STRATEGY OF LIBRARY DEVELOPMENT TOWARDS DIGITAL LIBRARY

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Abstract. This study intends to analyze the strategy for developing the library of the University of Nurul Jadid Paiton Probolinggo towards a digital library in increasing competitiveness in the current era of globalization. This study uses a qualitative approach analysis. This research has implications for library development in order to meet and match community competition in improving the quality of the library. The efforts made in developing libraries towards digital libraries by building information accessibility, digital library development strategies in building information accessibility through an organizational approach to digital library management funds, digital library technology implementation approaches, access policy approaches and information legality, and values transformation approaches. cultural diversity value. So this is expected to be able to develop the library towards a quality digital library

Keywords: Strategy, library development, digital library

INTRODUCTION

Along with the advancement of information, technology and advances in science in the field of information, it is felt that various advances and modernity have an impact on all aspects of information seeking behavior and the need for information is increasing. It is undeniable that we are required to face the changes that exist (Hartono, 2018).
The rapid development of information technology has affected various fields of life and professions, this has caused system changes in institutions. Information technology is widely used for work management because of its legitimate effectiveness and efficiency proven to be able to accelerate performance which will ultimately increase profits or incoming turnover (Dacholfany, et.al.).

The modernity of information media in the information age has given birth to various new innovations in the field of libraries and information, including producing various digital library innovations. The technological sophistication of the library automation system, digital library system, electronic database system and the internet (Hartono, 2017). The digital era is rapidly changing the functions and tasks of libraries to not only provide information from books or conventional ones, but is required to provide easy and quality access to information so that all students can use it. It is undeniable that the existence of a digital library has had a good impact on the condition of the library. Libraries contribute to science through storing various information and the history of scientific development, while information technology provides support for easy access and information systems in a library (Aminullah, Andi Muhammad, et al., 2021). A good combination and collaboration between Information Technology (IT) and librarian competence is able to create a new space for libraries to provide access to information needed by users (Arina Faila Saufa, 2018).

In its development, the library cannot be separated from technology. Information technology and the internet have resulted in a large number of collections available in digital form so that the idea emerged to form a digital library (Dwiyanto, 2005). Digital library (Digital Library) is a solution to the weakness of traditional libraries because it has the characteristics of collections that are available in digital form so that it allows users to access anywhere and anytime. The university library is an institution that plays an important role in obtaining and disseminating information for student academic and research activities (Dimas Sasongko, 2015). A digital library is an environment of multimedia material in an organized digital form, intended for the benefit of a structured user population, to facilitate access to content. A digital library is not a library that physically exists, but is a virtual library, that is, a digital library can be visited by users but not physically. The library is accessible to all information seekers. The services
needed by digital libraries require computer software or can also be accessed on Android (Winarko, 2009).

According to (Supriyanto, n.d.) digital libraries make it easier for users to access library materials, because various collections are already available in digital form. Dana et al., (2008) stated that developing a Digital Library is directed at improving the service process to customers with good quality and speed, as well as increasing the effectiveness and efficiency of library administrators. Neprianti & Hariyati, (2021) Stated the existence of digital library services in accordance with user expectations so as to increase user satisfaction and increase visitor access to digital services provided by the library.

Nurul Jadid University Paiton Probolinggo attracts researchers to focus their studies on understanding and studying how the library development strategy is towards a digital library so that the development of the Nurul Jadid university library does not only build quality in conventional services by relying on the ownership of collections and printed collections, but libraries must also undergo a metamorphosis in building services. information technology-based libraries in building an ideal library development strategy for digital libraries.

THEORITICAL REVIEW

First, Husnawati's research (2022) entitled "Efforts to Develop Early Childhood Literacy with Digital Libraries". This research is a qualitative research using descriptive data. This study aims to direct the children of the digital generation to be more positive with digital reading interests as well as to improve children's literacy with digital libraries that develop and grow according to their age. Based on the research conducted, it can be concluded that the existence of digital libraries is increasingly advanced, even as the frontline in filtering, collecting, processing and disseminating information, educational development cannot be achieved optimally without a well-managed library, efforts to improve children's literacy with digital libraries since early according to development. So as educators and parents need to accompany him as a filter for the flow of technology in the world of the digital era.

