

# ‘Real estate sector is ripe for tech disruption’

Blockchain-based applications are in their early days in the real estate industry but their potential for unlocking value are huge, say two experts

The impact of blockchain on real estate investment and transactions is a key theme at the upcoming RICS World Built Environment Forum Summit in New York. Here Dr. Thomas Wiegmann FRICS, managing director at Blue Asset Management and honorary adjunct professor at Bond University, and Steve Weikal, CRE Tech lead in the Innovation Lab at the Center for Real Estate, MIT, explain how the technology works and will affect the real estate industry.

## What is blockchain?

As with artificial intelligence, machine learning, 3D printing and virtual reality, blockchain is one of the most cited developments when it comes to digitisation. A blockchain is a distributed database that maintains a growing list of ordered, permanent records, called blocks. It uses cryptography to allow each participant in a network to view and manipulate the ledger in a secure way without the need for a central, third-party authority. Importantly, a copy (or partial copy) of the shared ledger is saved on every computer connected to a blockchain network. Blockchain-based applications are in their early days in the real estate industry and are scarcely implemented in the form of concrete products. However, it is clear that this technology possesses considerable potential for innovation, opening up new opportunities across the real estate industry.

## What is the link with bitcoin?

Media coverage of digital currencies such as bitcoin often focuses on its usefulness as an alternative to traditional tender. However, other innovative uses are made possible by blockchain, the underlying technology platform for digital currencies such as bitcoin, ethereum and stablecoin.

## Is it suitable for real estate?

A blockchain is a permanent, transparent,



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append-only, distributed record of an asset. Importantly, some digital currencies do not function as a unit of value like money, but rather represent a unit of account or a means of exchange, which could be well-suited to real estate. Instead of a digital ‘coin’, these are referred to as ‘tokens’, which are created and distributed to the public through an initial coin offering (ICO), a means of crowdfunding by selling tokens to fund project development. The challenge, says Joi Ito, director of the MIT Media Lab, is that there are no ‘legal, technical, or normative controls yet, and many people are taking advantage of this’. However, the ICO concept, secured and verified by blockchain, has intriguing possibilities for unlocking value in real estate.

## How does it work?

Platforms such as Atlant (Russia), Harbor (US), Meridio (US) and Templum (US) enable commercial real estate to be fractionalized into “security tokens”. In this model, an attorney or other qualified authority verifies that a given property has clean title, no debt or liens, and meets other parameters specified by the owner. A special purpose vehicle (SPV) is formed, outlining a direct relationship between a declared number of tokens and the total value of a property. When the tokens are sold in an ICO, owners gain liquidity from their assets, while individuals and businesses worldwide can acquire part ownership in the property, sharing in the rental income or capital appreciation

over time as provided for in the ICO agreement. The aforementioned firms also provide a secondary market exchange, to trade issued security tokens, backed by the real estate assets.

While real estate ICOs are a new capital model, they are an innovative way to provide liquidity and remove friction in real estate, by creating secure markets for peer-to-peer transactions of partial or whole ownership of commercial and residential property. ICOs are more scalable than real estate crowdfunding and more flexible than REITs, and could therefore become a viable mechanism for unlocking real estate value.

## How will such innovation impact the global real estate industry?

It is a change of mindset. A wave of new technology – ubiquitous connectivity and more powerful mobile devices, seamless easy-to-use apps, possibly secure frictionless blockchain transactions – may enable real estate to be used in myriad new ways, reinforcing the idea that real estate is a service rather than just a long-term commitment. Further impetus for the rapid growth of real-estate-focused technology has come from venture capital, which has increased consistently over the past few years in both gross terms and average funding per proptech venture.

## How does real estate compare with other sectors?

Typically people accustomed to technology solutions in all areas of their lives expect the real estate business to be similarly equipped – yet this global industry still often runs on spreadsheets, a 40-year-old technology. Former real estate careerists are launching start-ups to solve problems they experienced in the business, while technologists are eyeing a multi-trillion-dollar global asset class that is ripe for disruption. The impact of technology and innovation on the real estate industry cannot be understated. ■