Implementation Of IT Governance:
The Perspective Of Audit Information System
(Case Study Of Academic Information System
In One Of Central Java’s Higher Education Institution)

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Abstract — Development and wider application of technology increasingly fields led to the need for IT Governance for controlling the system. IT Governance can be done in various ways, one by conducting audits of information systems. Framework COBIT 4.1 was launched by IT Governance Institute in 2007 as part of IT Governance to measure the level of organizational maturity. COBIT 4.1 and Maturity model consists Likert Scale to measure the maturity level of "Academic Information Systems" in one of Central Java’s Higher Education Institution. The role of COBIT 4.1 IT Governance is to provide a framework for measuring the maturity level of the system. The results of this study was maturity level has been at the level of "Repetable". According to ISACA, this level indicates subsystem is to follow a repeating pattern, but has not been documented and communicated. According to researchers, this subsystem already has a pattern and a reference in the process but would be better if it begins to subsystem is documented and communicated with the applicable standards.

Keywords: ISACA, ITGI, IT Governance, COBIT 4.1, Maturity Model, Likert Scale.

1. INTRODUCTION

The development of technology encourage the wider implementation in various areas of life. Likewise in the sphere of education. This makes of IT governance needed so that the system can work well. Analysis of IT governance (IT Governance) has 3 areas of research is the analysis of IT strategic plans, cost-benefit analysis, and audit of information systems as an evaluation of the existence of information systems [1]. Evaluation of information systems this can be done with the information systems audit as applied within the company. Audit critical information systems to minimize the impact of risks in using information technology, such as: loss of data, errors in making decisions, the risk of data leaks, misuse of computers, the error calculating process, the high value of technology investments [2]. Audit of Information systems as a process of gathering and evaluating evidence to determine whether the computer system used has been able to protect the assets of an organization, capable of maintaining data integrity, can help achieve organizational goals effectively, and using resources in efficiency [3]. With the information systems audit, information technology governance is expected to be more controlled and run well. In addition, also note how information systems are implemented is supported by those employees who manage it. The extent to which the ability of employee to manage information technology agency will also determine how the benefits and usability of information systems. One of the frameworks used in information systems audit is COBIT 4.1. COBIT stands for Control Objectives for Information and Related Technology. COBIT 4.1 is a set of procedures that can help auditors, users, and management to bridge the gap between the risk of a business, organization, control needs and technical issues of information technology. COBIT 4.1 provides references covering the entire information technology and related business processes a company or government organization in the logical structure of activities that can be managed and controlled effectively [4]. The study, conducted in one of Central Java’s Higher Education Institution with the institution called X. This research is an information systems audit, so that the author feels to not have to include in research institutions is implemented. Institution X is one of the leading private institutions in Central Java who have applying information systems in this field of operational. Academic areas is one of the vital areas within the scope of educational organizations, so it is good to see how the management of operational areas of the IT Governance Institution X. Based on the background of the problem, then the problem of this study is 1. How is “Academic Information System” in Institution X? 2. What is organizational maturity level when analyzed within the framework COBIT Maturity Model 4.1? 3. How is the relevance level of maturity that is obtained from the analysis in the framework COBIT Maturity Model 4.1 with those found in real conditions?, 4. Is COBIT 4.1 framework can fulfill the needs of the audit of this research?, 5. What are the advices can be given by this research when the audit of information systems has been done? The research boundaries, this study focused on the operational information systems as objects of Institution X case study,