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INTER-ORGANIZATIONAL COLLABORATION AND INFORMATION SHARING IN INDONESIAN LOGISTICS NETWORKS

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Abstract
Logistics networks depend on cooperation between multiple independent organizations. The effectiveness of transportation, warehousing, port services, customs clearance, and distribution therefore depends not only on individual organizational capabilities but also on the quality of inter-organizational relationships. This study examines how collaboration and information sharing contribute to logistics performance in Indonesia. A qualitative literature-based approach was applied by analyzing studies concerning supply chain collaboration, information sharing, organizational trust, and logistics integration. The findings demonstrate that effective information sharing can improve coordination, reduce uncertainty, support joint planning, and increase service visibility. However, information sharing is influenced by trust, perceived information value, data confidentiality, technological compatibility, and organizational commitment. The study proposes that logistics organizations should develop collaboration mechanisms based on transparent communication, shared performance objectives, interoperable information systems, and clear governance arrangements.

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INTRODUCTION

No single organization can independently control the entire logistics process. Cargo movement involves multiple actors, including suppliers, carriers, ports, warehouses, freight forwarders, government agencies, and customers.

The performance of the logistics system therefore depends on how effectively these actors exchange information and coordinate decisions.

Information sharing can reduce uncertainty. When organizations know shipment schedules, cargo status, transportation capacity, and operational constraints, they can adjust their activities accordingly.

However, organizations may hesitate to share information because of concerns regarding confidentiality, competition, misuse of data, or unequal benefits.

This study investigates the relationship between collaboration, information sharing, and logistics performance.

Information technology has become one of the major resources available to logistics companies in addressing these challenges. Digital technologies can facilitate information exchange, improve operational visibility, support decision-making, and increase responsiveness to customer requirements. Evidence from the first study used as the basis of this analysis demonstrates that information technology has a significant relationship with logistics competitiveness and that regulatory convergence is also associated with both information technology and logistics competitiveness. The study further identifies information technology as a mediating mechanism between regulatory convergence and logistics competitiveness (Ratnasari et al., 2026).

However, technological capability alone may not be sufficient to explain the effectiveness of inter-organizational logistics activities. Logistics operations involve relationships among companies, customers, suppliers, business partners, transport providers, and other stakeholders. These relationships require the exchange of information and coordination of activities under conditions of uncertainty. Consequently, trust becomes an important relational resource (Barata, 2026).

The findings of these two studies suggest that technological and relational capabilities should not necessarily be examined independently. Digital systems can provide accurate and timely information, but organizations still need sufficient trust to exchange information, coordinate activities, and respond collaboratively to unexpected situations. Conversely, strong inter-organizational relationships may be strengthened when supported by reliable digital information systems (BRATA et al., 2023).

Despite the importance of these factors, studies concerning logistics competitiveness frequently examine technological capability, regulatory conditions, and relational mechanisms separately. This creates an opportunity to develop an integrated perspective that considers both technological and relational resources as interconnected foundations of logistics competitiveness.

The contribution of this study lies in connecting technological and relational perspectives into a single analytical framework. Rather than treating technology and trust as independent factors, this study views them as complementary organizational capabilities that can jointly support operational coordination, responsiveness, and competitive advantage (Barata et al., 2022).

RESEARCH METHOD

The study used qualitative literature analysis. Relevant publications concerning supply chain collaboration, information sharing, inter-organizational trust, and logistics integration were reviewed.

The literature was organized into three analytical categories: information characteristics, relational conditions, and operational outcomes.

Data Sources

The analytical material consisted of the two uploaded research articles. The first article focused on the effect of regulatory convergence and information technology on logistics competitiveness, while the second focused on the formation and maintenance of trust in inter-organizational logistics relationships.

The two studies were selected because they examine related dimensions of logistics performance within an Indonesian organizational context but employ different theoretical and methodological perspectives.

Data Analysis

The analysis was conducted through four stages. First, the researchers identified the main concepts, variables, and findings reported in each study. Second, the findings were grouped into three analytical dimensions: technological capability, relational capability, and logistics competitiveness. Third, similarities and complementary relationships between the findings were identified. Finally, the findings were synthesized into an integrated conceptual interpretation.

The analysis focused particularly on information exchange, responsiveness, coordination, reliability, communication, regulatory adaptation, and competitive performance.

