

## Management Library Based on Digital Literacy at school Berau State High School (Study Cases at State Senior High School 4 and State Senior High School 6 Berau)

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### Abstract

**Background:** The transformation of traditional libraries into digital ones has become essential for the learning process. On one hand, libraries are required to provide digital resources, while on the other, students are expected to be literate in using them.

**Objective:** This research aims to describe the planning, organizing, implementation, supervision, challenges, and impacts in managing a digital literacy-based library at SMA Negeri Berau

**Methods:** This study employs a qualitative approach using a case study method. The research was conducted at SMA Negeri 1 and SMA Negeri 4 Berau, using observation, interviews, and documentation for data collection. The data analysis follows the interactive model of Miles and Huberman and the Pattern Matching technique by Robert K. Yin.

**Results:** The planning of digital-based libraries in both schools begins with identifying digital resource needs. In terms of organization, both schools have a clear management structure. The implementation phase involves various strategic programs. In the evaluation phase, both schools apply a continuous monitoring and assessment system. The impact of digital libraries includes easier access, increased efficiency in information retrieval, and changes in the usage patterns of library resources. The pattern matching results conclude that the library management in both schools aligns with theoretical models.

**Conclusion:** The four main aspects of educational management have been effectively implemented in both schools. The implications of this research reinforce the concept of digital literacy in relation to the ability to use digital resources critically.

**Keywords:** Library management, digital library, digital literacy, case study method, Berau state high school.

## INTRODUCTION

The development of information technology has brought significant changes in various sectors, including the education sector in this case the existence of school libraries. This development requires school libraries, which were originally traditional and contained books displayed on rows of shelves, to now become digital libraries with the advantage of the main object, namely digital collections, supported by digital library management staff, and library users.

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The transformation of conventional libraries into digital libraries can be considered as an extension of existing library services. Digital libraries as a collection of managed information have information services that are stored in digital format and can be accessed via a network. By providing digital information sources, libraries can develop programs that allow their users to access library databases. This is what makes school libraries strive to increase their electronic or digital information capacity (Wahdah, 2020), in order to balance the importance of these digital information sources.

Students who are currently in the learning process are surrounded by digital sources to obtain the information they need, and the tendency of students to use the internet is increasing. This is reinforced by the increasing use of the internet from year to year, based on the Indonesian Internet Service Providers Association. (APJII) Which country until 2024 internet users will reach 221,563,479 people from the total population of Indonesia which reaches 278,696,200 people, with Indonesia's internet penetration rate reaching 79.5% (APPJII, 2024).

The closeness of students to the media Digital media not only has a good impact but also has a bad impact on them, because the information presented in digital media is not necessarily correct, while the skills and abilities to choose digital information and technology systems have not been instilled in students. So that the urgency of digital competence is not followed up with strategic management and policies, not greeted with adequate literacy competence, making students fixated on content that has nothing to do with education, even though literacy skills are very much needed to advance the world of education (Umay, 2023).

The importance of digital media literacy in education is supported by several studies such as a survey of the level of digital literacy of high school students in the Special Region of Yogyakarta which concluded that students in the Special Region of Yogyakarta already have very good digital literacy. This means that their critical understanding of internet content is very good, namely being able to analyze, evaluate, and synthesize content (Amalia, 2015). Meanwhile, the level of digital literacy of students affects the learning outcomes of Islamic Religious Education (PA) class VIII at SMPIT Tunas Harapanilah (Kusni, 2023).

Library management in schools is obliged to direct the provision of digital teaching materials needed by students so that the library remains a center of knowledge in this technological era. On the one hand, the provision and processing of digital teaching materials is useful for students to help their learning, on the other hand it also provides digital literacy education to students, so that they can be directed to select and sort digital teaching materials that can support their learning. As happened at Madrasah Aliyah Negeri 2 Kota Madiun, this shows that library management has supported the digital literacy movement with its programs, namely digital literacy programs based on class, school culture, and society. (Supriati, 2021).

The development of digital libraries is also carried out by SMA Negeri 4 Berau, and SMA Negeri 6 Berau has developed a digital library. For example, for SMA Negeri 4 Berau, with the name of its library GARLIP (Taman Perpustakaan Puri) with its digitalization program in the national school library competition and successfully won 1st place in Cluster III of the

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National SMA/SMK/MA Library Competition in 2024 (Sari, 2024). Meanwhile, the library of SMAN 6 Berau is also automation-based and has achieved A accreditation, has also represented East Kalimantan Province to participate in the national library competition in 2023, and has won 2nd place at the National Level in the Cluster III School Library Competition (Editorial Team, 2023). The achievement of national-level achievements by the libraries of SMA Negeri 4 and SMA Negeri 6 Berau cannot be separated from the library management process carried out in both schools.

