Urgency of digitizing school libraries in Indonesia's post-truth era: A cross-perspective review

Syifaun Nafisah

Library Science Study Program, Universitas Islam Negeri Sunan Kalijaga Yogyakarta Jl. Laksda Adisucipto, Depok, Sleman, Daerah Istimewa Yogyakarta, 55281)* Corresponding Author, Email: 197812262008012017@uin-suka.ac.id

Received: September 2021; Accepted: October 2022; Published: December 2022

Abstract

The pandemic era has changed all aspects of human activity to be online-based, including the learning process. The online learning process requires digital-based learning resources and knowledge. The condition of school libraries in Indonesia, which is still in the library automation system stage, causes the library's role as a center of knowledge to be not optimal. Therefore, this study examined the urgency of digitizing school libraries to create learning centers based on various perspectives. This study used a qualitative approach with a literature review type. The validity and reliability test used used crossreference source checks, quick recording, member checks, and extended observation. Data analysis used content analysis with the Miles and Huberman approach model. Based on legal, psychological, health, educational, economic, social, and technological perspectives, research showed the urgency of digitizing school libraries in the post-truth era. Library digitalization has created an educational space allowing the learning process in the library through the provision of collection resources in digital collections by the library. Schools face obstacles in digitizing libraries: inadequate facilities and infrastructure, lack of skills and abilities of librarians for digitization, lack of support from schools as institutions that oversee libraries, and lack of funds provided. Libraries need to consider barriers and solutions. If realized, the library can become a knowledge center as the primary source of information providing the required information, especially for school student users.

Keywords: School library; Digitization services; Center of knowledge; Educational Space; Post-truth

Urgensi digitalisasi perpustakaan sekolah pada era post-truth di Indonesia: Studi lintas-perspektif

Abstrak

Era pandemi telah mengubah semua aspek manusia menjadi berbasis online, termasuk proses pembelajaran. Proses pembelajaran online membutuhkan sumber belajar dan pengetahuan yang berbasis digital. Kondisi perpustakaan sekolah di Indonesia yang masih dalam tahap sistem otomasi perpustakaan menyebabkan belum optimalnya peran perpustakaan sebagai pusat ilmu pengetahuan. Oleh karena itu, penelitian ini mengkaji tentang urgensi digitalisasi perpustakaan sekolah untuk membuat center of knowledge berdasarkan berbagai perspektif. Penelitian ini menggunakan pendekatan kualitatif dengan jenis kajian literatur. Pengujian validitas dan reliabilitas menggunakan teknik pengecekan silang sumber referensi, mencatat cepat, member cek, dan perpanjangan pengamatan. Analisis data menggunakan analisis isi dengan model pendekatan Miles dan Huberman. Berdasarkan perspektif hukum, psikologi, kesehatan, pendidikan, ekonomi, sosial dan teknologi, hasil analisis menunjukkan urgensi digitalisasi perpustakaan sekolah di era post-truth. Hal ini dikarenakan digitalisasi menciptakan ruang edukasi yang memungkinkan proses pembelajaran. Hal ini dikarenakan digitalisasi menciptakan ruang edukasi yang memungkinkan terjadinya proses pembelajaran di perpustakaan melalui penyediaan koleksi dalam bentuk digital oleh perpustakaan. Sekolah mengalami kendala dalam digitalisasi perpustakaan: sarana dan prasarana yang belum memadai, keterampilan dan kemampuan pustakawan untuk digitalisasi masih kurang, kurangnya dukungan dari sekolah sebagai lembaga yang mengawal perpustakaan, dan kurangnya dana yang disediakan. Perpustakaan perlu mempertimbangkan kendala dan solusi pemecahannya agar digitalisasi perpustakaan dapat terwujud. Jika terwujud, perpustakaan dapat menjadi pusat pengetahuan sebagai sumber informasi utama untuk menyediakan informasi yang dibutuhkan, terutama bagi pengguna pelajar sekolah.

Kata Kunci: Perpustakaan Sekolah; Layanan digitalisasi; Center of knowledge; Ruang edukasi; Post-truth

INTRODUCTION

In most people's mindset, a library refers to a building with bookshelves, where books are arranged according to certain scientific subjects so that users can quickly get the books they need. Along with the times, we must review the mindset because libraries are starting to initiate collections with a paperless concept libraries — information through digital technology influences libraries. Digital libraries are born to implicate users' needs information accessibility. libraries provide new ideas in librarianship because they are considered capable of responding to the challenges of the industrial revolution, where the massive development of science and technology is a marker.

