

MA Music Business

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Lecturer: Ian Penman

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Antoine Marcel

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I/. INTRODUCTION

It is true that the development of the Internet and digital technologies has caused the music industry to face significant challenges. Even though the industry has always been able to adapt to technological breakthroughs concerning physical media, the "dematerialization" of music has caused an unheard-of upheaval in the business due to a new method of consumption (Saidani, 2016).

Records stores were soon supplanted by computers and digitising equipment. Due to "peer to peer," sharing and the interchange of music files between Internet users was made feasible. Illegal downloading, a true plague of music and cause of a serious crisis, was brought about by the Internet revolution. The first programme to make a name for itself in the world of unauthorised downloading was Napster, which was developed in 1999. Therefore, the availability and accessibility of music over the internet causes a significant decline in CD sales, handing the music industry which saw a 60% decline between 2002 and 2012 a devastating hit (Ministry of Culture, 2014).

This represented a huge lack in the source of income for artists. To counter this phenomenon, modern tools have been developed with streaming platforms like Spotify for instance. However if these tools seem to have reduced the issue of piracy it has made the revenue system for the artists even worse.

The music industry is in a perpetual development and Blockchain technology is attracting particular attention. It is often presented as a disintermediation tool that allows different members of the network to store and share information or to carry out transactions without that it is not necessary to involve any central control body. Could the exclusive use of the Blockchain in music governance respond to the various problems encountered today in the sector of the music industry?

In this essay, we will analyse what is blockchain, then we will study the current state of the music industry. Finally, we will learn what issues could blockchain solve but also its limitations and how are companies already implanted in the decentralized ecosystem.

II/. What is blockchain?

Blockchain can be defined as a storage and transmission technology of information, based on peer-to-peer exchanges, transparent, secure and therefore operating without a central control body. It is a database decentralized organization that validates and records all types of transfers between its members. Its character distribution allows accessibility to all and the verification of the validity of the chain is done directly by users without intermediaries. (Zolynski, 2017)

The transactions carried out between users are organized in the form of blocks which must, in a unitary way, be validated by the nodes of the network, in other words, the miners. Once the certification and timestamping have been completed, the transaction becomes visible to all network users due to its integration with the blockchain. The integrity and authentication of transactions, which are therefore tamper-proof, are guaranteed by the

use of cryptographic keys. The Blockchain is based on “open source” software which gives it this unprecedented transparency. (Hayes, 2022)

Several blockchain-related initiatives have been introduced in the music industry. To begin with, this technology has a variety of applications. For instance, the Blockchain can be used as a register to guarantee the traceability of data. Blockchain can be used as a record to guarantee information traceability. It also provides a tool for transferring assets. Finally, smart contracts, which enable the automation of contractual agreements, are at the core of this ecosystem. (Caprioli, 2016)

III/. Current state of the music industry.

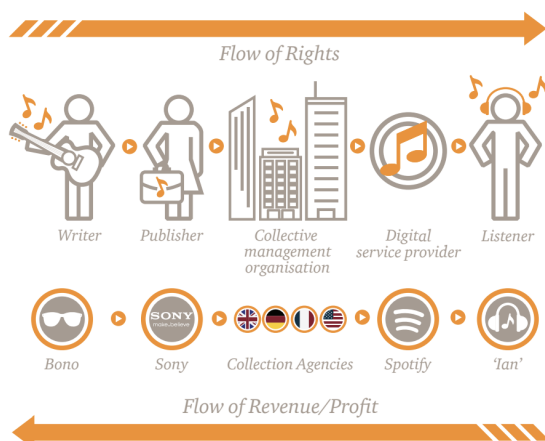
The global music industry is worth \$43 billion however only 12% of this revenue is going to artists. (Big Z, 2022)

