

## Business Portfolio and IT Strategy Alignment: Enhancing Performance through Digital Innovation at PT Telkom Indonesia

John Sihotang<sup>1\*)</sup>; Randy Giovani<sup>2)</sup>; Fikry Ramadhan Suhendar<sup>3)</sup>; Imas Komariyah<sup>4)</sup>

<sup>1)</sup> [jhotank@yahoo.com](mailto:jhotank@yahoo.com), Sekolah Tinggi Ilmu Ekonomi Miftahul Huda, Subang, Indonesia

<sup>2)</sup> [rgiovani@stud.hs-bremen.de](mailto:rgiovani@stud.hs-bremen.de), Bremen University of Applied Sciences, Germany

<sup>3)</sup> [fikry@stiemifdasubang.ac.id](mailto:fikry@stiemifdasubang.ac.id), Sekolah Tinggi Ilmu Ekonomi Miftahul Huda, Subang, Indonesia

<sup>4)</sup> [komariyahimas26@gmail.com](mailto:komariyahimas26@gmail.com), Sekolah Tinggi Ilmu Ekonomi Miftahul Huda, Subang, Indonesia

\*) Corresponding Author

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### ABSTRACT

The telecommunications industry has been undergoing a wave of transformation due to fundamental shifts in consumer behavior, rapid technological innovation, and increasing market competition. For PT Telkom Indonesia, these changes have posed significant challenges, particularly in the Enterprise segment, where performance has declined in recent years.

**Objectives:** This paper analyzes the relationship between business portfolio configuration, B2B IT digital strategy, and business performance at PT Telkom Indonesia, emphasizing the intermediary role that digital innovation plays in linking strategic initiatives to performance achievements.

**Methodology:** Employing a quantitative design, data were drawn from 136 respondents occupying managerial positions in Telkom Indonesia's business units. The research model was tested using PLS-SEM facilitated by SmartPLS 4.0, aiming to capture both direct linkages and the mediating impact of digital innovation across variables.

**Finding:** The analysis shows that while the structuring of the business portfolio does not significantly enhance business performance, the deployment of B2B IT digital strategy has a notable positive effect. Furthermore, digital innovation critically shapes organizational outcomes by serving as both a direct contributor and a mediator, reinforcing its strategic importance in converting planned initiatives into measurable value.

**Conclusion:** The study reveals that innovation is fundamental to strategic success. Rather than being determined solely by the formulation of business portfolios or digital strategies, Telkom Indonesia's performance is significantly influenced by the firm's capability to operationalize these strategies through continuous innovation. These insights reinforce the critical need for digital transformation initiatives to fully integrate innovation into strategic execution frameworks.

**Keywords:** Business Portfolio; B2B IT Digital Strategy; Digital Innovation; Business Performance.

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## INTRODUCTION

The rapid growth of the digital economy has changed the global business landscape, pushing companies to make digital technology a core part of their strategies. As a result, the IT services industry is expanding quickly worldwide, driven by digitalization, higher demand for cloud solutions, and new digital platforms for various sectors. Indonesia is following this trend, with strong IT services growth as more organizations use technology to boost efficiency and compete in the market.

The table below compares annual IT services spending and growth rates globally and in Indonesia from 2021 to 2025. This shows how Indonesia's IT services sector is keeping pace with global growth as both respond to digital transformation and greater technology adoption.

**Table 1** Annual IT Services Spending and Growth Rates

| Year | Global IT Spending (USD Trillion) | YoY Growth (%) | Indonesia IT Services (USD Billion) | YoY Growth (%) |
|------|-----------------------------------|----------------|-------------------------------------|----------------|
| 2021 | 4.23                              | 8.6            | 4.00                                | 10.0           |
| 2022 | 4.50                              | 6.4            | 4.40                                | 10.0           |
| 2023 | 4.80                              | 6.7            | 4.84                                | 10.0           |
| 2024 | 5.26                              | 9.6            | 5.32                                | 10.0           |
| 2025 | 5.74                              | 9.1            | 5.70                                | 7.1            |