Second, Hartono's research (2022) entitled "Representation of Information Democracy as Library Development in a Digital Ecosystem". This study aims to examine and explain how the modernization of the library in building the accessibility
of information in the digital ecosystem. The conclusion of this study is that the representation of library information democracy in the digital ecosystem of university libraries in Malang, among others; strengthening in information disclosure by developing open access, technological modernity and information accessibility and developing library services based on Indonesian culture and humanism.

Meanwhile, the difference between these studies and this research lies in the research objective, namely to analyze the library development strategy of Nurul Jadid University Paiton Probolinggo towards digital libraries in increasing competitiveness in the current era of globalization.

METHOD

This study uses a qualitative approach analysis. Qualitative research is research conducted to produce analytical procedures, without using statistical analysis procedures or other quantification methods. While this phenomenological research is a research that aims to understand phenomena (phenomenologically) about what is experienced by research subjects, such as behavior, perception, motivation, action, and others holistically. The type of phenomenology in this study is used to understand the Library Development Strategy towards a Digital Library at Nurul Jadid University.

The main instrument in this research is the researcher as the key instrument. In the process, researchers used participant observation techniques, indept interviews, and documentation to obtain data on Digital Library Development. While the data sources of this research consist of interviews with students and the librarian of Nurul Jadid University, from several scientific writings, such as books, journals on Library Development. After the data was collected, the researcher used data analysis using Miles and Huberman data analysis techniques, which consisted of data reduction, data display, and verification. Furthermore, to use credible data, the researchers used checking the validity of the data by triangulating methods and theories.

RESULTS AND DISCUSSION

1. Digital Library

A digital library is a system that has services and information objects with these information objects through digital devices. With this service expect to easily find information such as documents, images and databases in digital format quickly, precisely and accurately. Digital library collections are not only limited to electronic
documents in lieu of printed form, the scope of the collection includes digital artifacts that cannot be replaced in printed form. Library collections emphasize this information, ranging from traditional documents to search results. The digital library is merely a collection of organized digital information by expanding at least by adding that the collection is provided as a service to utilize the information network.

The difference between a digital library and an ordinary library can be seen from the existence of the collection. Digital collections do not have to be in a physical place that stays in one place, while the usual library stays in one place, namely a library. The second difference can be seen from the concept. The concept of digital libraries using the internet and computers. While the usual library concept with books placed somewhere. Third, digital libraries can be enjoyed anywhere and anytime by users. While the ordinary library to enjoy it must be in a place and also at a certain time with the hours that have been regulated by the policy of the library organization.

Digital libraries have several advantages over conventional libraries including: Save space because digital libraries are documents in the form of digital, so that their storage is very efficient; Dual access, meaning that every user can access the books they need at the same time with the same good quality, whether the collection wants to be downloaded or just read; There is no limit to space and time. So that pemustakan is more flexible to access digital library collections provided that there is a computer network; Digital library collections can be in the form of multimedia, for example, digital libraries in the form of a combination of text, images and sound, can even store documents that are only moving images and sounds that cannot be replaced with text; The cost is cheaper, meaning that it can be said that the cost of digital documents is relatively cheap, but this is not entirely true because to produce an e-book that can be reproduced in unlimited quantities, it can be concluded that the cost of electronic documents is very cheap.

2. Digital Library Design

The things that underlie digital libraries include: Knowledge society is a group or cluster of knowledge in a broad scope and is one of the basic foundations for the development of a nation and state; Knowledge management is a systematic process of information management, to increase knowledge and understanding
comprehensively in a specific area; There are two kinds of knowledge creation, namely explicit and tacit knowledge. Explicit knowledge such as: books, proceedings, papers/articles, presentations, minutes, diaries, and so on. While tacit knowledge is present in each person, so we need a systematic way or mechanism to observe, capture data or information from each individual in an organization; Knowledge management system is a systematic and structured knowledge management process to strengthen knowledge creation through computer networks, both the internet and the internet.

