

ABSTRACT

In the process of information system security management there are several problems that arise such as problems the weakness of the strategy in anticipating the threat of disturbances and attacks on information data in a company, which makes a lot risk IT happen. The preparation of an information security management system should be based on the results of risk analysis and mitigation, so that the proposed security strategy can effectively reduce the risks that have been identified. In this research, data was collected by interview, observation and survey methods. After the data is collected, an information security management system maturity assessment is carried out using the KAMI index to get the results maturity level, and carry out a risk assessment with the FMEA method (Failure Modes and Effect Analysis). From the results obtained from the maturity level assessment at PT. XYZ is the average maturity level its one (Initial Process) and risk assessment using the FMEA method with the results of four risks with a value of “very high” then risk mitigation is carried out using the ISO standard 27002:2022 with carried out to risks that have an RPN valueMedium s.d. Very High and Governance of maturity level which is expected to help PT. XYZ improve and make improvements to its information security management system.

Keywords: information security management system,risk IT, ISO 27002:2022, FMEA,maturity level, KAMI index.