Sources: Gartner, Canalys, Mordor Intelligence, CRN

PT Telkom Indonesia (Persero) Tbk, Indonesia's largest state-owned telecom company, is fundamentally transforming itself into a digital solutions provider. Through its "Five Bold Moves" strategy, Telkom is shifting from traditional connectivity toward integrated B2B IT platforms and services, focusing on cloud, data centers, cybersecurity, and digital ecosystems for enterprises. To support this, Telkom invested IDR 2.6 trillion in acquiring TelkomSigma and partnered with Huawei to develop cloud solutions for SMEs, corporations, and public institutions.

This strategic realignment demonstrates Telkom's commitment to digital transformation, with efforts to refine its focus and enhance value for business customers. This approach aims to strengthen Telkom's position as a B2B IT leader in Indonesia's digital economy. Despite strong potential, Telkom's Digital IT Services divisions face intense national competition, holding a 29.3% market share and serving around 212,000 MSMEs—while another 338,000 MSMEs remain untapped.

In 2023, Telkom reported revenues of IDR 149.2 trillion (up 1.3% YoY) and a net profit of IDR 24.6 trillion (up 18.3%). The Enterprise segment contributed 22.4% of total revenue (IDR 44.7 trillion, up 2.1%) and net profit of IDR 602 billion. However, Telkom's enterprise revenue growth of 2.1% lags behind global and national IT services growth (both at 9% CAGR 2021–2025), highlighting challenges in the effectiveness of its B2B digital strategy.

This raises critical questions about the alignment and impact of Telkom's business portfolio and digital strategy, and the role of digital innovation in bridging performance gaps—issues that are seldom addressed holistically in research on state-owned enterprises in emerging markets. To address this, the study proposes a conceptual model combining

business portfolio, B2B digital strategy, digital innovation, and business performance, grounded in the Resource-Based View (Barney, 1991) and Strategic Innovation Theory (Teece, 2007), with empirical insights from Indonesian SOEs (Rufaidah, 2012; Tjahjadi et al., 2022; Rezaei & Ortt, 2018). Research Objectives:

- To examine how business portfolio and digital strategy directly influence performance.
- To investigate whether digital innovation serves as a mediating factor in this relationship.

## **LITERATURE REVIEW**

Digital transformation has made the strategic integration of business architecture, technological investment, and innovation capacity a focal point in modern organizational theory. Numerous studies (Rehman et al., 2023; Teece et al., 1997; Barney, 1991) converge on the understanding that the impact of digital initiatives and portfolio strategies on business performance is heavily contingent upon an organization's ability to realize these initiatives through innovation mechanisms.

The literature presents two prominent theoretical perspectives that inform this study. The Resource-Based View (RBV) (Barney, 1991) emphasizes that sustainable competitive advantage derives from valuable, rare, and inimitable internal resources, with digital capabilities and business portfolios forming essential parts of this framework. In parallel, Strategic Innovation Theory (Teece, 2007) and the concept of dynamic capabilities position innovation as a critical enabler for organizations to respond to environmental volatility and seize new opportunities.

A review of empirical research reveals a consistent pattern: while the alignment of IT capabilities and digital strategy with business goals is fundamental (Chen & Wang, 2020; Bharadwaj, 2000), performance improvement is more pronounced when these strategies are supported by effective innovation processes (Castillo Apraiz et al., 2021; Martin et al., 2016). In other words, strategy and resources alone do not guarantee success—innovation acts as the catalyst that bridges the gap between strategic intent and realized business outcomes. For example, Chen & Wang (2020) and Castillo Apraiz et al. (2021) both highlight that IT and competitive strategies drive superior firm performance only when firms also develop innovation capability. This perspective is echoed by Rezaei & Ortt (2018) and Martin et al. (2016), who argue that innovation not only facilitates the implementation of strategies but also enhances their impact on operational and financial performance.

