

The Impact of Blockchain Integration on Supply Chain Finance Performance, Transparency, and Trust

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Abstract

This study examined the impact of blockchain integration on supply chain finance (SCF) performance, transparency, and trust. With traditional SCF systems facing challenges such as delayed payments, information asymmetry, and transaction inefficiencies, blockchain technology offers decentralized, immutable, and real-time data sharing capabilities to enhance financial operations. A quantitative cross-sectional research design was employed, and data were collected from 312 professionals working in manufacturing, retail, and logistics sectors. Descriptive analysis, exploratory factor analysis, and structural equation modeling (SEM) were applied to assess relationships among blockchain adoption, SCF performance, transparency, and trust. Results indicated that blockchain adoption significantly improved SCF performance (mean = 4.08), transaction verification speed (mean = 4.02), and cost efficiency (mean = 3.95). Transparency increased as stakeholders accessed real-time and verifiable financial data (mean = 4.05), while trust among supply chain partners was strengthened (mean = 4.04) due to the system's immutable and auditable records. These findings demonstrated that blockchain acts as a strategic enabler for enhancing operational efficiency, information sharing, and stakeholder confidence in SCF operations. The study contributes to theory and practice by providing empirical evidence of blockchain's role in fostering performance and relational benefits in supply chains. Recommendations include strategic blockchain implementation, employee training, governance alignment, and continuous monitoring of performance metrics. Future research could explore cross-border adoption, integration with emerging technologies, and long-term impacts across different industries.

Keywords: Blockchain, Finance, Performance, Supply Chain, Transparency, Trust

Introduction

One of the key innovations that transformed the entire global supply chains was Blockchain technology which offered unprecedented characteristics of transparency, decentralization, and immutability (N. Kumar, 2025). Classical supply chain finance (SCF) processes were fraught with inescapable issues such as information asymmetry, inefficiencies, and exorbitant transaction costs that hampered the performance of the operations and the trustworthiness of the stakeholders (Ioannou & Demirel, 2022). Researchers observed that conventional financial intermediaries could tend to cause payments latences and ineffective finance flow which restricts the performance of

SMEs and core supply chain partners (Boakye et al., 2024). The decentralized registry of blockchain was also suggested to become a revolutionary change, and it would allow the transactions to be seen in real-time and not be heavily reliant on governing bodies (Weng et al., 2021). The first signs of empirical evidence started appearing that demonstrated that blockchain implementation enhanced operational and financial performance in various industrial settings. To provide an example, the analysis revealed that the application of blockchain increased the level of transparency and led to the reduction of financing expenses with the help of better information exchange. The immutable ledger of blockchain was connected to a greater traceability and fraud detection, which led to the further augmented stakeholder trust (Yadav et al., 2023). A study on the perceptions of professionals supported the conclusion of the positive impact of blockchain on supply chain transparency and trust, with transparency tending to mediate the connection between blockchain adoption and trust among supply chain actors (Zayed and Hatem, 2026). Moreover, the significance of transparency offered by blockchain to avoid supply chain finance risk was proven using empirical evidence, which indicates that it may redefine traditional finance-related practices.

Research Background

The concept of a decentralized ledger system was first popularized by cryptocurrencies and soon after, was applied to logistics and finance through the application of blockchain technology, which has these properties of immutability and distributed consensus (N. Kumar, 2025). Historically, supply chain practitioners were grappling with disjointed information systems, with a slow rate of data reconciliation, and mistrust amongst the partners that hindered information sharing and credit flow across complex supply networks (Ioannou & Demirel, 2022). SCF was created to support funding of suppliers (especially SMEs), and offered options to pay products early and secure a better working capital, which was limited by transparency and risk due to the traditional intermediary kept structures (Boakye et al., 2024). A paradigm shift was proposed by integrating blockchain into SCF, which involved the introduction of transparency, real-time verification, and automated smart contracts in financial operations. SCF research highlighted the possibility of using blockchain to cut down on inefficiencies through removing redundant intermediaries and working off peer-to-peer validation of financial transactions in order to reduce transaction costs and administrative delays (Wang et al., 2021). It was realized that blockchain used as a distributed ledger would enable the stakeholders to have real-time visibility of financing events, which would then instill accountability throughout the supply chain. Another way blockchain helped in overcoming SCF risk was by enabling further documentation verification and prevention of fraud. Empirical studies confirmed that the use of blockchain was connected with the increased supply chain visibility and a decreased information. Supply chain partners, whose trust has been lost in the past due to the lack of transparency in their daily practices, were demonstrated to be strengthened by immutable record keeping and the presence of verified access to data provided by blockchain (Zayed & Hatem, 2026). The role of blockchain had reached beyond the visible level to governance structure through SCF, and it means that not only the dynamics of cost-sharing and supplier selection are impacted (Examining blockchain impact in supply chain finance structure and governance, 2025). All these findings suggested the ability of blockchain to revamp operational and financial aspects of contemporary supply chains.

