Beyond Bitcoin Hype

Though cryptocurrencies snag all the attention around blockchain, its other applications are more likely to disrupt real estate. **BY MEG WHITE**

Media outlets have written breathlessly over the past few years about property purchases made in bitcoin. But what many reports leave out is that nearly every time a real estate transaction involving the digital currency closes, it is converted back to cash because sellers don't want to gamble with volatile exchanges.

The fact is cryptocurrencies are more splash than substance at this point, at least for real estate. But the underlying technology, known as blockchain, could make a greater impact on the industry before long. "Everybody's talking about cryptocurrencies," says Alex Voloshyn, chief technology officer of Propy, a company that uses blockchain to record real estate transactions. "Blockchain has vast applications, but cryptocurrency is just the simplest and most hyped."

Chao Cheng-Shorland, CEO and co-founder of ShelterZoom, among the first real estate tech players with a blockchain-based transaction platform, agrees. She predicts that the regulatory environment and consumer discomfort with the volatility of cryptocurrency will hold bitcoin back for the foreseeable future, but blockchain is ready to move forward now: "It has many more use cases and it's such a good fit for real estate."

What Is Blockchain?

Though it's often referred to as "*the* blockchain," this technology is really about many chains of information. Think of a line of boxes, each containing a compressed chunk of information. The entire chain is stored locally by every participant, making the whole system less prone to hacking because the data is distributed among members. The potential for fraud and abuse is also reduced because the so-called "distributed ledger" is owned by all, rather than just one person or institution.

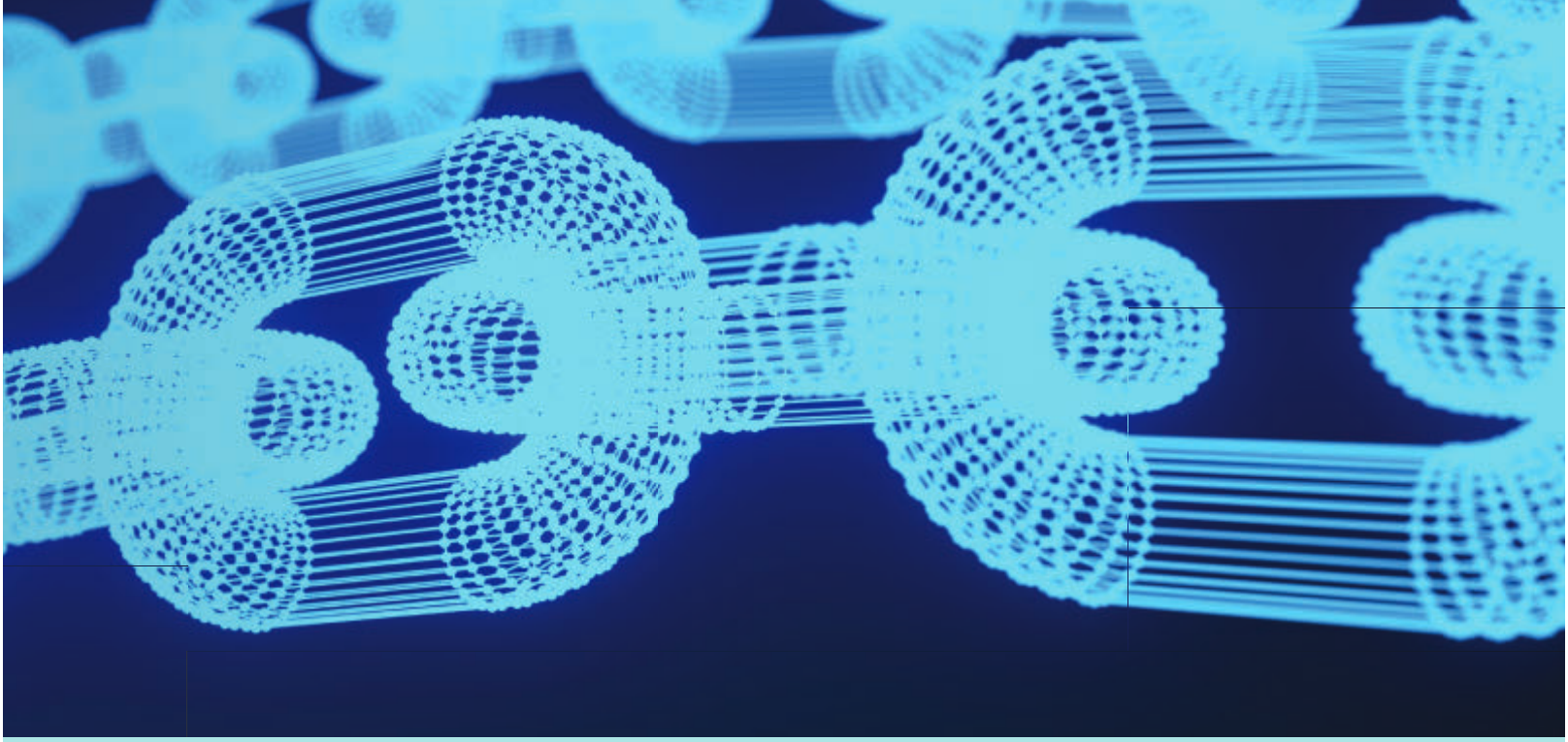
When new data is added to the chain, it must be verified by participants. Different blockchains handle this in various ways. In bitcoin and other "proof of work" systems, participants compete to be the first to come up with the verification code that proves the new addition's validity, through a computing-intensive process called "mining." The winner is rewarded in cryptocurrency, which monetarily incentivizes members to work quickly to ensure the veracity of data. Other systems rely on sponsors who verify the data on a "proof of stake" model; these participants are invested in the accuracy of the data and, through consensus, ensure the system remains truthful.

