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An Evaluation of EVM-Compatible Blockchain Platforms for Trade Finance

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Abstract

Blockchain, such as Bitcoin and Ethereum, has received significant attention and widespread usage in recent years. However, blockchain scalability has emerged as a challenging issue. This article explores the existing scalability options for blockchain, which can be categorized into two groups: first layer solutions and second layer solutions. First layer solutions involve network modifications like altering block size, while second layer solutions encompass techniques applied outside of the blockchain. Ethereum, the second largest blockchain, utilizes the Ethereum Virtual Machine (EVM) for executing smart contracts on the blockchain. Currently, there are several EVM-compatible blockchains with noticeable differences. In this study, we evaluated multiple platforms for conducting business processes in trade finance. We considered both Layer 1 and Layer 2 blockchain solutions and examined variations in cost and performance (speed). Based on the evidence gathered in this study, we provide recommendations for system designers to consider when selecting a blockchain platform.

Author keywords

Blockchain; transaction; variance

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