Building Our Blockchain Future: What Lies Ahead (Part 3)

Joseph Raczynski  April 21, 2016

Topics: Corporate Legal, Data Analytics, Government, Law Firms, Legal Innovation, Legal Managed Services

This is the third and final post in a series about blockchain, an online public ledgering system, and how it will soon significantly impact many aspects of the legal industry. In the first post, I demonstrated the potential and the pitfalls of Bitcoin and its underlying blockchain technology; and in the second post, I described what full global adoption of a cryptocurrency would entail. In this installment, I will explain the potential legal implications of blockchain technology.

Part 3: Beyond Bitcoin — Blockchain and the Legal Impact

While Bitcoin may disappear in a few years — doubtful, but possible — the underlining technology is by far the most important development going forward. Blockchain is a public ledger. It can be applied to almost anything that you would normally save to a database or spreadsheet.

In the Bitcoin example, the blockchain shows the exchange of all the money that has ever changed hands in Bitcoin transactions. It does not list who owns the coins per se, just that they exist or that they changed hands. It is controlled by no single person but by all parties connected to the exchange. This public, but encrypted spreadsheet in the sky is in theory more secure and open than our current system of money exchange. The network maintains a collective history of all of the transactions that have ever occurred on the network. You can view all of the Bitcoins changing hands every moment of the day at Blockchain.info.

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And as you see the transactions scroll up, you soon identify several important legal implications. For one, none of this money has been passed through a bank or other financial institution, nor has it be screened by any government agency. That is, if you have a major transaction of $10,000 or more coming or going from the US — one that is normally required to be reported — it is not being reported via Bitcoin today. As you might surmise, many positives with this technology exist, but significant challenges, mostly concerning government regulators and current US laws, are also present.
While Bitcoin created the first blockchain, many other such chains have been created since. For example, there are other cryptocurrencies that use the technology. However, where this becomes most interesting is how related businesses could use a ledger-based blockchain platform. Fundamentally it is a program from which to build a system of accounting or process. One network called Ethereum, which has been described as a “decentralized virtual machine that can execute peer-to-peer contracts” is leading the charge with smart contracts and the law.

Here is how I see blockchain affecting the legal industry.

**Blockchain and the Law**

*Creation of Contracts:* The blockchain could alter the landscape of contract attorneys. Part of what makes the blockchain so special is that not only does it keep records which are immutable, it also creates a process around that. For example, I could create a contract which stipulates that when my patent was approved by the Patent and Trademark Office (PTO), my four partners would receive a 10% share in my company. How would that work? The contract on the blockchain would check to see if the patent was approved, then trigger a process releasing the shares to the partners. All of this would be automated and fall outside of human legal action. Indeed, you could go one step further and tie-in a payment system so that when that patent was granted, bonus funds could be dispersed automatically into the accounts of said partners.

*Intellectual Property:* If blockchain is ripe for anything it is IP. This technology creates a publically accessible, indisputable ledger of each filing which could be held not solely by jurisdiction but on a global scale benefiting everyone. This information would offer clean and clear rights of use for all parties. You could even submit your trademark through the system. Leveraging an algorithm identifying any likeness to the trademark, the system could then grant or dismiss it. All of which would become part of the public ledger for anyone to review.

*Land Registry:* Some Latin American countries are beginning to use blockchain as a means to keep track of who owns which land deeds. Wealth is created through ownership, and one of the most challenging aspects of developing countries is determining who owns a piece of land. Disputes often occur because of corrupt governments or individuals taking advantage of the under-educated. Having a public blockchain ledger would allow for everyone to be aware of who owns which parcel of land; and it would make the exchange of those plots much easier and more equitable.

If a family were to buy a plot of land that could be registered on the legal blockchain, it would be much more verifiable than even perhaps government records. All parties would be able to authenticate this as compared to one entity (the government) holding onto all the records. This process would even create a better base for the government to fairly tax individuals and businesses.

*Establishing Records:* In some African countries they are looking at using blockchain technology to keep census information. Voter records could also be added to this process as a means to have a central repository of eligible citizens. In this area, currently under development, blockchain seems primed for tremendous growth.

*Financial Service Industry:* The banking industry also is jumping into this arena. The theory is that our stock exchanges will become blockchain enabled. The idea is simply that every stock bought or sold would be on the ledger. You could trace back your own ownership of that equity and even tie that to your estate-planning documents. Extrapolating this out, those documents also could be housed on a blockchain with respective triggers for when you eventually die. Ultimately that information is then released to your beneficiaries based on that event (Date of Death) recording by the Social Security Administration (SSA).
Personally I have little doubt that blockchain technology will revolutionize the legal industry in the coming years. The question is if it will be more like HTML — a behind the scenes technology — or if it will be a more obvious, almost tangible technology that we will all reference by name. There is almost no doubt that this technology will be a significant disrupter to the legal profession and the overall market on many fronts. The biggest industries — government, banking, legal, healthcare and others will either use it or be significantly impacted by it.

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Joseph is an innovator and early adopter of all things computer related. His primary bent is around the future of law and legal technology in several fields including machine learning, mobile, security, cryptocurrency, and robotics (drone technology).

Joseph founded wapUcom, LLP, consulting with companies in web and wireless development. As a side project DC WiFi was created to help create a web of open wireless WiFi access points across cities and educate people about wireless security.

Currently he is with Thomson Reuters Legal managing a team of Technical Client Managers for both the Large Law and Government divisions. Joseph serves the top law firms in the world consulting on legal trends and customizing Thomson Reuters legal technology solutions for enhanced workflows. He graduated from Providence College with a BA in Economics and Sociology and holds a Masters in eCommerce and MBA from the University of Maryland, University College.

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