

Are Headwinds Hampering Delaware's Blockchain Initiative?

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While the recent booms and busts in cryptocurrencies like bitcoin and initial coin offerings have been stealing headlines, the door has been opened for a less hyped but potentially equally important application of blockchain technology in the corporate context. On Aug. 1, 2017, the Delaware General Corporation Law was amended to, among other things, make it explicitly legal for entities incorporated in Delaware to use distributed ledger technology, including blockchain, for record-keeping and administration of stock ledgers. The amendments are just the first step in the Delaware Blockchain Initiative, or DBI, and using blockchain technology in the corporate context could revolutionize corporate record-keeping, governance and finance.

That said, despite the current cryptocurrency fervor, it remains to be seen exactly how, and how quickly, blockchain technology will be adopted by the broader corporate community, and whether Delaware will continue to lead the charge.

A Bit of Blockchain Background

Blockchain is a form of distributed ledger technology. Distributed ledger technology allows records to be stored and updated on multiple computers or “nodes” across a network simultaneously, rather than having to consolidate such records to a traditional centralized ledger. With a blockchain, transactions are cryptographically linked and secured (i.e., “chained”) to the transactions that came before them. This cryptographic linking prevents duplicative transfers or “double spending” and makes data on blockchains resistant to “hacking.”

Blockchains vary in how they verify and seal transactions, and in the complexity of the transactions they permit. The process may be public or permissioned. On public blockchains, transactions are verified by the entire community of users running that particular blockchain protocol. On permissioned blockchains, only certain nodes on the network have permission to verify and seal transaction blocks. Public blockchains generally require more computational resources (which equates to higher transaction fees and longer transaction times) than permissioned blockchains to validate and seal transactions.



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These differences may be highlighted by comparing two of the currently most popular blockchains: (1) bitcoin, which is a public blockchain on which transactions may take hours, or even days, to settle and can involve transaction fees that have previously reached as high as \$34 per transaction[1] and (2) Ripple (using a token called XRP), which is a permissioned blockchain on which transactions settle in seconds and generally cost fractions of a cent.[2] In addition, although many view blockchain technology as essentially synonymous with cryptocurrencies, some blockchain protocols have very complex scripting or “smart contracting” capabilities, which allow them to be used for much more than merely the storage and exchange of value.

The Rise of Blockchain Initiatives

Delaware is not the only state with a blockchain initiative; for example, as part of the Illinois Blockchain Initiative, the Cook County recorder of deeds conducted a successful pilot program to test the use of blockchain technology with respect to its land records.[3] Illinois, Delaware and others are also considering how blockchain could revolutionize Medicaid and utilities regulation, among other things.[4] However, the DBI has made the largest waves in the corporate law community. This is likely because, while other states have passed laws, for example, clarifying that electronic records may include records stored on a blockchain,[5] Delaware was the first state to amend its corporate law to expressly accommodate the technology.

Small Amendments

The recent amendments to the DGCL include an amended definition of “stock ledger” in Section 219(c) that covers “records administered by or on behalf of the corporation,” together with amendments to Section 224 that provide that records may be “administered by or on behalf of the corporation” through, among other things, distributed electronic networks or databases (e.g. a distributed ledger or blockchain). Additionally, Section 232 was amended to clarify that “electronic transmission” for purposes of the DGCL includes the use of, or participation in, distributed electronic networks or databases.

Huge Potential

Real-Time Record-Keeping

Currently, record-keeping with respect to ownership of public companies is based on “1970s-era technologies of depository institutions, jumbo paper certificates, and a centralized ledger.”[6] Most public company equities issued in the United States are held on the ledger not under the names of individual investors, but rather under the name of an entity that is a “record holder” on behalf of beneficial owners.[7] A broker keeps an entry in its database showing an investor as the stock’s “beneficial owner,” and the record holder keeps an entry in its database showing the broker’s ownership. This system of separation of record and beneficial ownership solved many of the problems that previously plagued corporate record-keeping, but has also created a few conundrums of its own.