The basic design of digital libraries includes 2 areas, namely digitizing documents and building digital databases that can be accessed by users. Other areas are basically the same as modern libraries, where the library automation process has been running well. Matters related to document digitization include: Selection of document digitizing tool (scanner); Preparation of printed documents that can facilitate the digitization process; The digitization process includes technique, speed, neatness, and accuracy; The digital data editing process is the process of checking and correcting digital data, both in terms of appearance and completeness, such as bookmarks and others; The creation of metadata is the provision of additional information which is the identity of the data so that it can assist in the information retrieval process; and The link process to the bibliographic data system is an adjustment process that connects digital file data with bibliographic data in the collection catalog.

3. **Digital Library Standard**

Digital library standards are generally almost the same as non-digital libraries, as stated in Article 11 of Law No. 43 of 2007 concerning libraries (collection standards, facilities and infrastructure standards, service standards, library staff standards, management standards, and management standards) however, emphasizes more on digital collections and services.

Some digital library standards that need attention, namely: Six-ware standardization, namely: a. Software Standardization, b. Hardware Standardization, c. Netware standardization, d. Dataware Standardization, e. Brainware Standardization, f. Environmentware Standardization; Standardization of digital collections which include: a) The ratio between the number of digital collections and
potential users, for example: 700/1000 = 70%, b) The ratio between digital collections and total digital collections, c) The ratio between digital image collections and total digital collections, d) Ratio between digital sound collection and total digital collection, e) Ratio between video collection and total digital collection, f) Ratio between multimedia collection and total digital collection, g) ratio between access level of digital collection and digital collection with non-digital collection; Standardization of digital content collection, which comes from softcopy directly from the compiler or scanning results and the completeness and suitability of the content; Standardization of the scanning process; Standardization of initials of organizational sub-units and initials of collection types; Standardization of digital file content (including content and access level); Standardize the nomenclature of files, folders and digital databases; Digital file security standardization; Standardization of digital collection lending; The standardization of data exchange, for example, is Z 39.50 by the American National Standards Institute which is a standard for exchanging catalog data via the internet, besides that, the Dublin core Metadata contains 15 elements that have been approved at an international meeting in Dublin, Ohio, the 15 elements are: title, creator, subject, descriptions, publisher, contributor, date, type, format, identifier, source, language, relation, coverage and rights.

Information Accessibility is the activity of users in obtaining information through procedures and mechanisms established by the library concerned (Diavano & Andalas, 2020). Accessibility of information for the community is very important to be considered by the government, because the accessibility of information will have an impact on the level of literacy and knowledge of the community (Diavano & Andalas, 2020). The concept of accessibility is to make it easier for people to an object, service, and also the environment. In the concept of information accessibility there are four dimensions, namely, core accessibility, information accessibility, system reliability, and control language ease. The concept of accessibility will not stop only with the availability of an abundant collection. This can be realized by the users being able to access the collections provided in a complete and comfortable manner. That way, it can be underlined that the accessibility of digital collections is
an effort to provide easy access to digital information for users in a complete, full, fast, and responsible manner.

In the information age, libraries are faced with the problems of information media and information accessibility which leads to the competence of conventional library roles being replaced by household tasks. Advances in internet information technology (e-resources) have an impact on the development of information collections, information organization, preservation, information resource services and library policies in preparing digital sources of information. With the progress of this era, it requires librarians to be ready to prepare and organize information.

Thus, the role of digital libraries in the information age are: First, digital libraries provide all information in electronic form that is in accordance with the information needs of the community. Second, digital libraries are transformed in organizing information that meets compliance with information technology, metadata, information retrieval systems, telecommunication networks, able to adopt the internet and the web and able to carry out digitalization techniques professionally. Third, digital libraries play a role in disseminating their digital collections that can be accessed by the user community quickly, precisely, accurately and easily. Fourth, digital libraries play a role in preserving digital collections to save the expected information values. Fifth, digital libraries play a role in implementing the regulation of access rights to the public so as to avoid information ethics, copyright issues, and plagiarism.

Implementing a digital library is related to the accessibility of information, that the concept of accessibility is the degree of ease achieved by people, towards an object, service or environment. The concept of information accessibility involves four dimensions, namely, core accessibility, information accessibility, system reliability and ease of understanding the control language. The concept does not stop at the availability of abundant digital collections. This can be realized if the user can access the collections provided in a complete and comfortable manner. Thus, it can be underlined that the accessibility of digital collections is an attempt to obtain full, complete, easy, fast, and accountable digital information.

