

Blockchain Disrupting the Title and Settlement Industry

A PRACTITIONER'S VIEW

Blockchain Disrupting the Title and Settlement Industry: A Practitioner's View

Blockchain technology is evolving quickly in today's FinTech segment. There are some interesting start-up firms that are looking at ways to revolutionize and disrupt the title and settlement services industry. Clearly, our industry has experienced a dearth of meaningful technological innovation. Most of the innovation revolves around automating archaic systems rather than promoting truly revolutionary thinking. For example, eClosing technology has been around for more than a decade and we do see pockets of utilization, but it still isn't commonly adopted in the marketplace.

Could blockchain provide that needed boost to truly disrupt the title and settlement industry?

Benefits of a Blockchain Solution

There are numerous purported benefits for blockchain technology and most of them revolve around four main categories:

- 1) Transactional Integrity - otherwise referred to as immutability. Simply put, once a transaction is logged on the blockchain, it cannot be changed. Blockchain transactions are confirmed and validated and are cryptographically linked in blocks using hash algorithms. So, changing data in the block would require changing the hash in multiple blocks at the same time.
- 2) Security - blockchain data is stored in distributed ledgers called nodes across a network. Blockchains are continually updated and kept in sync so tampering with data on one node would be quickly identified as an anomaly.
- 3) Elimination of Third-Party Intermediaries - since blockchain records are immutable and secure, they can be trusted. There is no longer a need to use transactional intermediaries such as bankers, brokers, and title agents.
- 4) Speed - blockchain and Smart Contracts will be used to transact the purchase and sale of real estate in minutes rather than weeks or months.

It is with these core benefits in mind that we look at the title and settlement transaction. There is no doubt that realizing these benefits in a real estate conveyance would be truly disruptive. There are many obstacles that need to be solved to realize these sweeping benefits.

Blockchain as a Solution for Title Transactions

It's easy to see why blockchain appears to have significant applicability to the title insurance industry. Property is transferred from a seller to a buyer through some form of conveyance instrument such as a deed. A deed conveys ownership from person A to person B. Later, that same ownership is conveyed from person B to person C. These conveyances are even referred to as the 'chain of title.' So, it's understandable that these conveyances are seen as ripe for blockchain innovation.

Many of the recent real estate blockchain use cases focus solely on the conveyance of property from a seller to a buyer. This is an interesting first step, but it is important to remember that conveying property entails the seller fully warranting title with the obligation to defend against any lawful claims. These lawful claims to property appear in a wide variety of forms.

Someone can file a lien which creates a lawful interest in the property. Past due taxes, homeowner's association dues or unpaid utility bills can create liens against property. A court judgment may be entered against a person and that judgment now encumbers the property. If a home owner deceases, then their ownership interest may pass to the heirs. The heirs then have a lawful claim to the property. These interests have to be fully satisfied before a property can be sold.

Each state has its own rules as to how these interests are established and ultimately cleared away. Because the legal construct for each state can be complicated, a system of search and examination of land and court records has become fairly standardized. Generally, a title search is performed according to state regulatory guidelines to identify these interests so they can be addressed before someone purchases the property.

Obstacles to Overcome

For blockchain to be truly disruptive, it would need to contain information about these liens, judgments, taxes, unpaid utilities and other matters which encumber the property. Ideally, the blockchain solution would capture those transactions. However, many times these liens and judgments only reference the name of the person. A key feature of a truly disruptive solution is referencing a specific property when these liens, judgments and other title encumbrances are created in the first place.

Certain types of liens or judgments expire with the lapse of time or expire if not actively renewed. Understanding which liens or judgments have expired is outside the scope of most contemplated blockchain solutions, but is critical to understanding if there are valid encumbrances on the property. Therefore, some form of title examination would be required to determine if these liens or judgments still cloud the title.

If title examination is still required in a blockchain environment, then a usable platform must be created to search the blockchain for all transactions affecting a property. Today, performing this research is accomplished through reviewing a county's recorded documents that are posted on title plants or county web portals. Similarly, a method to review blockchain transactions would need to exist. There are platforms today that allow you to search a blockchain, but you have to already know the exact transaction ID (hash) you are looking for. That is very different than being able to search the blockchain for all transactions relating to a particular property.

