

INSIGHTS FROM THE BDO REAL ESTATE & CONSTRUCTION PRACTICE

# DRIVING IMPLEMENTATION THROUGH EFFICIENCIES: GETTING BLOCKCHAIN OFF THE GROUND

Blockchain is an innovative type of distributed ledger technology (DLT) with the potential to drastically alter the real estate industry. Over the past decade, blockchain has been used to secure payments, optimize the supply chain and connect buyers and sellers in new and more efficient ways. Because it forms a decentralized, immutable record, blockchain has many uses for leasing, purchases and sales transactions. In the long run, it will transform how owners, buyers and lessees transact by facilitating more secure money transfers, property registrations and signed agreements.

## So, why hasn't blockchain taken off?

There are two major hurdles to overcome before blockchain technology can be adopted widely: poor understanding of the technology and regulatory uncertainty. Blockchain has the potential to be the next step in the real estate industry's technological evolution, but clearing these hurdles will take time.

**1. Insufficient knowledge and information about the technology:** People have grown more comfortable and confident conducting real estate transactions online, a trend that the pandemic helped to accelerate. However, blockchain's relative novelty means people are still a little wary; when it comes to scaling new technology, there are more laggards than early adopters. The lack of standardization in the industry also makes it difficult to implement at scale. Widespread adoption and standardization across the commercial real estate industry requires increased education about the technology and a stronger digital foundation for the network.

**2. Regulatory uncertainty:** Federal and state lawmakers have introduced blockchain-related legislation, which addresses trust concerns by providing guidelines for cryptographic signatures standards for smart contracts and record keeping. As blockchain grows in popularity, it has highlighted the lack of regulation around DLT. Standardization could help drive widespread adoption in commercial real estate, but if restrictive regulations are put in place, that could limit blockchain's utility and benefits.

The global blockchain market is expected to grow from \$3 billion in 2020 to \$39.7 billion by 2025, according to data from Markets and Markets. While external factors may cause an initial slowdown in adoption, there are opportunities to create efficiencies that can help drive blockchain implementation in the commercial real estate space. Here are four ways organizations can implement blockchain to make projects, business applications and transactions more efficient.

## TRACK AND TRACE

Track-and-trace capabilities allow individuals to view historical and real-time lifecycles of products in the supply chain by tracking their origin, current location and historical status, in addition to the environmental conditions to which they have been subjected. Construction materials, including industrial building materials and manufactured goods, can be tracked using blockchain.

The use of blockchain to identify where all materials in a supply chain are located is known as "geo-contextual automation." Along the supply chain, track-and-trace capabilities provide transparency as to where various products are sourced, when they are manufactured, the material composition and the environmental impact associated with production. This is especially important given that material is often uniquely produced for a specific project. Losing track of one key material can upend the schedule and increase project costs. If an issue arises, track-and-trace capabilities can easily identify it.

Track and trace also allows insurance carriers to better assess the risk of insuring a property based on location, flood plain, building materials and prior claims.

## TITLE ISSUANCE

Blockchain technology will change the future of title issuance. When real estate transactions take place, a new title search must be executed to identify any encumbrances or situations that may impact the transaction. These processes can be automated by blockchain technology with the results stored securely and transparently. Manual processes, such as surveys, would still need to be conducted, but blockchain technology can capture and track the results and verify that the survey was performed by an accredited organization, which can ultimately help prevent title theft.

## FRACTIONAL OWNERSHIP

Implementing blockchain can also help categorize fractional ownership in real estate investing. A real estate property can be digitally represented through a process of tokenization, which allows for smaller investors to access real estate investments that may have initially required significant capital. Token exchanges such as tZERO make the buying and selling process easier for investors by facilitating trading and investing on a digital platform.

## SUSTAINABILITY AND ESG

Consumers and investors alike are increasingly interested in organizations' sustainability practices. Public and private corporations, both in the United States and Europe, are adopting blockchain solutions to help track their carbon footprint, establish a role in the climate crisis and commit to net zero greenhouse gas emissions. An increase in federal and state regulations around blockchain is accelerating the adoption of blockchain in the environmental, social and governance (ESG) space, as it can help ensure data security, chain of custody and supply chain integrity. Blockchain technology can also provide immutable and transparent records for interested parties to track an organization's waste and environmental impact.

Blockchain technology also establishes an audit trail, which is essential in order to verify data being reported out. This is expected to undergo increasing scrutiny in the near future as a result of SEC disclosure requirements. In this way, blockchain functions as an attestation tool to help increase the accuracy, transparency and consistency of financial reporting and ESG practices.

## THE FUTURE OF BLOCKCHAIN IN REAL ESTATE

Implementing these practices can create efficiencies and lay a transformative foundation for broader adoption of blockchain technology in the real estate industry. As end users gain a better understanding of the technology's benefits and lawmakers and regulators clear a path to widespread implementation, adoption across the industry will enable improved security, transparency and convenience for leases and transactions.

### HOW BDO CAN HELP:

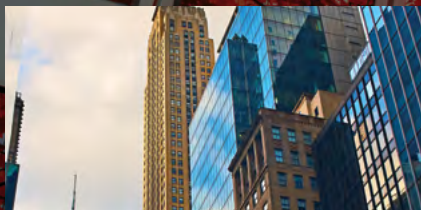
**Blockchain experience:** BDO has both national and global blockchain groups comprising technical, tax and audit professionals. BDO professionals also sit on the board of the Accounting Blockchain Coalition and have helped to define standards for auditing blockchains, in addition to participating in the development of blockchain training for the AICPA. BDO helps organizations visualize, develop and implement single-entity and multi-entity blockchain applications.

**Real estate experience:** Blockchain will likely be the next evolution in real estate. BDO has a national and global presence along with deep industry experience, offering keen insights into blockchain implementation for real estate transactions.

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