According to its etymology, industrial revolution is a process of change and development of human life by making work equipment to increase industrial production or results. This revolution began to occur in 1750-1850. Significant changes occurred in agriculture, manufacturing, mining, transportation, and technology during this period. These changes also have an impact on changes in social, economic, and cultural conditions. One of the striking changes as a result of the industrial revolution is the shift in roles in process, the production both the production of goods, services, information, which initially made humans the center of activity, shifting to machines that can move and think automatically, such as computers and robots. This impact also extends to the library as an institution providing information literacy services to the public.

The significant influence currently felt due to the industrial revolution is information dynamics in society. This information dynamic occurs due to the development of knowledge in various forms developed by information providers so that information users can access it. The development of this massive information gave birth to the need for information storage space to accommodate the amount of data that was too large. Currently, information service providers are developing a computing model known as cloud computing.

Cloud Computing is set technologies that make up a cloud environment. The cloud itself is a metaphor for the development of the internet. Based on the literal meaning and basic concepts, conceptually, Cloud Computing is defined as storing and accessing data and programs via the internet from a different location or using a computer from our computer's hard drive. Information providers develop cloud computing to provide advanced services tailored to customer demands. provider initially offers the technology on a commercial basis. Amazon, Google, and Microsoft are information services that provide users with this cloud computing technology.

With the growing need for cloud computing, the epistemology of cloud computing has also developed. Cloud Computing is evolving into a model for developing, disseminating, and disseminating information that enables the delivery of products, services, solutions in real-time via the internet. This development has resulted the infrastructure of this technology is very complex. The complexity of the Cloud Computing Infrastructure formed by this technology must provide various services information needs and significantly in user needs in terms of form, type, amount, and time. This complexity is

also related to the computing capabilities provided by the technology as a service to the users. Users can get these needs and access them via the internet.

The use of cloud computing is also growing with the advantages this technology possesses, not only commercial purposes, but many of these information service providers provide free cloud computing services to their users. The edge of cloud computing technology is that it does not limit the capacity of conventional servers regardless of the number of processors, hard disks, and core memory. This advantage makes application and information service users significantly advantage of technology commercial purposes and storing personal data and information.

Physical limitations on conventional servers, conventional computing will burden traditional servers with maximum load. If the storage resources conventional servers run out, it is necessary to reinstall all applications and data on the server. This condition requires a larger storage capacity to migrate all existing applications to the new server. This migration process will take time to set up the application on the new server. That is if all the functions go well. If it does not go well, it will take longer.

Cloud computing technology seeks to improve the weaknesses of conventional computing as a superior form of service offered to users. Cloud computing technology offers advantages and convenience; there is no limit on local server data, information, and application storage. This complexity gave birth to a new concept in data management. This new concept is a data management concept known as big data.

Big data is a collection of processes consisting of large volumes of structured and unstructured data and is used to assist business activities. Big data is development of database systems in general, where information users and information service providers have used it manage data and information. Processing speed, volume, and available data types differentiate big data and databases. Big data provides more varied data than DBMS (Database Management System).

Management and processing of data in big data require cloud computing as a platform. Big data value and legal scope make cloud computing more wellintegrated for big data management. Big data has a huge role, especially in the industrial sector or information service provider institutions such as libraries.

The impact of the industrial revolution on libraries can be seen clearly in the regulations governing library operations, especially in Law of Republic Indonesia Number 43 of 2007. Paragraph 12 of this Law states that library collections are selected, processed, stored, served, and developed based on user's needs by considering information and communication technology developments. Furthermore, Paragraph 14 Section 3 states that every library develops library services considering advances in information and communication technology development. In Paragraph 19 Section 2, library development is an effort to increase resources, services, and library management, both quantity and quality. This development is carried out based on the library's characteristics, functions, and objectives and in accordance with the needs society users and by utilizing information and communication technology (Republik Indonesia, 2007).

Based on this regulation, our government shows awareness and responsibility as an institution that has authority over all service processes provided to the community, including information literacy services and the implementation mandated to libraries. Our government is aware of the impact caused by technological advances as a result of the industrial revolution, which will continue. This regulation creates new dynamics for information service providers. Libraries must also innovate in the delivery, management, preservation, utilization, and dissemination of information as information literacy service to the public quickly, accurately, in real-time, efficiently, and cheaply by using information technology in the service process.

In the conventional paradigm, the library is a part of or a separate building containing a collection of books arranged in a certain way. The library is also a physical building where books are collected and arranged according to a particular system needs. **Technological** developments have contributed to the birth of a new paradigm known as the modern paradigm. Automation and the digital era grouping phases of library development. This information retrieval tool is a marker of the automation period known as the Online Public Access Catalog (OPAC). In this era, library collections are still paper-based, while users can access them via the internet in the digital era.

