

1. INTRODUCTION

Utilization of Information Technology (IT) in companies (agencies) is currently an important element to support the effectiveness & efficiency of business processes [1]. The role of IT can improve the quality of services to achieve business goals [1]. Utilization of IT must be accompanied by appropriate and relevant management to minimize the risks that may arise [1]. The benefits of IT are not only as the main support facility but also the main key in effective service for the company [1], especially in the utilization of IT assets of PT ABC. Based on the green book of the PT ABC Regional Office, the company currently has around 200 employees. In utilizing IT assets, the division responsible for managing and maintaining the company's IT assets is the IT Asset division.

IT assets are goods that are valued by a company or company that can provide benefits to the company's operational activities [2]. Tangible and intangible assets can be used as company tools [2]. In the utilization of IT assets, risk management is needed [3]. According to Arthur J. Keown [3], risk is the prospect of an unfavorable outcome, where the actual result may differ from the expected result. IT asset risk management is expected to reduce the impact of risk on the company's business areas [4].

Based on the results of interviews with PIC related divisions PT ABC has never conducted an information security risk analysis on its IT assets. This is certainly a problem, because the company is one of the largest banking service companies in Indonesia. Business areas that have an impact on PT ABC can be in the form of a decline in reputation due to an unsafe and frequently disturbed system, decreased productivity due to many employees coming in and out, financial losses due to reduced productivity, fines and penalties due to lawsuits, as well as employee health and safety conditions that are not considered because the financial area is disrupted. Therefore, so that the service quality of the company is well maintained, the author will conduct an information security risk analysis on its IT assets and provide control recommendations as a mitigation measure against the risk of these assets.

The method used in the analysis of IT asset information security risk is the OCTAVE Allegro method. As a compared to other methods, OCTAVE Allegro method can identify IT assets, vulnerabilities, and threats to IT assets quickly, precisely, and accurately without the need for extensive knowledge of risk management [5]. This method is widely applied to companies with more than 100 employees [5]. The OCTAVE Allegro method is considered suitable and can be applied according to the conditions of PT ABC. Furthermore, providing control recommendations, the standard used is ISO 27002:2014. Selection of ISO 27002:2014 because ISO 27002 provides guidance on information security control practices and is a standardization of information security management, commonly called ISMS (Information Security Management System) [6]. This research produces a Risk Register document. Therefore, the findings of the IT asset analysis using the OCTAVE Allegro method are the contents of the Risk Register document.