

ABSTRACT

CLOUD GOVERNANCE IN SMARTCO DIGITAL TRANSFORMATION BASED ON AMBIDEXTROUS COBIT 2019 TRADITIONAL AND DEVOPS APPROACH

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Digital transformation helps organizations respond to rapid technological change and evolving customer needs. Cloud computing supports this transformation by offering scalability, flexibility, and efficiency. However, many companies face governance challenges in managing cloud adoption while ensuring security, compliance, and operational continuity. This study proposes a cloud governance model for SmartCo that combines traditional COBIT 2019 practices with agile approaches from the DevOps Focus Area. The model applies ambidextrous IT governance to balance innovation and control. Using the Design Science Research method, data were collected through expert interviews and internal documents. Analysis was conducted on seven governance system components based on the COBIT 2019 framework. The selection of priority Governance and Management Objectives (GMOs) was informed by a governance model aligned with relevant national regulations, including the State-Owned Enterprise (SOE) Minister Regulation No. PER-2/MBU/03/2023, the Minister of Communication and Information Technology Regulation No. 5/2021, and supported by prior literature on cloud computing and governance. Through this framework, three key focus areas were identified: DSS04, DSS05, and MEA01. The analysis revealed several critical gaps, such as unclear ownership of cloud operations, limited automation, suboptimal compliance practices, and insufficient procedural controls. To address these issues, a set of targeted solutions was proposed, including clarification of roles and responsibilities, formalization of organizational structures, and strengthening of compliance mechanisms. All findings were classified into three core aspects: people, process, and technology forming the basis for 9 improvement recommendations. These recommendations were further evaluated and prioritized using a Resource, Risk, and Value (RRV) analysis, resulting in a structured implementation roadmap. These efforts are expected to raise SmartCo's average capability maturity score from 3.15 to 3.51. The study contributes to research by extending ambidextrous governance to cloud environments and offers practical guidance for organizations aiming to align cloud strategies with business goals while meeting regulatory requirements.

Keywords: *Ambidextrous Cloud Governance, Digital Transformation, COBIT 2019, DevOps, Design Science Research, Case Study, SmartCo*