



Self-Managing Real Estate

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Blockchain is poised to make a sea change in just about every industry and business, even real estate.

Remember that folder with all the important papers related to your house? You know, the one with your mortgage and insurance documents, the foundation repair bill, the estimate to redo the electrical for that home theater, and the map showing that your neighbor's driveway is actually 2 ft. on your side of the property line? Very soon, a new technology called blockchain might allow the house itself to track what happens to it, so that you (and subsequent owners) don't miss anything. In fact, blockchain is poised to make a sea change in just about every industry and business.


Blockchain is an open, peer-to-peer (meaning shared) ledger of transactions. It's accounting, but the ledger doesn't live in a central place—it's distributed and supported by everyone's systems. So to authenticate a transaction, more than one node has to "see" the transaction occur and agree that it's accurate. Only then is the transaction added to the ledger. Once the block (transaction page) is filled, it's permanently recorded, and a new block is started. The block can't be changed once it's verified—it's part of the permanent record. This means that every single transaction can be

retrieved forever, creating a radical new kind of transparency. And everyone should be considering how such transparency will affect their business and their industry.

But back to your house. Blockchain technologies are governed by software code called smart contracts. Think of this code as self-running rules that automate all of the processes. If designed correctly, a business can practically manage itself based on the self-running code.

Therefore, blockchain technology could enable your house to manage its own transactions. It's not going to call the plumber—yet—but it could manage all of the those documents. Sometime in the next 10 years, rather than relying on a real estate agent or current owner to share the provenance of a property you might be able to submit a query and get a report on every transaction for a house or condo: every repair, change of hands, valuation estimate, tax assessment, redistricting, construction document, and lien. You'll no longer wonder whether that house is built on an old burial ground or whether the agent failed to mention the meth lab the past owners operated. The blockchain record will tell you, and you'll be able to trust it. And

the house will continue collecting and recording this information through a network of blockchain-enabled services, including identity, storage, and transaction tokens. Your home and its relationships will be recorded for all to see, which might be liberating or creepy—or both.

We don't normally think of objects as having agency (being entitled to act and make decisions for themselves), though we all know they have a history. This first step is an extension of that history: making it visible to all. The next step—giving objects autonomy—is the subject for another column entirely. 

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