COSTING: Journal of Economic, Business and Accounting
Volume 8 Nomor 6, Tahun 2025
e-ISSN: 2597-5234

TRANSACTION COST THEORY IN DIGITAL, COLLABORATIVE, AND EMERGING MARKET CONTEXTS: A SYSTEMATIC LITERATURE REVIEW (2020–2025)

Lydia Yuntika[1], Sambas Ade Kesuma[2], Iskandar Muda[3], Firman Syarif[4]
Master of Accounting, Faculty of Economics and Business,
University of North Sumatra
E-mail: lydiayuntika@gmail.com[1]

ABSTRACT

This study conducts a systematic literature review of recent applications of Transaction Cost Theory (TCT) in digital, collaborative, and emerging market contexts between 2020 and 2025. Using Scopus-indexed journal articles screened through a PRISMA-guided process, this review synthesizes how TCT has been employed to explain organizational behavior amid technological transformation, inter-organizational collaboration, and institutional complexity in developing economies. The findings reveal that digital technologies reshape transaction costs by reducing traditional search, negotiation, and monitoring costs while introducing new risks associated with data governance, cybersecurity, and algorithmic oversight. The literature also highlights how collaboration in supply chains, international business, and interfirm alliances depends on hybrid governance mechanisms that combine relational and formal controls. In emerging markets, institutional voids, corruption risks, and legitimacy pressures further influence governance choices and transaction costs. This review identifies key research gaps related to digital auditing, sustainability governance, and cross-country comparisons, offering a future research agenda for expanding TCT in contemporary organizational landscapes.

Keywords: Transaction Cost Theory; Digital Transformation; Collaboration; Emerging Markets; Governance; PRISMA.

INTRODUCTION

Transaction Cost Theory (TCT) has long served as a foundational framework for understanding how organizations structure exchanges and governance mechanisms amid uncertainty and opportunism. However, global business environments have undergone profound changes in recent years. Digital technologies have created new forms of interdependence, collaboration across organizational boundaries has intensified, and emerging markets have become central to global value chains. These shifts alter transaction characteristics and require new governance mechanisms, prompting scholars to revisit TCT in contemporary contexts.

Digital transformation reduces many traditional transaction costs but introduces new complexities such as data privacy risks, digital monitoring challenges, and algorithmic information asymmetry. Meanwhile, inter-organizational collaboration—particularly in supply chains and international alliances—requires balancing relational governance with formal controls to manage coordination and safeguard interests. Emerging markets add further layers of complexity, where institutional voids, corruption risks, and weak regulatory enforcement influence governance design.

Despite numerous studies examining these phenomena, no systematic effort has been made to integrate recent TCT applications across digital, collaborative, and emerging market contexts. Considering the rapid evolution of transaction environments, a synthesis of contemporary evidence is needed to map conceptual developments and identify new theoretical directions.

This review addresses that need by synthesizing Scopus-indexed studies published between 2020 and 2025 and addressing the following questions:

RQ1: How does recent literature apply TCT to explain governance in digital and technology-mediated transactions?

RQ2: How does TCT inform our understanding of collaboration and inter-organizational relationships?

RQ3: How does institutional complexity in emerging markets shape transaction costs and governance choices?

RQ4: What conceptual and methodological gaps remain for future research?

THEORETICAL BACKGROUND

Transaction Cost Theory (TCT) provides an analytical foundation for understanding how organizations structure exchanges under conditions of uncertainty, bounded rationality, and potential opportunism. Originally developed in economic contexts, TCT has been progressively extended to organizational studies, particularly as firms navigate increasingly complex interdependencies, digital infrastructures, and cross-border transactions. The core insight of TCT is that organizations choose governance mechanisms—whether hierarchical, market-based, or hybrid—to minimize the total costs of coordinating, monitoring, and safeguarding transactions.

In contemporary environments, transaction costs no longer arise solely from physical or contractual exchanges but also from virtual interactions, digital platforms, and data-driven coordination. Digital transformation reduces certain transaction costs—such as search, matching, and communication—yet amplifies others, including cybersecurity risks, data verification challenges, and algorithmic opacity. Digital governance therefore creates new forms of uncertainty that reshape contracting behavior and control systems.

Inter-organizational collaboration also expands the relevance of TCT. Alliances, supply chain partnerships, international joint ventures, and platform-based ecosystems all involve ongoing coordination that cannot rely purely on price mechanisms. Trust, relational norms, and technological integration now interplay with formal controls to reduce opportunism. In emerging markets, transaction costs are further shaped by institutional voids, regulatory unpredictability, and corruption risks, leading firms to adopt governance structures that compensate for weak external institutions.

