



Maturity Model Matrix of Information Governance in the Republic of Indonesia Public Television Broadcasting Institution

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Abstract

Information governance in the Republic of Indonesia Public Television Broadcasting Institution (LPP TVRI) is applied cross-functionally to jointly achieve the organization's duty and responsibility. This research was conducted to ascertain the level of maturity of the information governance matrix model. This will be useful in improving the efficiency and quality of the broadcast products produced by LPP TVRI. The research method in the study is a qualitative exploratory case study that considers how information governance practices have been undertaken at LPP TVRI. The research is limited to broadcast products which are under the responsibility of the program division, the documentation and library division, and the information technology division. By using Generally Accepted Recordkeeping Principles (GARP) from the Association of Records Managers and Administrators (ARMA), information governance activities are considered in line with eight principles, namely accountability, transparency, integrity, protection, compliance, availability, retention and disposition. The maturity matrix of information governance in LPP TVRI is at level 2, which means that it is in development. This development has meant that information management has been able to support broadcast production activities in LPP TVRI, but the existing information governance has not been strengthened by the existence of standards set by the organization.³

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I. INTRODUCTION

Society's need for information is being increasingly responded to positively by organizations by creating various information media in electronic forms, such as e-mail, websites, social media, videos, films, photos, and so on. The development of information and communication technology contributes to the creation of electronic information. One of such information-producing organizations is the Republic of Indonesia Public Television Broadcasting Institution (LPP TVRI), which is a state agency responsible for producing broadcasts that are considered safe for the public.

LPP TVRI produced their material based on their duty to provide information services, healthy entertainment, social control and unite, and to preserve the nation's culture for the benefit of all walks of life through the implementation of television broadcasting that reaches the entire territory of the Unitary Republic of Indonesia (Indonesia, 2005). To maintain historical value on their production results. The information management undertaken by LPP TVRI through information governance is first applied to the creation of material, through to the production process, storage and dissemination of broadcast material. The activity is conducted by coordinating divisions, namely the production division, the documentation and library division, and the information technology division.

ARMA (Association of Records Managers and Administrators) defines information governance as a strategic framework consisting of standards, processes, roles, and metrics that make organizations and individuals responsible for creating, managing, securing, maintaining, using and disposing of information which makes a contribution to the organization (Smallwood, 2013) Information governance is an integrated strategic approach to managing, processing, controlling, archiving, and retrieving information as evidence of all organizational transactions (Franks, 2013). Information governance is a concept that emerges and captures a more useful approach to government information which is appropriate to the digital age, in which information takes a more central role (Brown and Toze, 2017). Information governance has the ability to practice for the creation, capture, assessment, storage, use, supervision, access and deletion of information during its life cycle (Tallon, Ramirez and Short, 2014). Based on the above understanding, it can be stated that information governance is an approach taken to managing, processing, controlling, archiving and retrieving information in physical and digital form in accordance with the information life cycle in order to secure vital value for the organization.

The focus of information governance is not only on compliance, law and records management, but also on executives who should understand that they are responsible for information governance, and the theft, misuse or erosion of information assets (Indonesia, 2005). Information governance is not only the responsibility of one division, but of all divisions who participate; in this case, the manager has the duty and responsibility to determine the duties and responsibilities of each division in order to achieve the vision of the organization through the determination of an effective information governance system.

Regarding the achievement of the organization's vision and information governance system that has been applied at LPP TVRI, this research will examine in-depth the maturity model of information governance. Generally Accepted Recordkeeping Principles (GARP) were used to identify what level of information governance is

currently implemented by LPP TVRI. The analysis of the maturity model of information governance can be used as a reference by LPP TVRI to improve the information governance activities of the organization, so that the information governance used to achieve the organization's duty can be implemented optimally.

In this study, the GARP principles were used. These consist of:

1. **Accountability:** A senior executive (or person with equal authority) oversees the record program and delegates program responsibilities to the appropriate individual.
2. **Transparency:** The process and activities of the organization's record program are documented in an open and verifiable manner and available to all persons and relevant stakeholders.
3. **Integrity:** The record program must be established so that the records and information produced or managed by the organization have a reasonable and appropriate guarantee of authenticity and reliability.
4. **Protection:** A recorded program must be established to ensure a reasonable level of protection for records and information that are personal, confidential, privileged, confidential or important to enhance sustainability.
5. **Compliance:** Record programs must be developed to comply with applicable laws and other binding authorities, as well as organizational policies.
6. **Availability:** Organizations must maintain records in a manner that ensures that the required information is timely, efficient and accurate.
7. **Retention:** Organizations must keep records and information in a timely manner, taking into account legal, regulatory, fiscal, operational and historical requirements.
8. **Disposition:** Organizations must provide safe and appropriate disposal of records that no longer need to be maintained according to applicable laws and organizational policies. There are several disposal methods, including: throwing away, destructive, transfer and clean up.