Studies focusing on organizational complexity (Rufaidah, 2012) and the Indonesian context (Tjahjadi et al., 2022) reinforce these conclusions. Rufaidah (2012) underscores the importance of structuring business portfolios to maintain long-term competitiveness, but also notes that without a mechanism for innovation, such structures remain static and less impactful. Tjahjadi et al. (2022), analyzing Indonesian state-owned enterprises, empirically demonstrate that digital innovation capability significantly mediates the link between organizational learning and business performance, confirming the necessity for innovation-driven transformation in dynamic and emerging-market environments.

Thus, across these diverse studies, there is a clear consensus that the successful translation of digital strategies and portfolio configurations into superior business performance is highly dependent on a firm's ability to foster and sustain digital innovation. However, despite these insights, there remains a gap in the literature regarding how digital

innovation mediates the relationship between business portfolios, digital strategy, and performance, especially within emerging-market SOEs like PT Telkom Indonesia.

### **Key Concepts**

- **Business Portfolio:** Most scholars agree that a well-structured business portfolio helps organizations manage risk and exploit market opportunities (Porter, 1985; Rufaidah, 2012), but emphasize that its value is maximized only when combined with adaptive execution and innovation mechanisms.
- **B2B IT Digital Strategy:** Literature shows a convergence that IT strategies designed to serve enterprise clients must be closely integrated with organizational goals and client needs, and that digital strategy success is contingent on an organization's capacity for innovation (Bharadwaj, 2000; Davenport, 2013; Chen & Wang, 2020).
- **Digital Innovation:** Multiple studies (Teece et al., 1997; Martin et al., 2016; Tjahjadi et al., 2022) identify digital innovation as the dynamic capability that enables organizations to adapt, differentiate, and achieve superior performance in fast-evolving markets.
- **Business Performance:** Performance is multidimensional, covering financial outcomes, customer experience, process efficiency, and learning capability (Kaplan & Norton, 1996). The literature collectively asserts that innovative capacity is essential to transform strategic frameworks into tangible, value-creating initiatives (Pratono, 2020, MIX Journal).

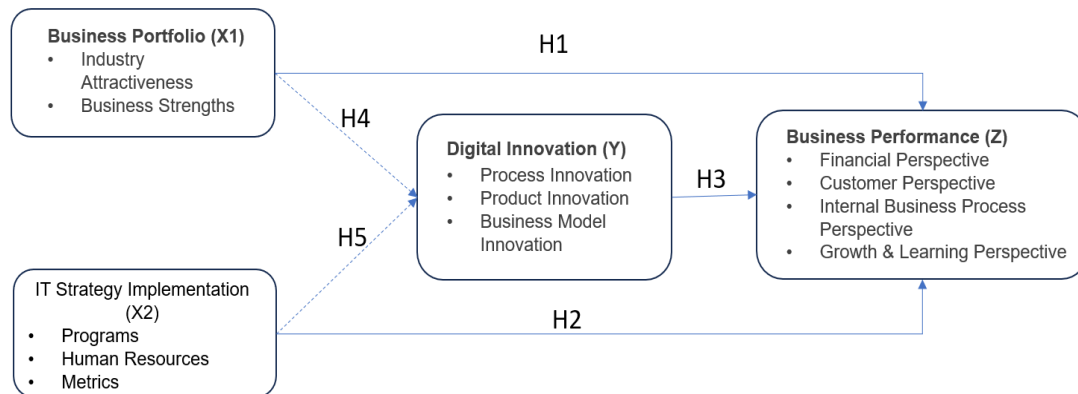
Taken together, the literature highlights a critical synthesis: digital innovation acts as a key mediator that links the configuration of business portfolios and B2B IT digital strategies to improved business performance. While strategic clarity and resource allocation provide the foundation, it is the ability to innovate that determines whether these elements translate into sustainable competitive advantage—particularly for state-owned enterprises in emerging markets, where digital transformation is both an opportunity and a challenge.