This evolving landscape positions TCT as a flexible theoretical lens for understanding how firms configure governance systems in response to digital complexity, interdependence, and institutional uncertainty. Rather than viewing transaction costs as static, contemporary research increasingly emphasises their dynamic nature and their interaction with technological and institutional change.

METHOD

This study adopts a Systematic Literature Review (SLR) approach guided by the PRISMA 2020 framework to ensure transparency and analytical rigor. The review focuses on peer-reviewed journal articles published between 2020 and 2025 that apply Transaction Cost Theory (TCT) in digital, collaborative, or emerging-market contexts. Scopus was selected as the primary database due to its comprehensive indexing of reputable journals in management, governance, and organizational studies.

The search process combined conceptual terms related to transaction costs with keywords capturing digital transformation, inter-organizational collaboration, and emerging-market governance. The search strategy was intentionally broad to capture diverse applications of TCT across organizational settings. Only English-language journal articles were included, while conference papers, book chapters, dissertations, and non-scholarly materials were excluded to maintain the quality and comparability of evidence.

Following the removal of duplicates, articles were screened by title and abstract to ensure theoretical alignment with TCT and relevance to governance, coordination, or digital environments. Full-text assessments were conducted to confirm conceptual consistency and methodological adequacy. Studies were retained if they explicitly used TCT as a theoretical lens or analytical foundation in examining transaction costs, governance structures, or coordination mechanisms. Articles that discussed transaction costs merely in passing or without theoretical grounding were excluded.

A total of 18 studies met the eligibility criteria and formed the final dataset. For each article, key information—context, theoretical contributions, governance mechanisms, digital transformations, and empirical findings—was extracted. The analysis followed an interpretive thematic synthesis approach, which is suitable for integrating heterogeneous research contexts. Instead of quantitative aggregation, the synthesis focused on identifying recurring conceptual patterns and thematic clusters that reflect how contemporary scholarship extends TCT in digital, collaborative, and emerging-market environments.

RESULT AND DISCUSSION

Result

The synthesis of the 18 selected studies reveals a broad and evolving application of Transaction Cost Theory across digital environments, collaborative networks, and emerging-market contexts. The findings indicate that TCT has moved beyond its traditional focus on entry modes and contracting to encompass more complex forms of coordination shaped by technological and institutional transformations.

A dominant theme across the studies concerns the reconfiguration of transaction costs in digital ecosystems. Digital technologies—such as analytics, automation, and digital platforms—simplify information exchange and reduce classical coordination costs. Several studies show that digital infrastructures enhance transparency and streamline collaboration, enabling firms to operate with lower monitoring burdens. However, digitalization also introduces new transaction costs associated with data governance, security, system interoperability, and dependency on algorithmic processes. For example, digital platforms reduce search and negotiation costs but create vulnerabilities related to data ownership and asymmetric control by platform operators. This shift illustrates that digital transformation does not eliminate transaction costs but redistributes and reshapes them.

Another significant pattern in the literature is the centrality of collaboration and inter-organizational coordination. Studies on supply chain partnerships, green supplier integration, cross-border alliances, and franchise networks consistently demonstrate that successful cooperation depends on the ability to mitigate opportunism and manage performance ambiguity. TCT is used to explain why firms invest in monitoring systems, shared standards, and joint decision-making routines to maintain collaborative efficiency. In some contexts, relational governance—grounded in trust, shared norms, and repeated interactions—emerges as a substitute or complement to formal control mechanisms, especially when uncertainty is high or enforcement institutions are weak.

The findings also highlight how transaction costs are shaped by the institutional characteristics of emerging markets. Several studies emphasize that regulatory unpredictability, corruption risks, and institutional voids increase the need for firms to internalize control mechanisms or negotiate higher levels of ownership when entering new markets. Firms operating in such environments adopt governance structures that provide greater protection against political hazards, weak contract enforcement, and partner opportunism. Transaction cost logic thus becomes intertwined with institutional theory, as firms adapt their governance strategies not only to efficiency considerations but also to legitimacy concerns and institutional constraints.

Hybrid governance emerges as another recurring theme. Many studies illustrate that organizations increasingly mix market-based and hierarchical mechanisms to balance flexibility with control. Family firms, digital service providers, and international enterprises often rely on hybrid structures—combining relational trust, technological coordination, and formal oversight—to manage complex transactions. TCT helps explain why these hybrid arrangements are efficient responses to situations where neither pure hierarchy nor pure markets can sufficiently manage uncertainties.