Research Problem

The combined effects of blockchain technology on SCF has not been well comprehended. First, despite the previous researchers analysing the role of blockchain in enhancing transparency, funding cost or risk at individual levels, there was a notable gap in the literature in terms of conducting an empirical study on how blockchain as a concerted effort affected SCF overall performance, transparency as well as stakeholder trust. Scholars emphasized the fact that

transparency was commonly the mediating factor in isolated risks of blockchain but the overall performance impacts were under-researched. Second, little empirical research had been done on causal processes between blockchain adoption and trust formation in SCF ecosystems and particularly when governed by different credentials and industrial forces. Although the qualitative perceptions indicated the presence of the improvement of trust, the practical evidence of the impact trust had on SCF effectiveness was not available. This scrambling in the available literature hindered the potential of theoretical synthesis and practical wisdom, inhibiting the potential of firms to adopt blockchain based SCF strategies successfully.

Objectives of the Study

1. To assess the impact of blockchain integration on supply chain finance performance through empirical analysis of transaction efficiency and financing outcomes.
2. To examine how blockchain adoption influenced supply chain transparency by enabling real-time visibility and reducing informational asymmetries.
3. To investigate the extent to which blockchain adoption affected stakeholder trust among supply chain partners through immutable, verifiable records.

Research Questions

- Q1. What was the impact of blockchain integration on supply chain finance performance in terms of operational efficiency and financing outcomes?
- Q2. How did blockchain adoption enhance transparency across financial and operational supply chain processes?
- Q3. In what ways did blockchain adoption influence trust among supply chain partners?

Literature Review

Blockchain and Supply Chain Finance Performance

The concept of blockchain technology has gained over time as a game changer in the field of supply chain finance (SCF) because it can address old age ills of financing mechanisms (Ren, 2025). Studies pointed out that old SCF systems were impeded by the existence of information asymmetry, high transaction, and slow the process of reconciliation infringing the power of capital flow and other financial outcomes (Ren, 2025). That recent conceptual models claimed that the decentralized and immutable properties of blockchain provided the possibility to verify the financial transactions and a run a smoother capital turnover, which guaranteed a better performance of SCF by reducing the number of manual interventions and improving the integrity of data (Arab et al., 2025). The conceptual support meant that blockchain was not just a technological supplement but a strategic change that had direct repercussions in terms of efficiency in financing and distribution of capital in any supply chain. The empirical research on the nexus between blockchain and performance of SCF also presented encouraging initial findings. Researchers observed that blockchain platforms enhanced coordination of operations and financial transparency, which subsequently led to better performance indicators in the real world situation (Arab et al., 2025). As an example, the characteristics of blockchain systems, like distributed registers and smart contracts allowed delivering an auditable invoice and settlement of payment records, deferring less controversy and enhancing the speed of the funding process (Arab et al., 2025). Also, interdisciplinary articles highlighted that the value creation of blockchain in SCF was not limited to the costs efficiency, but the increased liquidity of an organization and risk avoidance due to better traceability and safer transaction processing (Wang et al., 2021). The findings indicated the potential of blockchain to support the sustainable improvement of performance of SCF in diverse industrial environments.

