

In what ways would blockchain change the current landscape of the music industry commercially and legally?

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BATKOVA, KALINA – 2014509 (TILEYARD EDUCATION)

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Introduction

This report explores the question “In what ways would blockchain change the current landscape of the music industry commercially and legally”. Firstly, an explanation of blockchain is presented, followed by an overview of how it would work in relation to the music industry. Then, ways in which blockchain would change the music industry are presented. Finally, the legal implications of blockchain are outlined.

What is Blockchain?

Blockchain is a type of database or distributed ledger that keeps records of digital transactions (Investopedia, 2021). The way it stores information is what differentiates it from a typical database that has a central administrator - often utilised by banks and governments. Blockchain’s distributed ledger has “a network of chronologically evolving replicated databases, synchronised using the internet, visible to anyone within the network” (Gupta, De Leon, 2017). This means that the data is stored in blocks that are chained together. As new data comes in, it goes into a block and once the block is filled with data, it is chained to the previous one, hence why it is chronological.

Many different types of information can be stored on a blockchain, but “the most common use so far has been as a ledger for transactions”, typically cryptocurrencies such as Bitcoin (Investopedia, 2021). Blockchain is used in a decentralised way, so all users collectively have control over the peer-to-peer transactions, rather than a single person or group. All transactions are visible to anyone on the platform, so committing fraud is not possible, allowing users to trust each other and not need intermediaries. Data recorded in a blockchain is also irreversible, so transactions are recorded permanently. Furthermore, hacking attacks common for centralised systems are extremely difficult to carry out on a blockchain. However, there have been some large Bitcoin attacks such as the popular Mt. Gox attack (Lee, 2017). A blockchain network can be public and accessible to everyone, however it is also possible that it is private with restricted membership.

The process of a digital transaction has a number of steps (Figure 1). The transaction is placed in a block with other recent transactions and in turn sent to the network. Then,

miners (members of the blockchain network with the needed technology) compete with others to be the first ones to validate the transaction (which brings them an award, for example bitcoins if they have mined in the Bitcoin blockchain network). Once validated, the block is time stamped and put in the linear and chronological chain. The new validated transaction blocks are connected to older blocks, creating a chain showing all transactions of the blockchain since its beginning (Investopedia, 2021). Blockchain is a very disruptive system that could help shape numerous industries and is arguably the most important IT invention since the World Wide Web (Thompson, 2016).

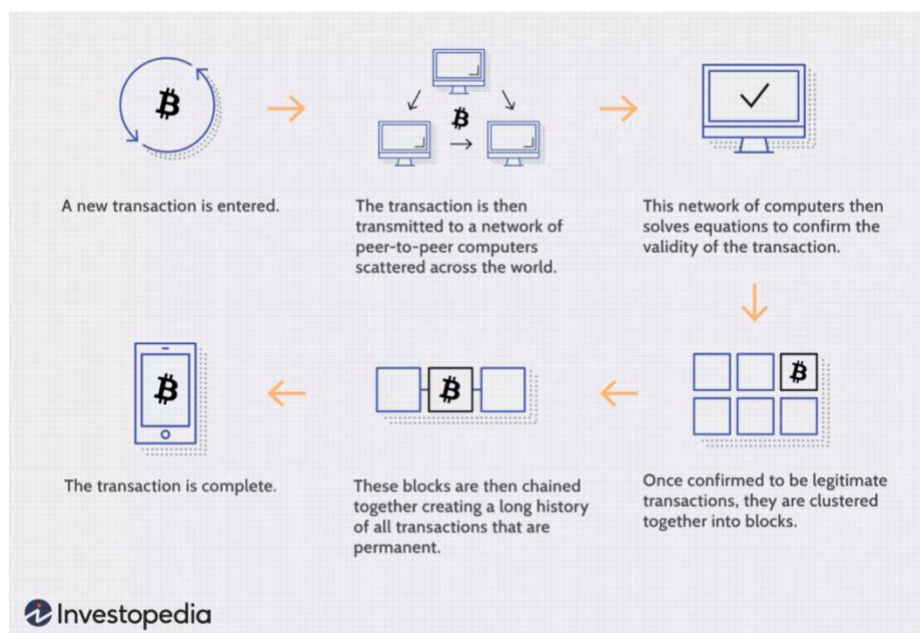


Figure 1. Blockchain Transaction Process

How would blockchain work for the music industry?