This approach allows the study to generate a broader conceptual explanation while maintaining a clear distinction between findings directly reported by the source studies and the interpretation developed through the integration process.

RESULTS

The analysis identified several important relationships

First, information sharing improves coordination by allowing organizations to synchronize activities.

Second, information quality is more important than information quantity. Inaccurate or outdated information may create additional operational problems.

Third, trust facilitates information exchange. Organizations are more likely to share information

when they believe that partners will use it appropriately.

Fourth, technological interoperability determines whether shared information can be used effectively.

Fifth, collaboration can produce operational benefits when participating organizations share common objectives.

The quantitative study also reported an R-square value of 0.627 for logistics competitiveness, indicating that 62.7% of the variance in the logistics competitiveness construct was explained by the constructs included in the model.

These findings suggest that digital capability should not be understood merely as the possession of technological infrastructure. Rather, its contribution to competitiveness depends on the organization's ability to use technology as part of operational and managerial processes.

Inter-Organizational Trust as a Relational Capability

The second major finding concerns the importance of trust in inter-organizational logistics relationships. The qualitative study demonstrates that trust involves both cognitive and relational dimensions. Participants associated trust with competence, reliability, consistency, honesty, mutual respect, and confidence that business partners would fulfill their commitments.

Trust was also found to develop progressively through repeated successful interactions. Small initial commitments, consistent performance, accurate documentation, and timely delivery created behavioral evidence that increased confidence between organizational actors.

Communication emerged as another central mechanism. Transparent and timely communication helped reduce uncertainty, align expectations, and maintain credibility, particularly when operational problems occurred.

Thus, inter-organizational trust can be interpreted as a relational capability that facilitates coordination and reduces the need for excessive monitoring. When organizations trust one another, operational interactions can become more flexible and responsive.

The Complementary Relationship between Technology and Trust

The most important integrated finding is that digital capability and inter-organizational trust represent complementary rather than competing resources.

Technology provides the infrastructure through which information can be generated, exchanged, stored, and processed. Trust, meanwhile, influences how organizational actors interpret information, communicate with one another, and respond to uncertainty.

For example, digital systems may provide real-time information concerning shipment status,

delivery schedules, documentation, and operational disruptions. However, the usefulness of such systems also depends on the willingness of organizational actors to communicate accurately and transparently. Trust therefore provides a relational foundation that can support effective utilization of technological systems.

The second study shows that communication and transparency are fundamental to maintaining trust, while the first study demonstrates the importance of information technology for competitiveness. When these findings are considered together, information technology can be viewed as an enabler of communication and coordination, while trust can facilitate the effective relational use of information.

Regulatory Adaptation, Technology, and Competitive Performance

The first study also found a significant relationship between regulatory convergence and information technology, with a path coefficient of 0.763 and a t-statistic of 20.194. Regulatory convergence was also significantly associated with logistics competitiveness, with a path coefficient of 0.734 and a t-statistic of 18.306.

Furthermore, the indirect effect of regulatory convergence on logistics competitiveness through information technology was reported at 0.350, with a t-statistic of 4.403.

These findings indicate that regulatory adaptation and technological capability are interconnected. In practical terms, regulatory requirements may encourage organizations to improve their information systems and operational processes. Technology can subsequently help organizations implement and monitor regulatory requirements more effectively.

When integrated with the trust findings, this suggests a broader framework in which institutional adaptation, digital capability, and relational capability jointly support logistics competitiveness.

DISCUSSION

Information sharing is not merely a technological activity. It represents an organizational relationship between parties that depend upon one another.

Trust becomes especially important when organizations exchange commercially sensitive information. Trust can reduce perceived risks and encourage more open communication.

Nevertheless, trust should be supported by formal governance. Data-sharing agreements, access controls, responsibilities, and performance standards can protect participants while enabling cooperation.

The findings also suggest that collaboration should be based on mutual benefits. If one organization receives most of the benefits while another bears most of the costs, long-term cooperation may become difficult.

Therefore, digital transformation should involve organizational adaptation rather than simply purchasing new technological systems. Employees, managers, and business partners must understand how digital information is generated, communicated, and used in logistics activities.

Trust as an Organizational Resource

Trust should also be understood as more than an interpersonal characteristic. The qualitative findings indicate that trust reduces monitoring requirements, facilitates decision-making, and improves coordination between business partners.