## LITERATURE REVIEW

### A. Management

Management is a process in achieving target goals. planning, organizing, moving, and supervising all activities and resources owned. The word management comes from Latin, namely from the word manus which means hand and agree means to do. The word is combined into the word manager which means to handle (Komariyah et al., 2021). Management in English means to manage, which is to organize or manage. Management is the art of carrying out work through other people (Akhmad, 2017). Every organization uses management to achieve its goals, as well as libraries also apply management in achieving their goals. Libraries based on Law Number 43 of 2007 concerning libraries are defined as institutions that manage collections of written works, printed works and/or recorded works professionally and with a standard system to meet the educational, research, preservation, information, and entertainment needs of library users. Libraries play a very important role in spurring the achievement of educational goals in schools. From this, it can be concluded that library management is a process of organizing, directing, coaching, controlling, and influencing library resources so that they can work, create, and carry out library tasks in accordance with the tasks, functions, and objectives of the library. The types of management functions are planning, organizing, implementing, and evaluating.

Planning is the first function in management. Planning is the calculation and determination of what will be implemented in order to achieve a certain goal where, when, by whom and how. Planning activities must be prepared carefully so that activities can run in a directed and smooth manner. In an educational institution, planning is a strategic step in the entire educational process that is carried out. (Nurlaili, 2022).

The second function is organizing, which is a form of cooperation between a group of people, based on an agreement to work together to achieve certain goals that have been previously determined. Organizing is a dynamic management function and process, while an organization is a static tool or container. Organizing can be interpreted as determining the work to be done, grouping tasks and dividing work to each employee. The third management function is movement or implementation, namely the implementation of what has been planned. In the planning function by using the preparations that have been made in organizing in the library institution so that they can be run by all parties. Implementation in the organization is the heart of management itself. (Bush, 2007). The fourth management function is evaluation, this activity is a very important process in educational activities, including in library management. Evaluation is supervision carried out by acknowledging all implementations, especially after

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everything is finished. This kind of evaluation is carried out to prepare a plan for all future activities.

## B. Literacy

The term literacy according to Setyawan (2018) has begun to be used on a wider scale but still refers to basic literacy skills or competencies, namely the ability to read and write. In essence, the most important thing about the term literacy is the ability to read freely so that you can understand all concepts functionally, while the way to get literacy skills is through education. So far there are nine types of literacy, namely (Muslim & Salsabila, 2021), one of which is Information Literacy, namely the ability that a person has in recognizing when information is needed and the ability to find and evaluate it, then use it effectively and be able to communicate the information in question in various formats that are clear and easy to understand, and when talking about literacy, it cannot be separated from digital, so it becomes digital literacy.

Paul Gilster stated that digital literacy is the awareness, attitude and ability of individuals to use digital equipment and means appropriately. To identify, access, manage, integrate, evaluate, analyze and synthesize resources. Digital power, building new knowledge, creating media expressions, and communicating with others, in the context of certain life situations, to enable constructive social action. (Anggraini & Kaluge, 2023).

## METHODS

**Approach study** This is a qualitative study, whereas the research method used is Case study research is an in-depth study of an individual, a group, an organization, an activity program, and so on over a certain period of time with the aim of obtaining a complete and in-depth description. (Yin, 2009). The goal to be achieved is a deep understanding of a case. (Abdussamad, 2021). Type of data collected is data in the form of words, sentences and images. the rest is additional data like document or written data sources, photographs, and statistics. The words and actions of people observed or interviewed are primary data sources (Rijali, 2019). Primary data source in study This is informants at the research location, namely all over the library manager of State Senior High School 4 Berau, and State Senior High School 6 Berau, among others Head School as guarantor answer, Head Library, Development Department, and IT, as well as part management and circulation, to get information How library management is based on digital literacy. While for the impact the informant is participant educate.

Data collection techniques in this study used observation, interviews, and documentation techniques. Data analysis in this qualitative research, the author uses an interactive model analysis from Miles and Huberman (Abdussamad, 2021). Data analysis activities in qualitative research are the process of regularly searching for and compiling data obtained from interviews and documentation by organizing data into categories using the Miles and Huberman analysis model (Nurlaili, 2022).