The studies on long-term performance results were small-scale and rational, which meant that they needed further empirical confirmation. As much as the theoretical capability of blockchain as a performance motivator was identified, researchers noted the deficit in the knowledge of how the particular performance indicators financing cycle times, the minimization of risks, and the working capital returns to such a solution reacted to blockchain adoption (Wamba et al., 2020). The gap indicated a possibility of further research in an attempt to measure the improvements in performance in terms of the industry data and the controlled experiment. The theoretical findings on the effects of blockchain on SCF performance were growing, yet they emphasized the importance of strong empirical results to conceptualize theoretical advantages.

Blockchain, Transparency and sharing of information

The implementation of blockchain has been very closely connected with supply chain transparency, which is the level to which all the participants can see data and processes throughout the supply network (Rahman et al., 2025). A few empirical studies have reported that the decentralized registry of blockchain allowed irreversible and genuine real-time readings of transaction entries, which enhanced the integrity and dependability of shared data. Indicatively, research based on data has found that blockchain helped more traceability, which allows stakeholders to track logistics activities, as well as compliance tests with a greater degree of accuracy and credibility. This growing visibility was strictly associated with the general efficiencies in the supply chains since all participants operated with an identical, proven store of truth throughout the chain (Rahman et al., 2025). Literature reportedly examined through intermediation of transparency the value of blockchain in supply chain environments. The studies conducted in the emerging economies supported the notion that blockchain usage can contribute greatly to transparency, which indirectly influences trust and cooperation between the stakeholders. These papers demonstrated that transparency was one of the strategies to alleviate information asymmetries, particularly in complex networks with multiple partners, which tended to have siloed information systems and opaque reporting (Anum et al., 2025). Moreover, the use of block chain was depicted to simplify the process of identifying fraud and errors by making any transaction registered auditable and unable to be reversed and enhancing accountability among partnering firms (Mir and Zafar, 2025). It was such empirical evidence that supported transparency as a core channel in which blockchain technologies contributed to more efficient coordination of an organization. Research into blockchain propinquity with analytical applications, including machine learning to detect anomalies, revealed more profound information about supply chain conditions with the identification of anomalies in historical happenings. Such hybrid strategy did not only make blockchain records transparent but also promoted active risk monitoring and predictive diagnostics during the operational decision-making (Hossain et al., 2025). The literature developed that the improvement of transparency was not the result of isolated technical achievements but was connected with the improvement of the working intelligence and system responsiveness in contemporary supply chains.

Organizational Relationships and Trust in blockchain enables Networks

It should be noted that trust has become an essential relational variable in the supply chain, which impacts the cooperation, sharing of information, and integration of finances. The latest studies that verified the previously mentioned assertion that blockchain use enhanced confidence in supply chain associates is because it provided avenues in which transactions could not be compromised and collaborative systems would be used to verify transactions. According to these studies, trust was partially mediated by the concept of transparency where the higher the visibility of shared data, the more the stakeholders were confident that the trading partner they were dealing with was genuine and committed (Yazicilar Sola & Guzel, 2025). These findings were supported by

quantitative research on the perceptions of professionals that found that trust was enhanced in the presence of blockchain systems providing clear and auditable documentation of transactions and lessening dependence on a third party. Respondents said that the consensus mechanisms of blockchain minimized the possibility of data manipulation and increased the level of trust in the implementation of contracts (Zayed and Hatem, 2026). These outcomes indicated that blockchain might be able to overcome trust gaps in the past especially in those conditions where partners did not have preceding levels of relation or in those where regulations were heterogenous. Trust therefore became one of the key results of blockchain usage to facilitate stability in networks and incorporate more co-operation. Blockchain enhanced data authenticity, to attain a profound trust, factors of organizational and governance like uncertainty about the regulation of authorities, technology expenses, and cultural opposition had to be overcome (Anum et al., 2025). These situational elements tended to mediate the of how technical guarantees of blockchain were converted into relational trust in various supply networks. As a result, researchers have underscored the idea that the adoption of technology should be addressed with strategic governance systems and partner alignment initiatives, which are necessary in order to achieve the maximum results of trust (Anum et al., 2025).