GARP is employed in this study through a matrix of maturity models to provide an overview of the position (level) of information governance. The levels can be described as follows:

- Level 1 (substandard): This level describes an environment in which record problems are not handled at all, or are handled in a very temporary way. Organizations which identify with this description should be concerned that their program will not meet legal or regulatory oversight.

- Level 2 (in development): This level describes an environment in which there is growing recognition that records have an impact on the organization, and that it can benefit from a clearer information governance program. However, at level 2 organizations are still vulnerable to legal or regulatory oversight because their practice is unclear and mostly temporary.

- Level 3 (essential): This level explains the minimum requirements that must be met to meet the legal and regulatory needs of the organization. Level 3 is characterized by established policies and procedures, and more specific decisions are taken to improve record management.

- Level 4 (proactive): This level describes an organization that has started to improve its information governance program throughout its business operations. Information governance issues and considerations are integrated into routine business decisions, and the organization easily meets its legal and regulatory requirements.

- Level 5 (transformational): This level describes an organization that has integrated information governance into its overall infrastructure and business processes, in such a way that compliance with program requirements is routine. These organizations have recognized that effective information governance plays an important role in controlling costs, and strengthening competitive advantage and client services.

This research is structured as follows. Part I deals with the importance of knowing the level of maturity of the model of information governance in LPP TVRI today. The maturity model matrix is measured by examining the level of maturity models with the GARP published by ARMA. Part II reviews several articles related to the GARP matrix. Part III concerns the research method employed, namely a qualitative approach combined with the exploratory case study method. Part IV discusses the results of the analysis and findings; based on the analysis of the production division, the documentation division and the library, as well as the information technology division, it is established that the maturity of the model of information governance has entered level 2, which means that information governance at LPP TVRI is still under development. Where information governance is applied, there are no standards or procedures, that are appropriate to the organization, nor standards set by ANRI. Part V is the conclusion of the research, which shows that the maturity model of information governance is at level 2, which means that it is in development. Further research is needed to measure the level of information governance applied at LPP TVRI, as it is a state broadcasting institution that has the duty and responsibility to provide safe broadcast material for the Indonesian people.

II. RELATED WORK

Previous research about maturity model has been widely discussed, including research (Hung, Hwang and Liu, 2013) conducted for the assessment of the maturity of the ISG (Information Security Governance), discussed the factors that influence it, as well as building the ISG maturity model. This research was conducted using a questionnaire sent to 93 schools in Taiwan. The results of this study are several schools whose ISGs levels were found to be low, so that, according to ISG, each school can improvise ISG according to their respective school environment.

Other research on the maturity model was also carried out by (Putri, Aknuranda and Nugraha, 2019) conducted to evaluate information technology governance at PT. PLN Kediri uses the COBIT 5 (Control Objectives for Information and Related Technology) framework, which found that the level of capability at PT. PLN Kediri at level 1 (the process is carried out). Recommendations from this research are PT. PLN Kediri can

make IT infrastructure development planning procedures in accordance with the COBIT 5 domain.

Research relating to the measurement of information governance maturity models was carried out by (Proença *et al.*, 2018) which was conducted to look at the maturity model of information governance that will be used to assess the European Archival Records and Knowledge Preservation project. Maturity model consists of a number of entities including maturity level from the lowest level 0 to the highest level 5. Various measurement models of maturity models are carried out in this study, and are still in the testing phase.

Based on previous research examining the maturity model in various fields of management, information security, and archives, this research will also look at the model of information governance in LPP TVRI using GARP with connected to the level of maturity models provided from level 1 to level 5.

III. METHODOLOGY

A qualitative approach was employed, combined with the exploratory case study method. This approach was used because the research aimed to analyze in depth the maturity model of information governance at LPP TVRI. The researchers limited the information management activities to the broadcast production aspect.

The research was conducted over the period March to May 2019 by collecting data through tvri.co.id website, records in the form of printed and electronic documents, field observations, and interviews to key informants. The informants chosen were stakeholders responsible for product development, documentation and library, news production, information technology.

IV. RESULTS AND DISCUSSION

To achieving duties and responsibilities of LPP TVRI in accordance with the law, information management activities implemented cross-functionally to continually coordinate between the production division, the documentation division and the library, as well as the information technology division. The information governance undertaken by LPP TVRI to produce broadcasts can be analyzed through the following stages:

1. Production Division

The production division is responsible for producing broadcast productions, as LPP TVRI is a state institution that has 29 regional stations spread throughout Indonesia. It has a special broadcast schedule in which broadcast material is collected from regional stations.

2. Documentation and Library Division

The documentation and library division is responsible for the documentation, storage, processing and maintenance of archives and regulatory documents, as well as other archives and documents. With regard to the activities of managing broadcasts, this division is tasked with gathering broadcast material, which is known as the ingest process. Broadcast material that has been reviewed will then be checked by the quality control

department, which will decide whether the material is in accordance with LPP TVRI values and is suitable for broadcast. Material that is ready to be broadcast by the quality control department will be forwarded to the information technology division.

