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Microsoft Bets That Bitcoin-Style Blockchains Will Be Big Business

Giant banks are experimenting with software inspired by Bitcoin, and Microsoft wants a piece of the action.

By Tom Simonite on January 22, 2016

Earlier this week a consortium of 11 giant banks including UBS and Credit Suisse announced that they had completed their first trial run of the idea of using software inspired by the digital currency Bitcoin to move assets around more efficiently. It was also a test of what Microsoft thinks could be a significant new business opportunity. The experiment, coordinated by a company called R3 CEV using Bitcoin-inspired software called Ethereum, took place inside Microsoft's cloud computing platform, Azure.

Many large banks have said they are investigating so-called blockchain technology (see "Banks Embrace Bitcoin's Heart but Not Its Soul"), with Santander predicting this could save the industry $20 billion annually. Microsoft wants financial companies to host their blockchain software inside Azure. It has recently struck partnerships with several startups working on blockchain software for banks and other big corporations.

"We see a huge opportunity here," says Marley Gray, who leads Microsoft's project and is technology strategist for financial services at Azure. "Enterprise-scale and enterprise-grade infrastructure is going to be vitally important for this financial infrastructure that will be woven using blockchain over these next few years."

The flurry of interest in blockchains is inspired by the way the software behind Bitcoin verifies and logs transactions. Each one is recorded in a public ledger known as the blockchain, maintained by a network of computers around the world. Cryptographic software verifies transactions as they are added and ensures that the historical record can't be altered.

Banks want their blockchains to record not bitcoins but transactions in conventional financial assets, such as currencies, bonds, or derivatives. Startups and banks are also exploring a concept known as "smart contracts," in which updates to a blockchain can add simple computer programs – for example, to automatically make a payout when a particular transaction occurs.

Banks also want their blockchains more private than Bitcoin's, which is public and maintained by a community of strangers. Instead, companies using a particular blockchain would each run some of the software contributing to its upkeep. Gray says that doing that inside Microsoft's cloud servers can let banks manage and deploy blockchains more easily, making them more reliable.

"I don't think it will be solely in Azure, but it can be a backbone," he says. Microsoft's blockchain as a service also makes it easy to experiment with different takes on the technology as companies try to figure out what it's good for, says Gray.

Despite much avowed interest in the technology from financial institutions, blockchains are not yet being put to work in any meaningful way. IBM, Cisco, and Intel recently formed an open-source project that will develop open-source blockchain software, but the most developed versions of the concept come from startups still testing and refining their products.

The mismatch between banks' ambitions and the embryonic state of blockchain deployments has led to complaints the idea is overhyped. Chris Larsen, CEO of Ripple, a company with cryptographic ledger software being tested by partners including Accenture, says Microsoft's involvement can help assuage such fears. "Microsoft adds credibility as to where the industry is going," he says. Since last month, Microsoft has been running one of the software "nodes" that power Ripple's ledger technology.

Still, to get beyond just experiments – and for Microsoft's blockchain platform to become a significant source of income – this new approach will need to become as useful and reliable as more conventional approaches to managing corporate data.

"We should be comparing ourselves with other infrastructure companies like the Oracles and SAPs of the world," says Chris Finan, CEO of Manifold Technology, which is testing its blockchain software with partners including the Royal Bank of Canada, and which is also a partner on Microsoft's blockchain platform. "We need to prove why this kind of infrastructure is more efficient."

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