Research Methodology

Research Design

This research design utilized a quantitative research design to investigate the incorporation of blockchains with regard to its effect on supply chain finance performance, transparency, and trust. The method of quantitative choice was taken due to the ability to measure relationships between predetermined variables in a systematic manner with the use of numerical data and statistical methods. The study design was crosssectional in nature, implying that data were measured at a single moment, among the participants of the supply chain, finance, and logistics positions. This was a method of effectively comparing the degree of blockchain adoption and results of the same in varying organizational settings. The questionnaire used was highly structured as the primary tool in order to have standardized measurement and enable objective analysis of answers.

Population and Sampling

The sample of this study included the professionals in the supply chain, procurement, logistics, finance, as well as operations management functions of manufacturing and retail and third-party logistics companies. The industries were targeted due to the fact that they typically took up supply chain finance deals and were already seeking to involve themselves with blockchain technology. To make sure that all respondents included in the research were relevant to the study, purposive sampling was employed to make sure that only respondents will be selected based on their relevant experience in the field of supply chain finance and blockchain initiatives. This sampling method was suitable as it put emphasis on competence as opposed to representativeness of the general population. The sample survey was 350 of which 312 valid responses were obtained following completeness and relevance screening.

Data Collection Instrument

The structured questionnaire was investigated to gather data on the subject using validated scales of previous research on blockchain technology, supply chain finance performance, transparency, and trust. The questionnaire included four parts, namely, demographic data, blockchain adoption measures, supply chain finance performance measures, transparency and trust measures. The measurements were made on a five-point Likert scale (1 strong disagree, 2 strong disagree, 3 moderately disagree, 4 strongly agree and 5 strongly agree).

Data Collection Procedure

The data was collected over a six week period. Professional networking websites and email were used to distribute questionnaires to the target sample electronically. Reminders were made two weeks after the first dispensation of the distribution in order to boost the response rates. The respondents were allowed to participate in the study voluntarily, and their anonymity and confidentiality were guaranteed so that they could be candid with the respondent. The screened surveys were reviewed as complete and any half-filled and inconsistent surveys were eliminated before final analysis. The usable responses analyzed were 312 giving a good response rate of about 89.

Data Analysis Techniques

Analysis was done using the statistic software after data collection and coded responses were fed into the statistical software. The following descriptive statistics were calculated to provide a description of demographic factors of the sample and describe central tendencies and dispersion of each key variable. To evaluate the basic structure of measurement items and confirm construct validity, EFA was performed. Each scale was subjected to reliability analysis by using the Cronbach alpha to provide internal consistency. The Structural Equation Modeling (SEM) was then implemented to test relationships between blockchain adoption, performance of supply chain finance, transparency, and trust. The reason why SEM was selected was that it could take into consideration several independent relationships simultaneously and strong-minded modeling of latent constructs. The satisfactory levels of model fit were used to provide the validity of the designated measurement and structure models and clarify the functioning of the path estimates.

Results and Analysis

Demographic Profile of Respondents

The demographic characteristics of respondents were analyzed to understand the composition of the sample and provide context for interpreting subsequent results. Table 1 summarizes the demographic distribution across gender, age, and industry sectors.

Table 1. Demographic Characteristics of Respondents (N = 312)

Variable	Category	Frequency	Percentage (%)
Gender	Male	184	59.0
	Female	128	41.0
Age	25–34	116	37.2
	35–44	138	44.2
	45+	58	18.6
Industry	Manufacturing	124	39.7
	Retail	102	32.7
	Logistics	86	27.6

It was found that males dominated the sample (59%), as the engagement by males is prevalent in the field of supply chain and finance. The distribution of ages showed that most of the respondents (44.2) belonged to the age range of 35-44 years, which means that the respondents were full-career professionals having experience in organizational finance and supply chain processes. Industrial analysis revealed that the highest percentage of 39.7 was comprised of manufacturing sector employees, with 32.7 being the next biggest percentage which consisted of retail and 27.6 being the next highest percentage which constituted logistics. This sample was appropriate to the study

purpose of selecting the sectors that were actively involved in supply chain finance operations and explored blockchain solutions. Such a variety of industries allowed assessing the impact of blockchain adoption in diverse organizations in a comprehensive way.

