

# How Blockchain Has Revolutionized the Concept of Trust

We live in a world where we have made centralized trust managers such as banks, stock exchanges and other financial middlemen indispensable. If we were to take a step back and look at things from a historical standpoint, it is clear that these intermediaries were initially put in place to preserve the truth and to maintain trust. These people existed because the exchanges in value on which society itself was founded required us to trust each other's claims.



What's extremely unfortunate is the fact that these middlemen, who were initially meant to serve as intermediaries, have become outright gatekeepers. They charge fees, restrict access, create friction and inhibit innovation in order to strengthen their own market dominance.

However, as cheesy as it may sound, Blockchain is starting to save the day. The arrival of this revolutionary technology has redefined the concept of trust by means of a radical, decentralized approach to accounting.

Thus, in our third article about Blockchain, we've decided to share our thoughts on how we believe Blockchain is redefining the concept of trust.

## Blockchain and Preservation of Truth



Blockchain at its core is nothing more than an electronic ledger - a mere list of transactions. And these transactions could theoretically represent anything. They could be actual exchanges of money, as they are on the Blockchains that underlie cryptocurrencies like Bitcoin. Or they could mark the exchanges of other assets,

such as digital stock certificates. They could represent mere instructions or even smart contracts (which are basically computerized instructions that trigger actions if a specific event is true. Ex: Buy a specific stock if the price drops below \$80.)

But what makes Blockchain an extraordinary ledger is the fact that instead of being managed by a single, centralized institution, such as a bank, it is stored in multiple copies on multiple independent computers that exist within a decentralized network. The underlying concept is that no single entity controls the ledger. By structuring the system in such a way, a Blockchain achieves to produce *and maintain* an immutable list of transactions i.e. a record of the truth that is nearly impossible to tamper with.

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## A Shift in Trust



What's even more important to note is that a computer in the network can make a change to the ledger **ONLY** if it abides by the rules dictated by a "consensus protocol", which is basically a mathematical algorithm that requires a vast majority of the other computers on the network to agree with the change.

Different kinds of consensus protocols exist within this general framework of thought:

- Public Blockchain ledgers, also known as “permissionless” ledgers; these are what Bitcoin and other cryptocurrencies belong to.
- Private Blockchain ledgers, also known as “permissioned” ledgers that might be used by different organizations that need a common record-keeping system.

Despite the numerous differences in consensus protocols which lead to a multitude of debates aiming to decide which of the protocols is the safest, it is important to note that these consensus protocols emerge from the same fundamental idea: placing one’s trust in mathematical rules and impregnable cryptography and not in fallible humans or institutions.

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## Encouraging Innovation



Lastly, it is important to note that Blockchain not only results in a drastic reduction the cost of trust, but it also helps lock in our current state of progress to encourage innovation in a world that’s technologically multidimensional.

As we move towards a more connected future with technologies like the internet of things, which is hoped to connect billions of autonomous devices and help them interact together to give birth to new efficiencies, the concept of trust starts to gain paramount importance. And it goes without saying that the ideal IoT would remain a mere dream if the micro-transactions between the devices were to require the expensive intermediation of centrally controlled ledgers.

Conclusion? All Hail the mighty Blockchain!

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Our [Scrum as a Service model](#) has helped our clients harness the power of Blockchain and rapidly turn their ideas and concepts into working, demonstrable software. And we'd love to help you do the same.