The characteristics of the modern library paradigm open up opportunities for libraries to build educational spaces as centers of knowledge for the community. This concept bridges the library to face the dynamics of information due to the development of information technology. The consideration of the urgency of developing educational space as a center of knowledge built through digitizing school libraries in the pandemic and post-pandemic is as follows.

First, the access media used in the modern paradigm of libraries in the digital era is internet media. This media is the most widely used communication media by the public. Based on a report by the Internet Service Providers Association (APJII), until April 2019, internet users in Indonesia amounted to 64.8% or around 171.17 people 264 out of Indonesians (Asosiasi Penyelenggara Jasa Internet (APJII), 2022). More than half of Indonesian people use internet media to disseminate information. It shows that this media is a familiar medium, including the use of the internet in online learning models during a pandemic. Even in the postpandemic era, the need for online information sources for student learning will increase. It is essential for the school library to immediately carry out the process of digitizing the library as a knowledge center for students. Its users can further optimize the digitized library as a center for knowledge resources in the learning process. Second, the concept of a digital library which was born as an implication of the modern library paradigm, requires that library collection files be stored and distributed in digital format. Digital libraries allow the formation of educational spaces as knowledge centers to meet their information needs for the learning process from the library as the primary source of information.

Several researchers have conducted studies related to digital libraries and their development. Ruslan (2017) explained the urgency of developing digital libraries in 2017, and those electronic-based libraries positively impacted improving quality. Furthermore, Ruslan (2017)explained that implementing a library automation system will help routine activities, including procurement, cataloging, member inventory, management, visitor statistics, and searching for collection information in the library can be done easily and quickly.

In addition, Hartono (2017), has also researched library development strategies to build information accessibility. research theoretically examines the urgency of developing digital libraries and produces some analytical results that we can realize the development of digital libraries with the support of: (1) library organization and (2) development management, information technology, (3) information access policies and regulations, (4) approach to implementing the values of cultural diversity, and (5) collaborative sharing of resources. Furthermore, the study also explains the need to regulate rights and obligations to present, store, disseminate, and use information (Hartono, 2017).

on Ruslan (2017) study, developing a digital library is a solution that positively impacts the quality of information services provided to users. According to Hartono (2017) research, organizational digital libraries need support and library management, technology, information regulation, culture, and collaboration between libraries. A Library development strategy is essential in providing information services to the community. This development requires a good interaction between supporting components to issue new service concepts in the library. One is the concept of educational space, as described by Nugraha, Yuliarso, & Hardiyati (2018).

In their report study, they emphasize that the idea of educational-social space is by changing the library paradigm from a conventional paradigm to a new one, collaborating, applying the right technology, and rearranging programs. The new paradigms in this context are the development/improvement of digital libraries.

Based on related studies, this study to examine the urgency of developing through educational space digitizing libraries, especially in school libraries, based on various perspectives. In the pandemic and post-pandemic era, school libraries should be proactive in improving their services by providing information services needed by users so that libraries become the primary source of knowledge in the learning process. Most school libraries are still developing library automation and have not yet reached the creation of a digital library, which is the main reason for conducting this research. The analysis results can be a reference for regarding libraries opportunities that libraries can develop to optimize library functions, especially the concept of educational space in libraries through library digitization activities. The purpose this study to determine the urgency of developing digital libraries in schools based on cross-perspective reviews to create educational spaces in libraries. The hope for the library's success in building educational space is to assist students in obtaining valid and quality sources of information as learning resources.

RESEARCH METHODS

The research method in this study was qualitative research with a library research approach. A literature study is a study that uses books and literature as the main object of research. Conversely, qualitative research aims to dig deeper into information about the main ideas that formulate research problems.

This approach was considered appropriate in this study. This study explored the potential for developing educational space through the concept of a digital library in the school library. This

approach allowed data findings to be examined more deeply, clearly, objectively, systematically, analytically, and thoroughly. Table 1 presents the primary data sources in this study. As a comparison, secondary data used journals related to research topics.

Table 1 Research's primary data sources

No	Source	Year
1	Law Number 43	2007
2	Law Number 11	2008
3	Indonesian National Standard 7330	2009
	Regulation of the Minister of National	
4	Education Number 32	2011

Source: Research data processing, 2021

The analytical approach in this study was literature study analysis. The qualitative analysis method is a method for analyzing, describing, and summarizing various conditions and situations from multiple data collected from the data collection process in the field. This type of analysis was used based on the objectives of this study, i.e., knowing the urgency of digitizing a school library for developing educational space as a center of knowledge.

