



THE ROLE OF BLOCKCHAIN TECHNOLOGY IN MODERNIZING GAMING REGULATION

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You may have heard of blockchain in the context of Bitcoin, you may be well versed in its use and application in certain sectors, or you may not have ever heard of it. Blockchain, in its simplest form, is a decentralized, digital document or transaction ledger system that does not require a centralized computer server.

It has been described as a “secure peer-to-peer ledger with storage, analogous to peer-to-peer music sharing systems such as Napster.”¹ However, we are confident that blockchain technology can operate legally and will have a much greater shelf life than Napster!

Blockchain has really advanced the use of Bitcoin by tracking it and accounting for its uses. But blockchain and Bitcoin are not mutually dependent. Rather, blockchain is a digitally secure and auditable recording and storage system, while Bitcoin is simply a virtual currency. Although blockchain is the underlying technology that was developed to run Bitcoin, today, there are many industries, including banking, insurance, finance, and shipping, that may not necessarily embrace the use of Bitcoin, but have implemented blockchain technology for purposes such as recording deposits, securities trades, escrow, etc.² In fact, NASDAQ will be utilizing “a blockchain-based system to record trades in privately held companies.”³ In a recent report by the UK Government Chief Scientific Advisor titled “FinTech Futures,” blockchain technology was recognized as providing “improved speed, efficiency, reduced cost of operation and the elimination of single points of failure from the system.”

Without going down the rabbit hole of Bitcoin, this article will explore some of the ways gaming regulation can be assisted with blockchain technology. With casino gaming operating in 40 states within the U.S., integrated resorts continuing to expand globally, and gaming machine supplies and sales being offered on an international basis, the same information, or slight variations of the same information, is currently required to be given to various gaming regulators over and over again. For example, some gaming device manufacturers get licensed in literally hundreds of jurisdictions, so owners and executives are having to distribute loads of documents, often containing extremely sensitive information, all across the world.



In the context of pre-licensing investigations and suitability checks, regulators are often confronted with two core concerns – standardization and data protection. While the industry yearns for uniformity among gaming jurisdictions with information requests and licensing procedures, the likelihood of that occurring is miniscule. Meanwhile, the security and protection of information provided to the regulators is also on the top of the minds of applicants, but the laws concerning location, sharing, and transmission of data can vary amongst the various gaming jurisdictions throughout the world. Blockchain-based technology can alleviate these two concerns.

As Nevada gaming lawyers know, the gaming licensing process is very rigorous. When a company is seeking a nonrestricted gaming license (e.g., resort hotel casino or slot machine manufacturer) in Nevada, the company and its owners and key executives must supply detailed personal and financial information. Some individuals going through the licensing process supply several bankers’ boxes worth of information, including tax returns and bank account statements. Just ten years ago, the documents were supplied to the Nevada Gaming Control Board as paper copies. Currently, the documents are often provided on a thumb drive or through document-sharing computer programs. The future lies in this same information being supplied and stored through blockchain technology.

Instead of uploaded documents being placed into a shared drive or downloaded onto a portable drive, blockchain technology allows the information to be uploaded to a decentralized, digital platform that immediately encrypts that information.⁴ Then, a digital key required to access the information is given to the

investigating agent or officer at the gaming regulatory agency.⁵ Another key is given to the individual whose information is being accessed, the applicant.⁶ Upon access, the applicant can upload documents that are required by a jurisdiction, whether it be a birth certificate or copies of tax returns, and then allow any jurisdiction where it is applying for a license or suitability to access required information by providing a digital key to the information. So, if a gaming regulatory agency does not need to look at a person's will, they can skip the document and instead look at what they find necessary to review. This means there is one platform for information about a company or individual and a regulator can pick and choose the information relevant to their pre-licensing process. When an applicant has received their latest credit card statement, they can upload it for access by regulators, which means they do not have to send copies to multiple jurisdictions. In addition, the blockchain platform can have one designation for the company and separate designations for individuals so that it remains portable to the individual if they leave the company.⁷



One significant advantage to blockchain is that the information can also be accessible to authorized parties to verify information. For example, if bank account statements are uploaded into the ledger, a limited password can be given to the bank, which can then review and verify that the bank statements are valid. This is made possible because the third parties or regulators view the exact same information in the ledger for which access has been authorized by the applicant. This means that there is no single point of failure in the blockchain system.

Another benefit of blockchain-based technology is the added data protection that it provides. Since the stored information is not contained in a centralized database, there is not a single server that can be hacked where private information can be altered without leaving a digital footprint of the accessing party. Since a database is not based in a single jurisdiction, the requirements for storage of personal data on a server would not apply. In addition, the information contained in the blockchain ledger is protected from manipulation through cyberattacks because it is immediately encrypted and only accessible using an authorized digital key or permission from one of the parties to the ledger (*i.e.*, regulator or applicant) and any access or alteration to such information is irrefutably documented.

There are other uses for blockchain in the regulatory environment. Blockchain could also be used to submit required reports to regulators, such as foreign gaming filings or gaming device shipment notifications, or would be helpful in maintaining compliance committee meeting materials that can be accessed by committee members and regulators alike.

Blockchain technology can also be used to audit gaming transactions. With Nevada's new



regulations permitting account wagering across the casino floor, the casino can utilize blockchain to track game play that can then be used for accounting. Again, the benefit of this system is that the regulators can access the ledger directly to perform an audit and compare against taxes and revenues being reported.



For enforcement purposes, regulators can compare the accounts, player data, and transactions performed across several properties owned by different companies to see if there is duplication, potential fraud, or suspicious activities.⁸ For example, blockchain could be used to audit and review sports book transactions across different operators to compare accounts that might be used for placing wagers on both sides of an event as a means to launder money.⁹

The use of blockchain-based technology can be beneficial to gaming regulators, as well as applicants or licensees, because it provides a safe environment for storing and tracking information, while allowing reliable third-party verification. Bitcoin may not necessarily be the future of gaming, but its underlying technology of blockchain can play a significant role in the world of gaming regulation.

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¹ Michael Mainelli & Chiara von Gunten, "Chain of a Lifetime: How Blockchain Technology Might Transform Personal Insurance" (Long Finance, Dec. 2014) at 4.

² *Id.*

³ Briefing: Blockchains, The Economist (Oct. 31, 2015), at 23.

⁴ Hypatia Technologies, Compliance Documents Management (Version: 0.3) at 6.

⁵ *Id.*

⁶ *Id.*

⁷ *Id.* at 11.

⁸ Hypatia Technologies, Responsible Gaming & Fraud Detection (Version: 0.7) at 9-10.

⁹ *Id.* at 8.