### **Development of Hypotheses**

Building on the literature synthesis above, the development of hypotheses in this study is guided by a comparative and integrative understanding of how business portfolio, B2B IT digital strategy, and digital innovation collectively influence business performance, especially in the context of state-owned enterprises in emerging markets.

- 1) H1: Business portfolio positively influences business performance.
- 2) H2: B2B IT Digital Strategy positively influences Business Performance
- 3) H3: Digital Innovation positively influences Business Performance.
- 4) H4: The relationship between business portfolio and business performance is significantly mediated by digital innovation.
- 5) H5: The influence of B2B IT digital strategy on business performance is mediated by digital innovation

The model derived from the hypotheses is shown as follows:



Source: The research model is constructed based on the synthesis of previous study

**Figure 1: Research Model**

## METHOD

This study uses a quantitative approach, combining descriptive and explanatory methods to achieve the research objectives. The descriptive analysis explores the characteristics and relationships of the main variables: business portfolio, B2B IT digital strategy, digital innovation, and business performance. The explanatory analysis tests the hypothesized causal relationships among these variables using statistical methods.

The research focuses on PT Telkom Indonesia (Persero) Tbk, specifically its enterprise units undergoing digital transformation. Primary data were collected via structured questionnaires distributed to managerial-level staff responsible for digital strategies and innovation. Data collection was conducted from June to July 2024 to capture current transformation activities. A total of 136 valid responses were gathered using purposive sampling, targeting managers and internal stakeholders directly involved in business portfolios, B2B IT initiatives, and performance evaluation.

Data were analyzed using Partial Least Squares - Structural Equation Modeling (PLS-SEM) with SmartPLS version 4.0, suitable for studies involving latent variables and moderate sample sizes. The analysis followed two main stages:

### Measurement Model Evaluation:

- Convergent Validity: AVE > 0.5
- Reliability: Cronbach's Alpha and Composite Reliability > 0.7
- Discriminant Validity: HTMT ratio

### Structural Model Evaluation:

- Path Coefficients: Examining the strength and significance of relationships
- R<sup>2</sup> Values: Assessing model explanatory power
- Bootstrapping: 5,000 subsamples to test statistical significance

This approach provides a solid basis for analyzing how the alignment of strategic initiatives and innovation affects business performance in the context of digital transformation.

## RESULTS AND DISCUSSION

### Results

The survey was conducted across various business units within PT Telkom Indonesia, involving 136 managerial-level respondents. However, only 130 participants completed the survey questionnaire. The respondents provided feedback on indicators related to business portfolio strategy, B2B IT digital strategy, digital innovation, and business performance. Below is a summary of the respondents' characteristics:

**Table 2** Respondent Profile

| Respondent Role              | Number of respondents | Percentage |
|------------------------------|-----------------------|------------|
| Strategic Planning           | 49                    | 38%        |
| Digital Innovation Lead      | 31                    | 24%        |
| Enterprise Solution Manager  | 26                    | 20%        |
| Other (Marketing, Ops, etc.) | 23                    | 18%        |

*Source: Processed data (2024)*

A survey instrument utilizing a 5-point Likert scale was employed, with collected responses cleaned and organized for statistical processing. The results of the descriptive analysis, based on the average construct scores for each variable after processing the questionnaire responses, are as follows:

**Table 3** Construct Mean Scores

| No | Construct                       | Score | % of Threshold (3.39) | Category |
|----|---------------------------------|-------|-----------------------|----------|
| 1  | Business Portfolio (X1)         | 3.92  | 116%                  | High     |
| 2  | IT Strategy Implementation (X2) | 3.82  | 113%                  | High     |
| 3  | Digital Innovation (Y)          | 3.69  | 109%                  | Moderate |
| 4  | Business Performance (Z)        | 3.53  | 104%                  | Moderate |