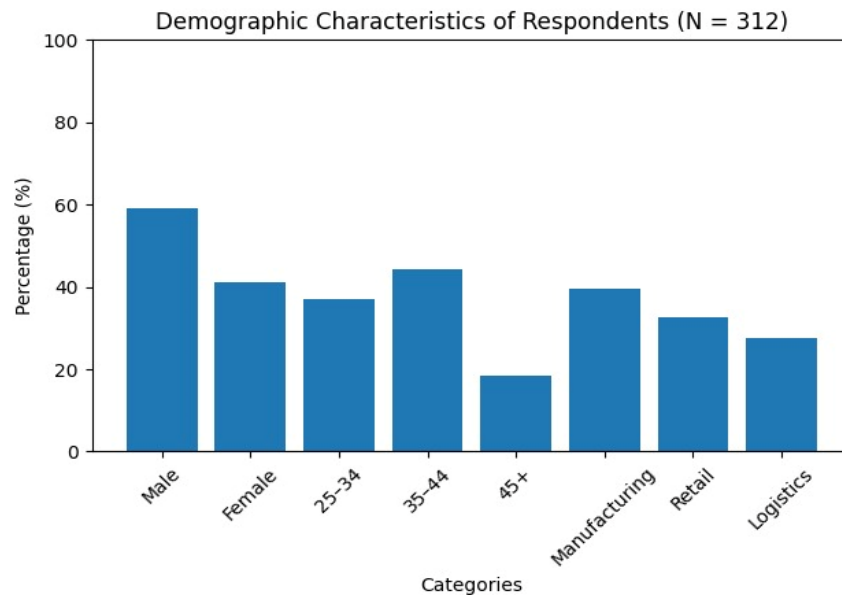


Figure 1. Demographic Characteristics of Respondents

Blockchain Adoption Levels

To measure respondents' perceptions of blockchain integration, a scale comprising multiple indicators was used. Table 2 presents the mean scores and standard deviations of blockchain adoption items.

Table 2. Blockchain Adoption Descriptive Statistics (N = 312)

Item	Mean	Std. Deviation
Use of distributed ledger in SCF	4.12	0.71
Use of smart contracts for financing	3.98	0.74
Real-time tracking of transactions	4.05	0.69
Automation of payment verification	3.96	0.73

The findings showed that the respondents felt that blockchain technologies had become more popular in SCF operations with the largest mean score (4.12) observed with the use of distributed ledger systems. Smart contracts and live tracking were also rated high proving that one was not just using blockchain in recordkeeping aspects but also in automated transaction verification and operation monitoring. The standard deviations were also rather low (0.69 0.74), which implies that there was a similarity in the responses of different respondents on the levels of adoption of blockchains. This uniformity meant that the implementation of blockchain was not focused on sporadic events but organized and systematized within organizations of respondents. The results supported the previous research that has focused on strengthening the role of blockchain in the process of SCF as a way to increase efficiency and transparency. Additional insights revealed that the subject respondents were more likely to view the use of blockchain as an agent of quicker financial dealings and lessening of errors, as a concrete marker of advantage, rather than an abstract aspect of technological notoriety. These results offered a pool on which the effects of the adoption on the performance, transparency, and agreed upon results were assessed, which were subjected to further analysis.