The research source contained global and implicit information. So, to find out the implied message regarding the urgency of digital libraries in research resources, it is necessary to process the data into a predetermined research framework to understand the information in each article and paragraph. It is to get a more precise and more detailed thread of the urgency of library development and explore potential for the development educational space through the concept of digital libraries in a more precise and more detailed way. The idea of educational space in theory and phenomena implied in previous research would create a framework. The data would be processed and analyzed based on information obtained from primary and secondary sources to answer the problem formulation.

Data findings would be tested using triangulation techniques for internal validity, and for transferability tests, research would compare data findings and existing theories or related studies. The reliability test minimized errors and bias using triangulation techniques in data collection and analysis by conducting member checks and documentation techniques. The final stage was analyzing the data with the Miles and Huberman Model, which consisted of 3 activities: data reduction, data presentation, and conclusion. Presentation of data in narrative form based on field findings after the data went through validation and internal and external validity tests. The actual validity or internal test was a test to ensure that the results were the conditions at the research site. The external validity test provided that other circumstances

could apply these findings if the conditions were homogeneous. Field-finding data

should also be consistent and objective. Figure 1 illustrates the research framework.

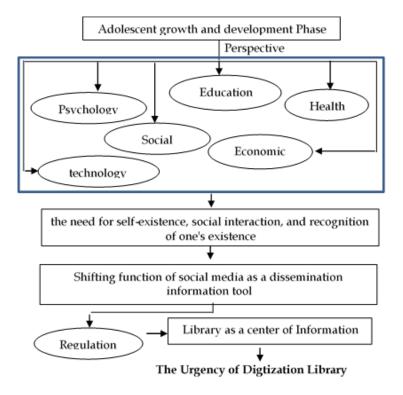


Figure 1. Research framework Source: Research data processing, 2021

RESULTS AND DISCUSSION

Law Number 43 of 2007 mentions the urgency of digitizing libraries. Article 3 of the Law states that the library functions as education, means of research, conservation, information, and recreation to increase intelligence and empower the nation. Referring to that section, Article 4 of the Law states that libraries aim to provide services to their users, increase interest in reading, and broaden horizons to educate the nation's life. This section shows the importance of the library's role in realizing quality human resources through information services provided to society (Republik Indonesia, 2007).

Based on this article, libraries must be at the forefront of providing quality information services to the public, especially in the current information age where the dissemination and development of information are increasing. The rapid dissemination of information makes quality information like a wilderness of knowledge mixed with 'junk' information, better known as hoaxes.

Hoax in the Online 'Indonesian Big Dictionary' means false information. In everyday life, hoaxes are called practical jokes; jokes, jest, pranks, or tricks are fake news/false with news. Along the increasing use of social media, hoaxes are also growing. The use of social media allows everyone to become an information producer. For specific purposes, propaganda or provocation uses hoaxes to spread through social media. The library must take on its role to realize the functions listed in Article 3 of Law Number 43 of 2007, namely as a medium for education, research, preservation, information, and recreation to increase intelligence and

empower the nation by providing quality information to the public.

Heterogeneous communities make libraries innovate in providing their services so that libraries can reach all levels of society. As an information management institution, libraries should use information technology to provide services to the community. In the Indonesian National Standard (SNI) 7330:2009, the use of information technology in providing services to the user community is contained in the mission to be achieved by the library, namely utilizing existing and future information and communication technology. For this reason, to standardize the quality of information services to the public, libraries must adopt information and communication technology by using information systems according to their needs.

An information system is a set of interconnected subsystems which interact with each other to process the data and process it to be information for decisionmaking, both now and in the future, for supports operational, managerial, strategic activities of the organization to achieve goals. The library information system is an interconnected subsystem to realize the library's function in the library's context. The library's mission in SNI 7330:2009 is a strong indication for libraries to switch from conventional libraries to libraries by utilizing information technology in library housekeeping or providing services to the community. Using library automation systems to assist routine activities in the library can expand library services to disseminate information collected in the library to the public. The realization is by developing a digital library.

Chapter IV Section 12 Paragraph 1 states that library collections are selected, processed, stored, served, and developed based on the user's interests by considering information and communication technology development. This Paragraph indicates that the collections served to the form users are in a supported and information communication technology, i.e., digital collection. Furthermore, Chapter V Section Paragraph 3 states that every library library services considering develops advances in information and communication technology. In this context, information and communication technology-based library services refer to information technology to assist library housekeeping in supporting organizational goals.

