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Blockchain Technology in Supply Chain Management: A Systematic Review And Meta-Analysis

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Abstract : Blockchain is a promising technology with its features such as immutability and decentralized database. It has applications in various fields such as pharmaceutical, finance, & the food industry. At the core of its heart lies its feature, traceability which is the most desired key in supply chains. However, supply chains have always been hit rock bottom by scandals and controversies. In this review paper, we have explored the advancement and research gaps of blockchain technology (BT) in supply chain management (SCM). We have used the Prisma framework for systematic literature review (SLR) and included a minuscule amount of grey literature to reduce publication bias. We found that supply chain traceability and transparency is the most researched objective in SCM. There was hardly any research in supply chain resilience. Further, we found that 40 % of the papers were application based. Most articles have focused on the advantages of BT, rather than analyzing it critically. This study will help identify gaps and suitable actions to be followed for an efficient implementation of BT in SCM.

Keywords : blockchain technology, supply chain management, supply chain transparency, supply chain resilience
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