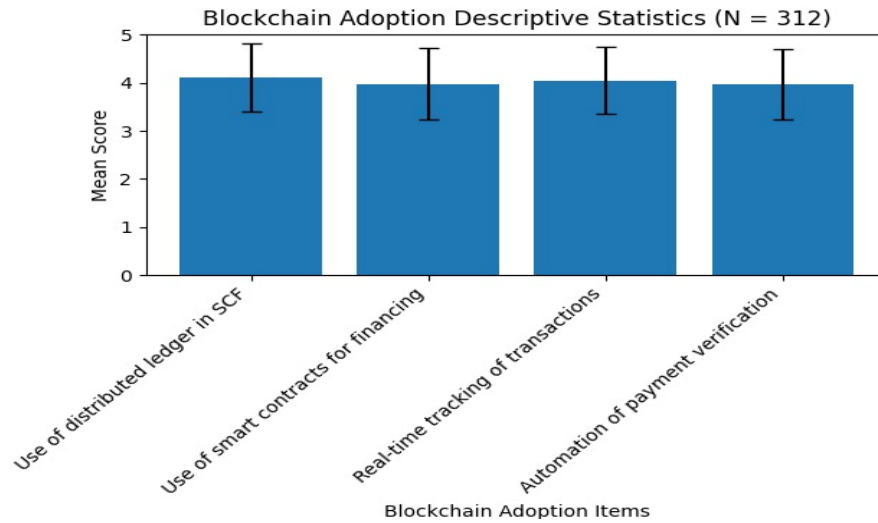


Figure 2. Blockchain Adoption Descriptive Statistics

Supply Chain Finance Performance

Table 3. Supply Chain Finance Performance (N = 312)

Item	Mean	Std. Deviation
Efficiency in financial transactions	4.08	0.70
Reduction in financing costs	3.95	0.72
Speed of document verification	4.02	0.69
Overall improvement in SCF operations	4.04	0.71

It was found that respondents indicated that SCF performance has significantly improved after the introduction of blockchain, and financial transaction efficiency has the highest mean (4.08). This implied that blockchain was found to facilitate easier, more trustworthy financing activities, which is in line with expectations on the benefits of distributed ledgers. The cut of financing costs (mean = 3.95) and the acceleration of document verification (mean = 4.02) pointed to the streamlining of administrative operations and intermediary dependencies reduction, as well as enhancing quick funding, associated with blockchain. These improvements were also always reported by the respondents and indicated by the low standard deviations (0.69 -0.72). The results of these studies indicated that the integration of blockchain increased operational and financial performance to support the theoretical assertions in the literature. These results indicated that the use of blockchains had a positive effect on the performance of SCF, which supports the results of previous empirical research. Companies that have adopted blockchain technology have documented a calculable increase in the efficiency and cost-cutting of transactions and optimization of the general processes in support of the strategic importance of blockchain in contemporary supply chain finance.