Take, for example, the appraisal litigation that arose from Dell’s go-private merger in 2013. There, certain beneficial shareholders sought appraisal rights for their Dell shares and so notified the record holder of those shares. The record holder tried to provide paper share certificates to the beneficial shareholders’ custodian banks that listed itself as the record holder of the shares at issue, but the custodian banks would only accept the share certificates if they listed the custodian banks as the record holders of the shares. To accommodate the custodian bank’s policy, the record holder transferred the shares to the

custodian banks, which became the new record holders of the shares. However, Section 262(a) of the Delaware code limits appraisal rights to “record holders” of stock who, among other things, “continuously hold[] such shares through the effective date of the merger,” and when the prior record holder issued the shares that had been held by it to the custodian banks, the shares were no longer held continuously by the same record holder through the effective date of the close of the Dell merger. Accordingly, Vice Chancellor J. Travis Laster held that, because the record holder had changed, the beneficial owners did not meet Section 262(a)’s continuous ownership requirement and therefore did not have standing to seek appraisal.[8] The decision was a relief to the company’s post-merger management and shareholders; however, reflecting on the decision a year later, Vice Chancellor Laster lamented that the result exposed certain issues with the current system that needed to be addressed.[9]

Additionally, transfers that occur under the current system have historically taken three days to clear, resulting in additional legal and practical oddities. For example, in the recent Dole Food Co. class action litigation, investors filed claims to 49.2 million Dole shares that were “facially eligible” to participate in a settlement class that in reality contained only 36.8 million shares. There, Vice Chancellor Laster determined that the current system rendered it “functionally impossible to resolve the share discrepancy in a practical or cost-effective manner,” but noted that blockchain technology may be a solution that could render these kinds of issues a thing of the past.[10]

Through blockchain, a corporation could issue its stock directly to investors. These investors could then transfer such stock directly to other investors with those transfers clearing in real time on a stock ledger that the corporation may access at any time. If these advantages are realized, the issues highlighted in Dell and Dole might be reduced to mere historical anecdotes in future corporate law textbooks.

Corporate Governance

Administering stock on a blockchain would also allow shareholders to vote their shares directly on that blockchain, rather than relying on the current complex proxy voting process and the inherent risk of mistakes that comes with it. Take, for example, another case that arose from Dell’s 2013 go-private merger.[11] In that case, T. Rowe Price lost standing to seek appraisal even though it had vocally opposed and repeatedly tried to vote against the merger. Because of the complexities of the current system, however, in order to vote its Dell shares, T. Rowe Price had to send its vote through multiple intermediaries. Although T. Rowe Price manually entered, at least three times, instructions to a third-party service provider to vote against the Dell merger, the service provider later provided an updated record related to the merger. This updated record triggered T. Rowe Price’s automated voting system, which was set to vote in favor of any management-recommended merger, like the Dell merger. As such, despite T. Rowe Price’s vocal opposition to the Dell merger, it ultimately unknowingly voted for the merger, thereby losing standing to sue for appraisal.

The corporate governance value of blockchain is not limited to shareholder voting, however. A corporation could also use blockchain to, among other things, record director votes and ensure board and management acts comply with the corporation’s governing documents and other corporate policies that could be programmed into a corporate governance blockchain. Moreover, using smart contracts, a corporation could streamline its compliance with regulatory requirements. For example, a corporation could preprogram shares issued in a private placement to be issuable only to the digital wallets of those who qualify as “accredited investors” under U.S. securities laws. Those same shares could also be preprogrammed to not be tradeable except in situations where such transfers qualify for an exemption to share registration obligations.

Additional Possibilities

Wide-scale adoption of blockchain technology offers potential solutions to the corporate record-keeping and governance issues discussed above, and so much more:

Property rights would be crystal clear. Capitalization table management would become easy Dividends and other corporate actions (such as stock splits) would be automated and always accurate. Certificates of good standing would never again require a prerequisite forensic audit. Securities lending records would always be accurate, so accidental over-issue of securities would never happen.[12]

Proposed future phases of the DBI also include the creation of a “smart UCC” filing system, using blockchain, in order to automate and expedite the UCC filing and search process. These smart filings eventually may be integrated into secured parties’ collateral management systems, allowing automatic margin calls and releases based on collateral value. With less risk for human error, and thus decreased risk in general, lenders may be willing to make more loans available to entities and individuals or decrease the interest rate charged. In addition, blockchain initiatives have the potential to revolutionize all sorts of state and federal record-keeping systems.

