Co-Creation IT Strategy in Telecommunication Companies: A Systematic Literature Review

Febri Egasmara[1], Ratih Hurriyati[2], Agus Rahayu[3], Lili Adi Wibowo[4], Sulastri Sulastri[5]

[12345]Universitas Pendidikan Indonesia, Bandung, Indonesia
febri@upi.edu

Abstract. An effective Information Technology (IT) strategy is essential for improving firm performance, particularly in the highly competitive telecommunications industry. This study investigates the concept of co-creation IT strategy, where companies collaborate with customers, suppli-ers, and business partners to jointly develop innovative IT-based solutions. Employing a Systematic Literature Review (SLR) method, this research analyzes 25 articles published between 2018 and 2024 sourced from Scopus, Web of Science, and Google Scholar. The findings reveal that co-creation practices significantly enhance product innovation, operational efficiency, and customer service quality. These improvements contribute positively to firm performance and sustainable competitive advantage. The study identifies key success factors such as mutual trust, transparent communication, technological adaptability, and stakeholder engagement. Meanwhile, challenges such as coordination complexity, resistance to change, and misalignment of goals are also noted. This research contributes by reinforcing the strategic relevance of co-creation in digital transformation, particularly in sectors where agility and responsiveness are critical. The results recommend that telecommunications firms proactively embed co-creation principles into their IT strategies to optimize value creation, user-centered innovation, and long-term performance improvement.

Keywords: Co-Creation, IT Strategy, Firm Performance, Telecommunication, Systematic Literature Review.

1 Introduction

The In response to technological changes and evolving customer needs, one emerging strategic approach is IT Co-Creation, a collaborative process between technology providers and end-users to create shared value in the telecommunications industry [1, 4]. Although this concept promises more innovative and responsive solutions, systematic studies examining its application in the telecommunications sector remain limited, with most existing research being fragmented case studies [3, 16]. Therefore, this article presents a systematic literature review to identify the strategies, impacts, challenges,

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and success factors of IT Co-Creation in the telecommunications sector and proposes a conceptual model based on thematic synthesis.

Previous studies have highlighted the importance of user involvement in system design to enhance alignment between technological solutions and user needs, where perceived ease of use and usefulness of technology encourage participation in collaborative systems like co-creation [1, 2]. However, challenges such as coordination complexity, internal resistance, and technological readiness remain major obstacles [3]. Meanwhile, co-creation has been shown to support business model innovation and improve competitiveness through flexibility and active user participation [4]. This research is designed to answer several main questions:

(1) What are the key elements of IT Co-creation strategy in telecommunications companies?
(2) How does IT Co-creation strategy contribute to firm performance improvement?
(3) What are the main challenges in implementing this strategy?
(4) What success factors support its effectiveness?

2. Methods

2.1 Literature Search and Selection Process

This study retrieved literature from Scopus, Web of Science, Google Scholar, and SINTA (2018–2024) using keywords such as "IT Co-creation," "Telecommunication Industry," "Firm Performance," and "Digital Innovation." Inclusion criteria required Scopus-indexed (Q1–Q3), relevant, empirical studies in English or Indonesian, while conceptual, irrelevant, and inaccessible articles were excluded. The selection process followed the PRISMA protocol—identification, screening, eligibility, and inclusion, resulting in 25 final articles, as illustrated in Figure 1.

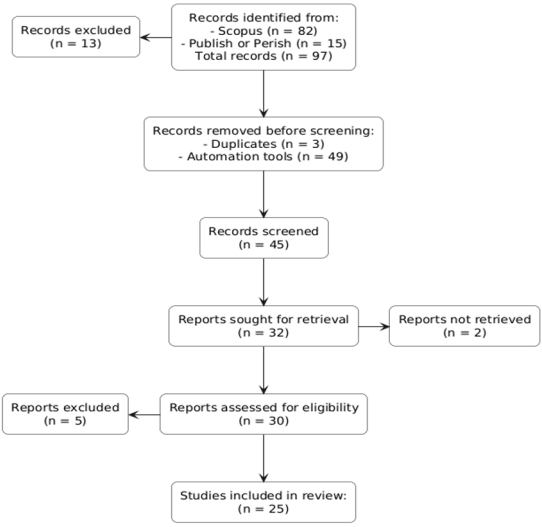

Fig. 1. PRISMA Diagram of the Literature Selection Process

Source: Author's Work

3. Results And Discussion

This study examines 25 scientific articles discussing IT Co-creation strategies in improving firm performance, particularly in the telecommunications sector, sourced from reputable journals (Q1–Q3) with diverse methodological approaches, geographic settings, and thematic focuses. The distribution of articles by year of publication is presented in Figure 2.

