

# Blockchain Technology: Advancements, Applications, and Challenges

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**Abstract:** *Blockchain technology is an advanced mechanism that enables the secure sharing of information within a business network. The data is stored in blocks, which are linked together to form a chain. Blockchain technology is essentially a digital ledger that stores data securely and cannot be erased. It is a trustworthy method for businesses to share information.*

*Using traditional databases to store financial transaction data can be risky. Blockchain technology provides a much safer way to maintain financial records. In traditional systems, a seller could falsely claim they did not receive a payment, even if they did. However, with blockchain technology, this is not possible because the payment is recorded permanently on the blockchain.*

*Blockchain solves such issues by creating a decentralized, tamper-proof system for recording transactions.*

**Keywords:** Blockchain