## *ABSTRACT*

# INTERNET OF THINGS GOVERNANCE MODEL TO SUPPORT TELCO DIGITAL TRANSFORMATION ALIGNED WITH COBIT 2019 TRADITIONAL AND DEVOPS FOCUS AREA *AMBIDEXTROUS* APPROACH

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*Digital transformation has become critically important for modern organizations to enhance efficiency, reduce costs, and accelerate innovation. TelCo, as a telecommunications company, integrates Internet of Things (IoT) technology to improve operational capabilities and customer experience. However, TelCo faces challenges in implementing effective IoT governance, given the complexity of the IoT ecosystem and the limitations of traditional IT governance frameworks. This research employs Design Science Research (DSR) methodology to develop and evaluate IoT governance models iteratively. Data was collected through semi-structured interviews with stakeholders and internal company documents, such as annual reports and policies. Analysis was conducted using the COBIT 2019 ambidextrous framework, focusing on DSS05, APO01, and BAI02 components. The analysis results reveal several gaps, including the lack of clear leadership roles, absence of formal governance committees, limited process automation, and incomplete documentation. Several recommendations generated include appointing a Business Continuity Manager role, formalizing governance and risk committees, improving documentation, and standardizing technical configurations. Through these interventions, it is expected to enhance governance, IoT security, regulatory compliance, operational efficiency, and support sustainable digital transformation.*



**Keywords—***Ambidextrous IoT Governance, Digital Transformation, COBIT 2019, DevOps , Design Science Research, Case Study, Telecommunications.*