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Risk Management in the Indonesian Archival Institution

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Abstract

An archival institution is one of the institutions that functions as an organization that does not have a priceless archive rescue organization. Like other organizations, archival institutions also experience risks that will affect their operational processes or important records they manage. The purpose of risk management is to minimize the failure received by the institution due to existing risks. This study is to understand how the conditions of risk management in archival institutions, the risks they face and the impacts that occur. This study also aims to map risks in archival institutions ranging from mild to severe impacts, so that archival institutions can reduce the impact of risks if such risks occur. This research method uses a qualitative approach in archival institutions in Indonesia, namely provincial archival institutions and tertiary institution archives. The results of this study indicate that the risk management in archival institutions does not exist in writing but has been carried out with reference to existing regulations.

Keyword : Archive, record, risk management, archive institusional, record institusional

Background

Archival institutions in higher education have functions that are not as important as libraries. All forms of activities that occur in the tertiary institution are recorded and stored, so that the management, both manually and digitally, has their own potential risks. Risk is defined as a thing that is detrimental or results that are not as expected. Risks arise when there is uncertainty or unexpected events.

Ariani (2016) said that the risk that usually occurs in printed archives is the risk of natural disasters that are difficult to avoid. In addition, what often happens is the lack of planning and procurement of adequate facilities for archival storage, so that this then indirectly triggers the risk of damage to the archive. Furthermore, Handoyo (2014) said that risk in kerasipan institutions is often caused by the unpreparedness of an institution in managing records.

Lots of risks and impacts that have occurred in the archival world in Indonesia. In 2009 an earthquake with a magnitude of 7.9 Ritcher scale in the West Sumatra region, specifically Padang. The loss not only came from buildings that were leveled to the ground, but also most of the collections owned by the Library and Archives Agency. Of the total collections that were damaged including the archives in it, only about 20% were saved (Adeliny, 2013). The 2004 Tsunami in Aceh also still left a lot of damage to the archival world. This is due to the archive recovery process which even continued until 2017 (Nurtanzila, 2018). Based on these data, it can be seen that risk management in information institutions, especially archival institutions, has not been prioritized. In fact, if an institution is able to apply risk management to its records, the impact of the damage that can occur can be minimized.

One effort to minimize the risks that can occur in the current archive is to do a form of transfer of the archive into a digital archive. Nurochman (2014) revealed that although UGM has implemented an information system in such a way as to manage the records they have, UGM still has not carried out risk assessment activities well enough because UGM still relies

on something that is still "incidental" to correct risks which then happen. Ali (2016) revealed that the use of technology does not simultaneously reduce the risk to the archive. Some threats are often feared to have an impact on the digital archive. Possible risks related to the use of technology in managing archives are cybercrime.

The application of risk management in organizations focuses on managing existing risks, starting from the identification, analysis, measurement of risk and its handling. Risk management is a set of policies, procedures that are complete, owned by the organization, to manage, monitor, and control the organization's exposure to risk (William & Smith 1998). Risk management in archival institutions functions to find out what causes risks to archive damage and can quickly deal with damage that occurs so that damage does not get worse and is quickly dealt with.

Purpose of the study

The formulation of the problem in this research is how the existing risk management conditions in the Indonesian Archives Institute start from identification, analysis pure risk is the risk that causes losses only. Speculative risk is a risk that causes losses but bias also has advantages. Static risk exists because certain shifts in balance such as disasters and the same from time to time, while dynamic risks due to changing conditions Risk is divided into 2 characteristics, namely threats (treats) and consequences (consequences). These two things are the most important things in understanding the concept of risk management that can be explored through identifying risks and identifying sources of threats that must be done in order to find solutions to risks that can hinder the performance of archival institutions.

Literature
Risk management

Risk management, risk assessment and risk-based assessment are important aspects of archive management (Jeurgens, 2014). Risk management is also very dependent on the economy of the agency or institution itself. The application of risk management is important for an organization, not least for archival institutions. Everything that is applied to avoid and minimize losses on work can be said as one of risk management. Implementation of risk management leads to risk reduction by making decisions to make and save certain records. These records are made to meet the needs for accountability, proof, and supporting information in carrying out activities (Surtikanti, 2015).

