THIS IS REAL ESTATE, WHY SHOULD I CARE ABOUT BLOCKCHAIN?

By Avi Spielman

Real estate is not an industry known for change. Perhaps that is why it's so surprising that the "hottest" new technology to come around since the advent of the Internet has its sights set on disrupting the real estate industry. The digital currency, Bitcoin, has frequently been making recent headlines, maybe you've heard of it, maybe not. Regardless, it is blockchain, the underlying technology for digital currencies such as Bitcoin, that has technologists and investors excited.

What is blockchain? The Wall Street CIO describes blockchain as, "a data structure that makes it possible to create a digital ledger of transactions and share it among a distributed network of computers." Furthermore, "It uses cryptography to allow each participant on the network to manipulate the ledger in a secure way without the need for a central authority." In other words, a copy (or partial copy) of a shared ledger is saved on every computer connected to a blockchain network. This "distributed ledger" is a reorganization of how information is typically stored, providing an unparalleled level of transparency, audit ability, and security. The WSJ CIO shares that "Today, more than 40 top financial institutions and a growing number of firms across industries are experimenting with distributed ledger technology as a secure and transparent way to digitally track the ownership of assets, a move that could speed up transactions and cut costs while lowering the risk of fraud."

How does this affect the real estate industry? It starts with the more nimble technology-based real estate companies. For example, Airbnb recently "acqui-hired" Bitcoin and blockchain micropayment company ChangeCoin. Flip, a lease swapping company, stores verified financial, education, and background information on blockchain. More and more, real estate companies are finding ways to integrate Bitcoin and blockchain, including buyers accepting Bitcoin as payment for property and real estate crowdfunding websites accepting digital currency for debt and equity investment.

Although these developments are worth keeping an eye on, the more intriguing long-term possibilities lie in how blockchain can revolutionize the way public records are processed, maintained, and verified in the United States, particularly real estate titles.

Consider the Following Possibilities:

Property ownership – Blockchain enables all data pertaining to a property or owner to be easily verified and accessed by a buyer, seller, and trusted third parties. Furthermore, information asymmetry may be eliminated, theoretically assuring provenance of title, transfer, deed, and liens. Domestically, this may reduce human error or the need for redundant database systems. Internationally, it could stymie corruption and promote participation in formalized systems.

Contracts 2.0 – Blockchain enables the use of "smart contracts" (also known as "smart property"), which are computer protocols that emulate contractual clauses through facilitating, verifying, and enforcing contract performance. These "self-executing" agreements can automate certain processes of a real estate transaction (i.e. escrow services) while providing additional assurances to the participants (i.e. validate identity), in turn shortening the life-cycle of a deal and reducing associated risks and costs.

The global impact of blockchain on the real estate industry may be more profound:

Accessibility - According to a recent study conducted by the Pew Research Center, smart device usage (such as smartphones and computers) continues to grow at a rapid pace in emerging countries. Suddenly, by utilizing the internet on these devices, citizens have access to resources such as financial institutions, registries, and title information, often for the first time.

Participation - In many countries, registration of land is bureaucratic, expensive, and time-consuming, leaving many citizens with no other choice than to transact outside of the formal system. This is true in the United States as well, where property transacts in many communities informally. Blockchain can provide a method for administering a lowcost certificate of ownership from a computer or phone, bringing many people into the formal system.

Governance - In 2011, Transparency International reported that land is the second most corrupt sector in the world. That is why challenges in land administration are generally thought to be governance issues, not technology issues. After all, land registries in developed nations operated relatively efficiently even before the digital registries and cadastres phenomenon of the past 20 years. However, blockchain can bring transparency to the opaque nature of title registrars and take a major step toward curbing corruption.

The Future is Here - Since 2014, there has been more than $993 million of venture capital investment in Bitcoin and blockchain-related start-ups. That number is increasing at a rapid rate, making it clear that the private sector believes in bitcoin and blockchain. This includes blockchain-based real estate title recording start-ups, such as Ubitquity (U.S.), ChromaWay (Sweden),

Bitland (Ghana), and Bitfury (Republic of Georgia). In fact, in the summer of 2016, Ubitquity performed the first-ever blockchain based transfer of real estate title.

While Blockchain technology offers these and other exciting prospects for the future, introducing and integrating such a disruptive framework in an entrenched, administration-based industry such as real estate will require tireless commitment from forward-thinking, influential leaders. Legal reforms need to be introduced to include blockchain innovations, such as legally recognizing the authenticity of digital proofs of ownership. While it may be too early to predict when and how blockchain will change the real estate industry, the possibilities are too exciting to ignore and steps can be taken now to prepare for the inevitable transition to blockchain-based systems.

Even though implementing a blockchain registry system will not help to identify who has what right and to where, will not resolve property rights disputes, nor resolve the tedious and time-consuming process of collecting, verifying and bringing data into the formal system in the first instance - the good news is, it doesn't have to. Blockchain cannot fix the issues of the past, it can remove the issues from the future. ▽

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