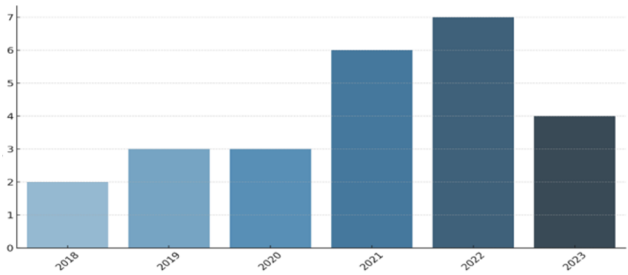

Fig. 2. Distribution of articles by year of publication (2018–2023)
Source: Author's Work

3.1 Thematic Analysis

Based on thematic synthesis, six key themes emerged reflecting the core dimensions of IT co-creation strategies in the telecommunications industry.

1. **Stakeholder Participation**
   Active involvement of customers, partners, and suppliers is central to value co-creation. Stakeholder Theory affirms that value creation extends beyond internal processes through external collaboration [11, 12], leading to higher service customization and market responsiveness [14, 15].

2. **Technological Support**
   AI, Big Data, and Business Intelligence enable real-time analysis and collaboration in co-creation processes [3, 17]. Based on TAM, user adoption depends on perceived ease of use and usefulness [2], with studies confirming positive correlations between AI and BI adoption and operational efficiency.

3. **Organizational Culture**
   An agile, innovation-driven culture enhances adaptability and stakeholder integration [4, 6]. Dynamic Capabilities Theory supports this, emphasizing the reconfiguration of internal competencies in response to environmental changes [9, 10].

4. **Operational Efficiency**
   Co-creation reduces operational costs and optimizes processes by integrating external inputs. RBV positions IT infrastructure, data analytics, and knowledge as strategic resources supporting performance [8].

5. **Customer Satisfaction**
   Customer satisfaction is both a driver and outcome of co-creation. Engaged customers who perceive technology as useful and easy to use demonstrate higher loyalty, reflecting TAM and Stakeholder Theory [2, 12, 13].

6. **Competitive Advantage**
   A well-executed co-creation strategy generates sustainable competitive advantage through unique innovations and strategic positioning, supported by both RBV and Dynamic Capabilities Theory [6, 8, 16].

3.2 Visualization of Bibliometric Analysis Results

Bibliometric visualization provides a graphical representation of scientific publication data to identify research trends, collaboration patterns among authors or institutions, and frequently occurring topics or keywords. Through this approach, researchers can better understand the structure, patterns, and development of knowledge within a specific field, while also identifying potential research gaps. Fig. 3 presents the VOSviewer network visualization of the 25 selected articles, showing that research on IT co-creation in the telecommunications sector primarily focuses on improving firm performance.

Key terms such as “performance,” “IT strategy,” “alignment,” and “digital transformation” dominate the map, reflecting the strategic role of IT in supporting business objectives. The identified clusters represent themes of open innovation, strategic frameworks, practical implementation, and governance, highlighting the integration of technological and managerial aspects. Overall, these findings suggest that IT co-creation is not merely a technical initiative but a collaborative managerial strategy that drives innovation and enhances firm performance through stakeholder involvement and strategic alignment.

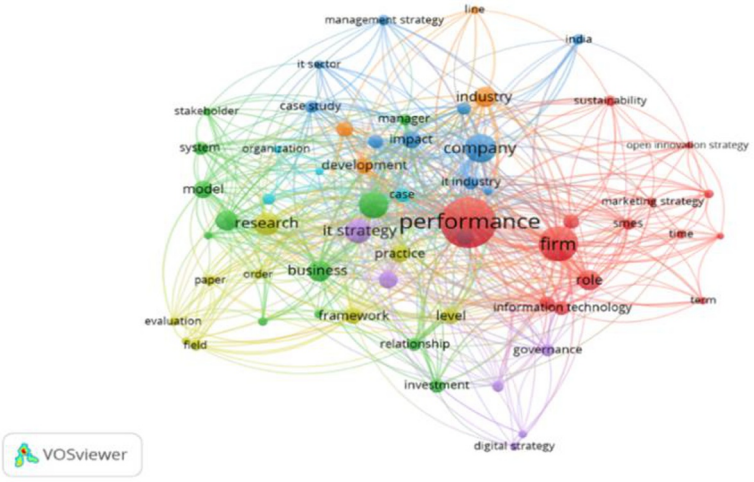

Fig. 3. VOSviewer Network Visualization

Source: Author’s Work

4. Conclusion

This study confirms that IT Co-creation strategy is a significant driver of innovation and competitiveness in the telecommunications industry. Key success factors include stakeholder engagement, technological support, organizational culture, and agile leadership, while major challenges involve coordination complexity, resistance to change, and misalignment between IT and business units. The findings recommend that telecommunications firms proactively embed co-creation principles into their IT strategies to optimize value creation and long-term performance improvement. Future research should explore longitudinal and cross-sector studies to further validate the proposed conceptual model.

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