Risk management is a systematic process that uses administrative, organizational, operational capability and capacity to implement regulatory decisions, strategies to reduce the impact of a recognized hazard, which consists of all activities, including structural and non-structural activities to avoid or limit the effects of losses from the perceived danger (Nurochman, 2014).

The purpose of risk management itself is to minimize failures that the institution receives. Institutions must also anticipate risks by having resources that meet current security standards. This is necessary so that risk management and its elements do not need to be implemented, because things do not happen that are desired and the risks faced never occur (Ali, 2016).

Glasglow Caledonian University lays out the stages in having risk management namely, a. Identify, identify risks, and categorize them as, strategic, financial or operational. b. Evaluation, evaluating the risks that have been identified. The aim is to get risk which has high potential.

Evaluation is carried out by looking at the likelihood and impact that will be caused.

RISK ASSESSMENT MATRIX

Low Impact High Likelihood **Amber**	Medium Impact High Likelihood **Red**	High Impact High Likelihood **Red**	**↑ HIGH**
4 Tolerate/Treat	7 Treat/Transfer	9 Treat/Transfer/ Terminate	
Low Impact Medium Likelihood **Green**	Medium Impact Medium Likelihood **Amber**	High Impact Medium Likelihood **Red**	**MEDIUM**
2 Tolerate/Treat	5 Treat/Transfer	8 Treat/Transfer/ Terminate	
Low Impact Low Likelihood **Green**	Medium Impact Low Likelihood **Green**	High Impact Low Likelihood **Amber**	**↓ LOW**
1 Tolerate	3 Tolerate/Treat	6 Treat/Transfer	

Likelihood of occurence

LOW   MEDIUM   HIGH

← Impact on the Business →

3. Mitigation, the results of the evaluation illustrated in the risk matrix above, then risk control can be done with 4T, namely:
   a. Transfering Risk, giving responsibilities to other people such as insurance parties or contractors (third parties)
   b. Tolerating Risk accepts the risk
   c. Treating Risk, taking the most effective actions, especially costs to reduce risk
   d. Terminating Risk, eliminating risk because the risk is too high and not continuing the activity.

4. Review, risk management requires a report evaluating the stages that have been carried out to ensure the risks have been identified, evaluated and how to control them.

   According to Williams & Smith (1998) in addition to the four elements above there are other elements that are also important, namely:
- Risk funding: costs for managing and handling risks.
- Program administration: organizational operational documents, such as regulations, program manuals, and others.

Research related to Risk Management
    Research on risk management in the archival world has not been done well in Indonesia or abroad. Research on risk management in Indonesia focuses more on information systems (husein & Imbar, 2015; Nurcahyo & Djunaedi, 2013) about risk management analysis on the application of information systems used by archival institutions.
    Research conducted by Adrienne & Sarah (2002) in the UK focuses more on disaster management in libraries and archives. The results of this study are the main key when a disaster is the leadership response, besides the disaster policy documents and disaster training to increase employee awareness of disasters. Ana (2009) who pointed out that The Canadian

Museum of Nature developed a risk model for preventive conservation that has proven useful in applications to the Portuguese archives.

Research conducted by Ambira & Kemoni (2011) aims to investigate archive management and risk management at the Kenya Commercial Bank (KCB), proposing recommendations to improve the function of records and risk management at KCB. The main finding of this study is that there are inadequate recording practices and management systems, deficiencies that undermine the risk management function.

Research methods

This study uses a qualitative approach because it is to understand risk management in Indonesian archival institutions. Qualitative research is a research approach that aims to understand the problems / phenomena that exist from the perspective of the participants, as well as using multimedia, using interviews / interviews, field observations as data collection techniques (Maleong, 2007).

