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Impact of Blockchain Technology on Supply Chain Management

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Abstract: There is a significant research gap in understanding the impact of blockchain technology on supply chain management, particularly in addressing challenges related to transparency, traceability, and trust. This research paper aims to investigate this gap by assessing the benefits, analyzing challenges, exploring real- world case studies, and providing recommendations for organizations. To achieve the research objectives, a comprehensive research methodology is employed. A systematic literature review is conducted to gather relevant studies on blockchain technology in supply chain management published between 2015 and 2021. The selected papers are analyzed to identify key themes, trends, and findings. Additionally, real-world case studies are examined to gain insights into successful implementations and practical implications. The research methodology also includes interviews and surveys with industry experts to gather firsthand insights and perspectives. The findings of this research contribute to the existing body of knowledge by providing a comprehensive understanding of the impact of blockchain technology on supply chain management. The analysis of benefits and challenges helps organizations make informed decisions regarding the adoption of blockchain in their supply chain processes. The exploration of real-world case studies offers practical insights and lessons learned for successful implementation. The recommendations for organizations provide guidance for integrating blockchain technology and mitigating risks. In conclusion, this research paper bridges the research gap by investigating the impact of blockchain technology on supply chain management. The findings and recommendations serve as a valuable resource for practitioners, researchers, and policymakers seeking to leverage blockchain's potential to enhance transparency, traceability, and trust in supply chain operations. The research methodology employed ensures a rigorous and comprehensive analysis, enhancing the credibility and reliability of the research outcomes.

Keywords: Supply chain management, Transparency, Blockchain, Risk mitigation

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