Tremendous Possibility; Tremendous Uncertainty

But disruption on such a wide scale takes time, if it comes at all. For example, although adopting blockchain-based record-keeping and corporate governance is relatively easy for companies that are just now incorporating in Delaware, the adoption process for large existing companies with outstanding certificated shares will likely be cumbersome.[13] Additionally, the benefits of maintaining corporate records on a blockchain, such as smart UCC filings and automated good standing reports, cannot be maximized until companies can link their systems to a blockchain maintained by their state of incorporation. Such linking would also allow companies to take advantage of the speed of permissioned blockchains while incorporating an independent public node to validate and seal changes to the company’s blockchain. But Delaware has not yet made this linking possible, even though the necessary software has already been built.[14] Moreover, the recent rise in scams in the cryptocurrency space and resulting regulatory crackdowns on cryptocurrencies and initial coin offerings by the U.S., [15] South Korea and China has prompted increase caution in some regarding the use of blockchain technology more generally.

And now the effects of these headwinds may be showing at the state level. For example, Delaware’s proposed blockchain-based “smart UCC” system was supposed to launch before the August 2017 amendments to the DGCL,[16] but its progress appears to have stalled. Moreover, the founding director of the Delaware Blockchain Initiative, Andrea Tinianow, recently left the project for a role in the private sector as chief innovation officer for Global Kompass, a Delaware-based management consultancy firm.[17] Tinianow’s responsibilities appear to have been assumed primarily by Deputy Secretary of State Kristopher Knight, who similarly wants to see blockchain technology incorporated into Delaware’s record-keeping systems, but also must remain considerate of the many competing interests surrounding such potentially disruptive technology.[18]

However, if Delaware fails to maintain a decisive edge with respect to corporate adoption of blockchain technology, new and innovative companies may begin to look for other incorporation options, including Illinois or even Wyoming.[19] Indeed, Caitlin Long, the former president and chairwoman of Symbiont Inc., the blockchain startup that Delaware has been working with to develop the infrastructure necessary to support the state’s blockchain-based record-keeping systems, recently left Symbiont to co-

found the Wyoming Blockchain Coalition.[20] The Wyoming Blockchain Coalition is focused on encouraging the adoption of blockchain technology in Wyoming and, so far, has been incredibly successful.[21] In the past two months, Wyoming has passed five blockchain-friendly bills, including the first state bill to define a certain form of cryptocurrency, known as “utility tokens,” as an entirely new asset class — neither a security nor a commodity — and has also exempted utility tokens from the state’s money transmission licenses.[22]

And without a clear leader in the state regulatory space, such regulation risks are becoming even more disjointed. For example, many states other than Delaware and Wyoming have already passed their own laws authorizing or restricting to varying and conflicting degrees the use of blockchain. However, while these bills may be intended to be enabling, at least in part, they also risk balkanizing the regulation of crypto assets (including stock recorded on blockchain) or, conversely, creating unintended latent conflicts with other portions of the state’s law if hastily grafted from another state with a different underlying statutory scheme.[23]

Moreover, some state laws may conflict with federal law. For example, Wyoming law now arguably conflicts with U.S. Securities and Exchange Commission, Financial Crimes Enforcement Network and U.S. Commodity Futures Trading Commission interpretations of federal law, as these federal regulators generally view cryptocurrencies as securities, commodities or money (and in some situations a combination of the three). Ultimately, U.S. courts may need to weigh in to determine which law controls in which contexts.

Nevertheless, early adopters are looking for ways to navigate this uncertainty and forge ahead with the adoption of blockchain technology in the corporate context. Perhaps the largest and most bullish of these early adopters is Overstock.com. Indeed, Medici Ventures Inc., a venture capital arm of Overstock.com, is an investor in Symbiont Inc. In December 2016, Overstock.com became the first publicly traded company to issue stock via blockchain. On Dec. 18, 2017, tZERO, an Overstock.com subsidiary, launched an initial coin offering to fund the development of an exchange to facilitate the trading of blockchain-based assets, including securities. On Jan. 16, 2018, Overstock.com announced that Kodak’s virtual security, KODAKCoin, would be the first token security offered on the tZERO exchange. However, the release of KODAKCoin has now been delayed indefinitely, and on March 1, 2018, Overstock.com publicly announced the existence of an SEC investigation of tZERO.[24] While the tZERO investigation appears to be part of a larger sweep by the SEC,[25] Overstock.com’s role as one of the largest proponents of blockchain use in the corporate context means the results of that investigation could carry extra weight in determining the future of blockchain technology more broadly.

Those interested in the development of blockchain-based assets would do well to keep an eye on this and similar companies, and states like Delaware and Wyoming, as they may be a bellwether as blockchain adoption pushes toward critical mass. Perhaps, if they succeed, it may mark a change in the winds for the progress of the DBI.