Paragraph 6 of the Law states the realization of integration of library services through collaboration between libraries, known as library networking. Paragraph 7 states the integration of library services through a telematics network. Telematics network, which comes from Telematique, communication assembles systems with information technology. In the First Part of Chapter XI, the intended purpose of the cooperation in Section 42 Paragraph 3 is cooperation as referred to in Paragraph (1) and service improvement as referred to in Paragraph (2) is by utilizing a library network system information and communication technology.

This Paragraph indicates that the collaboration between libraries uses technology-based communication network media, which typologically, based on its broad scope, refers to the internet. It means disseminating system development by the library using the internet so that the application should be the internet or a web-

based application. This web-based application is a tangible form of a product called a digital library.

The transition signal that implies the urgency of developing digital libraries from conventional libraries is explicitly described in the general section, which states that the development of information technology-based digital technology is the cause of the accelerated growth of libraries. This condition causes library management to become increasingly complex in science and technique. The role of library management is growing up. Based on Law 43 of 2007 concerning libraries, conclusion is as follows. The massive information development of communication technology in the last decade has also influenced library service activities. Information services as the primary library services in the dissemination process must be connected to information technology as the primary tool for processing, distributing, and disseminating information (Republik Indonesia, 2007).

For this reason, transferring information media into digital collections is a solution for information library services for users. The development of digital libraries is ultimately a solution as a 'weapon' for libraries to provide quality information services among the many information currently distributed through various media channels. Young people are the most users of information via the internet, where most young people are school age, so the primary duty of the library is to provide adequate information infrastructure through the school library. The school library is obliged to provide the infrastructure that supports development of the library as stated in Chapter IX Facilities and Infrastructure Section 38 Paragraph 2, i.e., by digitizing the library through the development of a digital library.

Law Number 43 of 2007 states that Libraries manage printed and recorded essay collections professionally with a standard system to supply information users need for educational, research, news, preservation, and recreational purposes. This definition has a strategic meaning, role, and function in realizing an insightful Indonesian society to educate the nation's life through service activities to increase users' reading interest. Furthermore, the library also preserves the nation's culture to promote national culture. The realization library's strategic role and function are developing and optimizing the library as a center of information and knowledge. The library can be a center of learning for knowledge, technology, art, and culture to develop social interaction, including social learning.

Social interaction is a social related individuals, relationship to individuals with groups, and between groups. In the library context, interaction can create the library as a center for developing science, technology, society, and culture. The requirement of social interaction is the occurrence of social contact and communication between community members. In general, social interaction has the objectives: establish and improve a friendly relationship, establish business relationships, implement mutually beneficial cooperation, execute or negotiate a problem in society, and adapt to the cultural environment or habits of other people or other groups.

In line with the main tasks and functions of the library, the implementation of social interaction in the library has the same purpose as social interaction in

Through social interaction general. activities, libraries can establish and improve information sources and service quality through good communication libraries between and users. communication establishment will be helpful the library provide to information sources needed by users and improve service quality based on user feedback. For business relationship establishment, the implementation of social interaction in the library is by exchanging information between libraries and applying the concept of cross-service between libraries. This concept offers a mutually beneficial collaboration in library networking by providing quality The information. public can think intelligently in responding to the flood of overgrown data in the last two decades. When the library can restore its function as institution that provides quality information sources to the public, it can realize the library as a center for education, information, research, culture, and recreation, as stated in Law Number 43 of 2007.

To realize a library according to its function, it needs to adapt to its users' cultural environment or habits. Currently, the library is in the digital era, or the digital period because there are generations that dominate life in that era: digital immigrants and digital natives. The digital migrant generation, also known as Generation X, was born between 1945-1976, while digital native or Generation Y follows the era of migrants. Generation digital Y Generation Z is the Internet Generation. Referring to the grouping of generations based on birth, the current library users are the digital migrant and the digital age.

The main characteristic of these two generations is using new media for information mediums based on the internet. Therefore, libraries, especially school libraries, in providing information services, must adapt to the characteristics of their users as stated in Law Number 43 of 2007. In this case, the development of the library should be in an internet-based services application for users.

The Declaration of the World Summit of Information Society (WSIS) on December 12, 2003, also stated this. This declaration agreed that libraries aim to develop an information society inclusively, humancentered, and specifically oriented development (Goggin, 2015). This agreement allows everyone to create, access, use and share information and knowledge by using their potential for sustainable development to improve the quality of life. This declaration shows that social interaction in libraries through information service activities has a very strategic role in supporting sustainable development and improving the quality of life. Therefore, the library needs to provide an area for the community to interact socially, communicate and share quality information. It refers to the definition of the education space.