For blockchain to really disrupt the title search and insurance process, we need a comprehensive system that will post these lien and judgment transactions to the blockchain, associate those transactions with a specific property and allow a search to be performed using a property identifier which will show all transactions in the blockchain associated with that property.

If a software solution is created to access blockchain records, either posting transactions to the blockchain or researching transactions already there, then does that software solution create the existence of another third-party intermediary much like the county recorder's office?

An additional obstacle arises from the state regulatory authorities in how they precisely define what is considered sufficient data for a title search. Those definitions specifically refer back to recorded instruments. These definitions will have to change so that transactions logged on a blockchain rather than utilizing traditional county recording functions are deemed acceptable.

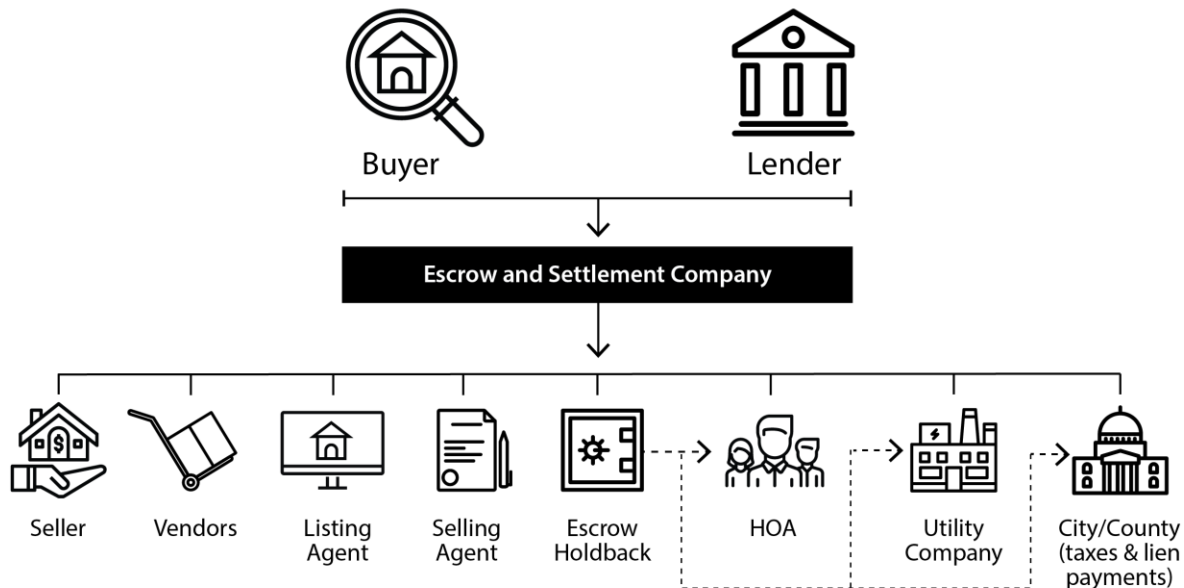
Another statutory hurdle revolves around notice requirements. States have established rules regarding the effect and priority of legal instruments. Generally, no bona fide purchaser takes a property subject to the claims of third parties unless they have notice of those claims. Notice is achieved through proper recordation in a county's public records system. These notice requirements form the underlying basis for recording all documents in the public records. A disruptive blockchain solution will need to satisfy these notice requirements and the statutory landscape will require modification to acknowledge blockchain transactions as providing proper notice.

Solutions to these obstacles will need to be shaped before blockchain can significantly change how title transactions are performed ensuring both sellers and buyers are protected from lawful claims that can arise threatening their ownership rights.

Blockchain as a Solution for Escrow Transactions

One of the most important functions of title and settlement providers is to receive all funds from buyers and lenders and then distribute that money to sellers and other parties to the transaction. This is typically referred to as escrow closing or settlement. Some articles have been written explaining that the settlement function can be disrupted by using smart contracts and cryptocurrencies such as Bitcoin. There are a few use cases where Bitcoin was used to some degree in a real estate transaction. However, when you dig a little deeper, you find that at the time of settlement, most, if not all transactions were converted to U.S. dollars to actually finalize the deal. It is still an interesting start!

For blockchain to really disrupt the settlement side of the transaction, we need to understand that there are multiple parties providing funds and multiple parties getting paid.