3. Information Technology Division

The information technology division is responsible for forwarding material that is ready for broadcast. When broadcasting the material, the division is guided by a predetermined schedule from the production division. Furthermore, the information technology division is responsible for ensuring that the Etere system used by LPP TVRI is functioning properly, starting from the ingest process, through to quality control and the process of broadcasting.

A matrix analysis of the maturity of the information governance model applied at LPP TVRI is given in Table 4.1:

Principle	Level	Finding
Accountability	Level 3	Accountability can be seen in the determination of senior executives, whose task is to oversee the recording program, starting with responsibility for the production, distribution and storage processes. All responsible member can be seen in the organizational structure determined in the LPP TVRI environment (TVRI, 2018).
Transparency	Level 2	Transparency can be seen on the broadcast material only be accessed by parties who have an interest in them. This accessing activity has yet to have clear rules, but they know if the authority on production division and the documentation and library division.
Integrity	Level 4	Integration, considered on the basis of reference values determined by LPP TVRI, can already be identified through the results of its products (broadcasts), which have a guarantee of authenticity. LPP TVRI's broadcast productions receive supervision not only from the internal environment, but also the external environment, namely from the KPI (Indonesian Broadcasting Commission) and the community.
Protection	Level 3	Protection is applied at LPP TVRI through access restrictions on the Etere system, but these restrictions have not been able to identify the nature of the documents stored, such as private, confidential, or important ones.
Compliance	Level 2	Compliance with regard to recorded programs has not yet been made at LPP TVRI, particularly with regard to the regulations established by ANRI (National Archives of the Republic of Indonesia) in terms of document and archive management.
Availability	Level 3	The availability of broadcasts at LPP TVRI is quite good because broadcast material is stored in one Etere system. Not all material can be accessed arbitrarily by all divisions, due to restrictions on the Etere system.

Retention	Level 2	Retention has also not been implemented at LPP TVRI because it considers all broadcasts material be documents that must be kept permanently.
Disposition	Level 2	Disposition has not been implemented at LPP TVRI because of organizational concerns that discarded or destroyed broadcasts may be needed again.

Table 4.1 GARP Analysis of LPP TVRI

Based on the results of the GARP analysis of LPP TVRI, it is established that the information governance model applied is at level 2, in the category of development. This shows that information governance has an impact on LPP TVRI, where the broadcast material produced can be found again through the Etere system. However, in the storage of the material, there are no regulations or standards applied in the LPP TVRI environment, especially with regard to the principle of retention and disposition. The organization still considers that all materials must be stored permanently. This is consistent with the findings from the interview with the head of the Documentation and Library division:

“yes, if possible, we will try to keep them as long as possible; there is no time limit, the exception is if our hard disk storage is full, so inevitably they must be removed.”

With regard to the policy on retention, this has yet to be implemented, as demonstrated by interviews with the head of the Documentations and Library division:

“At present, there is no policy, but later TVRI will make such a policy, so any stored data cannot be deleted. If ANRI requests for the data, we will submit it in the form of a file. We will use a file-sharing system, we have the same data.”

The absence of retention at LPP TVRI means all broadcast material id stored electronically through Etere. Storage through cassette media is also undertaken by LPP TVRI before using the Etere application. The tapes stored are also not disposed of because it is feared that they will be needed again.

V. CONCLUSION AND SCOPE FOR FUTURE STUDY

The information governance that has been implemented by LPP TVRI as a state public broadcasting institution in undertaking its duties and responsibilities to provide information services, healthy entertainment, control and social glue, as well as preserving the nation's culture for the benefit of all walks of life through television programs, has been conducted well. This can be seen by the good coordination between the production division, the documentation division and the library, as well as the information technology division, which ensures that the material that is broadcast is in accordance with the needs and duties of LPP TVRI.

The existing information governance has not been supported by standards or procedures in accordance with ANRI regulations, especially regarding the principles of retention and disposition. The information governance maturity matrix is currently at level 2 (development level); however, information governance activities are still not written

down and ratified into a single guideline or regulation, both from the internal and external perspective. This level means that LPP TVRI still needs to undertake many tasks to determine mutually agreed rules, so that these rules can be used as guidelines when conducting routine activities, with the hope that good information governance can help the organization minimize costs and create superior programs that are appropriate to the needs of customers according to the dynamic environment.

Based on the results of this study, it is also highly recommended that further research be conducted by analyzing each of the GARP principles in more depth. With a more in-depth analysis, it can be projected that information governance that should be achieved by TVRI at level 5 (maximum level), with LPP TVRI applying such governance to manage its information effectively, consequently having an impact on cost control, competitive advantage and the services provided to the people of Indonesia.

Further research could also be conducted by considering the information governance activities at LPP TVRI using ISO guidelines so that these activities can be undertaken more efficiently.

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