Analysis of Electronic-Based Dynamic Archives Management Using An Integrated Dynamic Archives Information System (SRIKANDI) To Improve Good Governance In The National Archives of The Republic of Indonesia

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Abstract: This research aims to map the strengths, weaknesses, opportunities and threats in developing the SRIKANDI application and propose various forms of recommendations. The use of technology in good corporate governance is an effort to respond to various existing changes. The government as an actor providing public services tries to innovate in responding to the needs and interests of the community. Currently, almost all Central and Regional Government Agencies have used SRIKANDI in managing their dynamic archives. One of them is ANRI. The use of technology is starting to be applied in the archives sector by Central Agencies and Regional Governments, such as storing archives which were initially stored in the Archives Depot, becoming stored in databases. The results of the SWOT analysis provide an illustration that the mapping consists of 5 strengths, 3 weaknesses, 3 opportunities and 3 threats. Things that tend to be weak and could become threats have been proposed in the form of recommendations for improvement and for those that are opportunities, recommendations for improvement have also been given.

Keywords: Archives, Dynamic Archives, Electronic Archives, Archives Information System, Good Corporate Governance.

INTRODUCTION

Along with advances in technology, the use of technology is starting to be applied in the Archives Sector by Central Agencies and Regional Governments, such as the creation of Archives which were originally paper-based to electronic-based, the use of Archives which were initially done offline to become online, the storage of Archives which were originally stored in the Archives Depository becomes stored in the database, sending letters which were originally done manually has become electronic. The application of the use of this technology still causes several problems, namely the management of electronic archives in silos, sending letters electronically using channels that are not reliable and trustworthy, as well as falsification and unauthorized access to archives which results in a lack of public trust in the validity of archives resulting from administrative activities. government. To realize

good archive management, the use of information technology cannot be avoided. In Law Number 43 of 2009 concerning Archives, it is stated that archive creators or archival institutions can create archives in various forms or transfer media, one of which is electronic media.

Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE) regulates that services for the availability of archives and reliable information in Central Agencies and Regional Governments are carried out through the provision of a systematic, comprehensive and integrated General Application for Dynamic Archives to face the global challenges of information technology development and communication [1]. One important part is accelerating the implementation of SPBE in the archives sector, namely the implementation of integrated electronic-based archives. To support the implementation of the National SPBE, as one of the steps to accelerate Bureaucratic Reform, this can be done by building a national archives system that is integrated both in internal archival affairs and integrated with other related systems. The system must be able to implement archival sharing between units and between government agencies, as well as a national archival reporting system and innovations in improving archival services.

Based on the Decree of the Minister for Empowerment of State Apparatus and Bureaucratic Reform Number 679 of 2020, the Integrated Dynamic Archives Information System (SRIKANDI) has been designated as a general application for dynamic archives [2]. The development of Information and Communication Technology (ICT) applications and infrastructure is carried out by the Ministry of Communication and Information. The preparation of business processes and data/information involved in SRIKANDI is carried out by the National Archives of the Republic of Indonesia (ANRI) as a non-ministerial government institution which has the task of carrying out government duties in the archives sector in accordance with statutory provisions and regulations. As a result, SRIKANDI has superior features starting from Official Manuscript Management, Archive Creation, Archive Use, Archive Maintenance, to Archive Depreciation. Currently, almost all Central and Regional Government Agencies have used SRIKANDI in managing their dynamic archives. One of them is ANRI.

However, there are several features that are often requested by Central Agencies and Regional Governments to increase the ease of use of SRIKANDI, such as electronic signatures, Artificial Intelligence and Machine Learning, mobile applications, and faster infrastructure. The large number of feature requests for SRIKANDI development shows high enthusiasm for the use of SRIKANDI. The requested features are not always achieved with something new, instead there may be business process modifications that can help improve the performance of SRIKANDI. Therefore, a comprehensive analysis of SRIKANDI is needed, not only regarding the development of application features and functionality, but also the governance of SRIKANDI which includes application architecture, application plans or roadmaps, business process innovation, data centers and networks, as well as system provision. service liaison in the context of electronic-based dynamic archive management. So that SRIKANDI can be implemented to support good government governance at ANRI.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Archives according to article 1 paragraph 3 of Law Number 43 of 2009 concerning Archives are records of activities or events in various forms and media in accordance with developments in information and communication technology created and accepted by State Institutions, Regional Governments, Educational Institutions, Companies, Political Organizations, Community Organizations, and Individuals in the implementation of social, national and state life [3]. The Big Indonesian Dictionary contains the meaning of archives as written (letters, deeds, etc.), oral (speech, lectures, etc.), or pictorial (photos, films, etc.) documents from the past, stored in written media (paper), electronic (tape, cassette,

videotape, computer diskette, etc.), usually issued by an official agency, stored and maintained in a special place for reference [4].