The research location is in the City of Surabaya, East Java Province, which focuses on archival institutions. Archival institutions in Law No.43 of 2009 concerning Archives include: 1) National Archives of the Republic of Indonesia (ANRI) as the Central Archives, 2) Provincial Archives, 3) District / city Archives Institutions, 4) Higher Education Archives Institutions. In this study the national archive is not the object of research because the location is outside the city of Surabaya, but the policy issued by the national archive will be one of the bases in data analysis. The archival institutions selected in this study are the East Java Province Archives Service, and the University Archives Center in Surabaya, the Surabaya Institute of Technology (ITS).

Data collection is done by interviewing the leadership and also making observations at the Archives Institute and also using secondary data, namely regulations on risk management. The collected data is then processed, analyzed and concluded based on the interview transcript analysis, compared and contrasted with the published literature. The aim is to compare with concepts or theories or vice versa (Miles and Huberman, 1994) then draw conclusions.

Research result
History of Archival Institutions Formation

The Regional Archive Office (KAD) of East Java Province, was established as an implementation of the mandate of Law No. 7 of 1971 article 8 concerning the establishment of archival units in each regional government unit. However, KAD was not necessarily formed in East Java Province. For this purpose, Static Archives Sub Division was formed, General Section in the General Bureau, Regional Secretariat of East Java Province.

A provincial level archival institution was established, namely the Regional Archive Office (KAD) which was established based on Regional Regulation No. 10 of 1992. De facto, the KAD only started operations in 1995, even though the Head of the Office had been appointed in 1994. Law No. 32 of 1999 concerning Regional Government and Law No. 25 of 1999 concerning Fiscal Balance Between the Center and the Regions, the Provincial Government and the East Java Provincial Parliament formed the East Java Province Archive Board. The East Java Province Archive Board was formed as an effort to save functions and institutions that previously existed, namely the East Java Province Regional Archives Office and the RI National Archives of the East Java Region.

Management of records in archival institutions

Records management in three archival institutions in Surabaya refers to the regulations provided by the Indonesian republic national archives (ANRI), as an institution responsible for managing archives in Indonesia. The regulation on archival management in Indonesia is under

the auspices of the Archives Act No. 49 of 2009, besides that ANRI also issued regulations related to the management of static archives, dynamic archives, and others.

East Java Province archives service in managing archives in addition to referring to the archival law also refers to the Regional Regulation (PERDA) of East Java Province No. 4 of 2015 concerning the Implementation of Archives. Likewise, the Surabaya City archiving agency which in managing its archives refers to the Surabaya City Regulation No. 3 of 2013 concerning the Implementation of Archives. The ITS archives agency also made its own regulations related to records management within the ITS environment, which was approved by the ITS rector, ITS Rector Regulation No. 17 of 2018 concerning the Organization of archives in the ITS environment.

Risk management in archival institutions.

Archival institutions in Surabaya, like other organizations, will also face risks while operating their business. From the results of data processing, it can be seen that written risk management in archival institutions does not yet exist, but there are regulations that have been made to fulfill aspects in risk management such as existing records management procedures.

Risk identification

Risk identification is carried out to find or find out the risks that might arise in the activities carried out by the organization, so that the organization can prepare if those risks occur.

Archives Institution of East Java Province.
So far there has been no risk identification in the archives institutions of East Java Province.

ITS Archives Institution

In writing, there is no policy on risk management in the UPT archives of ITS, but in reality there are risk management procedures in the field. Existing risk management procedures are adjusted to archive handling standards. Broadly speaking, the steps are as follows:
• Each related work unit reports the risks that exist in the work unit
• Then the SDMO team will come to conduct a survey and identification of risks.
• After the survey is conducted, the SDMO team will determine the action plan.
• After the action plan is implemented, the SDMO team will monitor and evaluate it.
• SDMO is very pro-active in responding to the risks that exist in archival institutions.