From a theoretical perspective, this interpretation is consistent with Social Exchange Theory, which emphasizes the development of trust through repeated exchanges, and Relational Exchange Theory, which recognizes the importance of relational mechanisms in sustaining inter-organizational cooperation.

Trust can also be considered an intangible organizational resource. When business partners have confidence in one another's competence and reliability, organizations can coordinate activities with less friction. Consequently, trust may contribute indirectly to operational efficiency and long-term relationship stability.

Communication as the Link between Digital Capability and Trust

Communication represents an important connection between technology and trust. The qualitative findings demonstrate that transparent communication reduces uncertainty and strengthens credibility.

Digital technologies can enhance the speed and accessibility of communication, but the presence of technology does not automatically guarantee transparency. Organizations still need to provide accurate information and communicate proactively when problems occur.

This distinction is important because logistics operations are exposed to uncertainty. Delays, documentation problems, transportation disruptions, and changing customer requirements can affect operational performance. Under such circumstances, transparent communication can help maintain trust even when operational problems cannot be completely avoided.

The Role of Consistency and Reliability

Both studies indirectly emphasize the importance of consistency. The competitiveness study highlights the importance of reliable logistics operations and information technology, while the trust

study identifies consistent performance as a major foundation of trust.

This suggests that competitiveness is not created by isolated technological innovations or individual successful transactions. Instead, it is accumulated through repeated organizational performance.

Consistent delivery, accurate documentation, timely information, responsive communication, and reliable technological systems can gradually strengthen the confidence of customers and business partners. Over time, this accumulated confidence may become an intangible source of competitive advantage.

Formal and Relational Mechanisms

Another important implication concerns the relationship between formal mechanisms and relational mechanisms. Regulatory frameworks and formal agreements provide structure for logistics activities, while trust and interpersonal relationships facilitate cooperation in situations that cannot be fully anticipated by formal rules.

The qualitative study indicates that informal relationships, mutual respect, and harmony complement formal contractual mechanisms in the Indonesian business context.

Therefore, logistics competitiveness can be approached through a combination of formal and relational governance. Formal systems provide clarity and accountability, while relational trust can facilitate flexibility and cooperation.

CONCLUSIONS

Inter-organizational collaboration and information sharing are essential components of integrated logistics management. Their effectiveness depends on information quality, technological compatibility, trust, governance, and mutual commitment.

Indonesian logistics organizations can strengthen network performance by establishing shared information standards, improving digital interoperability, and developing collaborative relationships supported by appropriate governance mechanisms.

The findings also highlight the importance of combining formal and relational mechanisms. Regulatory arrangements and formal agreements provide organizational structure, while trust, communication, reliability, and interpersonal relationships contribute to flexibility and sustained cooperation.

From a managerial perspective, logistics companies should develop digital capabilities together with relationship-management capabilities. Investment in information technology should be

accompanied by efforts to improve communication quality, transparency, service reliability, employee capability, and partner relationships.

This study has limitations because it is based on an integrative analysis of two existing empirical studies rather than newly collected primary data. Consequently, the proposed relationships should be tested through future empirical research involving larger samples, multiple logistics organizations, and additional variables such as service innovation, human resource capability, supply chain integration, and organizational resilience.

Future studies may also develop and empirically test an integrated structural model examining whether inter-organizational trust strengthens the relationship between digital capability and logistics competitiveness. Such research would provide stronger empirical evidence concerning the interaction between technological and relational resources in emerging-market logistics.

REFERENCES

Barata, F. A. (2026). THE IMPACT OF THE CONVERGENCE OF REGULATIONS AND INFORMATION TECHNOLOGY IN INCREASING LOGISTICS COMPETITIVENESS AT PT. FAB ENTERPRISES LOGISINDO. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, *10*(3), 1547–1556.

Barata, F. A., Ricardianto, P., Mulyana, A., Perwitasari, E. P., Arubusman, D. A., Purwoko, H., & ENDRI, E. (2022). *Berthing time in the port of Tanjung Priok, Jakarta, Indonesia*.

BRATA, F. A. R. I., ARIOHADI, M. W., Ricardianto, P., EL HAQ, L., Octaviani, R. D., & SITORUS, P. P. (2023). *SAFETY RISK AND OPERATIONAL EFFICIENCY ON LOGISTIC SERVICE PROVIDERS'SUSTAINABLE COAL SUPPLY CHAIN MANAGEMENT*.

