# Research on Traceability Algorithm of Logistics Service Transaction Based on Blockchain

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Research on Traceability Algorithm of Logistics Service Transaction Based on Blockchain

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The traditional logistics transaction lacks a perfect traceability mechanism, and the data information's integrity and safety are not guaranteed in the existing traceability system. In order to solve the problem of main body responsibility caused by the participation of many stakeholders and the uncompleted supervision system in the process of logistics service transaction, this paper proposes a traceability algorithm for logistics service transactions based on blockchain. Based on the logistics service supply chain and alliance chain, the paper firstly investigates the traditional logistics service supply chain, analyzes the existing problems, and combines the structural characteristics of the blockchain to propose a decentralized new logistics service supply chain concept model based on blockchain. Then, using Globe sandara 1 to standardize the physical products and data circulating in the new logistics service supply chain, form unified and standard traceable data, and propose a multidimensional traceable data model based on logistics service supply chain. Based on the proposed model, combined with the business process of the logistics service supply chain and asymmetric encryption, a blockchain-based logistics service transaction traceability algorithm is designed. Finally, the simulation results show that the algorithm realizes the end-to-end traceability of the logistics service supply chain, and the service transaction is transparent while ensuring the integrity and security of the data.

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