*Source: Processed data (2024)*

- The growth of the B2B IT Services business remains relatively strong; however, the level of competition is also considerably high. Telkom possesses strong capabilities, supported by the competencies of its subsidiary, PT Sigma, which is further reinforced through partnerships with major vendors.
- According to the respondents, the IT services strategy is appropriate and has been translated into strategic initiatives and work programs, as well as effectively communicated
- Among the three dimensions of innovation—process, product, and business model—the lowest score was observed in business model innovation.
- Performance measurement was conducted using the Balanced Scorecard framework, which consists of four perspectives: financial, customer, internal processes, and learning & growth. The lowest scores were found in the financial and customer perspectives, which respondents perceived as not having met the expected targets

To evaluate the reliability and validity of the constructs used in this study, the measurement model (outer model) was assessed through three key indicators: Cronbach's Alpha ( $\alpha$ ), Composite Reliability (CR), and Average Variance Extracted (AVE). As shown in Table 4, all constructs demonstrate satisfactory levels of internal consistency and convergent validity.

**Tabel 4** Measurement Model Assessment

| Construct               | $\alpha$ | CR    | AVE   |
|-------------------------|----------|-------|-------|
| Business Portfolio      | 0.879    | 0.905 | 0.579 |
| B2B IT Digital Strategy | 0.871    | 0.902 | 0.652 |
| Digital Innovation      | 0.883    | 0.917 | 0.736 |
| Business Performance    | 0.899    | 0.923 | 0.630 |

Source: Processed data (2024)

Cronbach's Alpha values for all constructs exceed the threshold of 0.70, indicating strong internal consistency. Likewise, Composite Reliability (CR) values are all above 0.90, confirming that the indicators consistently reflect their corresponding latent variables. In terms of convergent validity, all constructs satisfy the recommended AVE threshold of 0.50 (Fornell & Larcker, 1981), with values ranging from 0.579 to 0.736—indicating that each construct captures a sufficient proportion of variance from its indicators. These findings confirm the adequacy of the measurement model for further structural analysis. Discriminant validity is also supported, as all HTMT ratios remain below the 0.85 benchmark, demonstrating clear construct separation and no multicollinearity issues. To assess the structural model, a bootstrapping procedure with 5,000 iterations was applied, and the hypothesis testing results are summarized as follows:

**Tabel 5** Structural Model and Hypothesis Testing

| Path  | Beta ( $\beta$ ) | T-Statistic | P-Value | Result        |
|---|------------------|-------------|---------|---------------|
| Business Portfolio → Business Performance                                       | 0.122            | 1.145       | 0.253   | Not Supported |
| B2B IT Digital Strategy → Business Performance                                  | 0.375            | 3.748       | 0.000   | Supported     |
| Digital Innovation → Business Performance                                       | 0.421            | 4.261       | 0.000   | Supported     |
| Mediation (Business Portfolio → Digital Innovation → Business Performance)      | Indirect Effect  | T = 3.087   | 0.002   | Supported     |
| Mediation (B2B IT Digital Strategy → Digital Innovation → Business Performance) | Indirect Effect  | T = 2.621   | 0.028   | Supported     |

Source: Processed data (2024)

The coefficient of determination ( $R^2$ ) for Business Performance was found to be 0.574, reflecting that the model explains approximately 57.4% of the variability in this construct. In comparison, the  $R^2$  value for Digital Innovation was slightly higher, at 0.598.

### Key Findings

- 1) Business Portfolio's Limited Direct Contribution to Business Performance. The findings show that Business Portfolio does not directly influence Business Performance ( $\beta = 0.122$ ,  $p = 0.253$ ), implying that strategic configuration without complementary actions like innovation fails to deliver significant improvements.
- 2) B2B IT Digital Strategy's Strong Impact on Performance. A positive and highly significant relationship ( $\beta = 0.375$ ,  $p < 0.001$ ) was identified, demonstrating that targeted digital initiatives toward enterprise markets substantially drive business success.
- 3) Digital Innovation's Direct Contribution to Business Performance. Digital Innovation exhibits a robust positive influence on Business Performance ( $\beta = 0.421$ ,  $p < 0.001$ ), positioning it as a key enabler of competitive advantage.
- 4) Innovation as a Mediator between Business Portfolio and Performance. The mediation analysis ( $t = 3.087$ ,  $p = 0.002$ ) supports the role of innovation in converting portfolio strategies into actual organizational performance gains.
- 5) Innovation Mediates B2B IT Digital Strategy and Performance Relationship. The indirect effect ( $t = 2.621$ ,  $p = 0.028$ ) emphasizes that the strategic benefits of B2B IT Digital Strategy are realized through the firm's capacity to innovate effectively.

