



Will Workplaces Be Going Off The Rails On The Blockchain?

Insights

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What if I told you that technology with internet-like potential will soon lead to a seismic revolution in our society, including the workplace? That you could greatly streamline your hiring process, eliminate misclassification battles, or even save your company from spending legal fees to enforce employment contracts? While you might think this sounds like “fake news,” the technology exists today that could make these things possible sooner than you think. It’s called the Blockchain.

In the near future, every employer will use or interact with Blockchain technology in some fashion. It will fundamentally change the way we transact business with one another, leading to increased efficiency and untold cost savings. Moreover, it will form the backbone of the gig, or sharing, economy. It’s time for all to get aboard the Blockchain.

What Is A Blockchain?

In a nutshell, Blockchain technology allows people to exchange things of value with one another without the trusted middlemen we normally rely on to authenticate transactions, such as governments, banks, or even ride-sharing platforms. It allows us to authenticate and exchange assets, like virtual currency, intellectual property, titles, credentials, resumes, contracts, and personal data, on a decentralized virtual ledger.

Blockchain is a decentralized database that stores a ledger of assets and transactions across a peer-to-peer network, and uses 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. This allows Blockchain transactions to be verified, monitored, and enforced without the presence of a trusted third-party or institution.

Blockchain creates a public historical record of all transactions and what is owned by whom. But instead of centralizing the ledger in just one place or with only one entity, Blockchain’s entire network of users collectively account for a given transaction, and then distribute a shared (*i.e.*, decentralized) public ledger over that same network. The ledger is technically available on any computer using the network, but can only be accessed using a mathematically derived private key.

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. Facilitating a trustless transaction affords users the ability to trace the history of all data involved in the transaction to its origins on the network and locate any potential weakness in the chain.

Crazy, But That's How It Goes: Blockchain In The Workplace

Based on Blockchain's performance in the area of virtual currency transactions, myriad possibilities and probabilities emerge to impact the workplace.

"Smart" Contracts – Conditioned To Rule And Control

Blockchain technology can revolutionize work-related contracts and save millions of dollars in the process through the use of "smart" contracts – computer code developed to facilitate, verify, monitor, execute, and enforce the terms of an agreement.

Smart contracts are not new. Using Blockchain, however, a smart contract can manage itself with little to no human effort. Blockchain technology can authenticate the various promises in the contract, validating that each party has the ability perform the tasks it is responsible for. For instance, in an employment contract, Blockchain can verify that an employee has requisite qualifications for the job.

Moreover, performance of a smart contract can be more easily monitored through Blockchain technology. This monitoring could be performed either using an interface that allows the parties to access the Blockchain, or, since they are programmable, the parties may choose to code contracts so that monitoring occurs automatically.

The most promising feature of Blockchain, however, is its ability to allow a smart contract to self-enforce. This allows for substantial savings on costs associated with enforcement, such as labor expenses, legal fees, court costs, and more. You could, for example, design restrictive covenants and other provisions in an employment agreement that can trigger enforcement mechanisms, like automatic forfeiture of previously authenticated and verified cryptocurrency, or even immediate revocation of credentialing.

Smart contracts could be used in a variety of other ways, too. Collective bargaining agreements could be reduced to smart contracts and uploaded to the Blockchain. Or you could also use Blockchain to functionalize employee handbooks and other policies. The variety of means by which Blockchain may be used to enforce contracts or policies is limited only by the data on the Blockchain and the coding of the smart contract or policy. In other words, the possibilities are endless.

Blockchain In HR – Making Your Own Rules

Blockchain will transform the way human resources departments access and use employee data. Employers can create, manage, and securely store everything from employee applications and background checks to credentials and performance reviews on the Blockchain. Since it is a trustless technology, anyone using employee data on the chain has no reason to question its authenticity. Even the seemingly simple, yet many times difficult, task of checking references could be eliminated.

Blockchain could be programmed to authenticate employee resume information, including references, using the Blockchain network.

Organized Labor – Living With Something That Just Isn't Fair

Blockchain also has the potential to put a significant dent in organized labor. Workers currently have two binary choices: vote to join a union, or not. Blockchain technology could create a third possible alternative.

By combining smart contracts with workers' ability to share and use information in a cooperative fashion, Blockchain-enabled collective representation is possible. Workers could organize and sign representation cards on Blockchain without centralized assistance from a union. Elections could occur on Blockchain, and collective bargaining agreements could be reduced to smart contracts and programmed on a Blockchain. In a democratized Blockchain-driven union, members would likely see lower dues and an organization less susceptible to corruption.

Gig Employment – Millions No Longer Living As Your Foes?

As with all Blockchain applications, the technology allows workers in the gig, or sharing, economy to operate without a trusted third-party intermediary; in this case, the business connecting gig workers and consumers. Blockchain could give workers even more freedom than they currently enjoy and customers the potential for increased savings.

Here is how it would work. Instead of using an existing ride-sharing service, driver Ozzy and passenger Sharon would use a new ride-sharing application that interfaces with a Blockchain on their smartphones. Sharon would request a ride on the new app, and Ozzy, whose driving credentials had previously been authenticated and uploaded to the Blockchain, would accept Sharon's request.