The democratic nature of blockchains also applies to their proliferation. Anyone can use protocols—essentially software platforms—to create applications that use this powerful technology. Many who launch new blockchains fuel them with tokens. At the most basic level, tokens are "dollars" of cryptocurrency, but they are also used to help the blockchain function, as they do in bitcoin's platform. Furthermore, tokens can be used to represent ownership of assets (including real estate) or, like stock options, they may allow participants to buy into the governance of a blockchain-based company.

Now that you're armed with a better understanding of the technology, let's examine four ways, apart from cryptocurrency, that blockchain can change the real estate industry for the better.

1. Automated Payment Processing

So-called "smart contracts" use blockchain technology to create a list of conditions to be filled before an automated transfer of currency can happen. For example, a smart contract could be



set up to release earnest money back to the buyer automatically when predetermined criteria, such as scheduling inspections and securing a loan, are met by a certain deadline. Neither party has to put blind faith in the other that they'll get their money on time; as long as the requirements are met, the contract is fulfilled. This is one reason blockchain is sometimes referred to as a "trustless" system. Smart contracts could also be used to ensure agents are paid more quickly.

Moretti is looking forward to ways these distributed ledgers can make finance more efficient in several parts of her business. She walks the walk too, quickly agreeing to be paid in cryptocurrency tokens for her consulting work with Sheridan, Wyo.–based blockchain mortgage platform Block66 and using Hermosa Beach, Calif.–based Bitpay to handle escrow in her crypto-to-cash real estate deals. "Escrow times are going to at least be cut in half," she predicts, adding that blockchain technology is "going to be able to match clients with lenders in little as 48 hours and fund that loan."

2. Transaction Management

While many companies are examining how to use blockchain to enhance the offer-making and acceptance process in real estate, ShelterZoom claims to be the first to allow its technology to be integrated on any listing site. Its widget allows interested consumers or their agents to make an offer with the click of a button. ShelterZoom uses blockchain to create a virtual negotiation room where only verified participants—the seller, the buyer, and the real estate pros representing them—are allowed to enter. The company has executed more than 100 deals using the platform and is looking at other ways to use distributed ledgers to improve the property buying and leasing process. "We've actually tackled the hardest part, which is the dynamic part," says Amir Allen Alishahi, ShelterZoom co-founder and chief technology officer, noting that all the "moving parts" of the negotiation process—mortgage companies, contingencies, attorneys—can be revised midstream. One of their next projects is to create a space for homeowners to connect with service providers and bid out projects in a secure environment.

One benefit of putting these processes behind a virtual door is reducing the potential for advertisers to harvest and sell off consumer data. Because the transaction's data is shared only with the people directly involved in it, third-party marketers can't use it to target buyers, sellers, or agents with ancillary services. "It's an antidote to the unfortunate condition we face as consumers," Alishahi says. "With the evolution of technology, people can actually do things without having their data mined." But because listing data is mostly out in the open, agents are still going to get phone calls from aggregators looking to sell them leads, at least for now.

