

# **Review of Blockchain Technology Applications in Construction Engineering and Management**

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## **ABSTRACT**

Adoption of new technology is a relatively slow process in the construction industry. The growing number of cyber threats has raised a serious concern about the data transmissions. Blockchain technology (BCT) has been introduced to curb some of the privacy and security challenges. It is a technology that decentralizes authority and makes it almost impossible for external threats to alter the transmitted content. Thus, this paper aims to provide an in-depth review of the BCT articles in the construction industry, specifically for its applications in construction management. Five categories were identified for BCT in the construction industry after reviewing the existing literature: (1) secure data transmission and data ownership, (2) IT in construction, (3) quality information management, (4) stakeholders collaboration, and (5) construction payments and trust. The findings indicated that BCT presented high promises to improve the overall efficiency of the construction industry. Finally, insight for future research about BCT in the construction industry are provided.