Educational space refers to a place in which teaching and learning occur. The term is a superior alternative to the classroom because educational space may also refer to an indoor or outdoor location, either actual or virtual. Educational spaces support various pedagogies (Middleton, 2013).

In the library context, educational space can be defined as a building, part of a building or room, or virtual space as a digital library. This concept refers to the definition of digital libraries and educational spaces described above. This definition has intersecting meanings, where

space in both purposes refers to physical or virtual meanings, wherein space allows interaction to exchange information in society. There is an active and passive learning process with a conducive learning environment.

Referring to the advantages of digital libraries as described in the previous subchapter, digital libraries provide digital collections for education, research, preservation, recreation, and information from various purposes information sources, both internal and external sources. The internal reference is the institutional repository, and external sources are from related information units or institutions, such as other libraries, museums, an official government website, and others.

The advantages of digital libraries allow the library to be a center of knowledge and a place for the learning process that library users, especially students, can utilize. They need quality sources of knowledge in the learning process both inside and outside school, especially in the current pandemic era, where physical interaction between students and teachers is limited with online learning models. This condition will also continue to occur in the post-pandemic period.

School-age is the golden age of human development. The Golden Age is a compelling and urgent period for optimizing the various intelligence potentials possessed by human children towards quality Human Resources (Uce, 2015). The results of scientific research in neurology by Osbon, White, and Bloom state that the development of intellectual intelligence in children will reach 100% at the age of 0-18 years (Kertamuda, 2015); this age range is school-age. After 18 years is the period when the development of human intelligence stagnated. Raihana (2018) also states the golden age in her research report, that the development of human intelligence starts from infancy to adolescence, or in the age range 0-18 years, where this period is the school-age period.

The development of media technology is a challenge for children's development. The negative impacts of this are health problems, child development disorders, crimes against children, child behavior disorder, impaired concentration, impaired brain function in children (Pre-Frontal Cortex), and dependency gadgets which triggers introverts children (Subarkah, 2019). However, the current pandemic condition 'forces' schoolage children to spend more time interacting with devices for learning. It is currently applied in the pandemic and postpandemic era, and this condition will continue.

The challenge of the learning process in this era is the post-truth phenomenon. One of the post-truth phenomena is the function of social media shifting as a source of information. At this level, children should be creative in using the media by selecting and sorting information appropriately (Fatmawati, 2019).

Media usage for picking and sorting information becomes a challenge in the learning process in the pandemic and post-pandemic era. This challenge is because the literacy ability of Indonesian students is poor. Efforts related to literacy practices and literacy environment facilitation for students should be special attention to realize a literacy culture in Indonesia (Kharizmi, 2015).

The stakeholders' awareness to facilitate and educate the concept of information literacy and cultural literacy for early childhood in the form of a

complete grand design and its technical implementation is an urgent need in the community and schools (Putra & Oktaria, 2020). Early literacy implementation through the school library has proven to positively impact students for character building, increasing knowledge, developing student talent interests, adding and establishing positive relationships in social interaction activities and intellectual recreation (Fadhli, 2021). Rachmawati and Agustine (2021) have proven that literacy skills can prevent hoaxes related to information on social media.

As an institution providing information services to society, the library should have a grand design and technical implementation to offer literacy services to the community, especially school-age users. The library's strategy and technical assistance should adapt to its users' characteristics, i.e., the digital native generation already familiar with digital technology (Nashihuddin, 2021). The development of digital-based libraries is essential because libraries can no longer avoid providing information services for the user, especially in school-age as the age of most users in the library.

Based on scientific studies, referring to legal, technology, psychology, health, social, education, and economic review as described above, the urgency of digitizing school libraries is a step that must immediately accelerate their implementation in the post-pandemic period. The post-truth era phenomenon by massive marked information development with the function shifting of social media is the primary consideration of the need for a center of knowledge for school-age users in the learning process. Libraries, institutions with the primary

duty of providing information education, research, preservation, news, and recreation, are required to immediately realize digital-based information services in their routine activities and digital-based collection services according to digital native generation characteristics most of the users. The condition of school libraries in Indonesia, which is still in library automation systems implementation, should start to develop digital libraries immediately following the concept of educational space as described by Henri Lefebvre.

According to Henri Lefebvre's Theory, educational space is designing a space that allows both active and passive learning in a conducive environment (Leary-Owhin & McCarthy, 2019). The space can be in the physical or virtual space. Educational space in a virtual form in a library context refers to a digital library application. Digitization school libraries to build educational space will solve the degradation of the quality of information sources because it can be a center of knowledge that students use for learning activities purposes. With this digitalization concept, the library will become a center of knowledge for students as the primary source of information in learning activities. Library users also can utilize the center of expertise in the library collaborative repository for research activities that will foster a culture of critical thinking in the community, especially for the generation younger of Indonesia (Trianggoro, Tupan, Djaenudin, Widuri, & Rahayu, 2021).

