

ABSTRACT

PT. XYZ, as an aircraft maintenance company, also requires effective information technology (IT) risk management to support its operations. Given the current advancements in IT and the internet, IT has become increasingly critical. PT. XYZ currently lacks a formal framework for IT risk management, hence this study analyzes it using the ISO/IEC 27005:2018 framework. The methodology employed includes risk identification, analysis, evaluation, and treatment based on ISO/IEC 27005 guidelines. Data were collected through questionnaires and interviews. Risk assessment was conducted based on COBIT 2019 references such as Enterprise/IT Architecture, Hardware Incidents, IT Operational Infrastructure Incidents, and IT-Investment Decision Making, Portfolio Definition and Maintenance. The implemented risk management processes aid in mitigating these risks. The assessment revealed 21 identified risks categorized as eight (8) high-risk, five (5) medium-risk, and eight (8) low-risk issues. Risk treatment was guided by COBIT 2019 to support operational effectiveness and minimize negative impacts of IT risks. This research is expected to serve as a reference for the company and future researchers.

Keywords—*risk management, information technology, ISO/IEC 27005, PT. XYZ, COBIT 2019*