

## ***ABSTRACT***

*PT. XYZ is a company engaged as a provider of industrial electronics products and infrastructure and extensive infrastructure. In its operational activities, of course, supported by Information Technology that can increase the added value and competitiveness of the company. PT. XYZ has major IT assets that need to be protected to maintain the functionality of relationships with running business processes. In the protection of IT assets, keep in mind possible threats and assess existing controls to reduce the negative impact of risk. PT. XYZ has the application of risk assessment in the management of IT and business processes in each related division. However, the application has not fully assessed the threat to IT assets and assesses how far existing controls can reduce future threats and their impacts. Therefore, it is necessary to design and assess risk assessment in PT. XYZ to maintain IT function in its operational activities.*

*The design and assessment of risk assessment on the IT infrastructure is carried out using the COBIT 5 for risk framework that is focused on managing / controlling IT risks. Implementation of risk assessment is done by referring to risk scenario and control objective in COBIT 5 for risk. This study was conducted by identifying risk scenarios on IT assets based on the assessment of existing controls with control objectives in COBIT 5 for risk, subsequently determining risk treatments tailored to corporate decisions as controls to safeguard possible threats and impacts.*

*The results of this study are recommendations on the implementation and assessment of risk assessment in the form of risk potential and risk treatment, so it is expected that the implementation and assessment of risk assessment referring to COBIT 5 for risk can be applied to PT. XYZ in control as management of IT assets.*

*Keywords: COBIT 5 for risk, risk assessment, risk scenario, control objective, risk potential, risk treatment*