ABSTRACT

Maritime trade at Tarakan Island Port is a business process that supports the economic turnover in the area. The maritime trade process currently lacks guidelines or references as standards for addressing the risks involved, and there is no implementation of risk management in the IT field. This can lead to losses that impact the maritime trade process. Effective and comprehensive risk management is needed to ensure the safety of ships, cargo, and crew. Therefore, standards are necessary to address and manage risks that may disrupt the business process. In this research, an exploration is conducted on the application of COBIT 2019, specifically in the domains of EDM03 (Ensure Risk Optimization), EDM04 (Ensure Resource Optimization), EDM05 (Ensure Stakeholder Engagement) and APO12 (Manage Risk) which discuss IT risk management. One of the advantages of COBIT 2019 is its focus on the relationship between effective IT management and the achievement of business objectives. This helps organizations align their IT management efforts to support broader business strategies and needs. The methodology used in this research is quantitative research using the System Design Governance Workflow provided in the COBIT 2019 methodology guidebook. This research has implications for developing specific strategies and actions that can be adopted by organizations to prevent IT security risks. Thus, it can be used as a standard in understanding the local maritime environment to support the maritime industry. Furthermore, it will produce a web-based guide for organizational governance, risk, and maritime security (Maritime Security Guidance) that can be used by the organizations to receive or report suspicious incidents from vessels involved in maritime trade processes, as well as to carry out mitigation actions through the predetermined IT risk management.

Keywords: *Business, COBIT 2019, Maritime Trade, Safety and Security, Tarakan*