

BLOCKCHAIN'S IMPACT ON CRE

By Steve Bergsman | Sponsored by SIOR Foundation

Hey, veterans of the commercial real estate industry, the next revolution in business practices is coming to you courtesy of your children.

"My son got involved in bitcoin and that piqued my interest in blockchain, the underlying technology that makes bitcoin work," notes George McCutchen, SIOR, an industrial specialist and principal at Wilson Kibler Inc. in Columbia, S.C. "Blockchain is going to make a foundational change in commercial real estate as it is a safer and more secure way to keep track of data."

Geoffrey Kasselmann, SIOR, CEO at Op2mize in Northbrook, Ill. is also a futurist as well as a public speaker on the subject of disruptive technology. When he talks tech, a frequent question from the audience is about blockchain. However, even Kasselmann admits his interest in the subject of blockchain came about because his son wanted to invest money in bitcoin, or in this case,

Ethereum. "We bought \$1,000 of ether thru Coinbase and watched the price go way up and then way down," he recalls. "Bitcoin and other cryptocurrencies were the talk of the town before the bubble burst."

Kasselmann and his son actually made a little money on the investment, but what really caught Kasselmann's eye was what he calls the infrastructure on which bitcoin rides. "Blockchain is 'marketecture' that devised expressly to service bitcoin," he says. "It's not yet a 'today application' for commercial real estate, but it is a tomorrow application."

WHAT ARE WE TALKING ABOUT HERE?

The word blockchain is formed from what it is: an expandable list of records—called blocks—that is stored on a public database—referred to as a chain. The idea behind it is, as one writer on the Internet notes, "blockchain

allows digital information to be recorded, but not edited.¹"

Blockchain is like a very detailed ledger or database keeping track of the transfer of data such as property records or anything else that can be done in a chain of data, explains Louis Archambault, SIOR, partner at Saul Ewing Arnstein & Lehr LLP in Miami. "The chain of data (network) is encrypted, given a specialized key, and then kept track of within the chain of ownership. Whatever computer or system is attached to the chain keeps a record of the transfer of data."

The official definition of blockchain is "a time-stamped series of immutable record of data that is managed by a cluster of computers, not owned by any single entity.²" This is an important advantage of blockchain, because network-wide involvement creates security. Once the data is placed in the chain, everybody in the network has a record of the chain. At that point



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it becomes impossible to alter since everyone in the chain is then alerted. Each block of data is secured and bound to each other using cryptographic principals, hence a "chain."

Other important features of blockchain are transparency and the ability to gather, update, and get consensus among parties that don't know or even trust each other, adds Turner Levison, co-founder and CEO of CommissionTrac in Atlanta. "You have distributed information across a network that, in essence, is more secure than if it is on one server that could be hacked, manipulated, or destroyed."

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Blockchain is applicable for information on public ledgers that should be easily changed by one central source, Levison adds. "This makes it useful for the recording of titles and land deeds as immutability and transparency lends itself to things that that would otherwise be complicated or require a central authority to change."

THE FUTURE IS COMING FAST.

Cook County—the most populous county in Illinois and home to Chicago—has piloted a blockchain-based property title registry, says Kasselmann. "This is a permanent ledger. Everything that happens to a property PIN number from now on will

live forever and be available to any stakeholder in that property, including the county (for tax purposes), lender, title company, owners, and any other party who touches that property. The control, trust and authenticity of the title data are back in the hands of the property owner, who can authorize access to the data on the blockchain."

One of the problems during the 2008 economic downturn was that so many loans were sold, serviced, and commoditized by loan servicers that no one was keeping track of the underlying promissory note. The servicing companies ended up processing the mortgages but when they went to move to foreclosure, the court system would ask where the promissory note was or who had ownership of the underlying debt. As banks were bought, sold, or went under, the loan had been transferred so many times that the original sin was difficult to pin down. In addition, loan packages were bought and sold numerous times. The court system got bogged down because no one knew where the original note was.

"If the banks had transferred the record of the promissory note onto a blockchain and given



it a certain key, then as the note got transferred it would be recorded by that blockchain as to who had ownership of that note," says Archambault. "Everyone would know who owned that note because it was part of the chain."

The banks have long recognized that exact hangover of a problem and are working within their own systems to create blockchains that will keep track of negotiable instruments, Archambault contends. "Within banks that utilize blockchain, they can certify very quickly who owns certain loans because they have digitized and tokenized an instrument so it can be bought, sold, traded, and kept track of. The banks are working in-house to create blockchain systems."

Inherent in cryptocurrencies is something called tokenization, in which digital tokens replace currency or tradable instruments. "There are people currently working on the tokenization of real estate ownership, which would reflect what has already been done for multiple ownership instruments such as TIC [tenant-in-common], syndications, and real estate investment trusts, but in the digital world," says Archambault.

One current application of blockchain for real estate involves the tokenization of property ownership. When one tokenizes a property, the tokens can be tendered

as highly-liquid fractional ownership shares, explains Kasselmann. "A broker could represent property on a digital coin basis. There is already a dozen or so properties that have been successfully sold by digitizing on a blockchain and then selling tokens as fractionalized interest. Where this is headed is being able to sell and/or buy digitally on the internet as quickly as you could a share of stock."

One of the issues the industry is dealing with right now is wire fraud, says McCutchen, especially with the amount of bogus solicitations that come from overseas, and with regard to money laundering. However, he writes, "the transparency and identity verification processes of blockchain has the potential to reduce fraudulent listings, title fraud, wire fraud as well as other forms of criminal activity."

So far there hasn't been a more practical application for blockchain in the normal day-to-day activities of commercial real estate brokers, but Kasselmann maintains, "billions of dollars in 'proptech' start-ups are trying to figure out how to do traditional payment, rent collection, and vendor management, and to be an exchange for all other facets of the transaction process through blockchain and digital currency."

It wasn't so long ago that stock and bonds were represented by actual paper certificates, but the internet did away with

that practice. Change comes fairly rapidly these days, so the commercial real estate industry might be in the process of being blockchained into the future. Right now, we don't know what that means—or even that it is happening. ♥

1 <https://www.investopedia.com/terms/b/blockchain.asp>

2 <https://blockgeeks.com/guides/what-is-blockchain-technology/>

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