Bitcoin's 'blockchain' tech may transform banking

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The technology that drives the shadowy cryptocurrency bitcoin is drawing interest from the established banking industry, which sees a potential to revolutionize the sector.

Although bitcoin and related virtual currencies are limited to a small set of transactions and are often associated with the underground economy, the so-called blockchain technology is gaining currency in the financial world.

A blockchain is essentially a shared, encrypted "ledger" that cannot be manipulated, offering promise for secure transactions that allow anyone to get an accurate accounting of money, property or other assets.

"The blockchain, which is the technology behind the encryption and e-certification, that is a technology which might very well be very useful," said Jamie Dimon, chairman and chief executive of JPMorgan Chase at a conference earlier this year.

Leah Gerstner, a vice president for public affairs at American Express, said the financial group made its first investment in a digital currency company called Abra "as a way to get a better understanding of blockchain technology and explore its potential."

Gerstner told AFP that "we believe blockchain technology is playing an important role."

The use of blockchain began in 2009 with the introduction of bitcoin and other virtual currencies that are generated by complex chains of interactions among a huge network of computers around the planet, and are not backed by any government or central bank, unlike traditional currencies.

The blockchain offers potential to the traditional finance sector due to its ease of transaction with verification from any point on the platform.

"You can imagine a number of potential use cases for this technology in financial services across both business-to-consumer and business-to-business transactions—from international money transfers to stored value," Gerstner said.

The Linux Foundation recently announced a new collaborative "Open Ledger" project to advance blockchain technology, teaming with tech firms such as IBM and Intel, stock exchanges and major banks including Wells Fargo and Mitsubishi UFJ.

"Distributed ledgers are poised to transform a wide range of industries" including banking and shipping, among others, said Jim Zemlin, executive director at The Linux Foundation.

Transparency, lower costs

Blockchain technology could lower the cost for many kinds of consumer cash transfers that now are handled by companies like Western Union and MoneyGram.

The banking industry could save $15 billion to $20 billion in transaction costs for international payments by using the technology, according to Banco Santander, which is working on its own virtual currency.

A consortium of global banks including Morgan Stanley, HSBC, UBS, Credit Suisse, Barclays, Societe Generale and Commerzbank are working with the finance tech startup R3 to use blockchain technology for a wide range of applications.

Others moving forward include Bank of America, Citigroup and Goldman Sachs, which is working on its own virtual currency that could cut out intermediaries for settlements between financial institutions.

The technology could help facilitate instantaneous, secure financial transfers which now sometimes can take days when moving internationally, according to blockchain backers.

"This would change the way settlements of securities are traditionally carried out," said Prableen Bajpai, founding director of the India-based research firm FinFix.

The use of a cryptographic currency such as the one being developed by Goldman Sachs "facilitates rapid, secure and confirmed transactions via network, thereby eliminating the need for a third party," Bajpai said.

"The results are extremely timely and efficient settlements."

Another advantage is that transactions could be made without revealing identities and other information—which could be important for institutions trying to keep personal data secure from hackers.

But a number of issues need to be resolved before virtual currencies and blockchain technology become mainstream.

The anonymity of the transactions is something that concerns regulators seeking to crack down on money laundering, and financing of criminal or terrorist activity.

New York state, for example, is pressing to require the identification of those engaging in financial transactions.

Nonetheless, many see blockchain technology as the wave of the future.

"Ultimately, blockchain could become a way for those around the world who don't have a bank account to make purchases on the Internet. And that could affect the banks, as well as credit card companies like American Express, MasterCard, and Visa," says Ed Yardeni at Yardeni Research.

"Blockchain still needs to show that it can grow to the size of Visa's or MasterCard's networks. But there are certainly many smart folks throwing a lot of money at the technology, which may one day prove disruptive."