The International Standards Organization (ISO on records management-ISO 15489) defines records (archives) as information created, received and managed as evidence or information that organizations or individuals use to fulfill legal obligations or business transactions [5]. Meanwhile, according to The Liang Gie archives or what are called scripts are any written or pictorial notes about something or an event that people make to help their memory. As for T.R.'s opinion. Schellenberg quoted by The Liang Gie (2000:217-218), archives are defined as documents from a government or private agency which have been decided as valuable documents to be preserved permanently for the purposes of seeking information and research and are stored or have been selected to be stored at an archival body [6].

Dynamic archives according to article 1 of Law Number 43 of 2009 concerning Archives are archives that are used directly in the activities of the archive creator and are stored for a certain period of time. According to Sugiarto and Wahyono (2015:26) dynamic archives are all archives that are still in various offices, whether government offices, private or community organizations, because they are still used directly in planning, implementation and other administrative activities. Dynamic archives consist of vital archives, active archives and inactive archives. Vital archives are archives whose existence is a basic requirement for the operational continuity of the archive creator, cannot be renewed, and cannot be replaced if damaged or lost. Active archives are archives that have a high frequency of use and/or continuously. Meanwhile, inactive archives are archives whose frequency of use has decreased [7].

Based on ANRI Head Regulation Number 20 of 2011 concerning Guidelines for Authentication of Electronic Archives, electronic archives are archives that are created (created or received and stored) in electronic format [8]. According to Law Number 11 of 2008 concerning Information and Electronic Transactions, which was last amended in Law Number 19 of 2016, electronic archives or electronic documents are defined as any electronic information that is created, forwarded, sent, received or stored in analog form, digital, electromagnetic, optical or similar, which can be seen, displayed and/or heard via a computer or electronic system, including but not limited to writing, sound, images, maps, designs, photographs or the like, letters, signs, numbers, access codes, symbols or perforations that have meaning or meaning or can be understood by people who are able to understand them [9].

The characteristics of electronic archives according to Muhidin and Ali (2017) are as follows [10]:
1. Content is recorded on a medium and cannot be directly accessed (read) by humans because it is represented by symbols (binary digits) which must first be translated by a machine to be read by humans.
2. Content recorded on a medium (such as a disk, flash disk) can be separated from the medium.
3. The physical structure cannot be directly seen and is generally unknown to ordinary users. Each time the archive is moved to another facility, its physical structure may change. Users will always need a computer system that is capable of reading the physical structure.
4. Electronic archive metadata shows how information is recorded and created.
5. It cannot be identified by looking at the physical entity, but from a logical entity which is the result and which provides evidence of an activity or transaction.
6. Archive storage media must be kept in the best possible condition. However, in relation to the media, electronic archives will continue to be under threat in the not too distant future. In addition, due to the rapid development of information technology, many computer systems become obsolete in a relatively short period of time.

Meanwhile, the benefits of electronic archive management according to Irwanto Eko Saputro (2013) quoted from Muhidin and Ali (2017) are as follows:

1. Handling of electronic archives and static archives can be managed from the start of planning or creating the manuscript or document.
2. Meet top management's demands for speed and accuracy.
3. Facilitate accessibility and ensure accountability.
4. Towards a paperless society and saving space or infrastructure (from building to server).
5. Supervision management will be easier, faster and more accountable towards good governance.
6. Improve public services.

Archival Information Systems are devices that interact with each other in processing archival data to achieve the goals of the archival function, namely storage, structuring, grouping, control and maintenance of archives (Febriadi, 2014) [11]. Archival information systems are used to store archives in a database which can be called up, changed and saved again at any time. If this system can be used well, it is hoped that according to Zulkifli (1996) it will fulfill the principles of archive management, which consist of: the principle of centralization, the principle of decentralization, and the principle of a combination of centralization and decentralization [12]. Horrison (Syamsul, 1999) believes that the archive storage system is as follows: Alphabetical filling (alphabetical archives), Subject filling (subject matter archives), Geographical filling (regional archives), Numerical filling (number archives), and Chronological filling (date archives) [13].

Quoted from aptika.kominfo.go.id/information/jasa/srikandi/,it is stated that SRIKANDI is an application launched by the Government as a general application in the archives sector that can support archive management and electronic-based government governance with target users, namely all central agencies and regional governments. The electronic archive management principles used by the SRIKANDI application refer to ANRI Regulation Number 6 of 2021 with the following principles [14]:

1. Authenticity. The principle of authenticity is a description of the characteristics of Electronic Archives which can prove that when they were created or sent, they were carried out by the correct party who created or sent them according to their purpose.