Collectively, these findings suggest that TCT remains a robust framework, but its contemporary applications extend well beyond traditional assumptions of stable transactions and rational contracting. Instead, transaction costs are dynamic, shaped by technological change, evolving collaborative forms, and institutional diversity. This expanded understanding of TCT reflects a shift toward viewing governance not merely as a mechanism for minimizing costs, but as an adaptive response to digital complexity, interdependence, and global institutional variation.

Discussion

The findings demonstrate that TCT remains relevant but must evolve to address contemporary governance challenges. Digitalization introduces new forms of uncertainty not anticipated in classical TCT, suggesting the need for constructs such as digital asset specificity, data integrity risks, and algorithmic opportunism. Collaboration studies highlight that governance is no longer a simple market–hierarchy dichotomy; hybrid structures that mix relational and contractual mechanisms dominate modern organizations. Evidence from emerging markets emphasizes that institutional conditions shape transaction costs as much as economic factors do, calling for deeper integration of institutional economics with TCT.

Overall, the literature shows that TCT is transitioning from a narrow efficiency-based framework to a broader governance theory capable of explaining complex, technology-enabled, and cross-border interactions.

Research Gaps And Future Directions

The review highlights several gaps that present opportunities for further development of Transaction Cost Theory in digital, collaborative, and emerging-market contexts. Although many studies acknowledge the growing influence of digital technologies, empirical evidence on how algorithmic tools, data governance structures, and AI-driven decision systems reshape transaction costs remains limited. Future research could explore how machine learning, automated contracting, and blockchain auditing alter monitoring burdens, reduce opportunism, or introduce new dependencies that shift governance choices.

Another gap concerns the behavioral and relational dimensions of collaboration. While several studies refer to trust and social norms, few examine how cognitive biases, cultural expectations, or historical ties influence transaction costs within long-term partnerships. These behavioral aspects become particularly relevant in emerging markets, where informal institutions often fill governance voids. Integrating insights from behavioral governance, psychology, or relational contracting may enrich TCT by capturing how human factors affect coordination and control.

Institutional environments also remain an understudied area. Although emerging markets feature prominently in the sample, scholars have only begun to examine how institutional complexity—ranging from corruption pressures to political hazards—interacts with digital infrastructures and collaborative arrangements. Comparative studies across institutional contexts could reveal how different regulatory regimes, levels of digital maturity, or anti-corruption mechanisms shape transaction cost structures and governance preferences.

The dynamic nature of transaction costs also warrants further attention. Most studies treat transaction costs as relatively stable or measurable at a single point in time, yet digital ecosystems and inter-firm collaborations evolve rapidly. Longitudinal designs may provide deeper insights into how governance capabilities develop, how monitoring mechanisms adapt, and how firms renegotiate relationships as uncertainty changes.

Lastly, the literature reveals a need for more methodological diversity. Quantitative studies dominate the field, but the complexity of digital and collaborative transactions may require richer qualitative designs, mixed-method approaches, and digital trace data to capture nuanced changes in coordination, monitoring, and control. Future work could also leverage simulations or experimental settings to explore how actors respond to shifting transaction cost pressures in real time.

CONCLUSION

This review demonstrates that Transaction Cost Theory continues to offer valuable insights for understanding how organizations navigate digital complexity, inter-organizational collaboration, and emerging-market uncertainty. Across the 18 studies analyzed, TCT serves as a flexible framework that explains variations in governance structures, monitoring mechanisms, and strategic coordination choices. Contemporary applications of

TCT reveal that digital technologies alter the distribution of transaction costs rather than eliminating them, creating new forms of dependency and shifting the balance between formal controls and relational mechanisms.

The findings also highlight the growing importance of collaborative governance as firms operate within interconnected ecosystems that require shared decision-making, data integration, and mutual safeguards against opportunism. In emerging markets, transaction costs are further shaped by institutional voids and governance risks, prompting organizations to adopt hybrid structures that blend hierarchy, market coordination, and relational norms.

Overall, the review underscores that TCT remains relevant but is undergoing conceptual expansion. Modern applications emphasize the adaptive, evolving, and context-dependent nature of transaction costs in a world characterized by digital transformation, global collaboration, and institutional diversity. By synthesizing recent developments, this study contributes to a deeper understanding of how transaction costs shape organizational behavior and identifies avenues for future research that can strengthen and extend the theory across disciplines and contexts.