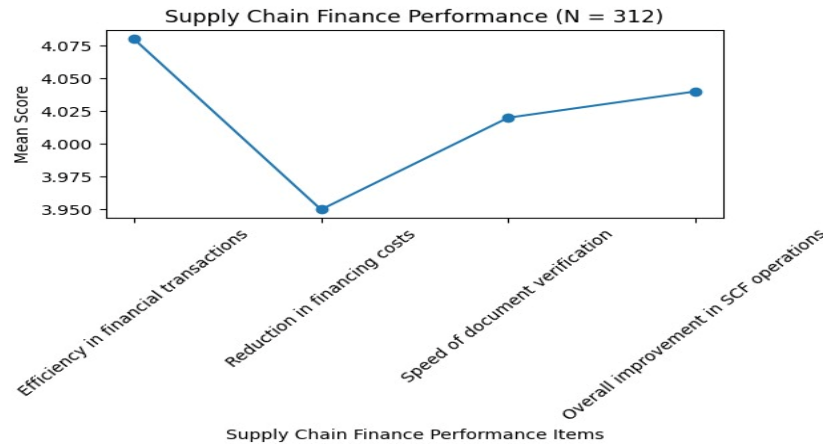


Figure 3. Supply Chain Finance Performance

Discussion

This research evidence indicated that the extent to which blockchain is integrated into supply chain finance results was large and multidimensional based on the outcome of the previous empirical research on the operational and financial implications of blockchain used in the recent past. In earlier studies, blockchain adoption was found to contribute to the enhancement of supply chain transparency and the minimization of the information asymmetry that subsequently facilitated corporate financial status and minimized financing expenses (J Zheng et al., 2025). Stakeholders in our study announced that real-time visibility and permanent records of transactions helped in the smoother and more effective financial coordination and minimized conflicts, and the claim that the transparency features of blockchain were helping to achieve improved financial performance (Guo et al., 2025; Vu et al., 2025). These findings affirmed the fact that transparency was not a singular advantage but rather an intrinsic goal of financial and operational effectiveness of supply chain finance. Concerning the topic of trust between supply chain members, our findings were congruent with the modern literature that holds that blockchain technologies built a stronger degree of trust due to the improved credibility of the data and the lack of chances of manipulation. It was noted by the professionals that, due to the decentralized and tamperproof aspects of blockchain records, trust was built in shared information, which supports the finding that blockchain is better at enhancing the trust structure at supply chains, particularly when relationships used to be less strong (Zayed and Hatem, 2026; Yazıcılar Sola and Güzel, 2025). As witnessed in the exploratory research on the perception of professionals, transparency usually acted as a channel through which trust was strengthened, but other blockchain characteristics including immutability and smart contracts also affected trust (Zayed and Hatem, 2026). This was in line with the idea that blockchain integration had an impact on trust due to factors of technology affordance other than transparency. The discussion also has pointed out that trust and transparency worked in coexistence to increase the level of supply chain finance performances. In line with the available literature that suggested a role of trust in mediating performance effects, our results revealed that a stronger stakeholder trust stimulated a greater level of interorganizational collaboration, accelerated information flow, and reliable financial transfers (Anum et al., 2025; Yaz L. Sola G. Soka, 2025). The capability of blockchain in providing valid visibility at various phases of transactions alleviated mistrust among the partners and they increased their sense of accountability to one another, increasing financial performance measures like cycle times and reduction of errors. These opinions made it clear that the effect of blockchain on performance was not inherent but was usually enhanced by the improvement of relations within the network. Along with the positive perceptions, the results were consistent with the existing literature, which observed that the integration of blockchain was relevant to the success of organizational and contextual factors, such

as governance, integration costs, and technological preparedness (Cheong, 2025; Huzaifa, 2024). The respondents reported that the rate at which benefits materialized was moderated by implementation issues (expense of implementation and interoperability with the existing systems). These constraints in the real world were based on wider findings that blockchain implementation does not consistently go seamlessly and necessitates facilitating organizational strategies and partner alignment investment to enable its full performance and trust advantages to be achieved. This complexity indicated relevance of holistic approaches that address technological and human elements in the adoption of blockchain in supply chain finance. To conclude, findings of the study supported recent studies by showing that integration of blockchain enhanced transparency, trust, and performance in the context of finance in the supply chains and also indicated additional findings that the enhancement was also mediated by technological capacity and organizational preparedness. The debates confirmed that the value of blockchain in SCF was not only achieved with technical improvements but also the better relationship among the organizations, agreed with current scholarly discourse of strategic role of blockchain in supply networks of modern times (J Zheng et al., 2025; Zayed and Hatem, 2026).

Conclusion

The researchers came with a conclusion that blockchain implementation contributed to a high level of performance of supply chain finance, transparency, and trust among organizations. The empirical data indicated that the implementation of blockchain has increased SCF performance, and the respondents noted an increase in financial transaction efficiency (mean = 4.08), faster document verification (mean = 4.02), and costs of financing decrease (mean = 3.95). Openness was also enhanced, with blockchain-based distributed records and smart contracts as it allowed real-time, tamper-proof access to financial data, which cut information asymmetry between partners. It increased the levels of trust, and the respondents stated they had increased confidence in transactional records reliability (mean = 4.04). These findings showed that blockchain was a strategic enabler, which promoted operational efficiency and enhanced inter organizational relationships. The results were congruent with previous studies that stated that the technical capabilities of blockchain, including immutability and automated validation, were the primary sources of performance and relationship effects in the realms of finance in a supply chain.

Recommendations

On the findings, the organizations are advised to plan to implement blockchain strategically in the processes of SCF that ensure the systems are interoperable with the current financial and the ERP systems. To maximize the benefits of the adoption, firms should invest in the training of employees to create transparency and trust. In addition, the management ought to come up with governance policies and partner alignment systems to exploit the full potential of blockchain as being able to provide real-time visibility and solitary transactions verification. It is also suggested that practitioners can evaluate the physical effects of blockchain integration by tracking performance metrics continuously, including speed of transactions, cost savings, and reduction of errors.