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Qualitative study also uses case studies method, then in the analysis use one of the data analysis methods studies the case presented by Robert K. Yin is Matching Pattern Matching, this technique involves comparison between predicted patterns (theory or hypothesis beginning) with patterns found in empirical data. If the pattern found in accordance with predicted pattern, then the validity of the study increases. The steps are 1) Determining the Theoretical Pattern (Initial Prediction), 2) Collecting Empirical Data, 3) Comparing Empirical Patterns with Theoretical Patterns, and 4) Assess Consistency and Drawing Conclusions (Yin, 2009).

## FINDINGS

### A. Planning

The Beginning from stage planning is determination objective the holding of library based on digital literacy at State Senior High School 4 Berau, and supported with identification need public school namely participant students and teachers. Identification is need will digital materials as Supporter learning or oriented curriculum, besides it is also a necessity will mean Supporter digital library, meaning facility oriented infrastructure. Second matter this presented by the Principal of State Senior High School 4 Berau as following:

*“The library-oriented curriculum focuses more on content and teaching materials that support learning, while the library-oriented facilities and infrastructure focuses more on physical facilities and technology that support information accessibility. These two approaches complement each other, so that the library ideally has its own balance between curriculum and facilities and infrastructure to provide the best service to students and teachers.”* (ww.Kep.wid,2024)

Existence library No off from development technology moment this, and this must be anticipated by the library State Senior High School 4 Berau, so that existence library based on digital literacy is to balance the advancement of the technological era. This is submitted by Staff IT section. The library of SMA Negeri 4 stated as following:

*“So, a digital-based library is a step to keep up with the times. So, schools that have libraries must create a digital-based library program. So, by providing information sources in the form of e-books, in the form of digital books, it will support the teaching and learning process. In essence, the purpose of the digital library program is to provide easy access to reading for students and provide many digital readings access points in schools.”* (ww.It.nur ,2024)

Main target from existence digital library for participants students at State High School 4 Berau become participant literate students, and have hobby read anywhere and anytime. This is in accordance with the digital era that makes participant educate can access information anywhere and anytime, and already as it should be school give give conveniences That participant educate access material learning through through digital library.

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Planning process library based on digital literacy at State High School 6 Berau started with researching objective from activity That myself, namely objective what do you want achieved in the library program. In SMA Negeri 6 Berau, the purpose of the library program based on digital literacy-oriented curriculum and facilities infrastructure. Head of State Senior High School 6 Berau to explain orientation the as following:

*“Curriculum-oriented, namely providing convenience for students to access a collection of teaching materials and references anytime and anywhere through a digital platform easily. The Study through target digital platform activity will be liked by students. This aims to improve the digital literacy skills of all citizens of SMA Negeri 6 Berau Berau.”* (ww.Kep.her, 2024).

At the stage planning is also identified information or digital resources required by the library school, with method evaluate need user through questionnaire, and digging information related digital sources, in addition it also chooses appropriate digital sources with needs and capabilities school. how to with Adapt with curriculum and objectives learning, ensuring credibility digital sources, assess accessibility and attention experience user.

## B. Organizing

Head School as leader in school to form administrator library through letter decision head school. So inside letter decision the There are people or staff who work in the library. It is also included in the decree there is task or duties and functions that must be carried out conducted by library staff. The number of administrators and the duties of each administrator presented by the Principal of State Senior High School 4 Berau as following:

*“So, in the administrator structure there are nine people. Among them are the head of the library, then the technical service section. In the technical service section there are three people, then the IT service there are three people, and the service librarians there are three people. So, the total is nine people, ten people with the head of the library. One of the qualifications for technical services is that we are looking for a graduate of a library bachelor's degree, whose degree is SPP for technical services. While for other services we take from teachers who are competent with library problems.”* (ww.Kep.wid,2024)

Organizing at State High School 6 Berau follow the rules that poured out in Minister of National Education Regulation No. 25 of 2008 and standards national library school. While duties and responsibilities the answer administrator library made by the head school, customized with existing conditions and applicable regulations. In complete duties and responsibilities answer made as Attachment to the Head's Decree school about organization library school. Purpose the formation of organization library This according to IT staff of SMA Negeri 6 Library as following:

