ABSTRACT

Cloud computing serves as a key enabler in the digital transformation of the banking sector due to its ability to provide scalability, flexibility, and cost efficiency. However, BankCo faces challenges in aligning cloud adoption with governance that balances stringent control and the drive for digital innovation. This study aims to develop a cloud governance framework based on an ambidextrous approach that integrates traditional COBIT 2019 with DevOps. The Design Science Research (DSR) methodology is employed in this case study through five iterative stages, with data collected via semi-structured interviews, supported by questionnaires and triangulation with internal company documents. The analysis focuses on the seven components of the governance system as outlined in COBIT 2019. The prioritization of Governance and Management Objectives (GMOs) is determined based on design factors, the DevOps focus area, national regulations (POJK No. 11/2022 and Minister of State-Owned Enterprises Regulation No. PER-2/MBU/03/2023), as well as existing literature on cloud computing. Three primary focus areas are identified: DSS05 (Managed Security Services), APO13 (Managed Security), and MEA03 (Managed Compliance with External Requirements). The gap analysis reveals shortcomings in cross-functional communication, limited automation in cloud management processes, and suboptimal practices in cloud compliance control. These findings are categorized into three main aspects: people, process, and technology. A total of 17 improvement recommendations were formulated based on Resource, Risk, and Value (RRV) analysis and subsequently prioritized into an implementation roadmap. Estimates indicate that if the proposed solutions are implemented, the maturity level could increase from an average of 3.1 to 3.7. This research is expected to contribute to the banking industry in designing cloud governance and enrich academic literature on ambidextrous approaches to cloud governance in support of effective digital transformation.

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