Vermont Gives Blockchain Tech a Boost

The state's foray into blockchain may serve as notice to other public-sector entities that the technology's potential soon may be coming to fruition.

BY **ADAM STONE** / AUGUST 11, 2015   0

Early this month, Vermont's governor gave blockchain a big push forward, formally asking a broad coalition of stakeholders to consider whether the technology could be used to help manage state records.

Blockchain is the "digital ledger" driving bitcoin, the emerging electronic currency. It's a decentralized record, one that is transparent to all users: a chronological transaction log that cannot be altered.

The ledger is still in its early days, and bitcoin watchers give Vermont high marks for giving blockchain a boost.

"Anytime government is on the leading edge of new technologies, I am going to applaud them for that. Kudos for starting the conversation," said James Haight, an analyst at Blue Hill Research.

SERVING STATES

Vermont's foray into blockchain, while still in its investigative stage, may serve as notice to other states that the technology's potential soon may be coming to fruition.

Where could blockchain make a difference in government operations? The most prominent example is in the area of land records, which must be kept for a long time, and must be sufficiently visible that anyone with an interest can track ownership of a piece of property. Those criteria are well suited to blockchain's capabilities.

Some advocates say blockchain could be used to ensure social services are delivered and used as intended. Others speculate that a transparent, chronological ledger could establish a definitive chain in efforts to track patents and intellectual property.

Blockchain has so far been used most prominently to manage bitcoin's complex behind-the-scenes recordkeeping. Advocates say the technology could likewise go a long way toward simplifying government recordkeeping, while simultaneously

ensuring the accuracy of vital information.

"Governments keep public records, from basic things like title registries to birth certificates, death certificates, all sorts of licenses, and right now all these important records are trapped in big filing cabinets," said Aaron Wright, a fellow at the Coin Center, a policy research and advocacy group, as well as a professor at Cardozo Law School in New York.

Blockchain changes the paradigm of security in recordkeeping. Right now a typical arrangement allots security responsibilities to a single entity: an IT shop's security guru, or an outsourced provider managing security in the cloud, for example. Blockchain offers a different vision, with security assured through the fundamentally open nature of the ledger. The chain is transparent. If anyone were to try to alter or corrupt the flow of information, everyone else would know.

So security is one aspect of the blockchain that advocates say would come as a boon to government. Others look to the technology as a potential way to dramatically reduce the cost of government's bureaucratic overhead.

"The government keeps a lot of records, so there are gigantic administrative and audit costs associated with any aspect of the system," Haight said. "This may be an opportunity to reduce those transaction costs across all levels of government."

BROAD BUY-IN

While Vermont clearly is interested in exploring these possibilities, the state is hardly going in blind. In fact, Gov. Peter Shumlin's request for a blockchain report pulls together stakeholders from a broad array of entities.

The request seeks input from the Secretary of State, the Commissioner of Financial Regulation, and an Attorney General, asking them to consult with the delegates of the National Conference of Commissioners on Uniform State Laws and the Center for Legal Innovation at Vermont Law School.

Those who follow blockchain say it makes sense for the state to move forward slowly, and to seek buy-in from a diverse body of interested parties.

"This is new technology. It is exciting technology and it is being looked at by a lot of different industries, but Vermont is still wise in doing this with the appropriate sense of caution," Wright said. "It makes sense to make sure everyone is on the same page with it before diving in too deep."

Caution is the order of the day even among blockchain's biggest proponents. Take for instance Ethereum, a highly publicized firm that is leading the effort to develop a blockchain platform independent of bitcoin. The company's website touts its product as "a safe decentralized software platform" – with the word "safe" crossed out with a big red X.

Clearly this is still uncharted territory.

"It can work, it can scale to be big enough, but when you get to things like the user interface, there is a real level of complexity. Only a small handful of people know how to do it at this point," Haight said. "That tiny concentration of knowledge needs to expand."

Such caveats notwithstanding, it's clear that Vermont's high-profile dive into blockchain represents a significant win for a technology that is still in its infancy.

"There clearly is some legitimacy threshold that's been crossed here," Haight said. "It takes blockchain out of the realm of taboo."

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