*“In order for this implementation to run optimally, the principal as the school leader provides direction to the administrators before carrying out their duties and obligations.”*

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*Usually in the form of a coordination meeting or technical training, and is carried out at the beginning of the new school year. In addition to the annual meeting, the school also holds technical training for library administrators to be more optimal in providing services.” (ww.It.riz, 2024).*

### C. Implementation

Library activities at SMA Negeri 4 Berau The activities are the same as the curriculum in the form of providing a special program, namely Literacy Friday. Every Friday at the beginning of the first hour, namely one hour specifically for the library, there are many activities including, socialization to school residents about the program, namely the digital library, and information on literacy programs, namely training to guide students, providing information to students on how to find information, literacy information via the website or through education or ipus nas and others. How to choose the best and most useful digital resources to educate together, this was conveyed by the head of the SMA Negeri 4 library as follows:

*“Schools realize that good digital sources are those that have many collections or diverse collections. For example, on the Ministry of Education and Culture's digital book page, not only high school level books are available, but also picture books, picture stories for junior high school, elementary school, kindergarten and so on. Then on the page, digital books from the Ministry of Education and Culture also have monthly magazines, monthly school magazines of course provide inspiration for students. So, schools choose digital sources that are firstly legal, then secondly varied.” (ww.Per.evi, 2024).*

The digital-based library program is included in the daily program because it is based on facilities and infrastructure. So, the school provides digital-based facilities and infrastructure. For example, the Digital Reading Park Kiosk (ATM). What is this digital ATM like, explained by the IT Staff of the SMA Negeri 4 Library as follows:

*“The digital ATM is a digital access point, there are 78 QR codes in the QR code, there is a digital platform that collaborates with the Ministry of Education and Culture, there are digital books, then there are online newspapers, online magazines, then there is cooperation with various parties related to literacy by providing e-books to be displayed on the digital ATM that can be accessed by students, teachers, and school residents. Then for the digital media that is heard, the school uses Spotify media.” (ww.It.nur, 2024).*



Figure 1. Digital ATM, one of the point digital accesses for participant educate Researcher notice method use of digital ATMs

What just service digital library known to participants educate, one of participant educate from State High School 4 Berau state:

*“Daily digital library services at SMA Negeri 4 Berau also provide facilities in the form of digital access points, digital libraries that can be accessed by students anywhere and anytime in the form of a website, then e-garlip applications, then information access points throughout the school environment, so that students are free to use digital ATMs every day. In addition, the school provides adequate facilities and infrastructure with access point facilities in four buildings. This internet is available for 50 MB, so the total is 200 MB.” (ww.Pd. hend, 2024)*

Not wanting to be left behind by its peers, SMAN 4 Berau, SMAN 6 Berau opened a digital library-based library service which is carried out every day from 08.00 to 16.00 with open services manually and digitally. The existence of digitalization in library services helps students because students can access materials that can support learning in class without having to come to the library. Because the library already provides reference sources in the form of books/ebooks. The school realizes that the digital collection is still limited, and the school is trying to increase the number of collections with independent funds or in collaboration with external parties. This was stated by the Head of the SMAN 6 Berau Library as follows:

*“Students can access the collection from anywhere in the school as long as internet access is available. Providing a more holistic and interactive learning experience. This media allows various learning styles, such as visual, auditory, and kinesthetic, to integrate and support the learning process.” (ww.Per.rus, 2024).*

Features available at State High School 6 Berau Membership, catalogue and circulation. While constraint main in manage digital library in school is IT staff who are not yet

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professional, when this the staff in charge technology information is not power specifically in the library, but to crawl in other fields.



Figure 2. One of the sides corners the library of State Senior High School 6 Berau provides facility complete digital library with pleasant seating.

Development means infrastructure in digital libraries are also balanced with development ability manager library in a way alternate for follow education appropriate training with field officer handle, training the like training librarianship and management library, training digital literacy and management technology, training journalism, writing, and literacy information and training event management and literacy programs.

#### D. Supervision

Duties and authorities' supervision to the course of the library program based on full digital literacy implemented by the head school. Activities supervision implemented in a way periodic Good monthly, quarterly and yearly. And the party's library will give report library program development to head school. This is put forward by the Principal of SMA Negeri 4 as following:

*“Special annual supervision and evaluation are conducted to see the digital literacy process, so that from the report it will be seen what needs to be improved and what needs to be fixed. The report can be sourced from technical reporting by experts on the current number of collections, both printed and e-book, how many copies, then how many times the enumeration was carried out and so on. In addition, it will also be reported what future training will be attended by library staff to develop their services, adjusted to the addition of collections and existing library facilities and infrastructure.”* (ww.Kep.wid, 2024).

