

10 THINGS YOU NEED TO KNOW ABOUT BLOCKCHAIN



What is Blockchain?

The simplest way to understand blockchain is to think of it as a vast digital ledger (or database) of transactions or information that is shared among millions of computers, or other devices connected to the Internet.

When blockchain is used for transactions, with each transaction a person makes — such as sending or receiving funds — the ledger grows. Each new transaction becomes (or forms part of) a “block” that is added to the “chain.”

What makes blockchain technology so revolutionary is that it’s both secure and can be decentralized. Through using complex cryptography and a consensus between computer servers, transactions can take place between unknown parties without a central authority to grant approval.

Blockchain has the potential to reshape the financial services industry — and much more. Here are 10 things you need to know.

1 ■ **It is Not Synonymous with Bitcoins**

Bitcoin is a digital currency, and the technology that underlies and supports Bitcoin is blockchain. However, blockchain technology has functionality beyond Bitcoin.

2 ■ **It May or May Not Involve Digital Currencies**

Blockchain has uses beyond sending or receiving value. For example, it is currently used in parts of the world to track ownership and the transfer of assets, including real estate and securities.

3 ■ **It Can Be Used for Public and Private Transactions**

There are in essence two types of blockchains: private and public (or centralized or decentralized). A public blockchain allows everyone to see all transactions that have taken place on the blockchain, everywhere in the world. A private blockchain is where permission is restricted and only permits a predetermined group of members to access the blockchain. It is also possible to use a combination of the two.

4 ■ **It Can Execute Contracts**

“Smart Contracts” are contracts written in code so that computer protocols facilitate and enforce the performance. When a transaction takes place, the blockchain technology can determine if all conditions that have been coded into the smart contract have been met and if so, it then executes the contract.

5 ■ **The Regulation of Blockchain Depends on its Use**

How blockchain technology is regulated will ultimately depend on its use. Where blockchains are used to transfer securities, provisions of securities law will have application. Where the blockchain is used to execute smart contracts for wagering (one effective use of smart contracts), gambling law and regulation will apply.

6 ■ **Digital Currencies are Regulated under the *Proceeds of Crime (Money Laundering) and Terrorist Financing Act***

Digital currencies, such as Bitcoin, will soon be regulated under Canadian money laundering legislation. Recent amendments made to the legislation include in its scope those who "deal in virtual currencies." Moreover, these provisions will subject those who "deal in virtual currencies" (still to be defined) to the money services business regime of the legislation.

7 ■ **Blockchain Solutions Are Already Operating in Canada and Globally**

In addition to digital currencies, blockchain technology is currently being used by organizations for everything from diamond certification to maintenance of health-care records. Many major international organizations have also recognized the potential of the technology and are making significant investments in the technology.

8 ■ **It Has Tremendous Potential Regarding Personal Privacy Protection**

Blockchain technology can be utilized to establish a decentralized personal data management system that would enable each individual user to control the use and sharing of their own personal information. Blockchain technology serves as the protocol that allows a user to determine when and with whom their personal data can be shared.

9 ■ **Canada is a Leading User of Blockchain**

Canada is already home to several blockchain start-ups, and there are Bitcoin ATMs in Montréal, Toronto, Calgary and Vancouver as well as many other locations across the country. The Bank of Canada is also currently experimenting with digital currency on blockchain.

10 ■ **It is Expected to be a Truly Revolutionary Technology**

The scope of blockchain technology and the impact it could have for all industries cannot be underestimated. While it is early days for the technology, those using, or considering using, blockchain technology should be aware of the potential it offers as well as the regulations that may need to be navigated.

CONTACT

For further information, please contact:

Jacqueline Shinfield
416-863-3290

Christine Ing
416-863-2667