Analysis of Human Resources and Information Technology (IT Governance) with COBIT 5

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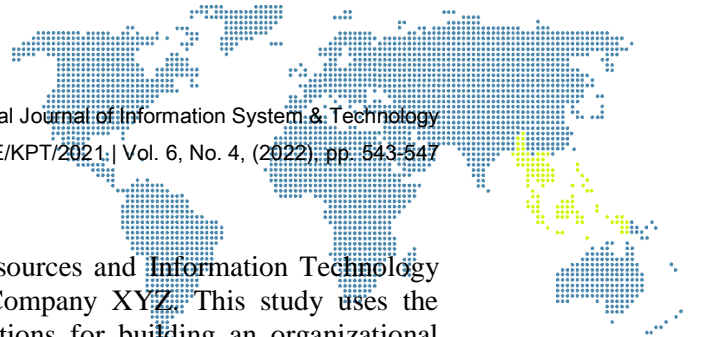*Universitas Nasional, Indonesia*
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Abstract

Technology is currently developing rapidly and plays a very important role in various sectors of human life, especially information technology in the field of human resources. With the development of this technology, benefits can be felt, namely the efficiency and effectiveness of activities that are still difficult to do manually. The application of information technology has high perceived investment and benefits so there is a need for significant Information Technology management. The use of information technology by institutions has been carried out for a long time, with increasing intensity. The human resources that currently exist in the company are not in accordance with the competence, reliability and educational background that are in accordance with the job, so a step is taken in managing human resources with appropriate information technology.

Keywords: COBIT 5, Human Resources, Information, Technology, human life

1. Introduction

The application of IT has now become a necessity and demand in every public service provider agency, given the increasingly important role of IT in efforts to improve service quality as one of the realizations of good governance. To ensure that the use of ICT truly supports the goals of governance, taking into account the efficiency of resource use and risk management, Good Governance is needed in relation to Information Technology Governance [1]. Information technology Governance has five things that need to be considered including strategy alignment, value delivery, resource management, risk management and performance measurement. To be able to determine the level of capability of technology governance, you can use the Control Objectives for Information and Related Technology (COBIT) framework. The COBIT 5 (Control Objectives for Information and Related Technology) framework is a comprehensive framework that companies can use to achieve goals in the IT governance and management area [2]. There is previous research on this research topic including [3] conducting research on information technology governance. The results of the analysis show that the maturity level of the UPT Puskom Undip information technology governance system is 2.88, namely at the Established Process level. At the level of the Established Process has been managed and communicated. The framework used in this research is COBIT 5. Furthermore, research conducted by (Maskur et al., 2017) [1] also concerns information technology governance. the results of the assessment of the level of IT governance capability in the aspect of "Optimizing IT assets, resources and capabilities" at BPMPTSP Bone Bolango Regency have not reached the desired target because there is still a gap between the current state and the targets set in each process. The framework used in this study is COBIT 5. Furthermore, the research conducted by [4] processed DSS01 (Manage Operations), DSS03 (Manage Problems) and DSS05 (Manage Security Services) had reached level 1 Performed Process because the PA 1.1 attribute reached the category L. The framework used in this research is COBIT 5.

2. Research Methodology

This research discusses; Analysis of Human Resources and Information Technology Governance (IT Governance) with COBIT 5 at Company XYZ. This study uses the COBIT 5 method with an initial plan and suggestions for building an organizational strategy for managing human resources. In carrying out research there are stages or flows, namely:

2.1. Data Collection

This data collection stage is used to obtain data or information that is very necessary in this study. There are several steps that have been taken in collecting this data, including:

    a) Literature review,
    b) Interview,
    c) Direct observation,
    d) Questionnaire filling

2.2. Mapping Information Technology Goals

At this stage the mapping of information technology goals identifies and analyzes the objectives of developing Human Resources with COBIT 5 Information Technology.

