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Abstract

The introduction of a permission-based blockchain consortium network for cross-border payment systems has completely changed how businesses run and made it possible for trade and commerce to take place on a worldwide scale. However, most of the current cross-border payment systems are only operational in pilot mode, which presents several difficulties such as high transaction fees and a drawn-out settlement procedure, as well as another crucial issue called trust in the payment gateway system. Blockchain technology has arisen in recent years as a potential answer to these problems, including quicker transaction speeds, cheaper transaction costs, and better security. In this study, a unique database storage management system and transaction processing mechanism have been used to propose a novel permission-based consortium blockchain network for cross-border payment systems, particularly for banking and finance. © 2023 IEEE.

Author Keywords

blockchain; cross-border; scalable; security; settlement

Index Keywords

Gateways (computer networks), Storage management; 'current, Block-chain, Cross-border, Gateway system, Payment gateways, Payment systems, Scalable, Security, Settlement, Transaction cost; Blockchain

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