Routinely checking the condition of the room and replacing equipment that is no longer suitable to use, so that this further minimizes the risk occurrence at ITS kerasipan institutions. The process of risk identification is carried out once a year by the ITS Directorate of Human Resources and Organizations (HRO), with the Directorate of Human Resources and Organizations responsible for risk management in the entire ITS work environment and involving all existing units including the ITS Archives Institute. The SDMO team consists of people who are experts in their fields, such as ITS lecturers from civil and industrial engineering study programs.

From the results of interviews with the three Archiving Institutions it can be seen that a comprehensive identification has not been carried out by the three Institutions. However, from the interview results it can be seen that they understand what risks might occur and what kind of impact they have on archival institutions, especially those that they manage (see table 1).

Risk Evaluation

Risk evaluation is carried out to measure risk by looking at the potential for how much damage and the probability of the risk occurring. The results of the risk evaluation institution in the archives can be seen in table 1.

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No	Identification Risk	Possibility	Impact	Action Plan
1.	Disaster (Fire, Flood)	Likely to occur unplanned. likely to occur within a period of more than 3 years	Very serious	Install fire extinguisher, fire detector and store important files in the fire cabinet and store it in a high place (2nd floor) to avoid flood disaster. Apart from that, archiving is also done.
2.	Biota (Termites, Rats, Mites, Fleas, etc.).	Regular, usually occurs within a period of one or two days, weekly or even monthly, but uncertain.	Not Significant	For rats, immediate action is taken such as administering poisons / traps.
3.	Physics (dust, storage room temperature)	Occur at any time but with a mild quantity.	Not significant	Installed air conditioning and cleaning the archive regularly
4.	Human Security / Crime	unplanned. likely to occur within a period of more than 3 years.	serious	Archival institutions are maintained by the Security Guard

Risk Mitigation
Archives Institution of East Java Province
All risks that have been identified by the archiving agency Prov. East Java is handled by an action in the form of a Treat, which is accepting the existing risk but taking several actions to reduce or minimize the possibility and / or potential impact of the risk. In other words, the archival agency carries out an action plan for each identified risk. The action plan can be seen in the table in the question. The archival agency also evaluates the action plan that has been carried out. During this time the archiving agency at the Library and Archives Service Prv. East Java uses references from government regulations relating to risk management because there is no risk management system established by the institution.

ITS Archives Institution
The handling by the archival institution in dealing with identified risks is to accept the existing risk (treat) but take several actions to reduce or minimize the possibility and / or potential impacts. For example, when it was discovered that there were mice passing in the archive room, the archivist immediately took action to eradicate the rat with poison and other methods that did not harm the archive.
In addition, the handling of risk in the ITS archiving institution is by transferring the existing risk to ITS SDMO. Because SDMO is indeed tasked to handle all risks in the ITS work environment.

Risk Review
Archives Institution of East Java Province

Archive storage building in the Library and Archives Service Prov. East Java is built high to cope with flooding (one of the most possible disaster risks). But besides that, the archive storage building is near the highway and the river (distance - + 100 m) so pollution dust is very vulnerable to enter the storage room and very vulnerable to flooding. Moreover, the archive storage building is located in an industrial and factory area, thus increasing the risk of archive damage due to pollution.

All archive storage rooms are given AC that is on for 24 hours, thus minimizing dust in the room. However, some files are not properly stored, some files are stored in open spaces with air conditioners that are not cold, many mice are roaming and the roof is leaking so that dripping dirty water from the upper floors. Even so, to minimize damage to the archive, the archive is always cleaned from dust every day (by the Cleaning service, which has been given insight into archives), eradicating the mice that are around the archive storage location. Depreciation of archives in the East Java Province Library and Archives Service is regulated in East Java Governor Regulation No. 10 of 2016 concerning the Depreciation of the Regional Government of East Java Province. Depreciation of the archive is done once a year, but if the circumstances do not allow, Depreciation of the archive can be done at an unspecified time. Factors that influence the schedule for depreciation of the archive are the budget of funds and the number of records to be destroyed. Depreciation of archives in the East Java Provincial Library and Archives Office is carried out by transferring to another filing unit, Submission to the archival and annihilation agency.