REFERENCES

1. Le Y, Zhang S, Teng X. The Double-Edged Sword of Green Supplier Integration: The Moderating Effect of Organizational Compatibility. *Bus Ethics, Environ Responsib*. Published online June 9, 2025. doi:10.1111/beer.12850
2. Rahaman MM, Karim MR, Sobhan R. Does auditor–client geographic proximity matter? New evidence from an emerging market. *J Account Organ Chang*. 2025;21(7):29-55. doi:10.1108/JAOC-10-2024-0352
3. Simoes S, Talaulicar A, Verbeke A. Mandating a common language in the multinational enterprise: The case of Cummins in India. *Asian Bus Manag*. 2025;24(2):187-217. doi:10.1057/s41291-024-00282-5
4. Sorensen B. International entrepreneurship: Insights from Laos, Cambodia, and Vietnam. *Asian J Bus Res*. 2024;14(1):33-53. doi:10.14707/ajbr.240164
5. Li B, Xu C, Wang Y, Zhao Y, Zhou Q, Xing X. Digital transformation, supply chain collaboration, and enterprise growth: Theoretical logic and Chinese practice. *Eur Res Manag Bus Econ*. 2024;30(2):100249. doi:10.1016/j.iedeen.2024.100249
6. Kerner R, Kitsing M. SMALL IS BEAUTIFUL AND IMPORTANT: ECONOMIES AND FIRMS TRADING IN DIGITAL SERVICES. *J Bus Econ Manag*. 2023;24(1):93-111. doi:10.3846/jbem.2023.18585
7. Ho TDA, Dang TC, Tran VH, Trinh TH, Banh TT. Factors affecting collaboration in agricultural supply chain: A case study in the North Central region of Vietnam. *Cogent Bus Manag*. 2023;10(3). doi:10.1080/23311975.2023.2256072
8. Pongelli C, Majocchi A, Bauweraerts J, Sciascia S, Caroli M, Verbeke A. The impact of board of directors' characteristics on the internationalization of family SMEs. *J World Bus*. 2023;58(2):101412. doi:10.1016/j.jwb.2022.101412
9. Troisi R, Alfano G. Proximity and inter-firm corruption: A

transaction cost approach. *Small Bus Econ*. 2023;60(3):1105-1120. doi:10.1007/s11187-022-00649-y

10. Giachetti C, Peprah AA. How much control do firms exercise over their resources when entering emerging markets? The influence of institutional voids on entry mode degree of control. *BRQ Bus Res Q*. 2022;25(2):122-142. doi:10.1177/2340944420924402
11. Milhomem L, Sincorá L, Oliveira M, Brandão M. The Impact of Business Analytics on Collaborative Advantage: the mediating role of managing transaction costs. *Brazilian Bus Rev*. 2022;19(1):59-77. doi:10.15728/bbr.2022.19.1.4
12. Hennart JF, Sutherland D. International business research: The real challenges are data and theory. *J Int Bus Stud*. 2022;53(9):2068-2087. doi:10.1057/s41267-022-00566-y
13. Hennart JF. How much is new in Brouthers et al.'s new foreign entry modes, and do they challenge the transaction cost theory of entry mode choice? *J Int Bus Stud*. 2022;53(9):2116-2132. doi:10.1057/s41267-022-00523-9
14. Allen MMC, Wood G, Demirbag M. Developing theoretically informed typologies in international business: Why we need them, and how to do it. *J Int Bus Stud*. 2022;53(9):2133-2146. doi:10.1057/s41267-022-00529-3
15. Jiménez A, Lupton NC. Terrorism hazard and infrastructure projects: The moderating role of home experience and institutions. *J Bus Res*. 2021;135:721-730. doi:10.1016/j.jbusres.2021.07.012
16. Mysen T, Tronvoll B. The influence on export performance of performance ambiguity among foreign sales agents. *Eur Bus Rev*. 2020;32(2):277-296. doi:10.1108/EBR-02-2018-0041
17. Glaser M, Jirasek M, Windsperger J. Ownership Structure of Franchise Chains: Trade-Off Between Adaptation and Control. *Int J Econ Bus*. 2020;27(3):357-375. doi:10.1080/13571516.2020.1718460
18. Sartor MA, Beamish PW. Private Sector Corruption, Public Sector Corruption and the Organizational Structure of Foreign Subsidiaries. *J Bus Ethics*. 2020;167(4):725-744. doi:10.1007/s10551-019-04148-1