



# The Fight Against The Coronavirus Finds An Unlikely Ally In Blockchain

Insights

5.18.20

Over the years, Fisher Phillips has covered the proliferation of blockchain technology extensively. From streamlining the [hiring process](#) to its [ability to enforce workplace policies](#), the benefits are numerous. This is particularly true for employers grappling with how to securely store employee health information in a post-pandemic workplace (more on that in a minute). If you have no idea what I'm talking about, or kind of know what I'm talking about, but still don't quite "get it," let's begin by answering that initial question: what is blockchain?

## Blockchain Is More than Bitcoin

Many of you have likely heard of the cryptocurrency, "Bitcoin." Blockchain is the technology that makes Bitcoin possible. At its core, Blockchain is a chain of records that can be added to, but not modified. It is a decentralized database that stores a ledger of assets and transactions across a peer-to-peer network, while using its network to authenticate transactions. Authentic transactions are then cryptographically secured and stored in blocks of data, which in turn are cryptographically linked and secured. A network of users, collectively adhering to a set of pre-agreed rules, carry out this cryptographic validation. This provides integrity to the system, ensuring only one single "correct" version of events is stored, which cannot be changed subsequently without the agreement of a majority of nodes. Nodes can be any type of device, but are most often computers, laptops, or large servers.

Once on a blockchain, data is unalterable; you can only add data, you cannot remove it. By locking the data cryptographically and replicating it on all computers across the network, blockchain makes tampering with data virtually impossible. This allows any blockchain user with proper access to view the data, track its history, and know that it can be trusted.

## Blockchain's Fight Against the Coronavirus

This theme of "trust" has propelled blockchain into the coronavirus discussion. The ability to aggregate droves of data in a secure, immutable ledger has many healthcare experts looking for ways to bring blockchain's utility to the frontlines of the battle. The Department of Electrical and Computer Engineering at Villanova University for, example, is [currently developing a platform](#) to contain COVID-19 by utilizing blockchain, Artificial Intelligence (AI), and Internet-of-Things (IoT) technologies to help medical facilities track coronavirus cases on a global scale. The system will utilize blockchain to share coronavirus test results among medical facilities on a trusted

infrastructure. IoT and AI are used to survey public spaces where large gatherings occur and push out alerts over the blockchain when such gatherings are deemed “high-risk.” These alerts will assist healthcare providers in making informed decisions about how to properly allocate the dwindling supply of medical staff and equipment. The need for such platforms is immediate, as more and more state governors identify “contact tracing” as a critical aspect of being able to safely reopen the economy.

Blockchain can also be a game-changer across a broad spectrum of companies as employees slowly return to work from country-wide stay-at-home orders. Many companies are now taking temperatures and conducting coronavirus tests onsite before allowing employees to enter the workplace. Collecting such information on virtually every employee puts HR departments at risk of being exploited and, as more companies are confronted with data breaches, it is critical that safeguards be put into place to prevent fraud and maintain security. In the face of rising cybersecurity crime, blockchain is being lauded as a solution. Since records stored on the blockchain are decentralized, there’s no single place where hackers can access and manipulate data. Additionally, access to the blockchain is limited and controlled and even those with access cannot arbitrarily make changes to the record. This type of safeguard limits both internal fraud and external hacks of sensitive employee records.

## **Conclusion**

Blockchain can come across as a hyper-technical and somewhat nebulous concept. The benefits, however, are not. A more secure, immutable system of storing data is a concept we can all get behind. Blockchain’s utility in the workplace will extend far beyond the frontlines of the coronavirus.

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