# CHAPTER I INTRODUCTION

#### 1.1 Background

The advancement in Information Technology (IT) and its utilization increase over time. The accuracy and quick flow of information are demanded in business practice as well. IT provides opportunity to gain competitive advantage of an enterprise and offers the equipment to improve productivity. IT helps to improve the effectiveness and efficiency of the organization business process to achieve its goals. Meanwhile, the increased roles of IT has to be directly proportional to the investment on IT, which is generally in large amount (Modissa and Rachmansyah, 2015). So, IT investment needs careful planning and optimum implementation.

Besides the expectation on a better return from IT investments and on IT to deliver what the business needs, there are many risks in IT-related activities. The risks can be failure in meeting the client's requirement, human error, internal fraud through software manipulation, external fraud by intruders, obsolesce in applications and machines, reliability issues or mismanagement and natural disasters (Savic, 2008). As said by Pribadi (2015), when IT implementation does not get attention from the top management, it can leads to financial loss. The integrity of data is not assured if the incorrect data is processed which results in inaccurate information. A project reputation can be damaged by the over-budget on IT, overtime on practice, and under-specification of the IT. All those issues reinforce the need of IT governance. Good IT governance will ensure efficiency and achievement of good service quality to organization purpose. An enterprise is able to ensure that IT activities support the achievement of its purpose by having IT governance. Furthermore, Gaynor in Abu-Musa (2007) said that IT integrates and institutionalizes best practices of planning and organizing, acquiring and implementing, delivering and supporting, and monitoring IT performance to ensure that the organization's information and related technology support its business objectives. IT governance enables the organization to take full advantage of its information, thereby maximizing benefits, capitalizing on opportunities and gaining competitive advantage. IT governance also identifies the deficiency of control and assures improvement of implementation that can be measured efficiently and effectively.

According to Information Technology Governance Institute (ITGI), a standardization, procedure, and evaluation on IT governance is needed to be the basis to assess how the enterprise is performing against generally accepted standards and its peers, or benchmarking, and to improve the utilization of IT in accordance with the enterprise's strategic purposes. IT governance needs to be evaluated to know the extent of IT governance implementation in current condition and potential development towards better IT governance (Nugraha, 2012). There are several frameworks exist as the reference of control and are developed to help entity to create good control system. They include COBIT, IT Infrastructure Library (ITIL), ISO 27000, ISO 9001;2000 Quality Management Systems-Requirements, Capability

Maturity Model Integration (CMMI), and A Guide to the Project Management Body of Knowledge (PMBOK). Some evaluate using balance scorecard, STOPE and other methods adapting from existing frameworks.

COBIT 4.1 is considered to provide a measurement of the IT governance in an enterprise by using maturity model. The maturity model scales will help professionals explain to managers where IT process management shortcomings exist and set targets for where they need to be. Maturity model has no intention to measure levels precisely or try to certify that a level has exactly been met. A COBIT maturity assessment is likely to result in a profile where conditions relevant to several maturity levels will be met (ITGI, 2007).

COBIT is universally accepted as the best practice or practical guidelines in information control, IT and related risks (ITGI, 2007). COBIT provides the measurement, indicator, processes and collection of best practices to assist entities in it governance and develop control over IT management. The framework describes several specific IT control and security processes that an organization can use to enhance its ability to achieve its business goals and to improve internal control. Conformance to these control and security processes should theoretically result in a lowering of the risk associated with IT. Management guidelines, as one of COBIT 4.1 component, provide required framework by management to control and measure IT performance by implementing IT capability measurement through 34 IT processes. COBIT 4.1 provides model of processes found in IT activities in 4 domain, Plan and Organize (PO), Acquire and Implement (AI), Deliver and Support (DS), and Monitor and Evaluate (ME). Each IT process has detailed control objectives (ITGI, 2007).

RSI Ibnu Sina Padang is one of the hospitals that is located in Padang, West Sumatera. RSI Ibnu Sina Padang is a private grade C hospital. As a hospital that has a vision to improve to grade B, RSI Ibnu Sina Padang has implemented IT as its tool to serve the community and improve public health. The IT system has to support the entity's purpose and act as a tool to assist performance achievement. However, health care systems are facing significant challenges associated with information systems (Asadi & Mastaneh, 2012). Most sections of hospital information systems lack proper management, making the conditions for development of hospital information systems unsuitable. Other problems are poor management of the project, imbalanced allocation of IT budgets, poor operational management of IT, and security management and data protection. So, IT governance frameworks can provide proper solution for many of such challenges (Kuhn et al., 2007).

On that basis, the author wants to evaluate the IT governance implemented in RSI Ibnu Sina Padang by using COBIT Framework 4.1 as the benchmark to improve IT facilities utilization optimally.

#### **1.2 Problem Statements**

Based on description above, the author identifies the following problems in this study:

1. How is the current implementation of IT governance in RSI Ibnu Sina Padang ? 2. What kind of improvements that can be done by RSI Ibnu Sina Padang to improve its IT governance?

# **1.3 Research Objectives**

The purposes of this study are to:

- 1. Evaluate the implementation of IT governance in RSI Ibnu Sina Padang by using COBIT 4.1 framework.
- Recommend IT governance practices that can improve IT governance in RSI Ibnu Sina Padang in the future.

# 1.4 Research Scope

This research covers several scopes:

- This research is limited on evaluating the implementation of IT governance in RSI Ibnu Sina Padang that is measured by using maturity level, COBIT 4.1 that issued by IT Governance Institute (ITGI).
- 2. This research does not design and implement any application in performance evaluation.

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3. This research only measures the current condition of maturity level (as is).

# **1.5 Research Benefits**

From this research, researcher expects to:

 To the enterprise, RSI Ibnu Sina Padang. This research is expected to assist RSI Ibnu Sina Padang in doing measurement of maturity level of the IT governance by using COBIT 4.1 in order to be used as recommendation and as a basis of policy to improve the effectiveness and efficiency of IT governance system.

- 2. To university, this study can be used as scientific study by the students and as a comparison for future related research.
- 3. To researcher, this study is an intellectual exercise which is expected to gain researcher's knowledge regarding IT governance in an enterprise.

#### **1.6 Writing Systematic**

To present systematic discussions and facilitate research understanding, the

remainder of this paper are structured as follows: ALAS

#### CHAPTER I. INTRODUCTION

This chapter explains the background, problem statements, research objectives,

research scope, research benefits, and writing systematic.

# CHAPTER II. LITERATURE REVIEW

In this chapter, the theories supporting this research are presented, including the definitions and literature explanations on the topic used as reference in the preparation of this research.

# CHAPTER III. RESEARCH METODOLOGY

This chapter explains about the research design used, the research step, research variables, data collection methods and data analysis methods.

# CHAPTER VI. RESULTS AND ANALYSIS

This chapter will include a brief introduction to RSI Ibnu Sina Padang, analysis of the COBIT 4.1 Framework and implementation of IT governance in RSI Ibnu Sina Padang. The evaluation by using maturity model are executed and the results are explained along with the recommendation for improvement in the future.

# CHAPTER V. CONCLUSIONS

This chapter contains the conclusions of the research results as well as suggestions for future research and RSI Ibnu Sina Padang.

