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The Growth of Smart Contracts

BY DANIEL FARRELL/ ON FEBRUARY 12, 2020



In December 2017, the frenzy surrounding cryptocurrencies hit its peak with bitcoin trading at nearly \$20,000 for one bitcoin.^[1] Every public company across the country was discussing how they intended to implement the blockchain into their business and the changes coming in their sector. Two years later and we've seen massive growth in the blockchain industry, with more growth coming. One report projects a nearly 70% compounded annual growth rate over the next 6 years in the blockchain industry throughout the world.^[2]

Chairman of the Commodity Futures Trading Commission Heath Tarbert said that he wants the United States to be at the forefront of this growth, stating "I think America needs to lead. You see other countries starting to make inroads in this area, and so . . . I want to at least create an environment where innovation can flourish, and whatever risks there are, we're able to mitigate those."^[3] But while many states^[4] have begun the regulation of cryptocurrencies like bitcoin and ethereum and currency trading networks such as Coinbase, only a few states have formally legalized another key consumer aspect of the blockchain: smart contracts.

Over the last year, the Illinois legislature passed and Governor JB Pritzker signed into law; Public Act 101-0514: the Blockchain Technology Act, which went into effect on January 1st, 2020. ^[5] In doing so, Illinois became one of only a handful of states to formally legalize "smart contracts." The act defines a smart contract very broadly, referring to it simply as "a contract stored as an electronic record which is verified by the use of a blockchain." ^[6]

Section 10 of the act sets out four key instances where smart contracts will receive legal protection, stating:²²

- A smart contract, record, or signature may not be denied legal effect or enforceability solely because a blockchain was used to create, store, or verify the smart contract, record, or signature.
- In a proceeding, evidence of a smart contract, record, or signature must not be excluded solely because a blockchain was used to create, store, or verify the smart contract, record, or signature.
- If a law requires a record to be in writing, submission of a blockchain which electronically contains the record satisfies the law.
- If a law requires a signature, submission of blockchain which electronically contains the signature or verifies the intent of a person to provide the signature satisfies the law.

This bill allows for smart contracts to be admissible in court as evidence of an agreement between two parties and to "prevent a court from denying smart contracts contractual or evidentiary effect solely by virtue of their status as a smart contract or electronic record stored on a blockchain."^[8] In essence, the act "extends the same legal recognition already enjoyed by paper contracts to blockchain contracts"^[9] and as such, a smart contract suffices as legally enforceable and evidence of a written record and a signature within the state.

In addition, this act prevents local government from imposing a tax or requiring a license or a permit for a business that uses smart contracts or blockchain technology in their course of business.^[10] This Illinois law is similar to statutes passed by legislatures in Arizona,^[11] Vermont,^[12] and Tennessee, ^[13] which also focus on the admissibility of smart contracts as evidence in court of a signature and a written record. The written record is important as certain types of contracts, like those that can not be performed in one year, fall under the statute of frauds, which require a written contract. Since these statutes allow smart contracts to be considered written records, this would allow contracts falling under the statute of frauds to be held in electronic record on the blockchain. ^[14] This is especially useful when it comes to contracts that cannot be executed within one year, as a smart contract can be coded to execute on a specific date or upon a specific event, lessening the concerns about a future breach of one of these contracts. As such, parties entering into these contracts will be more confident about the integrity of such an agreement.

The legal implications of these statutes are clear, but their expected overall impact in the financial technology sector is mixed. If you are seeking to use smart contracts in your business, there are only a handful of states where these contracts will definitively receive the full protection of the law. In these states, this ensured protection will allow for greater security and innovation in the blockchain sector. Businesses can freely engage with consumers via the use of smart contracts, free of fear that a court will invalidate the contract, solely because it is a smart contract. In addition, these states now become innovation hubs for businesses seeking to explore the use of the blockchain as they can now do so knowing the legal implications of their actions.