The digital process can be divided into four main activities, namely: 1) Scanning, 2) editing, 3) uploading, and 4) converting digital collections.
Conventional data include: a) catalog cards, b) shelfists, c) borrowing information, d) magazine control listings, e) index citations, f) borrowing data and related files, g) book texts and related files, articles, h) pictures, illustrations, graphs, and tables, i) data about books and library materials, lastly j) financial report data (Hartono, 2017).

In its dynamics, libraries do not only build their quality in conventional services by relying on collection ownership and printed collections. Libraries must experience a metamorphosis in building information technology-based library services. In the dynamics of the development of digital libraries in Indonesia, this is not as expected, according to the author's observations and from various scientific meetings to build an ideal digital library for Islamic universities, it is only a concept in designing digital libraries, implementation problems in management, technology and regulations and other problems. digital library development strategy.

The digital library development strategy in building information accessibility is as follows (1) digital library organization and management approach, (2) information technology implementation approach, (3) information access policy and regulation approach, (4) multicultural values implementation approach and (5) developing cooperation in sharing resources (resource sharing). Then as a modern society, the library requires regulation of rights and obligations in how to present, store, disseminate and use information in higher education activities. Libraries are also still working with legal and ethical principles based on the print tradition. When digital technology brings new features to the world of librarianship, it is the librarian's job to understand the new rules needed to keep library activities within the legal corridors that apply in a society (Supriyanto, n.d.).

4. Digital Library Development Strategy in Building Information Accessibility

In developing a modern and professional digital library in general, most Islamic university libraries in Indonesia can be carried out in 5 (five) approaches, as follows:

a. Digital Library Organization And Management Approach

In general, the meaning of "management" is to manage or regulate (Diana, Rahmah, Rofiki, 2022). In fact, management can be applied in any field. The essence is that management will always have an effect on every
activity carried out by humans, whether it is related to time, effort and cost. All of that requires good management if you want to get good results and in accordance with expectations. Understanding the principles of any management should have a model or element that is used as a footing theory and is always sustainable. Likewise, the development of digital collections is expected to continue to provide and disseminate the widest possible information for users. Such conditions certainly cannot be separated from a good management concept. Management is the process of planning, organizing, directing and supervising (Rofiki, Munawaroh, 2021, Rofiki, Hasanah, 2021, Resufle, Rofiki, 2022) the business, the efforts of the members of the institution, agency or organization and the use of organizational resources to achieve the goals of the institution, agency or organization.

The progress and retreat of an organization of an institution / agency can be seen from the management that is selected, conceptualized, implemented and used by consumers, which of all remains in the control of a manager / leader. In the world of libraries, especially digital libraries, a librarian is a very influential actor in all digital library services, starting from defining, operating and implementing them. A librarian is also expected to be able to develop all digital library services, deploy and operate a digital library service system. Discussing about human resource management is one aspect that cannot be separated, especially in the implementation of digital libraries. If the hardware and software are already supported, it must also be supported by the ability of competent human resources in their field.

Educational qualifications, work experience and abilities in certain fields will be a benchmark to determine the quality of existing human resources. In the context of HR, what needs to be considered from the start of recruitment is determining needs. What are the leadership needs for new employees in the library. Grensing and Pophal (2007) say that leaders need to identify the position, salary/wages, section/department, under whom the position is, hours required, job summary, main tasks, qualifications and (core) job relationships with other jobs in the library. After applying digital libraries, library leaders also
need to ensure that librarians under their responsibility have skills in information technology (Tedd dan Large, 2005).

In this case, they carry out several human resource training programs in the form of: (a) Basic ICT Training, (b) Understanding how ICT can help librarian work, (c) Security and health in the use of ICT, (d) Knowing how to find something for the benefit of the user; (e) Using ICT to support users in developing their activities; (f) Using ICT to support users to conduct effective learning; (g) Ensure effective ICT management in libraries; (h) How to use ICT to improve professionalism and to reduce bureaucratic and administrative burdens. According to Tedd, Lucy A and Andrew Large (2005) that in addition to the things above, additional knowledge is also needed for each librarian, such as: (a) Net Navigator – the ability in advanced searching, website validation, and using service signals; (b) Information Technology Gatekeeper–web design capabilities, uploading and updating information, setting up and managing databases; (c) Information consultant – analyze and diagnose user needs, be aware of information sources, build relationships with other information providers, information design and presentation skills; (d) Information Manager–strategic planning, understanding digitization, copyright and other intellectual property rights issues; (e) Educator– designs and develops training and training materials for other staff and users.