2. Reliability. The principle of reliability is a description of the characteristics of Electronic Archives whose contents are believed to provide a complete and accurate picture of the transactions, activities or facts stated and can be relied upon for subsequent transactions or activities.

3. Wholeness. The Integrity Principle is a description of the characteristics of Electronic Archives that are complete and unaltered and protected from unauthorized alteration.

4. Usability. The Principle of Usability is a description of the characteristics of Electronic Archives that can be located, rediscovered, presented and interpreted in a time deemed appropriate by stakeholders and connected to work processes or transactions.

METHODS

The research used is descriptive research with qualitative methods based on secondary data from various information sources such as study sources, ANRI annual reports, ANRI performance reports (LAKIN), archival journals, and other online publication sources. This research uses a SWOT analysis which focuses on electronic-based dynamic archive management using an integrated dynamic archival information system (SRIKANDI) to improve good government governance at the National Archives of the Republic of Indonesia.

RESULT AND DISCUSSION

The research used is descriptive research with qualitative methods based on secondary data from various information sources such as study sources, ANRI annual reports, ANRI performance reports (LAKIN), archival journals, and other online publication sources. This research uses a SWOT analysis which focuses on electronic-based dynamic archive management using an integrated dynamic archival information system (SRIKANDI) to improve good government governance at the National Archives of the Republic of Indonesia.

Table 1. SWOT Analysis

Strength	*Weakness*
✓ Ease of use of the SRIKANDI application ✓ The SRIKANDI application can be accessed via Website and Mobile ✓ The SRIKANDI application version 2.0 provides early warnings and solutions when users make mistakes ✓ Reliability of the SRIKANDI application (not many errors and bugs)	✓ Application security feasibility testing has not been carried out ✓ The use of a unique archive code has not been determined ✓ The dashboard in the SRIKANDI application is still not sufficient for archival monitoring information needs
Opportunity	*Threat*
✓ The SRIKANDI application can be integrated with e-office applications that are still used in government agencies ✓ The SRIKANDI application can be integrated with national personnel data ✓ The application user manual can be made more comprehensive	✓ Hacker attacks ✓ Personal data leak ✓ Leaks of state secret data

From the SWOT analysis above, gaps can be obtained regarding things that are still weak and could become threats and opportunities that can be implemented in developing the SRIKANDI application. The recommendations proposed for immediate action are as follows:

1) It is necessary to focus so that the SRIKANDI application can be integrated with e-office applications that are still used in Government Agencies.
2) Functional criteria in government are very important in the archival process considering that organizational changes or restructuring often occur in government agencies.
3) The SRIKANDI Application Security Implementation Strategy that must be carried out is:
   a. Implementation of an Information Security Management System
   b. Fulfillment of Application Security Standards.
   c. Test the security feasibility of the application
   d. Establishment of a Cyber Incident Response Team (CSIRT)
4) Proposal to create a comprehensive user manual (guide) for the SRIKANDI application
   a. Added notification feature
   b. Added data input / migration feature for job groups
   c. Mobile version development
5) There is a standard classification coding standard so that it can be uniform throughout Indonesia.
6) Proposal that letters can be sent without having to be signed.
7) The registration process for destination, copy, disposition, etc. only needs to be entered once by the agency admin.
8) The business process for managing inactive archives can be carried out automatically if the JRA period has entered.
9) When creating an inactive file, you can still move files if there is an error in placing the file in the folder.
10) Integrating the SRIKANDI application with e-office which is still used by government agencies.
11) Integrating the SRIKANDI application with national personnel data.

CONCLUSIONS

The result of this research is a gap analysis in the development of the SRIKANDI application using the SWOT analysis method which maps 5 strengths, 3 weaknesses, 3 opportunities and 3 threats and outlines the form of recommendations based on the results of the gap analysis.

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The recommendations for developing the SRIKANDI to-be application resulting from this activity are still high-level in nature so they need to be reduced to a low-level design to make implementation easier. Documents prepared regarding guidelines and guidance in developing the SRIKANDI application also still have to be adjusted and revalidated by expert judgment by relevant stakeholders (ANRI, BSSN, Kominfo, KemenPANRB). We hope that the application of the general application of SRIKANDI can become the foundation for the application of dynamic archives in digital form in order to support the realization of Dynamic Archives Digitalization and be able to realize ANRI as the backbone of state administration management, especially in developing dynamic archives in accordance with the provisions of statutory regulations.

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