

# Smart Contract Tools for Addressing the Menace of Payment Challenges to Contractors on Construction Projects

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## SUMMARY

Due to complex stakeholder interaction and approval process, the payment for contracts in Ghana's construction industry is most often unduly ineffective and lengthy. Governments of many other countries attempted to address payment-related issues in the construction industry, through legislation, novel types of payment agreements, conventional information technology solutions, and supply chain management best practices. However, payment challenges remain one of the major issues to address in the construction industry; Ghana is not an exception. Applications of blockchain technology, a reliable and distributed data storage system upon which smart contract is founded are becoming more popular as remedies for challenging inter-organizational processes. A smart contract is defined as a self-executing contract or set of rules between two or more parties with the terms of the agreement directly written into lines of code and existing across a distributed, decentralized blockchain network. The suitability of smart contract technology to address payment challenges in the construction industry is examined in this paper. In this paper, the severity of payment challenges, their root causes, and the possibility of smart contracts to address them, are thoroughly examined and discussed. Some data was collected through a questionnaires survey to ascertain quantity surveyors' and project managers' appreciation of the capacity of smart contracts to help in addressing payment issues in construction contracts.

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