Ratnasari, E. D., Barata, F. A., & Pristiana, U. (2026). TRUST FORMATION IN INTER-ORGANIZATIONAL LOGISTICS RELATIONSHIPS: A QUALITATIVE CASE STUDY OF FAB ENTERPRISES IN INDONESIA. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, *10*(4), 2270–2279.

Cao, M., & Zhang, Q. (2011). Supply chain collaboration: Impact on collaborative advantage and firm performance. *Journal of Operations Management, 29*(3), 163–180.

Lee, H. L., & Whang, S. (2000). Information sharing in a supply chain. *International Journal of Technology Management, 20*(3–4), 373–387.

Mentzer, J. T., DeWitt, W., Keebler, J. S., Min, S., Nix, N. W., Smith, C. D., & Zacharia, Z. G. (2001). Defining supply chain management. *Journal of Business Logistics, 22*(2), 1–25.

Simatupang, T. M., & Sridharan, R. (2008). Design for supply chain collaboration. *Business Process Management Journal, 14*(3), 401–418.

Yaqoub, A. M. (2012). The mediating role of interorganizational trust on the relationship between supply chain collaboration and operation performance. *Jurnal Manajemen dan Kewirausahaan, 14*(2), 138–146.

Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. SAGE.

Chan, I. Y., Ma, P., & Ho, T. Y. (2025). Impacts of relational and formal governance on information sharing and project management performance in collaborative contracts: A mixed-method approach. *Journal of Construction Engineering and Management, 151*(7), 04025080. https://doi.org/10.1061/JCEMD4.COENG-15704

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE.

Denzin, N. K., & Lincoln, Y. S. (2018). *The SAGE handbook of qualitative research* (5th ed.). SAGE.

Komakecha, R. A., Ombati, T. O., Kikwatha, R. W., & Wainaina, M. G. (2025). Resource-based view theory and its applications in supply chain management: A systematic review. *Management Science Letters, 15*, 261–272.

Legood, A., Van Der Werff, L., Lee, A., Den Hartog, D., & Van Knippenberg, D. (2023). A critical review of cognition-based and affect-based trust. *Journal of Management Studies, 60*(2), 495–537.

Metz, A., Jensen, T., Farley, A., Boaz, A., Bartley, L., & Villodas, M. (2022). Building trusting relationships to support implementation: A proposed theoretical model. *Frontiers in Health Services, 2*, 894599.

Miao, M., Jalees, T., Zaman, S. I., Khan, S., Hanif, N. U. A., & Javed, M. K. (2022). The influence of e-customer satisfaction, e-trust, and perceived value on consumers' repurchase intention in the B2C e-commerce segment.

Sakas, D. P., Reklitis, D. P., Giannakopoulos, N. T., & Trivellas, P. (2023). The influence of websites user engagement on the development of digital competitive advantage and digital brand name in logistics startups. *European Research on Management and Business Economics, 29*(2), 100221. https://doi.org/10.1016/j.iedeen.2023.100221

Sergi, B. S., D'Aleo, V., Konecka, S., Szopik-Depczyńska, K., Dembińska, I., & Ioppolo, G. (2021). Competitiveness and the Logistics Performance Index: The ANOVA method application for Africa, Asia, and the EU regions. *Sustainable Cities and Society, 69*, 102845.

https://doi.org/10.1016/j.scs.2021.102845

Sinitò, D., Santarcangelo, V., Stanco, F., & Giacalone, M. (2023). Industry 4.0: Machinery integration with supply chain and logistics in compliance with Italian regulations. *MethodsX, 11*, 102269. https://doi.org/10.1016/j.mex.2023.102269

Vu Thi Thu, H., & Thu, T. N. (2025). The impact of logistics performance and green logistics performance on intra-ASEAN goods exports. *Asian Journal of Shipping and Logistics, 42*(1), 24–33. https://doi.org/10.1016/j.ajsl.2025.11.003

Werner-Lewandowska, K., & Kosacka-Olejnik, M. (2019). Logistics 4.0 maturity in service industry: Empirical research results. *Procedia Manufacturing, 38*, 1058–1065. https://doi.org/10.1016/j.promfg.2020.01.192