

# Exploring the Future Impact of Tokenization, Smart Contracts, and Blockchain on the Commercial Real Estate Industry

*Lee Samuelson\**

**In this interview, Lee Samuelson discusses how blockchain technologies, smart contracts, and tokenization will change and shape the real estate industry of tomorrow.**

Historically commercial real estate was stuck in the Stone Age. Traditionally, ownership and encumbrancing regarding the properties have been kept in paper formats — some of which may or may not be publicly available. In the United States, ownership is transferred by a written deed and needs to be recorded in the public records to provide notice to third parties and protect your rights. While a lease needs to be written, it may or may not be recorded.

We can imagine a day when blockchain technology is used to create and trade assets and digitize aspects of certain assets such as real estate, record each transaction, and make data available online without the need to go through intermediaries, but do so in a way that creates certainty of “ownership.” In addition, the introduction of tokenization can enable new ways of conducting business in the real estate market, and the digital tokens and as-

sets can replace traditional forms of commerce. Eventually, using blockchain technology, peer-to-peer transactions, and transfers of ownership and financing may be used to eliminate intermediaries, make transactions more efficient, and to even execute smart real estate contracts, such as leases that provide access to the premises upon payment.

In this interview, Lee Samuelson discusses how blockchain technologies, smart contracts, and tokenization will change and shape the real estate industry of tomorrow.

**Blockchain is starting to disrupt the real estate industry. How do you expect that process to evolve?**

**Mr. Samuelson:** Ultimately, blockchain technology is just a way to decentralize carrying out business. People will be able to conduct business with unknown third parties,

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with confidence and without intermediaries. It is a flexible platform that will enable people to share public information (such as ownership) or provide special information to only people they are transacting with (such as income and expenses). The ultimate goal of using blockchain technology is to provide speed, certainty, and accuracy of information and provide for flexibility in structuring and executing transactions.

I see the blockchain disruption as three phases — there are things that can happen in the short term, the medium term, and the long term. Eventually, you could use blockchain technology to actually buy, sell, and lease real property. It can be used as a tool to perform due diligence on the property, learn everything about the property, and be comfortable with your investment. In addition, it could replace something that we have currently in the United States: title insurance, which insures your ownership in a property. So it could reduce the need for title insurance, and eliminate its cost.

But all that said, I view that as very far off in the future. The reason for that is, in order for it to be effective all information regarding the property would need to be moved onto the blockchain, which is a massive undertaking.

### **What needs to be moved onto the blockchain before you could buy, sell, or lease property?**

**Mr. Samuelson:** All of the ownership records, the encumbrances, the easements, and the leases. Also, the economics and anything that drives the economics, with respect to whether it's going to be a cash-flowing property, needs to be moved onto the blockchain. For example, all of the services agreements, contracts, expenses, and revenue have to be

tied to it. It could all be available — some of it to the public and some of it would be accessed only if you gave permission. So not everybody in the world could see, for example, what the rent is under the lease.

Eventually, we can even envision having drones going around, constantly updating surveys and 3-D images of the property. A buyer could tell easily whether the person who's purporting to sell the property actually owns it. Who has lease rights to it? Who has easement rights? Are there any financings that encumber the property? What are the taxes? Are there any violations on the property? Has everything been approved? Everything could be tied to that property through tokenization.

Ultimately, you need to have somebody who's going to produce what I like to call a dashboard or some software that would help you visualize and understand the property and pull all this information together, because it's decentralized — it's everywhere and nowhere at the same time.

### **What challenges must be overcome before we reach that point?**

**Mr. Samuelson:** Unfortunately, right now it would be a massive undertaking to move all of the pertinent information to the blockchain and tokenize a property.

In the United States, every county has its own recordkeeping system. That's where you go to determine ownership and the encumbrance of every property in that county. But when you buy property, you have two issues. You are deemed to know what's recorded with respect to that property, and also what you can find out if you actually visited the property. So if no leases show up on record, you have to

visit the property to see if somebody is living in the house, and if so, you would have to inquire. You are tasked with finding out if they are the seller or a tenant.

To get all of this information regarding a property put on to the blockchain will take a long time, have significant political and costs issues — who's going to run it and operate it and the like? Therefore, I see that using blockchain technology to enable doing due diligence and facilitating transfers of real property as the most futuristic potential benefit of using it in the blockchain.

**You've given us the big picture of what's possible down the road. What about the near term?**

**Mr. Samuelson:** The one that I think is the most immediate, that can be done by using this decentralized system, is what I like to call tokenization of the ownership entity. Basically, if you have an entity that owns the property, you can use the blockchain to create tokens, just the way that you would issue shares in or interest in the entity. You can do that through the blockchain and create a token that represents various interests in the property owner. It can have a preferred return, or a direct return, and all your rights and obligations, just as if you went out and bought a stock certificate on the public market or a limited partnership interest.

The rub is, at least as of today, it still would be deemed to be a security, so you're subject to all the securities rules and regulations and there's no real way around it. If you follow the applicable rules, then a securities offering can be done without using the public markets, and just use the blockchain to have a peer-to-peer way to do it. However, at the end of the day,

buyers have to know that you have something to sell and what it is — it will need to be "marketed," even if executing on a peer-to-peer basis. There will need to be some kind of platform for doing that. So even though in decentralizing you can go peer to peer, you need to have some marketplace in order to find people, and to be found.

In addition, using blockchain and tokens can similarly be used with financings, so that a lender could participate some or all of its loans.

**How could smart contracts be leveraged for commercial real estate transactions?**

**Mr. Samuelson:** I believe that in the medium term there can be many smart contracts that will operate in the real estate space, such as leases or financings or even utility agreements. Smart contracts are just really computer code written within an agreement and it does whatever it's supposed to do.

One of the things that may happen can be like Airbnb: a smart contract could be tied to a property and when you pay, it unlocks the door for your stay. On financings, when fully paid, a smart contract could automatically release the lien. The financing smart contract could work to service a loan, sending payment notices based upon a fixed or even indexed rate, and let the lenders know if payment was made or if there was a default — and possibly even automatically deducting from various accounts. So it could reduce the servicing of various financing loans.

Smart contracts could be used for lots of different things. Eventually, you'd get smart contracts that could address utilities. It would

keep the electricity on if you paid, and turn it off if you did not pay.

Another example would be in a commercial lease context. If you needed after-hours air conditioning, the service could be part of your lease. You would request additional air-conditioning time. The smart contract would keep the air conditioning on, charge you, and take the money out of your account directly.

**So the most immediate near-term use of blockchain in the real estate industry may be the tokenization of ownership interests in the entities that own properties?**

*Mr. Samuelson:* Yes, as discussed above. But I think one of the interesting things with blockchain and its technology is that it's really

the building blocks for the way people can interact on a more global, secured, decentralized platform — like the internet on steroids. It creates a safe and secure method for interacting and conducting business between people that don't know each other. You don't need to have an agent, as the "smart contract" will help to facilitate the transaction. For example, if I'm going to pay you \$500 for something, the smart contract would be set up so that if I pay you, I actually get it, providing the parties comfort that the transaction will occur properly.

I believe the tokenization of real estate entities is the most exciting near-term use of blockchain and smart contract technology, because it is building upon the typical equity investments that are done today.