2.3. Information Technology Governance (IT Governance)

Information technology governance (IT Governance) in the management of data processes is an important asset management management for the company. IT Governance in managing data processes that are not good can raise several obstacles that will become threats such as loss, destruction, wiretapping and theft of data in the company. IT governance does not only function as a support (support) but becomes a part or determinant of the success of an institution or company. IT Governance is an integrated component of company activities that includes a leadership structure and business processes that ensure that the implementation of information technology goes well according to the company's strategy and objectives [5].
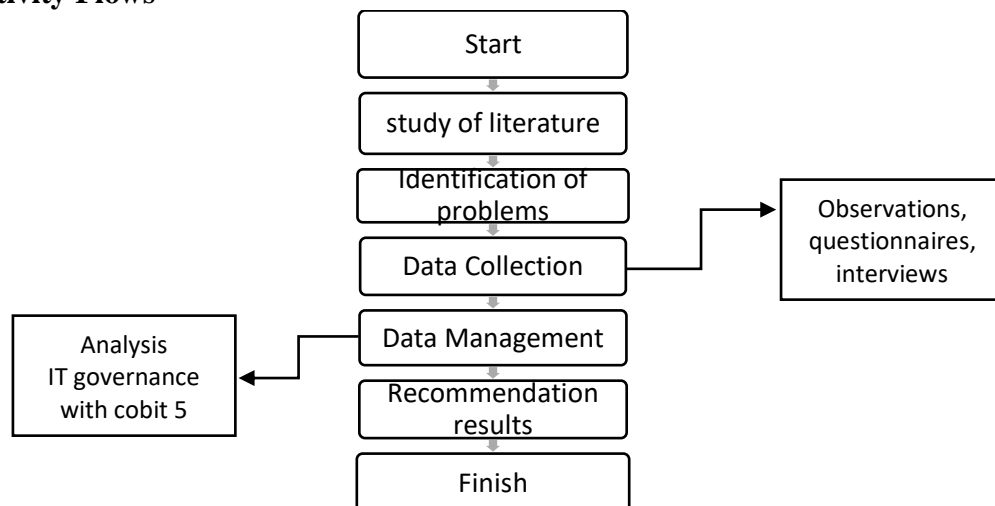
2.4. Activity Flows

Figure 1. Activity Flow

In this study, we started early by searching using documents from books and journals related to COBIT 5 information technology governance. Then the next stage helps problems that aim to find out the main issues so they can be resolved through the IT governance process. Furthermore, data collection uses the method of observation, interviews, questionnaires. The next stage is data processing, where in this process all the

data collected from the results of the questionnaire answers is processed using the maturity analysis method using COBIT 5 to find the required results.

2.5. COBIT 5 (Control Objectives for Information and Related Technology)

COBIT 5 is an overall framework that can assist organizations in achieving their goals for organizational IT governance and management [4]. COBIT also has a broader and more detailed spectrum of IT processes. Benefits of COBIT 5 according to ISACA [6].

2.5.1. Benefits for stakeholders for the company are as follows:
a) Maintain the quality of information for stakeholders in decision making.
b) The strategic objective of the investment value of IT utilization.
c) Application of IT will achieve competitive advantage.
d) Maintain tolerable risks.
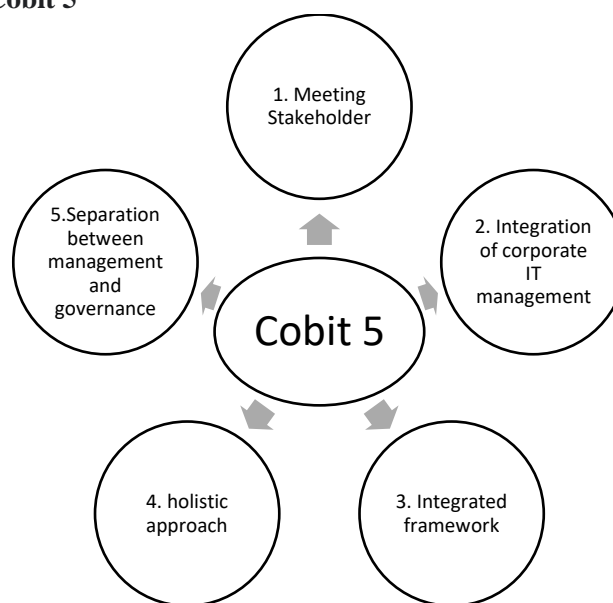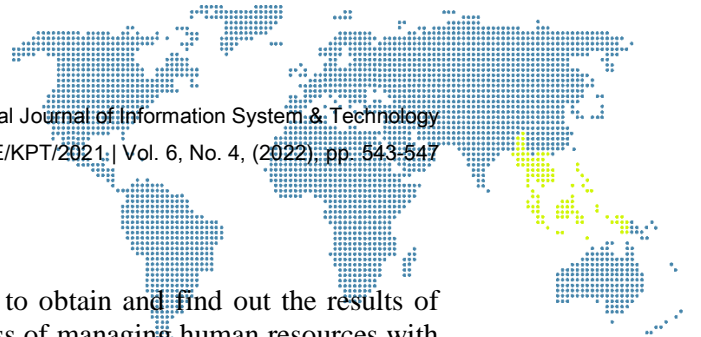e) Optimization of IT usage costs