### Discussion

The descriptive analysis indicates that PT Telkom Indonesia has successfully implemented its business portfolio and B2B IT digital strategy, as evidenced by high average scores from respondents. These outcomes reflect the company's commitment to ongoing digital transformation, such as the "Five Bold Moves" initiative and the strategic integration of subsidiaries like PT Sigma. However, digital innovation—particularly in business model innovation—received only moderate scores, highlighting a gap in Telkom's ability to translate strategy into novel value-creation mechanisms. Business performance was also rated as moderate, especially in financial and customer outcomes, suggesting that strategic and innovation efforts have not yet fully materialized into measurable results.

- The analysis found no significant direct relationship between Business Portfolio and Business Performance ( $p = 0.253$ ). This finding supports the argument by Rezaei and Ortt (2018) that diversification alone is insufficient without effective execution and innovation. A complex portfolio, if not strategically managed, may dilute focus and reduce operational efficiency.
- There is a strong positive relationship between B2B IT Digital Strategy and Business Performance ( $\beta = 0.375$ ,  $p < 0.001$ ). This aligns with prior studies by Chen & Wang (2020) and Bharadwaj (2000), which emphasized that well-aligned digital strategies enhance organizational responsiveness, productivity, and customer engagement in B2B contexts.
- Digital Innovation shows the strongest effect on Business Performance ( $\beta = 0.421$ ,  $p < 0.001$ ). This supports both theoretical foundations (Teece et al., 1997) and empirical studies (Tjahjedi et al., 2022), confirming that innovation serves as a dynamic capability that helps firms navigate uncertainty and achieve sustained performance outcomes.
- Digital Innovation significantly mediates the relationship between both Business Portfolio and B2B IT Digital Strategy with Business Performance. This finding reinforces Strategic Innovation Theory by highlighting innovation as the operational bridge between strategic intent and outcome realization. Without an embedded culture of innovation, even well-



formulated strategies may not yield substantial performance impact. This study contributes new insights by applying strategic innovation frameworks to a state-owned enterprise (SOE) in an emerging market—an area underrepresented in the literature. It demonstrates that, similar to private firms, SOEs must prioritize innovation capacity to make their strategic shifts effective. Moreover, the research underscores that strategy execution must be dynamic and adaptive; organizations must continuously recalibrate strategies through innovation to maintain relevance in fast-changing environments.

## CONCLUSION

This study examined the influence of business portfolio structure and B2B IT digital strategy on business performance at PT Telkom Indonesia, with digital innovation serving as a mediating variable. Anchored in the Resource-Based View and Strategic Innovation Theory, the findings reveal that while the digital strategy has a strong direct impact on performance, business portfolio diversification alone does not yield significant results unless supported by innovation.

Digital innovation plays a pivotal mediating role, validating its function as a bridge between strategic intent and tangible outcomes. The moderate levels of innovation and performance observed suggest that Telkom must enhance its innovation capacity—particularly in business model innovation—to fully capitalize on its strategic initiatives. Practically, this implies that organizations must not only craft robust strategies but also embed innovation as a core organizational capability.

For Telkom Indonesia, sustained competitiveness in the dynamic B2B digital landscape will depend on continued investment in innovation platforms, digital R&D, and adaptive execution. Ultimately, the study reinforces that the journey from strategy to performance is shaped by an organization's ability to innovate consistently and strategically.

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