The importance of digitizing school libraries requires schools to consider several factors in developing school libraries. The purpose of digitizing library materials is to preserve library materials, visibility, accessibility, and effective use of

printed and non-printed collections of school library resources. This digitization activity is a school effort through the library to improve information literacy skills for students to prepare them for the future. This goal is the first factor that the library must consider in digitizing the library, namely the librarian's ability to digitize collections.

Based on the findings of a study, the research infers that most librarians are aware of the importance of digitalization technology in libraries. However, the facilities for digitizing school libraries still need to be sufficiently available. In addition, the school, as the management that oversees the library, knows the importance of this technology. Still, the school is not ready to carry out the process of digitizing the school library. The second factor is the skills of librarians to handle the digitization of their school libraries.

Efforts to digitize the library must support all relevant parties to provide adequate services students. to developing digital libraries, librarians are generally aware of the importance of digitalization technology. However, the level of planning for implementing digitization in the school library is still low. This condition is related to factors considered by schools before the digitization process: availability facilities, library capabilities, and school support (Ukpanah, Ebong, & Enang, 2018). obstacle Another faced in development is the lack of qualified personnel to operate the system and inadequate facilities and equipment (Bello, 2013). For this reason, seeing the importance of library development from various scientific perspectives, schools must immediately prepare digital library development factors, including facilities, librarian skills, and funding, so that the development of digital libraries in schools can run well.

CONCLUSION

Since the world has entered the posttruth era, the development of information requires libraries to adapt to technological developments. One of the technologies that libraries can adopt in this era is the application of digital libraries. Online-based learning that occurred in the pandemic era and will continue in the post-pandemic era causes school-age children to need quality sources of information for learning activities purposes. The use of social media as a source of information causes the degradation of knowledge because this information is like the wilderness of information that mingles with 'junk' information. The poor literacy skills of students in Indonesia cause the students to be at risk of accessing 'junk' information. Therefore, it is necessary to digitize the school library to become a center of knowledge for its users. This research finds the urgency of developing digital libraries based on the studies, especially in school libraries. Speed refers to various scientific perspectives. Based on the legal review, the library's operational standard states that library development must consider the development of information technology. The psychology and health perspective also emphasizes school-age children's importance in acquiring quality information stimulus, considering that school-age is the golden age for optimizing children's intelligence, social, and character. From an economic view, digitizing libraries will be more effortless for libraries to disseminate their information to reach all levels of society through collaboration between libraries. Based on a technology perspective, library digitization will create

an educational space that allows users to learn in a conducive environment. The library needs quality information and digital knowledge sources to realize educational space. The realization is by accelerating the digitization of the school library. The digitization of the school library allows it to be a center of expertise for its users. The digitization of school libraries will provide practical encouragement for schools through libraries to carry out teaching and learning for students. At the next stage, it is necessary to conduct a more in-depth evaluation of the influence of the development of digital libraries on the wealth of information sources for students and their impacts on the development of students' character.

REFERENCES

- Asosiasi Penyelenggara Jasa Internet (APJII). (2022). *Insight: Gudang data*. Asosiasi Penyelenggara Jasa Internet (APJII). Retrieved October 17, 2021, from https://apjii.or.id/gudang-data/hasil-survei
- Bello, S. (2013).Automation digitization of primary/post primary school libraries as an impetus for and effective teaching learning. Journal of Educational and Social 79-88. Research, 3(10),https://doi.org/10.5901/jesr.2013.v 3n10p79
- Fadhli, R. (2021). Implementasi kompetensi pembelajaran sepanjang hayat melalui program literasi di perpustakaan sekolah. *Jurnal Kajian Informasi & Perpustakaan*, 9(1), 19–38. https://doi.org/10.24198/jkip.v9i1.2 7000
- Fatmawati, E. (2019). Tantangan literasi informasi bagi generasi muda pada era post-truth. *Jurnal Perpustakaan Pertanian*, 28(2), 57–66. https://doi.org/10.21082/jpp.v28n2

