

A Systematic Organizational Review of Blockchain Literature in Supply Chains: Identifying New Research Avenues

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Abstract

Potential blockchain applications in logistics and transport (LSCM) have gained increasing attention within both academia and industry. However, as a field in its infancy, blockchain research often lacks theoretical foundations, and it is not clear which and to what extent organizational theories are used to investigate blockchain technology in the field of LSCM. In response, based upon a systematic literature review, this paper:(a) identifies the most relevant organizational theories used in blockchain literature in the context of LSCM; and (b) examines the content of the identified organizational theories to formulate relevant research questions for investigating blockchain technology in LSCM. Our results show that blockchain literature in LSCM is based around six organizational theories, namely: agency theory, information theory, institutional theory, network theory, the resource-based view and transaction cost analysis. We also present how these theories can be used to examine specific blockchain problems by identifying blockchain-specific research questions that are worthy of investigation.

Keywords: logistics, supply chain, blockchain, innovation