

Using Blockchain Technology to Promote Sustainable Supply Chains: A Survey of Previous Studies

Authors : Saleh Abu Hashanah, Abirami Radhakrishnan, Dessa David

Abstract : Sustainable practices in the supply chain have been an area of focus that require consideration of environmental, economic, and social sustainability practices. This paper aims to examine the use of blockchain as a disruptive technology to promote sustainable supply chains. Content analysis was used to analyze the uses of blockchain technology in sustainable supply chains. The results showed that blockchain technology features such as traceability, transparency, smart contracts, accountability, trust, immutability, anti-fraud, and decentralization promote sustainable supply chains. It is found that these features have impacted organizational efficiency in operations, transportation, and production, minimizing costs and reducing carbon emissions. In addition, blockchain technology has been found to elicit customer trust in the products.

Keywords : blockchain technology, sustainability, supply chains, economic sustainability, environmental sustainability, social sustainability

Conference Title : ICSCOR 2023 : International Conference on Supply Chain and Operations Resilience

Conference Location : New York, United States

Conference Dates : February 16-17, 2023