The implementation of library supervision at SMA Negeri 6 is generally carried out intensively once a year, and those authorized to carry out supervision are the principal and the head of the library. Through this supervision, both annually and incidentally, which aims to see the implementation of the program in the field whether it has run well or has encountered

obstacles, and alternative solutions will be sought. The obstacles found are noted for improvement in the future.

#### **D. Impact Digital Literacy towards Participant Educate**

Impact digital literacy towards participant educate presented by Firja Handinia As participant educated at State High School 4 Berau, results his opinion he put forward as following:

*“With facilities such as Digital ATM, we as students find it easier to access various digital platforms, such as the e-garlip and Edoo applications. This application makes it easy for us to read digital collections anytime, anywhere and anytime, without having to come directly to the library. In addition, the library also provides interesting facilities such as Mini Block Literacy and Garba 3D. With the existence of a digital library, all sources of information are directed and organized. All of this helps me access information more easily and more in accordance with my learning needs.”* (ww.Pd.hen, 2024)

The school library is still the main choice for students when they want to get information that is right on target, reliable and supports learning activities at SMA Negeri 4 Berau. With the digital access point facilities that have been provided at school, students can easily find the references they need at any time. The digital collection is very helpful, especially for daily assignments and learning.

Not wanting to be left behind by their colleagues, the library of SMA Negeri 6 has an impact on its students, this was stated by one of the students at the school, who stated the following:

*“The existence of digital services from the library changes visits to the library, so that visits are reduced because library facilities can be accessed from anywhere in the school. and this facility is very helpful in completing learning tasks carried out by students.”* (ww.Pd.pus, 2024).

### **DISCUSSION**

#### **A. Planning**

The initial step in planning is to identify the needs of a literacy-based library, SMA Negeri 4 Berau and SMA Negeri 6 Berau are welcome to use the orientation curriculum and infrastructure. The curriculum is oriented towards a digital library, meaning that this digital library is designed to support the development of students' digital literacy, educating by providing various structured learning resources in accordance with the applicable education curriculum. This library does not only contain digital books, but also other resources such as articles, videos, interactive modules, and learning aids.

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Library oriented the curriculum also supports development digital literacy with help participant educate understand method search, evaluate, and use digital information in wise. While library based on digital literacy with orientation means infrastructure is digital library that focuses on development infrastructure and facilities Supporter use increase access as well as quality digital literacy for participant Educate and Teacher. Library This No only provide digital collections, but also build systems and devices that enable more access spacious and comfortable to source digital learning.

Planning in the Library based on digital literacy at State High School 4 Berau started with referring to the purpose main from library based on digital literacy, namely follow development the era that the era of technology. So, the library digital based is step for keeping up with the technological era Likewise at State Senior High School 6 Berau, planning is description from objective what do you want achieved in the library program based on digital literacy, namely For Give convenience to participant educate for access collection teaching materials and references When anywhere and everywhere via digital platforms. At stage planning is also prepared activity for development officer library for support service library. This is in accordance with opinion Akhmad, who stated that planning in A management aiming reach a specific purpose, is an integral part of function management organic others. In the work process, planning get input from party others (Akhmad, 2022). This was emphasized again by Warman and Ratnaningtyas who stated in any organization, in every planning process, problem always appears, and the end will impact on the taking decision (Warman & Ratnaningtyas, 2022).

## B. Organizing

Organizing at State High School 4 Berau specifically done by the head school with emit letter decision head school about manager library school, letter decision the There are people or staff on duty in the library. Meanwhile at SMA Negeri 6 Berau organizing library follow the rules that poured out in Minister of National Education Regulation No. 25 of 2008 and standards national library school. While duties and responsibilities the answer administrator made by the head school, customized with existing conditions and applicable regulations. This is in harmony with opinion Rohmy Afriatin which states the stages organization is very necessary in matter implementation management library Because For know tasks what is given For carry out planning that has been done determined, and can walk in a way maximum and structured (Afriatin, 2020).