Nowadays music can be streamed and downloaded easily, however the payment to artists is slow and not very transparent. With blockchain's value chain, creators will be able to see exactly what amount of capital they ought to be paid for the usage of their music.

Blockchain technology would also enable the easy identification of the real copyright holder and help track derivative works. Thus, the dynamic value of the song could be determined by tracking the system relationships, so micropayments to artists can be made without the need of third parties such as distributors. This way artists could have fair and transparent compensation for their works. They would be able to monetise their work or

make it available free of charge. Some examples of blockchain mechanisms are OP_RETURN, Nielsen SoundScan and Application Programming Interface (API). API's aim is to "demystify rights ownership, digital distribution, and usage by providing developers and enterprises with tools to access and manage digital assets, including copyrights" (Gupta, De Leon, 2017).

Since 2016, a new blockchain technology has been developing called the Open Music Initiative (OMI). It is led by the Berklee College of Music Institute for Creative Entrepreneurship and the MIT Media Lab, supported by a number of major labels, streaming services, publishers and collection societies (OMI, 2021). OMI's goal is to advance and encourage the creation of innovation in music, making sure fair compensation for rights holders, creators, and performers is received. As defined in a report by the Inter-American Development Bank, "OMI is not a database or a standard, but instead an open-source technical architecture comprised of core functional blocks and APIs that will allow developers and stakeholders to build their own systems and tools that are OMI compliant" (Gupta, De Leon, 2017).

In 2017, Spotify acquired Mediachain Labs, which is a peer-to-peer blockchain database for sharing information across different organisations and applications (Daley, 2019). In a blog post, also featured on Music Business Worldwide, the Mediachain team explained that "Over the last three years, we've developed open, decentralized data infrastructure, built open-first applications to surface attribution for creators, and even prototyped our own cryptocurrency to reward creators and curators for their contributions to culture" (Music Business Worldwide, 2017).

Currently, there are a number of blockchain start-ups trying to make their way into the industry. Audius is a San Francisco-based start-up that is a blockchain-based streaming platform connecting fans directly with the artists and their exclusive new releases. Their monetisation programme is still in development and allows artists to set their own rates and base it around data that shows them who their superfans are (Jones, 2021). Audius would keep 10% of revenue and the rightsholder would take the rest. Since its launch in 2019, "Audius has reached 1.3 million users listening every month, over 50,000 people have uploaded content and the platform hosts around 200,000 tracks" (Jones, 2021). They have

also recently raised nearly \$10 million from Silicon Valley investors demonstrating the potential growth of the platform. There are other similar companies on the market such as BitSong, which is “the first decentralised music streaming platform dedicated to artists, listeners and advertisers” (Daley, 2020). On it, artists can attach adverts to their songs and for each ad listened, the artist and the customer get up to 90 percent of the profits of the advertiser.

One of the biggest challenges of the music industry right now is that a global registry of musical works and authors does not exist. They are all separated in the collection societies of different countries, but such a registry is needed due to the Internet and the online global consumption of music. Blockchain could potentially provide a seamless and quick experience for the ones who create music and interact with it by functioning as both a database and network. In fact, there now is a live music database called Viberate, which stores “more than 460,000 artists, 5,000 music festivals and 500,000 global music events” (Jones, 2021). So, it is only a matter of time before a global database for all recorded music gets completed.

How would blockchain change the music industry?

One way blockchain would benefit certain parties of the music industry, more specifically artists, is **speedier payments**. Musicians could be paid quicker because intermediaries such as the distributors and collection societies would be cut out. Due to the reason that all members would have the same ledger, the money would come in quicker for everyone (Gupta, De Leon, 2017).

Another way would be **dynamic pricing**. Now, everyone pays the same monthly fee to listen to whatever they want on streaming platforms. However, a blockchain streaming technology could charge a more frequent user of a song differently from a sparing user. This way consumers would have to pay for the items they play rather than entire catalogues, which could feel restrictive to some, others may enjoy paying very small amounts exactly for how much they consume. Furthermore, public spaces such as restaurants or shopping centres could pay based on their exact usage rather than a fixed fee.

Greater flexibility in IP valuation could be the result of dynamic assessment of music usage (Sitonio, Nucciarelli, 2018). Blockchain could allow artists to set their own rates or even superior price optimisation models with the use of smart contracts. These contracts may have options stating that if a music item gets big market traction, then the end user pricing or royalty rate could be adjusted. This way, musicians would not have to rely on Spotify's low royalty rates or sign unfavourable record deals due to lack of negotiating power.