3. Reliable Record-keeping

After Vermont passed a law to make it easier to use blockchain technology to promote economic development, the city of South Burlington capitalized on that change to enter into a contract with Propy to digitize real estate transactions on a distributed ledger. Propy CEO Natalia Karayaneva says the company is currently in the second stage of implementing the project, moving from maintaining a shadow system of property records on blockchain to having public records workers give up their old system and move fully onto Propy. Once the pilot is complete,

the company will import the entire history for every property, retroactively adding individual blocks of data for each instance when changes were made to ownership in the past.

While Propy aims to reduce the cost of property transfers, the technology also promises to cut down on abuses and inefficiencies. Propy is already helping officials in Ukraine combat fraud and corruption. Blockchain's transparency allows anyone to see changes in real time, and the fact that users must actively verify data accuracy helps root out scams. Karayaneva predicts that, in the coming years, blockchain will allow countries held back by outdated record-keeping or endemic fraud to leapfrog onto the international real estate market.

Such applications could also disrupt the property title business. Title companies won't vanish, Karayaneva says, but those that don't evolve won't last. Right now, "it's a $10 billion industry that just aggregates data," she says.

Karayaneva doesn't see Propy as a threat to the way listing data is organized or distributed. "I don't think that MLSs will be disrupted by blockchain," she says, noting the cost to put such tiny pieces of data about individual listings on a distributed ledger is prohibitively high at this stage. "It's currently a pretty efficient system of collecting data from brokers. Smaller applications like listings, I'm not sure if we will see a mass adoption."

Indeed, blockchain technology is better suited to track events (such as property changing hands) than data (such as number of bedrooms). Part of this has to do with the linear nature of distributed ledgers, which continually add information as time goes on, but it's also related to the cost and time it currently takes to add and verify new information.

4. Seamless Association Service

Blockchain technology may help smooth the data-sharing process among the national, state, and local REALTOR® associations. In October 2017, five state associations—Indiana, Massachusetts, California, Florida, and New Jersey—came together with the National Association of REALTORS® to test a pilot data-sharing program using distributed ledgers called BlockR. The associations are gathering member data from two or three of their local associations, adding state information for those members, and recording that data onto the blockchain. NAR is adding national data, creating an environment where engagement milestones—such as continuing education, committee service, RPAC donations, community service, and more—can be seen by all six associations at once. This will help with tasks such as confirming emeritus status or linking up the history of members who've changed associations. "There's a lot of value—both to members and associations—to being able to collect and share member data at a deeper level than we ever have before," says Liz Sturrock, NAR vice president of information technology. "This is a great example of NAR's leadership in bleeding-edge technology at a very low barrier to entry and investment."

NAR is also examining how distributed ledgers might affect closings in the future; this April, the association launched the Total Electronic Closing Presidential Advisory Group. And although blockchain-fueled innovations affecting listing data are likely further off than applications such as smart contracts and managing title transfers, the Real Estate Standards Organization, of which NAR is a charter member, has put together a workgroup to determine how blockchains can be used to improve the process of marketing and selling listings.

Adopting a Pioneer Spirit

As for cryptocurrencies, while a lack of government oversight keeps many away, some real estate pros see opportunities over the long term. Despite the naysayers, those practitioners are incorporating cryptocurrency in their business plans. After completing four transactions in which her buyer client wanted to use bitcoin to purchase property, Piper Moretti established the Crypto Realty Group (under the Christie's International Luxury Real Estate brokerage umbrella) in Los Angeles last year.

All four transactions were "crypto to cash," where a payment processor steps in at a predetermined time to liquidate enough bitcoin to pay the agreed-upon cash amount to the seller. But from her view on the ground, Moretti believes the intense interest she's seen from buyers with bitcoin to burn will eventually cross over to sellers. Seeing more consumers investing in cryptocurrencies, she feels it's inevitable that fully crypto-to-crypto transactions will be common someday. In the meantime, she's not focusing on bitcoin as her only connection with blockchain. She's excited about how the technology will change title transfer, lending, and more, and advises agents and brokers to "at least have a working knowledge of blockchain, because you will eventually get a call about it."

While blockchain has the potential to erase many headaches plaguing the real estate industry, it's a tool, not a panacea. More experimentation, governance conversations, and innovative thinking are necessary before it becomes part of agents' everyday work. ShelterZoom's Alishahi encourages real estate professionals to remain engaged in the conversations that will lead to the regular use of blockchain technology. "For the industry to go forward, blockchain is an absolute must," he says. "It ensures the survival of the industry. You have to innovate to survive."