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BUSINESS PROCESS REDESIGN OF DIGITAL LIBRARIES IN INDONESIA¹

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Abstract:

The library visit interest of high and university students in Indonesia is underrated, so it is necessary to improve and increase the capabilities of digital libraries. By using a literature study, it was concluded that improving and increasing students' reading interest in Indonesia can be done by redesigning digital library business processes.

Keywords:

Business Process Redesign, digital library, literacy interest

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A. INTRODUCTION

One of the objectives of being a "state" as stated in the Preamble to the 1945 Constitution of the Republic of Indonesia, is to educate the nation's life. One of the means to educate the younger generation of the Indonesian nation is to improve and increase the ability of libraries to attract interest in reading and visits from all levels of education in Indonesia.

However, it is unfortunate that students' interest in visiting the library is still very far from expectations. National Socioeconomic Survey of Socio-Cultural and Education Module (MSBP) 2021 data from the Central Bureau of Statistics (2022) (BPS) shows that the percentage of students/students, consisting of Elementary School (SD)/equivalent, Junior High School (SMP)/equivalent, Senior High School (SMA)/equivalent, and Higher Education (PT), who have not visited the library in the last 3 months in 2021 is quite high, which are 92.23%, 85.60%, 83.86%, and 81 respectively .26%. This must be addressed considering that one of the government's efforts to realize equal educational opportunity and improve the quality, relevance and efficiency of education management in order to face the challenges and demands for change that exist both on a regional, national and global scale is through improving the quality of libraries.

¹ This article is a private scientific study of the researcher and does not reflect the institution's opinion/policy.

In fact, there are government efforts to digitize libraries given the Covid-19 pandemic. The government and stakeholders are aware that technological advances have opened up innovation in various aspects of supporting education, one of which is the existence of a digital library (Central Bureau of Statistics, 2022). The existence of libraries, both digital libraries and physical/conventional libraries, is expected to be able to develop and foster student interest in reading, but the results of the 2021 Susenas MSBP show that only a tiny proportion of students have visited the library in the last three months 12.15 percent based on Central Bureau of Statistics in 2022.

To increase Indonesian students' interest in reading, this study investigates to answer how the business processes of digital libraries in Indonesia able to improve and increase the capabilities of digital libraries.

B. METHOD

This study uses a literature review approach considering the literature review is a study carried out as rigorously, comprehensively, and transparently as possible but it has a simple way of generating ideas that lead to insightful and innovative research questions (Greetham, 2021). Based on the literature review method, this study is expected to be able to summarize the answers to the problem formulation and identify gaps (Hempel, 2020) related to students' and college students' reading interest in Indonesia by improving library business processes, especially digital libraries.

C. DISCUSSION

1) The Urgency of Digital Libraries in Indonesia

The literacy level in Indonesia is a strategic issue in The National Medium-Term Development Planning (RPJMN) IV 2020-2024 considering the results of the PISA survey conducted by the OECD, in 2018 it showed that the average reading ability of Indonesian students was 371 points, which means it is still lower than the average score of Organisation for Economic Co-operation and Development (OECD) countries. ASEAN, and several countries with characteristics resembling Indonesia (Central Bureau of Statistics, 2022). One measure of literacy level is a culture of fondness for reading, which reflects people's interest in and ease of access to information. This low student/student reading culture must be addressed, one of the causes of which cannot be separated from the limited library facilities in schools (Central Bureau of Statistics, 2022).

Libraries have always been associated with physical collections of books, magazines, journals, and other printed collections. However, technological advances and ease of access to information at this time should force libraries to innovate in developing their services. This innovation is realized in the form of an electronic or digital library so that library users can obtain and know library collections (Central Bureau of Statistics, 2022).