The network would then authenticate the transaction and any requisite conditions, such as a driver's license verification. Once authenticated and complete, the transaction would be entered on the Blockchain as a block of data. Passenger payment and driver reviews could also be entered. The transaction record exists permanently and may be viewed by the next person seeking a ride from Ozzy or the next driver responding to a request from Sharon.

All gig businesses, not just ride-sharing services, could face the impending challenge of irrelevancy with this new technology. It is unlikely, however, that behemoths like Uber and Airbnb will allow smaller competitors running applications on Blockchain to dethrone them. These entities incorporating Blockchain into their existing business model is a much more likely probability. However, if you operate in a sharing economy business, you should start planning to use the technology before your workers develop their own and realize they don't need you.

Blockchain would certainly save gig companies on recordkeeping costs, but it also has the potential to do something far greater: end the argument about whether gig workers are misclassified as independent contractors. By incorporating Blockchain technology into their existing models, gig employers can act simply as user interfaces programmed to use a Blockchain to facilitate

transactions between workers and customers. Further relinquishing control over workers could put to an end the expensive legal challenges that have cost gig companies dearly.

Implementation Challenges: When Things Are Going Wrong For You

Despite the warranted jubilation surrounding this new technology, practical and legal considerations should cause employers to pause before immediately adopting it. Several challenges need to be addressed before you board the Blockchain train.

Building A Workplace Blockchain – Inheriting Troubles

In order to achieve widespread adoption, Blockchains will have to connect and work together. Blockchains have rules that can limit the type of data or transaction they accept; for example, Bitcoin's Blockchain only allows transactional data for the exchange and holding of Bitcoin. So if you want to run a new type of transaction or use new data, an existing Blockchain may not work, and developing a new Blockchain can be expensive and not a universally desirable undertaking.

It is also a stretch to think it's possible to create a Blockchain that contemplates all the different types of data and transactions we could ever need. Instead, various companies, governments, and groups are developing technology called "sidechains," which allow different Blockchain networks to work together. This allows for the building of an interconnected web of Blockchains, greatly scaling data and allowing for numerous different transactions to occur. Eventually companies may be able to tap into this web of networks, but more progress is needed before achieving this desired functionality.

Privacy Concerns – Mentally Numb

Blockchains can contain a massive amount of personally identifiable information and other related data. Current privacy regulations, such as the European Union's new General Regulation on Data Protection (GRDP), are ill-equipped to handle personal data on Blockchain, especially if it's public. Thus, companies should consider privacy implications when considering Blockchain technology.

Take the GRDP's codification of the "right of erasure," or "the right to be forgotten," as an example. The right of erasure declares that individuals have the right to have their personal data erased after the balancing of certain public interests. Most free countries have laws that allow individuals to have information removed from third-party databases under certain circumstances; examples in the United States include expungement of criminal records, removal of inaccurate information from credit reports under the Fair Credit Reporting Act, and the right to have defamatory information removed from a website.

However, a cornerstone of Blockchain, and the key to its reliability, is the permanence of the data uploaded. All users of the Blockchain network would have to simultaneously agree to remove the data to comply with certain legal requirements, which is a virtual impossibility. Moreover, erasing one piece of data would alter all subsequent transactions that relied on it, thus creating an alternate future (more appropriately described today as "alternative facts").

The Healthcare Insurance Portability and Accountability Act (HIPAA) presents another potential data security roadblock for Blockchain technology. Blockchain uses mathematical private keys (pseudonyms) for verification and authentication purposes. Because these private keys allow for the possibility of re-identification of anonymized protected health information, this aspect of Blockchain violates HIPAA's Privacy Rule.

Paying Employees With Virtual Currency – Listening To Fools

Although not a requirement, the potential of Blockchain technology is optimized by using virtual currency for any transaction requiring some sort of payment. This is because the virtual currency itself is on a Blockchain, thus eliminating third-parties that come along with traditional currency, like banks and clearinghouses, that charge higher fees and have slower processing times. However, using virtual currency comes with certain risks at the present moment.

First, there is the practical issue of acceptance. Virtual currency and its value are still unknown to most people. Many are suspicious of it, with their only previous exposure being sordid stories like the now-infamous Silk Road incident. From an employee relations perspective, nothing good can come from forcing employees to accept virtual money, especially if local laws prevent payment in such a fashion.

Moreover, the value of virtual currencies fluctuates wildly. Bitcoin, for example, may be up 30 percent one day and down 50 percent the next, making it difficult to value your product or an employee's service. Paying employees in virtual currency increases the risk of violating wage and hour laws, as a company paying an employee one Bitcoin per week could violate minimum wage laws if the value drops precipitously before payday. If you want to use virtual currency as a form of compensation, a better approach would be to use government-backed currency to satisfy minimum wage and overtime requirements, and offer Bitcoin only as a bonus.

Conclusion: You Gotta Listen To My Words

Blockchain technology will change the way we transact business with each other, including how we interact with employees. It may even give new definition to the sharing economy. When you do not have to trust the other party to a transaction in order to consummate it, the possibilities are endless.

You should initiate conversations with your IT department and security teams to determine whether Blockchain plans are in the works at your company. If so, you will want to provide legal and human resources counseling, making sure to include employee relations and data security teams in the discussions. The extent to which Blockchain is deployed in the workplace, and how employers actually use it, remains to be seen. Regardless, before long we will all be going off the rails on the Blockchain.

For more information, contact the author at ABridgers@fisherphillips.com or 704.778.4173.

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