Guidelines for managing vital records at the Library and Archives Service Prv. East Java is regulated by East Java Governor Regulation No. 23 of 2011 concerning guidelines for managing vital records in the government of East Java Province.

The regulation governs all matters relating to vital records, ranging from Determination of Vital Records, Procedures for Identifying Vital Records, Procedures for Borrowing Vital Records, Procedures for Protection and Safeguard of Vital Records to Procedures for Rescuing and Restoring Damage to Vital Archives in the Aftermath of a Disaster.

ITS Archives Institution

The ITS Archive Institute applies the classification of security and access to dynamic archives that have been regulated in ITS Rector Regulation No. 19 of 2018 concerning Classification of Security and Access to Dynamic Archives in the ITS Environment as one of the strategies in dealing with existing risks. The Classification of Security in Dynamic Records is the category of confidentiality in information of Dynamic Records based on the level of seriousness of the impact it has on the interests and security of the state, the public and individuals. Dynamic Archive Access Classification is a category of restrictions on access to Archives based on the authority to use Archives in relation to the implementation of certain tasks and functions. The security classifications and dynamic archive access within the ITS environment are classified as highly confidential, confidential, limited and ordinary / open.

Depreciation of records in the environment is regulated in the same regulation as the pattern of archive classification, namely ITS Rector's Regulation No. 18 of 2018 concerning Archive Classification Patterns and Archival Retention Schedules in the ITS Environment. (file attached: 'ARCHIVE AND JRA CLASSIFICATION PATTERN')

Depreciation of Archives, carried out through activities:

1) Transfer of inactive records from the archive management work unit to the sub division of archived

2) Destruction of inactive records

3) Submission of a static archive to ANRI

In its implementation, there were several obstacles encountered, such as the archive that should have been destroyed but still kept stored because it was considered to be needed in the future. Or with other kara, the destruction of the archive is not in accordance with JRA. Guidelines for managing vital records in the ITS Archives Institution are regulated in ITS Rector Regulation No. 17 of 2018 concerning the administration of archives in the Ten November Institute of Technology.

Based on ITS Chancellor Regulation no. 17 of 2018 article 19, management of vital archives includes:
1) Selection
conducted to determine the type of archive that essentially guarantees the survival of the organization when a disaster occurs.
2) Protection
protection referred to includes setting procedures, methods and techniques for preventing and protecting files from disasters.
3) Recovery of archives from disasters
Recovery of archives from the disasters in question includes setting procedures, methods and techniques for maintaining vital records according to the type of disaster.

Based on ITS Chancellor Regulation no. 17 of 2018 article 20, the ITS archiving agency serves duplicate / copies for borrowing / using vital files. Another thing that is done to minimize the risk of ITS archiving institutions is by serving archives in the form of copies to users. This is done to minimize archive damage due to user lending. The original archive is stored in the archive creator work unit.
The condition of buildings, rooms and equipment in the ITS archival institution is adjusted to the standards set by the Head of ANRI which include location, construction, building layout, archive storage space and archive equipment as well as archival maintenance specifications.

Data analysis
To reduce the emergence of various kinds of risks, the archival institution in managing its archives is 1). have its own archival work unit that is not combined with other work units, this is so that work becomes more focused; 2). have a record center (records center) to avoid missing / scattered documents and facilitate rediscovery if needed immediately. 3). have a Standard Operating Procedure (SOP) for records management as a guide in carrying out document management activities; 4). Have an Archive Retention Schedule that accommodates and sets the time period for storing documents in accordance with the use value and importance of the document. Related to regulations in Indonesia, there is already a law on archiving management as a reference for archival institutions in Indonesia to develop regulations in their own institutions.

Conclusion
From the results of the study it can be seen that the archival institution has carried out risk management even without a clear regulation. The head of the archives institute, together with his archivists, has identified, evaluated, mitigated and reviewed their records management. The archival institution understands the importance of archives which are managed as part of the nation's history, as an invaluable asset that needs to be protected and kept away from risks.

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