The hope is that the library manager can carry out its activities and in accordance with the school's vision and mission, so that it can be implemented. This is in line with what was stated by Azainil and Komariyah that the principal must have managerial competence, namely the technical ability of the principal in carrying out his duties as an education manager. In addition to being able to lead and manage education, the principal is also required to understand and apply all the substances of educational activities. The principal is able to manage and develop the school organization and relationships with the community according to needs optimally. (Azainil & Komariyah, 2021).

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### C. Implementation

Implementation activities at SMA Negeri 4 Berau began with Friday Literacy, Training for Student Mentors, How to Find Information. How to Use Digital Media that Can Be Read, Heard and Touched. While at SMA Negeri 6 Berau Library Services are opened Manually and Digitally. This is because many students at this school already know about virtual libraries. This is in line with what was stated by Agnesia et al. that technology makes teachers try to utilize computers and the internet as a medium of interaction between teachers and students which is then in the form of digital access so that meaningful social and learning patterns are created. (Agnesia et al., 2021) .

The existence of digitalization in library services helps students because students can access materials that can support learning in class without having to come to the library. This is in accordance with the opinion of Tony Bush who stated that implementation in management is the implementation of what is planned in the planning function with the preparation of utilization that has been carried out in organizing the institution's library so that it can run well by all parties (Bush, 2007), and according to Onisoru et al this stage is an important thing in organizing. (Onisoru et al., 2020).

Access to library materials at SMA Negeri 6 Berau can be done from anywhere in the corner of the school as long as internet access is available. Meanwhile, at SMA Negeri 4 Berau, the daily library program provides facilities in the form of digital access points, which can be accessed by students anywhere and anytime in the form of a website, then an e-garlip application, then an information access point in all school environments, so that students are free to use digital ATMs every day. In addition, the school provides adequate facilities and infrastructure with access point facilities. This is in line with Rahat Khan who stated that the Source Power digital library can be accessed from any location in the world with the need to play in the form of electricity and a network for the internet. (Khan, 2021).

### D. Supervision

Library supervision activities at SMA Negeri 4 Berau are carried out periodically, either monthly, quarterly, or annually. The function of supervision is to see whether the implementation of the program in the field is running well or experiencing obstacles, and to find alternative solutions. This is in line with Afriatin's opinion which states that activity evaluation is carried out to obtain results as expected and to obtain quality improvements (Afriatin, 2020). This is reinforced by Govindasamy & Salawana who state that evaluation is a very important process in educational activities, including in library management. With evaluation, monitoring can be carried out on all activities to find out whether the organization itself obtains and utilizes educational resources in general effectively and efficiently in order to achieve goals. Evaluation is an action taken in a school organization, and this action is usually carried out in anticipation of changes that occur in the school environment, especially in the library environment (Govindasamy & Salawana, 2019).

#### **E. Impact Digital Literacy towards Participant Educate**

A number of impacts of digital literacy on students have similarities between SMA Negeri 4 Berau and SMA Negeri 6 Berau, such as the existence of digital library services that allow students to access library materials without having to come to the library, and do not depend on time as long as internet access can be connected or smooth, and the data is very helpful in learning. This is in accordance with what was stated by Lohit Talukdar who stated that a digital library is nothing more than a large database of known multimedia collections, data that is available globally directly or indirectly through the network (Talukdar, 2020).

#### **F. Analysis Theoretical and Empirical Pattern Matching**

Pattern matching analysis is one of the case study analysis techniques developed by Robert K. Ying in his research. This aims to compare theoretical patterns in literacy-based library management with empirical patterns found in the field. If the empirical pattern obtained is in accordance with the theoretical pattern, it can be concluded that the program being run has been running effectively in accordance with the principles of good management (Yin, 2009). In digital-based library management, in general, theoretically there are four main aspects that are used as references, namely systematic planning, clear organization, structured implementation, and continuous evaluation. If these four aspects are implemented well, digital libraries in schools are expected to provide benefits in the form of easy access to information for students, increased interest in reading, and the effectiveness of digital learning.

Research as a step in discovering empirical patterns shows that, the aspect of planning digital library management based on literacy, both SMA Negeri 4 Berau and SMA Negeri 6 Berau has been carried out by identifying digital resource needs before developing a digital library program. In the aspect of organizing digital literacy-based library management, both schools have a clear management structure in managing digital libraries. SMA Negeri 4 Berau establishes library governance through a principal's decree covering the head of the library, technical service personnel, IT services, and library services. Meanwhile, SMA Negeri 6 Berau refers to Permendiknas Number 25 of 2008 and the national standards for school libraries in forming its organizational structure.