However, issues still remain, especially related to practical remedies to breaches of smart contracts. Smart contracts are coded to be executed on the basis of "If-Then" actions, meaning on the occurrence of a specific event, a specific part of the contract will be executed in the blockchain.[15] Smart contracts are only as "smart" as the parties drafting and coding them. Just as with written contracts, if the precise event is not defined correctly or if there are questions as to what extent the event was performed, litigation may ensue. However, if the smart contract fails to adequately account for this possibility, the contract may self-execute regardless of the breach, or not execute when it should have executed, leaving parties unclear on where they stand in their performance of the contract.

Additional questions have been raised regarding reversing contracts, jurisdiction of the parties and how to deal with the anonymity of the transacting parties themselves. ¹¹⁶ If a court cannot figure out who the contracting party is or to what extent they have jurisdiction over that party, a case may be dismissed or a smart contract may be found to be invalid, in circumstances where written contracts would not give rise to the same issues. If a smart contract executes under incorrect circumstances, the practical ability to reverse a contract is unclear, especially if one party chooses to not act in good faith. None of the statutes passed address these issues directly but as smart contract issues come before the courts, state legislatures will need to step up and pass laws to provide guidance to courts to solve these issues.

The passing of the Blockchain Technology Act in Illinois is an important step towards the future of smart contracts in the United States. Over the next decade, with such strong growth expected in the blockchain sector, we should expect to see more state legislatures pass laws that explicitly approve of smart contracts. These statutes are likely to mirror those in Illinois, with a broad focus on what defines a smart contract and admissibility of these contracts as evidence in court.

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^{III} Bitcoin Price Chart, Coinbase.com, https://www.coinbase.com/price/bitcoin.

^{III} The global blockchain technology market size is expected to reach USD 57,641.3 million by 2025, registering a CAGR of 69.4% from 2019 to 2025, PR NewsWire, (Aug. 15, 2019), https://www.prnewswire.com/news-releases/the-global-blockchain-technology-market-size-is-expected-to-reach-usd-57-641-3-million-by-2025–registering-a-cagr-of-69-4-from-2019-to-2025–300902333.html.

¹² Philip Rosenstein, 'America Needs To Lead' On Crypto', CFTC Chairman Says, Law360 (Nov 12, 2019), https://www.law360.com/articles/1219189.

^[4] See generally *State Regulations on Virtual Currency and Blockchain Technologies*, Carlton Fields, (Updated Aug. 29, 2019),

https://www.carltonfields.com/insights/publications/2018/state-regulations-on-virtual-currency-and-blockchain-technologies.

^{II} Noah Bradley, *Illinois takes a step forward and legalizes smart contracts*, CoinGeek (Jan. 12, 2020), https://coingeek.com/illinois-takes-a-step-forward-and-legalizes-smart-contracts/.

^{III} Blockchain Technology Act, 205 ILCS 730/__ (2020)

Id at Section 10.

^{III} Kevin P. Milewski, *Illinois Embraces Smart Contracts with New Blockchain Legislation*, Nat'l L Rev. (Jan. 24, 2020), https://www.natlawreview.com/article/illinois-embraces-smart-contracts-new-blockchain-legislation.

¹²¹ Danny Nelson, *Illinois Legalizes Blockchain Contracts,* CoinDesk (Jan. 9, 2020), https://www.coindesk.com/illinois-legalizes-blockchain-contracts.

¹⁰¹ Supra note 4 at Section 20.

¹¹¹ Stan Higgins, *Arizona Governor Signs Blockchain Bill Into Law*, CoinDesk (Apr. 2, 2017) https://www.coindesk.com/arizona-governor-signs-blockchain-bill-law.

^[12] 12 V.S.A. § 1913 (2016).

¹³³ Waller Law Firm, *Tennessee takes leadership role in support of blockchain to attract more businesses*, Nashville Business Journal (Nov. 6, 2018), https://www.bizjournals.com/nashville/news/2018/11/06/tennessee-takes-leadership-role-in-support-of.html.

^{114]} For more information, see *SMART CONTRACTS: Is the Law Ready?* at 22, Chamber of Digital Commerce (Sept. 2018).

[15] Yessi Bello Perez, *A quick guide to understanding blockchain smart contracts*, thenextweb.com, https://thenextweb.com/hardfork/2019/03/22/a-quick-guide-to-understanding-blockchain-smart-contracts/.

^{116]} *Supra*, note 14 at 29.