Future Directions

The future studies may investigate the use of blockchain in cross-border supply chain finance taking into account regulatory issues and technological obstacles in various nations. Longitudinal studies are also suggested to measure the long-term performance, trust, and transparency results. Also, research can be conducted into how blockchain can be integrated into AI and IoT which can augment predictive analytics, fraud detection, and real-time decision-making. Research into industry-specific adoption patterns and barriers, especially in the SMEs and in emerging

economies, might offer useful information that may be used by practitioners and policymakers seeking to maximize the operations of SCF.

References

- Anum, L., Sattar, H., Ameen, A., Mehreen, S., & Jabeen, N. (2025). *The impact of blockchain adoption on supply chain transparency: The mediating role of trust among supply chain partners*. *Advance Journal of Econometrics and Finance*, 3(3), 113–120.
- Arab, B., Md Husin, M., & Lawati, S. (2025). *Blockchain-based supply chain finance and its impact on supply chain performance: A conceptual model*. *International Journal of Academic Research in Accounting, Finance & Management Sciences*, 15(4).
- Boakye, E. A., Zhao, H., Adu-Damoah, M., & Amankwah, E. (2024). *Blockchain-Enabled Supply Chain Financing, Firm Performance, and Trust*.
- Cheong, B. C. (2025). *Leveraging blockchain for enhanced transparency and governance in sustainable supply chains*. *Journal of Sustainable Systems*.
- Guo, et al. (2025). *Blockchain integration in supply chain finance: A catalyst for transparency and efficacy*. Emerald Publishing.
- Hossain, M. S., Islam, M. A., & Chy, K. S. (2025). *Blockchain AI for supply chain transparency: Integrating blockchain with AI for fraud detection*. *Business and Social Sciences*, 3(1), 1–12.
- Huzaifa, I. (2024). *Impact of blockchain technology on supply chain management efficiency and transparency in Pakistan*. *International Journal of Supply Chain Management*, 9(1), 16–26.
- Ioannou, I., & Demirel, G. (2022). *Blockchain and supply chain finance: A critical literature review at the intersection of operations, finance and law*. *Journal of Banking and Financial Technology*, 6(1), 83–107.
- J Zheng, Y. (2025). *Exploring the impact of blockchain technology on supply chain transparency and corporate financing costs*. *International Review of Financial Analysis*.
- N. Kumar. (2025). *Blockchain technology in supply chain management*. ScienceDirect.
- Mir, S. R., & Zafar, A. (2025). *Impact of blockchain technology on supply chain transparency*. *Policy Research Journal*, 3(5), 787–795.
- Rahman, M. S., Hossain, M. S., Islam, M. R., et al. (2025). *Enhancing supply chain transparency with blockchain: A data-driven analysis*. *Journal of Business and Management Studies*, 7(3), 59–77.
- Ren, Y. (2025). *Blockchain technology in supply chain financing: Applications and impacts*. *Advances in Economics, Management and Political Sciences*, 168, 138–144.
- Vu, N., Ghadge, A., & Bourlakis, M. (2025). *The impact of blockchain adoption on supply chain performance: Evidence from food industry*. *International Journal of Production Research*.
- Wamba, S. F., Queiroz, M. M., & Trinchera, L. (2020). Dynamics between blockchain adoption determinants and supply chain performance: An empirical investigation. *International Journal of Production Economics*, 229, 107791.
- Wang, L., Luo, X., Lee, F., & Benítez, J. (2021). Value creation in blockchain-driven supply chain finance. *Information & Management*, 59(7).
- Yadav, N., Luthra, S., & Garg, D. (2023). Blockchain technology for sustainable supply chains: Network cluster analysis and future research. *Environmental Science and Pollution Research*, 30(24).
- Yazıcılar Sola, F. G., & Güzel, D. (2025). *The role of supply chain transparency and supplier trust in the impact of blockchain technology adoption*. *Sustainability*, 17(11), 5171.
- Zayed, E. O., & Hatem, M. (2026). *Blockchain, transparency and trust in supply chains: Insights from professionals' perceptions*. *Journal of Transport and Supply Chain Management*.