

Legal and Business Affaires

Blockchain and Its Implications on the Music Business

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Blockchain and Its Implications on the Music Business

Blockchain is remodelling the world in different fields such as government-related affairs, healthcare and banking, to name a few. Since its establishment in 2008, the influence it has caused on the various areas has shifted to the arts such as music and entertainment. The consequences of its involvement in the arts could completely revolutionise the music industry with an impact on the intellectual property laws, ways artist promote themselves, payment methods and change in revenue and the categorisation of the industry.

1. What Is Blockchain?

Ameer Rosic (2016) explains that “A blockchain is a time-stamped series of immutable records of data that is managed by a cluster of computers not owned by any single entity.” The data, or digital information, is perceived as a ‘block’, whereas the database is the ‘chain’. Its technology operates as a joint ledger for documenting transactions and conserving the integrity of information.

The information withheld in the data includes the transaction records such as date, time and amount, the digital signature and a hash, which is a unique code that differentiates every block from the other. The advantage of blockchain is that it is ultimately safe due to its “advanced encryption”. (Douaihy, pp. 14) All the various information is stored on disparate servers, ensuring that it is harder to hack. This means that there is not one account of events that can be manoeuvred. By manipulating the data of one single block, the hash from all the following blocks will be altered, leaving traces behind. Fortney (2019) illustrates that it would mean that “in order to change a single block, then, a hacker would need to change every single block after it on the blockchain”. He explains that it would take a tremendous amount of time and be incredibly hard to calculate, suggesting it is ultimately safe.

The technology created by a person or a collective, under the alias Satoshi Nakamoto in 2008, was applied shortly after to Bitcoin where it was and still is used as a ledger for all the transactions originating from the internet. Since then, there has been many startups and well-established companies that have incorporated the technology.

2. Blockchain in the Music Industry

There is an arsenal of issues that the music industry is currently faced with day to day. The first one being, the lack of one single database that keeps a record of artist's royalties, making it hard to keep track. The second issue is the delayed payments. Lastly, there is the fact that funds are transferred wrongly and end outside the artists' reach. Blockchain does not only bid solutions to the here-above mentioned issues but could potentially offer an abundance of advantages for the future of the industry.

2.1 Intellectual Property Right

Firstly, blockchain could offer a solution to the issue revolving around intellectual property right. Research by O'Dair (2016) shows that its main challenge is "the fact that there is no single database that documents ownership of all song and recording copyrights." Records of property rights are conserved in numerous databases due to the fact that each streaming platform, record company and publishing enterprise, own an individual collection of data. This is the reason for the phenomenon called the 'Black Box Royalties' or Black Box Income. In 2019, the estimated worth of uncollected royalties, or Black Box Royalties, was \$2.5 billion or £1.9 billion. Shiloh (2019) explains that in the period enclosed by 2016 and 2019, 46 million cases of "unidentified songwriters or unknown copyright owner notice of intents (NOIs)" have been filed by streaming services with the US Copyright Office. This is aggravated by the fact that different countries have different jurisdictions and therefore different means to pay royalties. It also hugely touches on other elements of the music industry such as "licensing tracks for adverts, films, and computer games". (O'Dair, 2016).

This is where blockchain science could avidly change the argument of royalties. Blockchain would provide one database, or "metadata core ledger" (Jongerius as cited in Shilov, 2018), that would contain all records of a song. This would ensure that the artist could track all royalties.

2.1.1 Hyperledger Fabric

Multiple companies bid a blockchain technology offering a solution to the property right issue, such as Hyperledger Fabric. It operates as a DLT or ‘distributed ledger’. The company collaborates with “The American Society for Composers, Authors and Publishers, the Society of Authors, Composers and Publishers of Music, and PRS for Music” (Shilov, 2018) so that one may create the metadata ledger. That being said, there is an issue revolving around Hyperledger Fabric. The DLT does not operate with currency exchange, making it impossible to be used with streaming services. That means it would not be able to cover the streaming platform’s collection of data and therefore would not operate as one single database.

2.1.2 Ascribe

Another company offering an alternative is Ascribe. The company “allows visual artists to claim authorship for a work, timestamping that claim onto the blockchain along with a unique cryptographic ID.” They cannot prevent other artists from reproducing an artist’s work; however, they can ensure that it will always be traceable. Not only do they offer safety, but the company also allows the artist to transfer the intellectual property to others.

2.1.3 UJO

UJO is a platform that uses blockchain to dispose of the difficulty of property rights. Similarly to Ascribe, it not only offers a database of copyright but also gives artists the option of transferring their rights using smart contracts, a crucial part of blockchain technology. They are an automated contract between buyer and seller immediately drafted into a code, meaning they do not require any monitoring. UJO demonstrates that artists believe in blockchain science as Imogen Heap, Giraffage and RAC have all partnered with the platform to “release music, manage payments and establish chain-of-ownership.” (Daley, 2019).

2.2 Payment Distribution

Arguably the most drastic change blockchain could offer the music industry, is the removal of intermediaries to receive royalty fares. Similarly to Napster and Torrent, Blockchain is a peer-to-peer network; however the considerable difference between those networks and blockchain is the possibility of economic sustainability.

Every song involves a minimum of two different copyrights: one being the recording, the other being the music itself. In the United Kingdom, the Phonographic Performance Ltd (PPL) who keep track of the performer's rights, pay annually; the Performing Rights Society (PRS) who trace the copyright of a song, pay quarterly whilst labels and publishers usually pay once every six months. Such a system can appear archaic as a track can be downloaded or streamed in mere seconds.

Wright and De Filippi (2015) propose that a smart contract could be the solution to the delayed payments as they offer immediate settlements. It would remove all the intermediaries, avoiding all setback of payments, ensuring that the artists, in accordance with the settled shares, would receive the royalties fee roughly simultaneously to the track's download.