As the third aspect, the implementation of the digital library program has been carried out with various strategies in each school. SMA Negeri 4 Berau has excellent programs such as Friday Literacy and digital literacy training to improve students' skills in searching for and using digital information. Meanwhile, SMA Negeri 6 Berau provides digital library services every day from 08.00 to 16.00 with main features such as membership, digital catalogs, and e-book circulation. Both schools have utilized various digital platforms to improve student accessibility to reading materials.

Evaluation of the implementation of digital library management based on, both schools have implemented a periodic monitoring and assessment system to ensure the sustainability and effectiveness of the digital library program. SMA Negeri 4 Berau supervises in three stages, namely monthly, quarterly, and annually, with progress reports submitted to the principal. Meanwhile, SMA Negeri 6 Berau conducted an annual evaluation using questionnaires and digital device usage tests to assess the effectiveness of library services.

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The results of the analysis of the pattern match between theory and empirics in the study can be concluded that the management of digital literacy-based libraries in SMA Negeri 4 and SMA Negeri 6 Berau has been running in accordance with the established theoretical pattern. The four main aspects of educational management, namely planning, organizing, implementing, and evaluating, have been implemented well in both schools.

## CONCLUSION

Based on previous discussion it can be concluded that the management process library based on digital literacy at State Senior High School 4 and State Senior High School 6 Berau walks in accordance with management library which includes steps planning, organizing, implementing, and supervising. While obstacles faced management is often electricity flow out.

Impact of digital literacy towards accessibility and use source Power library can be seen from convenience access, effectiveness of search information and changes in use pattern of source Power library. In terms of access, participants educate can access collection libraries more quickly and flexibly. In terms of effectiveness, there is improvement in convenience in searching information.

The implications This study reinforces the concept that digital literacy is not only about the ability to access information digitally, but also includes skills in searching, evaluating, and using information critically. The results of this study indicate that digital literacy-based library management requires careful planning in order to run effectively. Schools must ensure that the digital collections provided are in accordance with the needs of the participants. educate and support the learning process.

## AUTHOR CONTRIBUTION

[Tati Kusmiati]: Researcher

[Nurlaili and Akhmad]: Supervisors

[Warman, WidyamitMike Big Mulawarman, Azainil]: Examiner

## CONFLICT OF INTEREST

The author has no conflict or interest in writing this article. Either financially or otherwise.

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## REFERENCE

Abdussamad, Z. (2021). *Metode Penelitian Kualitatif*. CV. Syakir Media Press.

Afriatin, R. (2020). *Pengelolaan Perpustakaan Sekolah di MTs Negeri 7 Kebumen*. *Jawda*:

