very important role in facilitating the community to develop their potential, especially in the academic circumstances in UIN Alauddin Makassar. Digital inclusion-based library transformation is an approach to library services by utilizing information technology that is committed to improving the quality of life and welfare of the library user community by following technological developments that have become part of people's lives.

The role of libraries in digital inclusion is to encourage people to be more familiar with technological devices so that people no longer experience being left behind in the industrial era 4.0. This can create public awareness to develop and be independent in improving through easy access, speed of access, and availability of complete and easy-to-use information sources.

Digital inclusion-based libraries are libraries that facilitate the community in developing their potential by encouraging readiness to accept very fast changes. In the strategy of transforming library services towards a digital system, the library can design the system and its collections to be utilized by the community as optimally as possible.

Thus, the inclusion of the role of libraries in digital the community is very decisive to bring the Indonesian people to become digitally literate and able to adapt to the development of information technology.

5. CONCLUSION

Libraries have an important role in the development and dissemination of information. Especially in academic libraries, in this case, the UIN Alauddin Makassar library has an important role in providing digital-based facilities to the communities it serves, especially UIN Alauddin students. The presence of the internet in the library is used as a means of searching for information and means of communication in services. So the implementation of internet services in the library needs to get a bigger portion. Therefore, the presence of digital devices in libraries is becoming increasingly important in meeting the information needs of users.

As a data and information center that is connected to internet technology, the library has a very important role in digital inclusion for the community. Digital inclusion through libraries

is to facilitate the community, in this case, the students of UIN Alauddin Makassar in developing their potential by encouraging their readiness to accept very fast changes. The transformation of a digital inclusion-based library through a library service approach by utilizing information technology. With digital inclusion, it will encourage people to be more familiar with technological devices, so that they do not experience being left behind in the field of technology in the industrial 4.0 era as it is today.

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