## ABSTRACT

*The telecommunications industry in Indonesia has experienced rapid development since the 1980s, with a significant increase in the use of the internet and mobile phones. However, the industry also faces major challenges regarding data security, with many cases of data leaks raising concerns about the protection of users' personal information. PT XYZ, as an internet service provider, needs to adopt effective security measures to protect its information assets from increasingly complex threats.*

*This research aims to identify vulnerabilities and threats to company assets, analyze their impacts, carry out risk assessments, and provide control recommendations to overcome risk levels. The main focus of this research is on aspects of corporate information security, using the international standard ISO 27001:2022 as a framework to ensure a more comprehensive approach to information security.*

*The research methods used include risk evaluation, risk mitigation, and risk evaluation and assessment. This process includes identifying vulnerabilities and threats, analyzing the impact of risks, and determining appropriate control measures to minimize the possibility of risks occurring. The data used in this research was obtained from questionnaires, interviews and company documentation.*

*The results of the study indicate that the overall level of information security maturity at PT XYZ is 91%, with several areas that require improvement, such as physical security parameters and physical access. This study identified 19 types of vulnerabilities and 11 types of threats that have the potential to target company assets. Based on the risk analysis, it is recommended that PT XYZ improve physical controls and take medium and long-term risk management actions for assets with the highest risk priority.*

*This study focuses on asset risk analysis at PT XYZ, an ISP company, using the Annex A7 ISO 27001:2022 standard, so the results may not be generalizable to other telecommunications companies. The data used mostly comes from questionnaires and interviews that have the potential to be biased. This study can be a reference for further research at other ISPs, with an emphasis on the importance of technology control analysis to ensure information security according to the ISO/IEC 27001 framework in mitigating data breaches.*



***Keywords:*** *Risk assessment, asset risk management, ISO 27001, physical security control*