Not only would it create a faster system, but it would also completely alter how artists could sell their music. If one were to link a cryptocurrency, similar to Bitcoin, to a specific album or song, the artist could construct a stock market where the audience could purchase aspects of a track, whilst obtaining payment accumulated from streams. This is why Wright and Filippi (2015) accentuate the use of micropayments in the industry of the arts. The speed of its payments and the "low transaction cost" could allow the audience to 'tip' their favourite artist. It could even go further as fans could potentially become promoters. De Leon and Gupta (IDB, 2017) claim that "blockchain could offer monetary rewards (in the form of micropayments) to avid listeners who also zealously promote their favorite music". There already exists a platform that offers such benefits. MyCelia, created by Imogen Heap, allows the artist to sell their tracks in favour of cryptocurrencies.

Furthermore, its system could appeal to artists as it offers per-stream or per-download payment. Whereas, the release of Spotify's payment calculations shows that it generates disorderly payments. (IDB, 2017)

The benefits of blockchain have been tested out by Heap's release of 'Tiny Human' (2015) on the platform UJO, mentioned above. O'Dair (2017) explains that "funds are sent directly from fans to artists at the point of download, with income automatically split between all copyright holders and paid within seconds.". This is merely one of the many real-life examples of blockchain's technology in the music industry.

2.3 Reshaping the Industry

As previously mentioned, blockchain uses open technology, ensuring a more transparent way of work. This is what could potentially rework the shape of the music industry and is; therefore, threatening labels and record companies. The digitalisation of the industry in the early 2000s allowed labels to reinforce their claim on the production and consumption of music. Blockchain's technology could conceivably prevent that.

O'Dair (2016) states that "Blockchain technology could enable a new stage in the 'direct-to-fan' model, allowing artists not only to sell recorded music directly to fans but to set their own prices." Blockchain's artist-to-fan model eliminates the need for intermediaries, meaning it would give artists the freedom to establish their own terms of usage and have more creative input.

Although blockchain's technology threatens the infrastructure of the industry, the drastic change could take many years. De Leon and Gupta (IDB, 2017) explain that "there is a significant economic rationale here, effectively sharing risk in a high-risk, high-reward market." They further suggest that similarly to the rise of the internet, blockchain could reshape the industry; however it will not decentralise it. O'Dair (2016) agrees, though claiming the reason lays with success. The writer states that many artists, especially emerging artists, necessitate the clout that a label can offer, therefore annulling labels would not be an option. Sitinio (2018) offers a solution to the problem. She suggests that intermediaries should not be eliminated; however, their roles should be reworked. Blockchain's science would be in charge of payment collection, intellectual property and transparency, whilst labels would take care of production and marketing. Certain companies have already experimented with similar concepts. The blockchain startup, MediaChain, was acquired by Spotify in 2017 whilst companies like ASCAP and SACEM are working with IBM to research the new technology.

3. Potential Problems Relating Blockchain

3.1 Intellectual Property

Although blockchain's technology has proven it could change the issues around intellectual property laws for the better, there are some technicalities that could form complications. Copyright laws depend upon the region, meaning that they differ from country to country. Admitting that there are international treaties such as Berne Convention for the Protection of Literary and Artistic Works and the Universal Copyright Convention that offer protection for foreign works, they are still tied to a region. Blockchain is decentralised meaning it is not. That being said, that decentralisation is the entire appeal of its technology as someone from the United States could work with someone in Asia without any intermediary.

Another concern when it comes to intellectual property rights and blockchain is the authenticity of ownership. "The creator of the register on the blockchain might not be the rightful owner to begin with and may have purloined it from the original creator." (De Leon, Gupta as cited in IDB, 2017). Both authors believe the registration process of copyright would become a 'first-to-file' system; whether or not that is the rightful owner of the copyright.

To conclude, "blockchain technology is poised to disrupt copyright law." (Evans, 2018), meaning right holders must make sure they thoroughly understand the science's impacts on the copyright laws. On top of that, the laws as we know it would have to be reworked.

3.2 Smart Contracts

Despite the fact that smart contracts are a plausible key to the use of cryptocurrencies in the music industry, there are some issues to be raised. As indicated previously, smart contracts can connect multiple parties directly and therefore eliminate the need for intermediaries. However, similar to the problems revolving around copyright, those above-mentioned parties could be in differing jurisdiction, raising the question of who will have the authority.

Smart contracts' self-executing algorithm technology is its biggest asset; however, it is contrastingly its biggest instability. If the contract were to go askew, who would be held responsible. De Leon and Gupta (IDB, 2017) explain that holding people accountable would be problematic as there is no distinct jurisdiction. Furthermore, antitrust issues could increase if the roles of labels, record companies and publishing businesses were to be acquired by blockchain's science. This could create a new wave of monopolies where blockchain is the centre.

In conclusion, blockchain's technology has the opportunity to completely revolutionise the music industry. The possibility that its science brings to create a transparent system would give artists more control over their creativity, income and the way they promote themselves. This would, in turn, dismiss certain roles, meaning the industry would have to reshape around it. Its creation of a public ledger would be an easy, accessible platform for musicians, label owners and other music businesses to access the information of a song's rightful owners.

However, for the machinery to cover all the predicaments, changes will have to be initiated. Legal undertakings will be needed to ensure that blockchain could work efficiently without creating miscellaneous problems revolving around ownership rights, and jurisdictions. What is certain is the fact that labels and record companies cannot ignore blockchain and are forced to implement the technology in what they have to offer. Blockchain could potentially dispose of certain roles; however, it could also create new job positions in the industry.

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