Obstacles to Overcome

In a standard real estate transaction, a purchase and sale agreement (PSA) is signed by the buyer and seller outlining who pays certain transactional costs. In a blockchain environment, self-executing Smart Contracts are generally promoted as an efficient way to document how the money will move to consummate the purchase and sale. The disruptive goal is for the Smart Contract to be predefined so that when a buyer and seller want to transact, they execute the Smart Contract. All the eMoney, be it Bitcoin, Ethereum, Litecoin, etc., transfers automatically through self-executing means, and the deal is done in a matter of minutes. Move in.

An obstacle to overcome is that the parties to the Smart Contract evolve over time and the amounts that need to be paid for conveying real estate change daily. A disruptive Smart Contract having an immediate, automated funds transfer component would need to perform an on-demand calculation of prorations for utility dues, HOA dues, and taxes. The Smart Contract would need to know who, and how much, to pay immediately at the time a buyer and seller want to transact.

This scenario is further complicated if the buyer needs to borrow money to buy the home. All lender adoption issues aside, the Smart Contract will need to know who the lender is, how much is being borrowed and have instructions for sending the eMoney. In today's real estate transaction, these details are seldom known upfront. For the settlement process to be truly disrupted by blockchain, the buyer would need to provide this lender detail into the Smart Contract in advance. This can be accomplished, but would likely require a third-party intermediary such as an escrow company to set it up. Another complication that needs to be addressed pertains to each state's statutory framework and their Good Funds statutes. Most states have some form of legal construct that governs how funds are used to transact real estate. Some Good Funds laws are very specific and define Good Funds as only certified checks, cashier's checks or wire transfers. Some states go further by mandating that the funds need to be routed

through the funds transfer system owned by the Federal Reserve. States will need to refine the legal landscape to acknowledge eMoney as satisfying Good Funds requirements.

Cryptocurrency volatility could create additional risk in a real estate transaction. The purchasing power of the U.S. dollar does not change dramatically in the short-term. When you decide to buy a house for \$250,000, that money generally has the same power today as it will 30 or 60 days from now. Some cryptocurrencies can't make that claim.

So let's say someone transacts to buy a home for 38.5 Bitcoin. Thirty days later, that same Bitcoin can spike up and be worth \$320,000. Did they just buy a \$250,000 house for \$320,000? Do they have the ability to renegotiate the contract? Or, do they simply lock in the purchase price using U.S. dollars which may defeat the purpose of using cryptocurrency in the first place?

It is important to note that cryptocurrency experts are hopeful that eMoney volatility will stabilize and issues surrounding large swings in value will self-resolve over time. Other forms of eMoney are pegged to the U.S. dollar and may not experience such volatility.

We, as an industry, will need to find ways around these obstacles so that the benefits of blockchain technology can be fully realized.

Blockchain Benefits Revisited

The transactional integrity and security offered by a blockchain solution are conceptually important. The idea that land and court records will be immutable and secure is a solid objective. However, in the U.S., we do not have wide-spread instances of a hacker gaining unauthorized access to a county recorder's document repository and changing ownership. Land records in other countries being much less evolved may pose this type of risk, but hackers stealing someone's home by altering existing land records is not a widespread risk in the U.S.

There certainly are instances where a fraudster may record a subsequent document in the land records in an attempt to assert an ownership right. This type of activity usually involves some type of forgery that passes through the recording clerk's watchful eye. However, if a fraudster were to forge a new document and push it through the recorder's office, couldn't they do the same thing on a blockchain? How would the blockchain miners know that it is a fraudulent transaction before they validate it?

Another suggested benefit of blockchain implementations pertains to the elimination of third-party intermediaries. As explored above, it does appear that there will still be a need for third parties to research blockchain transactions, determine each transaction's applicability to a property and create Smart Contracts that fully contemplate all the moving pieces in a real estate settlement. Clearly, the role of title and settlement agents may change, but there is still a need to perform these functions.

Conclusion

Blockchain may become the next foundation upon which real estate transactions are built. These are exciting times for this emerging technology. However, there are very real obstacles that must be overcome for blockchain to really change how title insurance and settlement activity is performed. It will take many years and a concerted effort to overcome the obstacles described above so that blockchain becomes the disruption for which the real estate sector is long overdue.