In the development of digital libraries, management aspects are also closely related to improving the accessibility of information. Management is able to manage human resources, infrastructure, information technology based on the reliability of the system and the ease of understanding the control language. The concept does not stop only with the availability of abundant digital collections, but this can be realized if users can access the collections provided in a complete and comfortable manner. Good library management will build the accessibility of digital collections as an effort to make it easier for users to get digital information in full, complete, easy, fast and accountable (Neprianti & Hariyati, 2021)

b. Digital Library Technology Implementation Approach
Technology is a means of disseminating information also affects the condition of society. If the society has rapid progress, the change and development of information will be fast as well. In developed countries, information is not only a necessity, but also a commodity that produces products or services whose value and price can be calculated. In an effort to build information accessibility, components such as hardware (hardware), software (software), networks (networks) and human devices (brainware) are needed. The purpose of the application in this case is the software used in implementing digital libraries. As Tedd and Large (2005) offer several digital library software based on open source. For example: DSpace, Greenstone, Eprints, Emilda, Evergreen, Opel Biblio and Learning Access (ILS) and many others. Then as a follow-up in the process of selecting digital library technology as in (Tedd and Large, 2005). This process is the process of selecting application software for digital libraries. There are 10 (ten) criteria in the selection, namely: (a) Is the software able to meet the desired needs? (b) How much of the desired need can the product satisfy? (c) Are the standards used in the product appropriate? (d) Is the user interface provided appropriate and easy to use and available in several required languages? If not, can the product be developed based on the required language? (e) Can the available features be used for searching and browsing the information contained in the digital library? (f) What is the experience of other institutions that have used the product? (g) What is the reputation of the organization or institution that produces the product? (h) What is the reputation of local suppliers? (i) Is support such as training, online help, and the like available, and in what language? (j) What are the implications in terms of the legal aspects of using the product?

In the development of digital libraries, aspects of information technology are closely related to increasing the accessibility of information. The implementation of digital library technology has an impact on the design, implementation and control and reliability of the system and the ease of understanding the control language. The concept does not stop at the availability of abundant digital collections, but this can be realized if users can access the collections provided in a complete and comfortable manner. Good digital library
technology will build good information accessibility. Digital collection is an effort to be able to provide convenience for users to obtain digital information in full, complete, easy, fast and accountable. Information technology is closely related to the information society because information technology is the main element in the implementation of digital libraries owned by libraries from design, needs analysis to implementation and implementation. Reliable information technology will also increase the quality of information and information sources for the information society in various aspects of life, both economic, cultural, political and social (Bua, 2021).

c. Access Policy Approach And Information Legality

The concept of accessibility is the degree of ease achieved by people, to an object, service or environment. The concept of accessibility of information involves four dimensions, namely core accessibility, information accessibility, system reliability and ease of understanding the control language. The concept does not stop only with the availability of abundant digital collections, but this can be realized if users can access the collections provided in a complete and comfortable manner. Thus, it can be underlined that the accessibility of digital collections is an effort to make it easier for users to obtain digital information in full, complete, easy, fast and accountable. According to Arms (2001) that the development of a digital library (digital library) is always in contact with the corridors of ethics, law and plagiarism as well as intellectual property rights. According to Putu Laxman Pendit (2007), the accessibility of digital collections of digital libraries is not only limited to electronic documents instead of printed form, the scope of the collection must emphasize the content of information, types of documents to search results.

Collections for libraries are one of the most important factors for the proper implementation of library services. Regulation in this case is part of the policy of a leader related to "memorandum of understanding", access rights and guarantees that are published. For that we need a written policy both for libraries as mediators, writers as contributors to papers and users as readers.