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- [1] <https://arstechnica.com/tech-policy/2018/02/bitcoins-transaction-fee-crisis-is-over-for-now/>
- [2] <http://fortune.com/2018/01/11/ripple-moneygram-xrp-cryptocurrency-bank-transfers/>
- [3] <http://cookrecorder.com/blockchain/>
- [4] E.g., <https://healthtechmagazine.net/article/2017/09/state-led-healthcare-pilots-seek-demonstrate-value-blockchain>
- [5] <https://www.coindesk.com/enabling-crippling-risks-state-state-blockchain-laws/>; 12 V.S.A. §1913(b)(1)
- [6] In re Dole Food Co. Inc., No. CV 8703-VCL, 2017 WL 624843 (Del. Ch. Feb. 15, 2017)
- [7] J. Robert Brown Jr., *The Regulation of Corporate Disclosure*, 18-15 to 18-16 (2016); see also In re Appraisal of Dell Inc., No. 9322-VCL, 2015 WL 4313206, at *4 (Del. Ch. July 30, 2015).
- [8] In re Appraisal of Dell Inc., No. CV 9322-VCL, 2015 WL 4313206 (Del. Ch. July 13, 2015), as revised (July 30, 2015)
- [9] *The Block Chain Plunger: Using Technology to Clean Up Proxy Plumbing and Take Back the Vote*, Vice Chancellor J. Travis Laster Keynote Speech, Council of Institutional Investors, Chicago, (Sept. 29, 2016), available at http://www.cii.org/files/09_29_16_laster_remarks.pdf.
- [10] In re Dole Food Co., Inc., 2017 WL 624843 at *4.
- [11] In re Appraisal of Dell Inc., 143 A.3d 20 (Del. Ch. 2016).
- [12] Andrea Tinianow and Caitlin Long, *Delaware Blockchain Initiative: Transforming the Foundational Infrastructure of Corporate Finance*, Harvard Law School Forum on Corporate Governance and Financial Regulation: The Delaware Law Series (Mar. 16, 2017), available at <https://corpgov.law.harvard.edu/2017/03/16/delaware-blockchain-initiative-transforming-the-foundational-infrastructure-of-corporate-finance/>.
- [13] Wonnie Song, *Bullish on Blockchain: Examining Delaware's Approach to Distributed Ledger Technology in Corporate Governance Law and Beyond*, Harvard Business Law Review (Jan. 3, 2018), available at http://www.hblr.org/2018/01/bullish-on-blockchain-examining-delawares-approach-to-distributed-ledger-technology-in-corporate-governance-law-and-beyond/#_ednref98.
- [14] See <https://www.delawareonline.com/story/news/2018/02/02/delaware-eases-off-early-blockchain-zeal-after-concerns-over-disruption-business/1082536001/>.
- [15] See "Your Utility Token May be a Security: SEC Staff Members' Remarks on Cryptocurrency"
- [16] See Tinianow and Long, *supra* note 12.
- [17] <http://delawarebusinessnow.com/2018/01/leader-states-blockchain-initiative-takes-post-private-sector/>; <http://statescoop.com/delaware-blockchain-director-resigns-but-the-states-work-will-continue>

[18] See <https://www.delawareonline.com/story/news/2018/02/02/delaware-eases-off-early-blockchain-zeal-after-concerns-over-disruption-business/1082536001/>.

[19] <https://www.coindesk.com/haven-blockchain-case-wyoming/>

[20] <http://www.newsweek.com/wyoming-cowboy-state-poised-today-become-blockchain-valley-828124>

[21] See <http://wyomingblockchain.io/>.

[22] <https://www.forbes.com/sites/rachelwolfson/2018/03/13/u-s-state-of-wyoming-defines-cryptocurrency-utility-tokens-as-new-asset-class/#765a9ee74816>.

[23] <https://www.coindesk.com/enabling-crippling-risks-state-state-blockchain-laws/>

[24] Overstock.com Inc. (2018). Form 8-K 2018. Retrieved from Overstock.com website here; <https://www.coindesk.com/overstock-confirms-250-million-tzero-ico-sec-review/>.

[25] <https://www.ccn.com/overstock-discloses-sec-probe-into-250-million-tzero-ico/>; see also <https://www.wsj.com/articles/sec-launches-cryptocurrency-probe-1519856266?mod=searchresults&page=1&pos=1>.