2.5.2. Principle of Cobit 5

Figure 2. Principle of COBIT 5

a) Stakeholder meeting.
Carry out process stages by holding meetings or gathering in order to support the creation of business value through the application of IT.
b) Integration of corporate IT Management.
Integrating corporate IT management with corporate governance. COBIT 5 considers all entities in the company as interrelated parts.
c) Integrated framework.
COBIT 5 is a framework that addresses high levels of governance and management of corporate IT.
d) Holistic approach.
Effective corporate IT governance and management requires a comprehensive approach to support the comprehensive implementation of corporate IT governance and management systems.
e) Separation between management and governance.
Provide a clear separation between management and governance[10].

3. Results And Discussion
3.1. Identification Questionnaire
The questionnaire here was developed and used to obtain and find out the results of values and measure the level of success in the process of managing human resources with information technology, for current conditions, or for conditions expected in the future [7]. By knowing the results of processing data from respondents, a desired level of success is obtained for all attributes in general, namely a value of 5 [8]. To achieve success, improvements must be made to the current conditions that can be adjusted to the specified priority scale [9].

3.2. Analysis of Success Rates
In the final research here, the results of data collection were obtained, namely by filling out questionnaires and interviews with sources obtained for the level of success of PT XYZ in managing information technology human resources based on COBIT 5.

The final results of the assessment of the success rate are seen in table 1 and in Figure 1. From the results of the success rate of the Plan and Organize (PO) regarding how to properly recruit new employees, according to the required position and maintain the performance of existing employees at PT XYZ . In this study it can be seen the results of the average value by getting a value of 3.00. so that the need for human resources still seems to have not reached the level desired and expected by PT XYZ

Table 1. Level of Success Plan and Organize

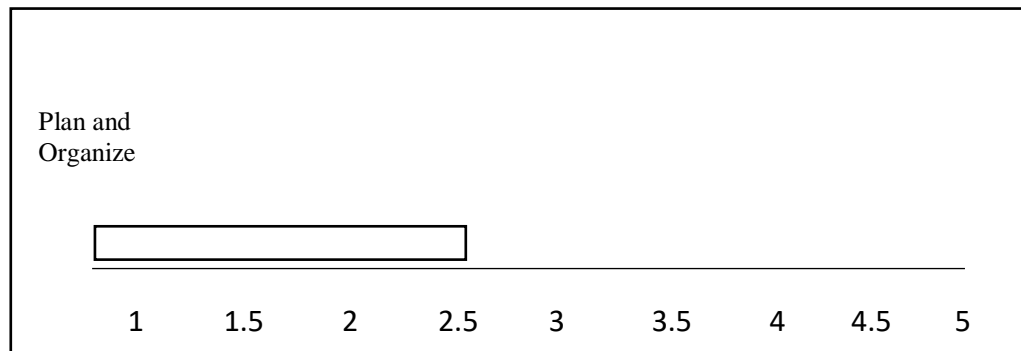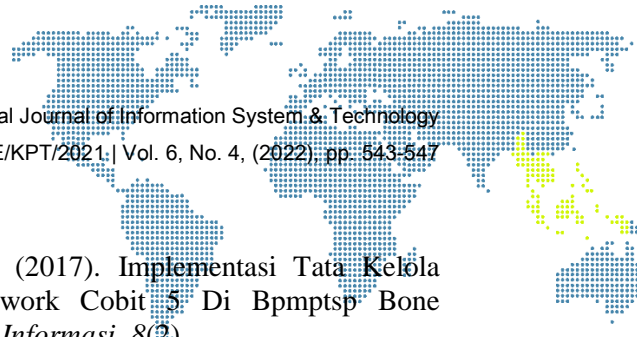| Level of success		
Currently	**Desired**	**GAP**
2.00	**5**	**5.00-2.00 = 3.00**

Figure 3. Success Rate

4. Conclusion
Based on the results of research that has been carried out, a Cobit 5-based information technology governance model has been designed to manage human resources in order to obtain appropriate human resources to provide information technology services and a governance model that is tested for accuracy and according to the level. The process of developing human resources in the field of information technology is still being carried out in stages and is still being processed, some of which have been fulfilled according to the initial plan. In achieving the level of number 5 which is carried out to produce activities that need to be carried out towards the development of human resources to achieve expectations and goals

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