- .2019.p57-66
- Goggin, G. (2015). Communication rights and disability online: Policy and technology after the World Summit on the Information Society. *Information, Communication & Society,* 18(3), 327–341. https://doi.org/10.1080/1369118X.2 014.989879
- Hartono. (2017). Strategi pengembangan perpustakaan digital dalam membangun aksesibilitas informasi: Sebuah kajian teoritis pada perpustakaan perguruan tinggi islam **Unilib**: di Indonesia. Jurnal Perpustakaan, 8(1), 75-91. https://doi.org/10.20885/unilib.vol 8.iss1.art7
- Kertamuda, M. A. (2015). Golden age strategi sukses membentuk karakter emas pada anak. Jakarta: Elex Media Komputindo.
- Kharizmi, M. (2015). Kesulitan siswa sekolah dasar dalam meningkatkan kemampuan literasi. *Jurnal Pendidikan Dasar (JUPENDAS)*, 2(2), 11–21.
 - http://jfkip.umuslim.ac.id/index.ph p/jupendas/article/view/233
- Leary-Owhin, M. E., & McCarthy, J. P. (2019). The Routledge handbook of Henri Lefebvre, the city and urban society. NEw York: Routledge.
- Middleton, S. (2013). Henri Lefebvre and education: Space, history, theory. New York: Routledge.
- Nashihuddin, W. (2021). Strategi kemas ulang informasi untuk peningkatan pelayanan perpustakaan di era new normal. *Jurnal Kajian Informasi & Perpustakaan*, 9(1), 59–78. https://doi.org/10.24198/jkip.v9i1.2 8767
- Nugraha, F. T., Yuliarso, H., & H. (2018). Penerapan konsep edu-social space pada perancangan Perpustakaan Umum Provinsi Lampung di Kota Bandar Lampung. *Senthong: Jurnal Ilmiah*

- *Mahasiswa Arsitektur*, 1(2), 263–272. https://jurnal.ft.uns.ac.id/index.ph p/senthong/article/view/736/404
- Putra, P., & Oktaria, R. (2020). Urgensi mengembangkan literasi informasi dan literasi budaya pada anak usia dini. *JIIP: Jurnal Inovatif Ilmu Pendidikan*, 2(2), 134–146. https://doi.org/10.23960/jiip.v2i2.2 1818
- Rachmawati, T. S. & Agustine, M. (2021). Keterampilan literasi informasi sebagai upaya pencegahan hoaks mengenai informasi kesehatan di media sosial. *Jurnal Kajian Informasi & Perpustakaan*, 9(1), 99–114. https://doi.org/10.24198/jkip.v9i1.2 8650
- Raihana. (2018). Urgensi sekolah Paud untuk tumbuh kembang anak usia dini. *Generasi Emas: Jurnal Pendidikan Islam Anak Usia Dini*, 1(1), 17–28. https://doi.org/10.25299/ge.2018.v ol1(1).2251
- Republik Indonesia. (2007). Undang-Undang Republik Indonesia Nomor 43 Tahun 2007 **Tentang** Perpustakaan, 1 November 2007. Lembaran Republik Negara Indonesia Tahun 2007 Nomor 129. Retrieved from Jakarta. https://peraturan.bpk.go.id/Home /Details/39968/uu-no-43-tahun-2007.
- Ruslan. (2017). Urgensi pengembangan

- perpustakaan madrasah berbasis elektronik di Kotamadya Banda Aceh. *LIBRIA*, 8(2), 179–196. https://jurnal.arraniry.ac.id/index.php/libria/article /view/1210/905
- Subarkah, M. A. (2019). Pengaruh gadget terhadap perkembangan anak. Rausyan Fikr: Jurnal Pemikiran Dan Pencerahan, 15(1), 125–144. https://doi.org/10.31000/rf.v15i1.1 374
- Trianggoro, C., Tupan, Djaenudin, M., Widuri, N. R., & Rahayu, R. N. (2021). Pengembangan repositori data pada lembaga riset dengan status Pusat Unggulan Ilmu Pengetahuan dan Teknologi. *Jurnal Kajian Informasi & Perpustakaan*, 9(1), 1. https://doi.org/10.24198/jkip.v9i1.2 6733
- Uce, L. (2015). The golden age: Masa efektif merancang kualitas anak. Bunayya: Jurnal Pendidikan Anak, 1(2), 77–92. https://doi.org/10.22373/bunayya. v1i2.1322
- Ukpanah, M. E., Ebong, M. D., & Enang, (2018).Awareness U. digitization of school library resources in Akwa Ibom State, Iournal Library Nigeria. of and Information Sciences, 6(1), 37-43. https://doi.org/10.15640/jlis.v6n1a6

c	Mafinale	/ In	Vaiian	Lafouraci	C. Domasickalegas	1/2/ 10	Ma 2	Daganhan	2022) 1	157 1	72
- 2). Matisan	/ Iurnai	Kanan	intormasi e	& Pernustakaan	VOL. TU	. INO. Z	(1)ecemper	20221	157-1	1/2

172