

## **ABSTRACT**

*The development of information technology today has developed in a better direction in the enterprise world. Good information technology plays a very important role in supporting the company's operational activities and company business processes. PT Nocola IoT Solution is a company that focuses on integration of core service systems, weighting systems, IoT development, software development, communication, navigation services, training. In the company's activities, IT risk management plays an important role in achieving business goals, reducing risk. However, the problem at PT Nocola IoT Solution is that it has not implemented IT risk management properly, but only performs standard IT security without managing risk mitigation that will occur in the future. This research was conducted in order to determine the current IT risk conditions at PT. Nocola IoT Solution using COBIT 5 for Risk which is an international standard framework that can be used as a reference in managing information technology resources in helping companies. The purpose of this study is to generate analysis and produce recommendations for IT risk management at PT Nocola IoT Solution. In COBIT 5 for Risk there are stages in carrying out risk management including Conducting risk scenarios, Conducting risk analysis, Determining the risks to be taken, Determining Responses to Risks, Conducting evaluations and reviews, Determining Risk Priorities and Making Risk Action Plans. In this study, it focuses on enabler processes with the data obtained from this research are primary data and secondary data from interviews, related journals and related documents provided by PT Nocola IoT Solution. Data collection is used by interviewing PT. Nocola IoT Solution as the object of research, and producing primary data in the form of current IT risk conditions, and secondary data in the form of company profiles, organizational structures, and policies owned by PT. Nocola IoT Solutions. In obtaining recommendations, strategic alignment was carried out from the company's enterprise goals to enterprise goals COBIT 5 with a score of 10, then enterprise goals COBIT 5 to IT-related goals with a value of 9, and IT-related goals to IT-related processes with the highest score of 8, then carried out risk approach from determining pain points, determining risk criteria, analyzing risk and determining risk priorities. From these activities, it is determined the priority processes that will be the domains for conducting the assessment, namely the EDM03 ensure risk optimization domain, AP012 manage risk, APO07 manage human resources and APO11 manage quality. Then an assessment is carried out on the processes aspect and it is found that there is no IT-related*

*policy at PT. Nocola IoT Solution, after that it is continued with a gap analysis from what is obtained from the existing evidence. From the results of the gap analysis, recommendations are obtained for enabler processes in the form of IT risk management policies for PT Nocola IoT Solution. policies related to risk management, then there is the people aspect in the form of training that was formed to guide the duties and responsibilities for each employee at PT. Nocola IoT Solution and the technological aspect in the form of tools used to support the activities needed by the company. in achieving its goals*

*Keywords— information technology, risk management, COBIT 5 for Risk*