There is concern that blockchain could challenge copyrights due to **piracy** (Gabison, 2016 and Vogel, 2015). The reason is that it would be extremely difficult to blame somebody for infringement once there is a decentralised network where pirated versions could be uploaded. The features of blockchain that "make pinning responsibility for pilferage are innate to the system" and the two elements would need to be analysed (Grupta, De Leon, 2017). It is unclear if the technology would be able to reduce piracy. Thus, revenue losses resulting from piracy would be unlikely even with blockchain.

Blockchain could also encourage **new music business models** where consumers become promoters. Just like Spotify encourages listeners to share music they like with their peers, a blockchain platform could offer financial contributions (micropayments) to customers who promote their favourite songs. This would be a positive for the music industry because the revenue generated by turning fans to promoters could outweigh the cost of encouraging them to perform this task.

Blockchain could **reorder the music industry** but not necessarily decentralise it. Nowadays the industry relies on artists sharing or renting their rights the labels or distributors in exchange for an advance. This is a high-reward market, however also high-risk, so it is very likely that the industry will become unified with blockchain technology. An availability of a distributed ledger does not mean that distributed ownership will be widely spread.

It is difficult to determine whether or not blockchain would significantly enrich author's **share revenue**. One more intermediary is introduced with this technology, which is the certain blockchain platform. This would decrease the payment size of the other people

in the supply chain. The question is would this decline be in favour of the authors? The value proposition of the intermediaries has to be explored. It is easy to think that a blockchain technology would extinguish the demand of PROs (Performance Rights Organisations) and labels, as artists could simply directly distribute their songs on a blockchain similar to how it happens now on streaming platforms. PROs mainly offer services related to processing royalty payments and IP (Intellectual Property) infringement, while labels launch artists and position them with more well-known performers. Labels create brand value, effectively popularise and protect the artist from infringers. The model of PROs and labels is quite vulnerable with companies like Spotify and Apple who are aiming to produce their own content. PROs have a structured system developed over time to process payments that make them indispensable. Labels and PROs are the main forces that fight piracy across all channels, so even if piracy proofing is possible on a certain blockchain, the rest of the globe is not (Grupta, De Leon, 2017). These are the reasons why it is very unlikely for these two areas of the industry to fade quickly. It is possible that in the long run mergers occur between labels, PROs and blockchain platforms that dominate the market if blockchain technology overshadows other modes of consumption.

Legal implications and blockchain

One way blockchain would contribute to the legal area of the music industry is through the creation and implication of **smart contracts**. A smart contract would create a single algorithm determining the relationships among all parties such as the musicians, labels and PROs. However, they would govern people in different jurisdictions and the blockchain owner may be able to not accept certain clauses of the contract or be subject to its own laws. Since it would not be clear which jurisdiction will have authority over the contract, the need of lawyers and judges would still be needed. These contracts would be able to respond to certain situations in a dynamic way. For instance, options may be triggered when a certain benchmark is reached, or royalty rates could be changed based on a song's success (Grupta, De Leon, 2017). This would be in turn beneficial to artists. Instead of passing through intermediaries, "revenue from a stream or download could be distributed automatically between rights holders, according to agreements, as soon as the

track is downloaded or streamed” (Arcos, 2018). These algorithms and contracts could become standardised and be offered off-the-shelf for everyone to use.

There are two main issues related to intellectual property in the music industry: **assignment of copyright** and **piracy**. On blockchain, a musician could be self-certified by a distributed ledger. However, the creator of the register on the blockchain might not be the owner and it is unclear if the blockchain registry would be able to determine the rightful ownership. It is possible that rightful ownership would be confirmed by digital signatures. Furthermore, the system could be based on “first to file”, meaning that the owner of the work would be the person who makes the digital signature first (Gupta, De Leon, 2017). This technology would be able to solve the absence of a global registry for music. In blockchain, the registration of the work would be in sync with the monetisation, so it would be impossible to monetise a song without it being registered.

Finally, Government structure can often be an obstacle to innovation. They often have established legal rules, practices and traditions, which is why there may be resistance to change. Blockchain has the potential to radically shift the industry and force governments to reform their legal rules. PROs’ need for modernisation may be stimulated by blockchain technology. After all, “governance and technology evolve simultaneously and each is forced to conform to the changes in the other” (Perez, 2009).