MSBP 2021 of National Socioeconomic Survey data, around 12.15% of students/students who visited the library in the last three months of 2021, those visited were still dominated by physical libraries at 10.49%, followed by electronic/digital libraries at 1.10%, and those who visited both types of

libraries (physical and electronic or digital) by 0.56%. Nowadays, in Indonesia, digital libraries have been developed, primarily by university libraries. In fact, several digital library networks have been formed. This supports the convenience of tertiary students finding references to support lecture material through digital library services (Central Bureau of Statistics, 2022).

The existence of this digital library shows that library collections can be accessed by various groups anytime and anywhere by using a computer, laptop, or other media through the internet network. Thus, the community, especially students, can more quickly and efficiently access services and information supporting school lessons (Central Bureau of Statistics, 2022).

2) Business Process and Its Redesign in Library

The identified business processes are adequate for redesigning today's traditional libraries. Business processes are essential assets for digital libraries to create value because processes are the basis for process improvement and organizational assets that are important for creating value for customers by continuously measuring, monitoring, controlling, and analyzing the company's business processes to provide the best value consistently to customers through the use of information technology (Chang, 2006).

Some examples of applications that can support library business processes are organizational support systems and enterprise applications. Executive support systems are reporting software that enables enterprise management to transform organizational data into helpful summary reports. Executive-level managers use them for quick access to reports from all levels and departments of the company, such as billing, cost accounting, personnel, scheduling, and more. As well as providing quick access to organized data from various departments within an enterprise, executive support systems can also help provide analytical tools that predict a series of performance outcomes over time using input data, making them useful to executives as they provide probable results and quick reference to statistics and figures necessary for decision making. Enterprise applications are software that provides business logic solutions and tools to model all business processes for organizations to increase productivity and efficiency. This application is critical to enterprise data quality as the system regularly becomes a central hub for data coming from multiple sources. Therefore, they help integrate contact data validation and upgrade solutions that guarantee all data entering the system is of high quality, good customer relations, increased organizational efficiency, and insights based on accurate data.

It is necessary to change the library's business process from physically borrowing books and other reading materials to streaming books and other reading materials via the internet. Business Process Redesign or Business Process Redesign is a more powerful type of organizational change in which business processes are analyzed, simplified, and redesigned. Such business process redesign will reorganize workflows, combining steps with cutting unnecessary procedures and eliminating repetitive tasks. For example, a library uses a new information system to change its business model. This change includes a paradigm shift because there is a radical shift in society in utilizing internet technology to watch reading. Customers no longer need to come to the library to select or borrow the books and other reading materials they want. Due to internet technology, customers can use their cellphones and/or laptops to

choose the books and reading materials they want, so libraries must carry out a paradigm shift in satisfying their users.

3) Cloud Computing in Library

Libraries can use cloud computing to manage the borrowing and supply of books. Cloud computing is a computing model in which computer processing, storage, software, and other services are provided as a collection of virtual resources over a network, especially the Internet. These "cloud" computing resources can be accessed as needed from devices and locations connected to the concept of cloud computing (Laudon & Laudon, 2013). In line with the thoughts of Laudon and Laudon (2013), the essential characteristics of cloud computing that digital libraries can use are:

- a) Provide self-service upon request. Consumers can acquire computing capabilities such as server time or network storage on demand automatically on their own.
- b) Network access everywhere. Cloud resources can be accessed using standard networks, Internet devices, and mobile platforms.
- c) Location of pooling resources independently. Computing resources are aggregated to serve multiple users, with different virtual resources dynamically assigned according to user demands. Users generally need to learn where computing resources are.
- d) Quick elasticity. Compute resources can be provisioned, scaled up, or scaled down on the fly to meet changing user demands.
- e) Measurable service. Charges for cloud resources are based on the number of resources actually used.

D. CONCLUSION

This study concludes that libraries in Indonesia must improve by redesigning their business processes toward digital library governance. Indeed, there are cost constraints considering the need for technology that is not cheap, such as cloud computing and other internet technologies. However, the central or local governments can become the main pushers, given the current lack of interest in reading by students and students in Indonesia.

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