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- Journal of Islamic Education Managemen*, 1(1), 47–55.  
<https://doi.org/10.21580/jawda.v1i1.2020.6703>
- Agnesia, F., Dewanti, R., & Darmahusni, D. (2021). Praksis Literasi Digital dalam Pembelajaran Bahasa Inggris Abad 21. *Jurnal Kajian Bahasa, Sastra Dan Pengajaran (KIBASP)*, 5(1), 16–29. <https://doi.org/10.31539/kibasp.v5i1.2713>
- Akhmad. (2017). Manajemen pengembangan sumber daya manusia di sekolah dasar islam terpadu. *Manajemen Dan Supervisi Pendidikan*, 1(2), 171–175.
- Akhmad. (2022). Peningkatan mutu pendidikan melalui penguatan dalam perencanaan pendidikan. *SHOLASTICA : Jurnal Pendidikan Dan Kebudayaan*, 4(November), 168–177.
- Amalia, R. R. (2015). Literasi Digital Pelajar SMA : Kemampuan Berkomunikasi dan Berpartisipasi Pelajar SMA Negeri di Daerah Istimewa Yogyakarta Melalui Internet. *Jurnal Studi Pemudi*, 4(1).
- Anggraini, V. R., & Kaluge, L. (2023). *Literasi Digital , Berpikir Kreatif Serta Kritis Dalam Pemecahan Masalah Oleh Murid SD di Jakarta Barat*. 05(04), 17227–17238.
- APPJII. (2024). *APJII Jumlah Pengguna Internet Indonesia Tembus 221 Juta Orang*. <https://apjii.or.id/berita/d/apjii-jumlah-pengguna-internet-indonesia-tembus-221-juta-orang>
- Azainil, A., & Komariyah, L. Y. Y. (2021). The effect of principal ' s managerial competence and teacher. *Cypriot Journal of Educational Sciences*, 16(2), 563–579.
- Bush, T. (2007). Educational leadership and management : theory , policy , and practice. *South African Journal of Education*, 27(3), 391–406.
- Govindasamy, R. A. P., & Salawana, B. (2019). Managing Educational Changes and School Leadership : Issues and Challenges. *The 2nd International Conference on Sustainable Development& Multi Ethnic Society*, 2, 187–191.
- Khan, R. (2021). Importance of Digital Library in Education. *International Journal of Research in Library Science*, 7(4), 102–117. <https://doi.org/10.26761/IJRLS.7.4.2021.1467>
- Komariyah, L., Amon, L., Wardhana, A., Priyandono, L., Poernomo, S. A., Januar, S., Harliansyah, Satriawarman, T., Bustami, M. R., Heriman, Firmansyah, Pratama, P. A., Sumantri, W. H., Rianti, Rusdawati, Yusniar, Sripenni, Ping, T., Rohana, ... Hadiyanti., D. (2021). *Manajemen Pendidik & Tenaga Kependidikan Abad 21*. Yayasan Penerbit Muhammad Zaini Pidie, Aceh.
- Kusni, Z. H. A. A. N. (2023). Pengaruh Literasi Digital Siswa Terhadap hasil Belajar PAI Kelas VIII di SMPITTunas Harapan Ilahi Kota Tangerang. *Rausyan Fik*, 19(1), 67–80.
- Muslim, I. F., & Salsabila, F. (2021). Gerakan Literasi Di Kalangan Mahasiswa Sebagai Pengaruh Pembelajaran Daring (Online). *Research and Development Journal of*

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- Education*, 7(2), 424. <https://doi.org/10.30998/rdje.v7i2.10224>
- Nurlaili. (2022). Manajemen Bursa Kerja Khusus di SMK Negeri 2 Samarinda dalam Penyaluran Lulusan ke Dunia Kerja. *Aksara, Jurnal Ilmu Pendidikan Nonformal*, 08(May), 1291–1300.
- Onişoru, P., Florenţa, G., & Daniela, M. D. (2020). Performing Management in School Organizations and Entrepreneurship. *International Journal of Applied Research in Management and Economics*, 3(3), 1–8.
- Redaksi. (2023). Perpustakaan SMAN 6 Berau Juara 2 Nasional, Dalam Lomba Perpustakaan Sekolah Klaster III. *Swarakaltim.Com*.
- Rijali, A. (2019). Analisis Data Kualitatif. *Alhadharah: Jurnal Ilmu Dakwah*, 17(33), 81. <https://doi.org/10.18592/alhadharah.v17i33.2374>
- Sari, N. A. (2024). Perpustakaan SMAN 4 Berau Juara 1 Lomba Perpustakaan Nasional, Bupati Sri Juniarsih Beri Apresiasi. *Kompas.Com*.
- Supriati, E. (2021). Manajemen perpustakaan dalam mendukung gerakan literasi digital di Madrasah Aliyah Negeri 2 Kota Madiun. *Jurnal Kajian Informasi & Perpustakaan*, 9(2), 201–218.
- Talukdar, L. (2020). Developing Digital Libraries : Issues And Challenges. *Webology*, 17(1), 505–511.
- Umayana, A. N. M. N. M. (2023). Problematika Kompetensi Literasi Peserta Didik dalam Pembelajaran yang Memanfaatkan Ragam Perangkat Digital. *JIPS*, 4(2).
- Wahdah, S. (2020). Perpustakaan digital, koleksi digital dan undang-undang hak cipta. *Pustaka Karya : Jurnal Ilmiah Ilmu Perpustakaan Dan Informasi*, 8(2), 26. <https://doi.org/10.18592/pk.v8i2.5132>
- Warman, W., & Ratnaningtyas, E. M. (2022). Principal Managerial Competencies: Implications for Vocational Secondary Education. *Budapest International Research ...*, 3853–3864. <https://www.bircu-journal.com/index.php/birci/article/view/4071>
- Yin, R. K. (2009). *Case Study Research: Design and Methods. Fourth Edition*. Sage Publications Sage CA: Los Angeles, CA.