Conclusion

It is clear that blockchain technology has created turbulence in the music industry. There already are dozen of blockchain companies that often have their own tokens that not only pay the artists instantly with the assistance of smart contracts, but they also reward users for their contribution to the platform. The main benefits blockchain offers are transparency and speedier payments because intermediaries are not needed. Moreover, artists are able to set their own prices and be in control of their works like never before. Smart contracts would facilitate day-to-day bureaucratic operations and a fairer payment to rightsholders. This is why labels and PROs could be worried about their roles in the industry in the long run. Would artists agree to the deals these organisations offer now given that they could try to be independent and maybe earn more? Currently, the blockchain

technology is still in the early stages of development and many users are not used to the concept. The future landscape of the industry, however, could be dominated by the world of blockchain.

Word count: 2,488

References

- Arcos, L., 2018. *View of the blockchain technology on the music industry*. [online] Bjopm.emnuvens.com.br. Available at: <<https://bjopm.emnuvens.com.br/bjopm/article/view/449/675>> [Accessed 28 March 2021].
- Daley, S., 2019. *17 Blockchain Music Companies Reshaping a Troubled Industry*. [online] Built In. Available at: <<https://builtin.com/blockchain/blockchain-music-innovation-examples>> [Accessed 27 March 2021].
- Gabison, G. A., 2016. Policy Considerations for the Blockchain Technology Public and Private Applications. [online] SMU Science & Technology Law Review. Available at: <http://works.bepress.com/garry_gabison/16/> [Accessed 28 March 2021].
- Gupta, R. and De Leon, I., 2017. *The Impact of Digital Innovation and Blockchain on the Music Industry | Publications*. [online] Publications.iadb.org. Available at: <<https://publications.iadb.org/publications/english/document/The-Impact-of-Digital-Innovation-and-Blockchain-on-the-Music-Industry.pdf>> [Accessed 27 March 2021].
- Investopedia. 2021. *Blockchain Explained*. [online] Available at: <<https://www.investopedia.com/terms/b/blockchain.asp>> [Accessed 27 March 2021].
- Jones, R., 2021. *Audius has raised nearly \$10m for its Spotify rival. Can its blockchain-based model change the game for artist payments?* - Music Business Worldwide. [online] Music Business Worldwide. Available at: <<https://www.musicbusinessworldwide.com/audius-has-raised-nearly-10m-for-its-spotify-rival-can-its-model-change-the-game-for-artist-payments/>> [Accessed 26 March 2021].
- Lee, T. B., 2017. *Feds say they caught a key figure in the massive Mt. Gox Bitcoin hack*. [online] Ars Technica. Available at: <<https://arstechnica.com/tech-policy/2017/07/feds-indict-a-leading-bitcoin-exchange-for-money-laundering>> [Accessed 26 March 2021].
- Music Business Worldwide. 2021. *Spotify acquires blockchain firm to build 'a more transparent music industry'* - Music Business Worldwide. [online] Available at: <<https://www.musicbusinessworldwide.com/spotify-acquires-blockchain-firm-to-build-a-more-transparent-music-industry/>> [Accessed 27 March 2021].

- Open Music Initiative. 2021. *About — Open Music Initiative*. [online] Available at: <<https://open-music.org/about>> [Accessed 26 March 2021].
- Perez, C., 2009. *Technological revolutions and techno-economic paradigms*. Working Papers in Technology Governance and Economic Dynamics. Norway: The Other Canon Foundation and Tallinn: Tallinn University of Technology. [online] TOC/TUT Working Paper No. 20. Available at: <<http://e-tcs.org/wp-content/uploads/2012/04/PEREZ-Carlota-Technological-revolutions-and-techno-economic-paradigms1.pdf>> [Accessed 28 March 2021].
- Thompson, C., 2016. *How Does the Blockchain Work? (Part 1) A Simple and Easy Explanation*. [online] The Blockchain Review. Available at: <<https://medium.com/blockchain-review/how-does-the-blockchain-work-for-dummies-explained-simply-9f94d386e093>> [Accessed 26 March 2021].
- Vogel, N., 2015. *The Great Decentralization: How Web 3.0 Will Weaken Copyrights*. [online] Review of Intellectual Property Law 15(1):137–49. Available at: <<http://repository.jmls.edu/cgi/viewcontent.cgi?article=1374&context=ripl>> [Accessed 28 March 2021].