

## What if...Blockchains Replaced Corporate Financial Systems?

Parked somewhere in a data centre, (on premise or in the cloud) every corporation has a finance and accounting system. Whether it is from Oracle or SAP, or from CA or Sage, your company likely spent around 5-10% of annual revenue to implement it and 2-4% per year to maintain it. While these systems have grown to support many aspects of a company's operations, at their core they exist to record financial transactions – what you paid and what you were paid.

For every transaction recorded in your finance system, there is (or should be) the opposite transaction recorded in another company's finance system. These systems are electronic versions of the paper ledgers that businesses kept, the first example we have comes from Amantino Manucci and dates back to 1300. They represent your private record of transactions.

Enter Blockchain.

While you may be familiar with Bitcoin or some other value exchange, crypto-currency, underneath them is a technology called Blockchain. One of the things Blockchain does is build an irrefutable, distributed, public record of transactions. In the case of Bitcoin, a record of everyone who has ever owned a specific coin and at what time. Even though the Blockchain is public, the encryption technology means only you have access to the transactions you did and only the parties involved in a transaction can know what was transacted and with whom. In fact, the total worth of bitcoin in the Blockchain is currently around \$20 billion, or about 0.025% of the \$80 trillion that is global GDP.

Setting aside the idea of virtual currency or value exchange, it seems feasible that a distributed, public general ledger could exist allowing corporations to record transactions. The transactions could still occur physically in a national currency, Canadian Dollars, but the general ledger entry would exist in a Blockchain. Conceptually, this means that no company would run a finance GL system, as we know it today.

One of the interesting aspects of Blockchain is its irrefutability. Imagine if we had a record of every transaction and that both parties had certified independently on the specifics of the transaction, a trusted transaction. It raises the question, what would auditors do? While grossly over simplifying the activities of accountants and auditors, it is possible to foresee a system where their core function, of assuring the financial records of companies, does not exist anymore.

While a grandiose concept, replacing private finance systems, with public Blockchains, thinking about these things helps explore the full potential of the technology to disrupt business. Blockchain is most likely to initially be applied to environments that have three characteristics. Value is exchanged, an intermediary facilitates the transaction and there are a small number of participants that conduct the transactions. Suggesting inter-bank payments and stock market transactions would be good early candidates.

It does seem that the ability to record transactions on a public, distributed register in a manner that is secure, private and irrefutable could really change the business landscape in quite interesting ways – if you are an auditor, it still might be time to start looking into a new career path.