According to the Big Indonesian Dictionary (2008) The problem of plagiarism or plagiarism is an activity to steal other people's writings; citing
other people's writings without citing the source or claiming to be his own (Language Center Dictionary Compilation Team, 2008). Plagiarism in libraries is closely related to the world of writing. So do not be surprised if this issue becomes one of the obstacles in the development of digital libraries. Some leaders of an institution argue that the construction of digital libraries can foster the practice of plagiarism. Regarding the accessibility of information, it can be explained that in legal matters it is closely related to the legality of information which will be directly proportional to the accessibility of information. The legal aspect of information relates to the ethics of seeking information, issues of intellectual property rights or intellectual property rights, plagiarism issues and issues of electronic transaction law. With the existence of policies and regulations on access to information, it will provide certainty to the public in seeking information as well as build convenience in obtaining information. With the establishment of accessibility of information, the needs of the community will be fulfilled in an effort to build all aspects of life for the information society (Dana et al., 2008).

d. Approach To The Transformation of Cultural Diversity Values (Multicultural)

In an effort to implement a digital library, the problem of information and communication technology alone does not fully guarantee the sustainability of the development of a digital library. The success of developing a digital library requires a touch of human thought and behavior. According to Steenerova in Laksmi (2006) that it is necessary to build a mindset with a cultural and holistic or comprehensive approach in developing innovation not only from the point of view of rationality, but also from the point of view of humans in their cultural system, which appears in the form of interactions between them and also between them and their neighbors. environment. With this background illustrates the complexity of humans in the information environment. Then in the framework of new thinking, new changes with a cultural approach based on ethnocentric mechanics towards humanism.

The success of an information technology implementation cannot be separated from human behavior that requires transactions between humans involving human intervention. In the development of digital libraries, cultural
issues are related to the accessibility of information. Accessibility of information provides easy access for the public from time to time. In developing a digital library of cultural issues, accessibility of information relates to the information society. For people who have habits and are accustomed to using technology, it will be easier to get information easily, quickly and accurately. The reliability of the accessibility of information will gradually build the accessibility of information (Fatmawati, 2017).

e. Cooperation Approach And Resource Sharing

In an effort to develop a library is through library collaboration. As a form of effort to build library services by using shared collections (resource sharing). These efforts are carried out because of the complexity in building library services. Sharing library resources is a demand in order to open open access in library services while at the same time overcoming the scarcity of information. As we know there is no single library in this world that can fulfill its own collection, so each library will need each other's collections in order to provide satisfactory services to its users. Therefore, the shared use of library collections is very helpful in providing services, especially for small libraries whose collections are very weak. This joint collection use program can run well if each library can provide information about what their respective libraries have.

In the development of digital libraries, the problem of resource sharing is related to the accessibility of information (Susanto, 2010). Accessibility of information provides a choice of shared access for the community. In the development of digital libraries, the problem of cooperation, accessibility of information is related to the information society. The public will get complete information and it will be easier to get information easily, quickly and accurately. With the collaboration of shared resources (resource sharing) will involve multiplying information from library partners. The development of information accessibility will gradually build an information society (Diavano & Andalas, 2020).

This section contains the data collection process, the time span and research location, and the results of data analysis (which can be supported by
illustrations in the form of tables or pictures, not raw data, and not in the form of a printscreen of analysis results), a review of the relationship between the results and the basic concepts, or the results of hypothesis testing (if any), as well as the suitability or contradiction with the results of previous studies, along with their respective interpretations. This section can also contain the implications of the research results, both theoretically and applied. Each figure and table used must be referred to and explained in the text, as well as numbered and referenced sources. The following is an example of how to write subtitles, sub-subheads, sub-sub-subheads, and so on.

CONCLUSION

A digital library is a system that has services and information objects with these information objects through digital devices. With this service expect to easily find information such as documents, images and databases in digital format quickly, precisely and accurately. Digital library collections are not only limited to electronic documents in lieu of printed form, the scope of the collection includes digital artifacts that cannot be replaced in printed form. Library collections emphasize this information, ranging from traditional documents to search results. The digital library is merely a collection of organized digital information by expanding at least by adding that the collection is provided as a service to take advantage of the information network.

The digital library development strategy has several approaches to building information accessibility. Among the approaches are: Digital Library Organization and Management Approach, Digital Library Technology Implementation Approach, Information Access and Legality Policy Approach, Cultural Diversity Value Transformation Approach (Multicultural). From these approaches it is possible to develop a digital library in information accessibility. Digital libraries also make it easier for users to access information.
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