The introduction of the internet has led to the rise of new industry leaders in music streaming platforms from early 2000. By making music more broadly accessible to listeners, streaming services like Spotify and YouTube have contributed to changing the landscape and changing how music is perceived to some level. However, in reality, the previous mechanisms that made up the music value chain have rarely changed, despite the fact that new platforms have introduced additional disruptions and altered the stakeholder landscape. That also implies that there are still a number of significant shortcomings, such as rising operational costs and high administrative fees, low artist payouts because of the presence of many middlemen, a general lack of transparency, particularly with regard to metadata and copyrights, and as a result ineffective and drawn-out processes for paying royalties as well as a lack of international cooperation because of a lack of trust. (De Meijer, 2022)

Twenty-eight collection societies collect royalties for mechanical recordings and public performance rights in 28 distinct marketplaces in Europe alone. Due to the centralization of the industry and the lack of transparency, royalty payments have slowed down or even been made incorrectly. As a result, there is still a gap between the creators of musical content, the performers, and the listener. (PWC, 2021)

Using blockchain technology, one of the goals is to achieve a music business, intermediary-free artist-centric structure.

Without Blockchain



With Blockchain

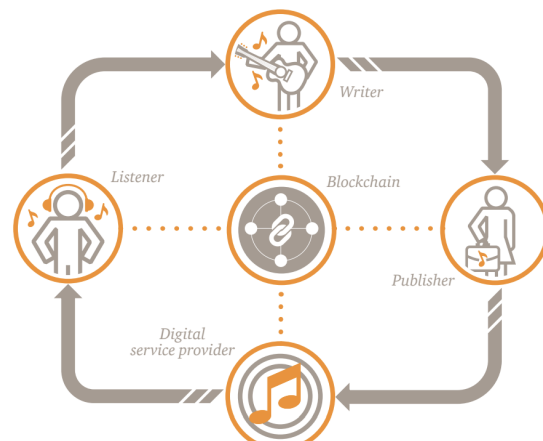


Figure 1: Blockchain artist-centric model without intermediaries. (PWC, 2021)

Concerning creative and specifically intellectual property in music, there are two different copyrights to take into consideration: The Composition Copyright and the Masters copyright.

- 1) The composition copyright (©) underlines everything related to the creation of a raw piece of music. This implies the melodies, the lyrics, the chords, the arrangement of the song etc. The composition copyright is held by the people who created the song and by their publisher.
- 2) The master copyright concerns a specific sound recording using the copyright of a composition. For instance, covers or remasters using lyrics, melody or a chord progression from a copyrighted composition. The master copyright is owned by the performing artist and their label.

The copyright to an artist's recordings is typically given to the label when they sign a record deal, especially with a large label. This implies that they are no longer the owners and are now solely entitled to royalties. In reality, the only situation in which artists might get them back is if the label filed for bankruptcy. (Lindvall, 2009)

The number of stakeholders involved in creating a song or an album is one of the reasons it is so complicated to earn fair revenue considering the Intellectual Property (IP) of the artist. Labels, artists, writers, producers, musicians, publishers, distributors, managers, agents, and lawyers are among the other participants. Everyone concerned in this situation needs to be paid for their work. (Gorlon, 2021)

However, it does not stop here. Following the collection of the royalties by collection agencies or mechanical rights organisations, the artist is given a single payment of its royalties usually every 6 months, and sometimes more. (Gonzalez, 2021)

IV/. Smart contracts

One of the main innovations promising to improve the music industry is with the blockchain technology of Smart Contracts. What are they?

According to IBM: "Smart contracts are simply programs stored on a blockchain that run when predetermined conditions are met. They typically are used to automate the execution of an agreement so that all participants can be immediately certain of the outcome, without any intermediary's involvement or time loss. They can also automate a workflow, triggering the next action when conditions are met." So a network of computers will execute an activity if certain conditions have been confirmed and met. These include making the appropriate

financial payments, registering a vehicle, distributing notices, or issuing a ticket. The blockchain is then updated after the transaction is complete. As a result, the transaction cannot be changed, and only those who have been given permission can see the result. (IBM, 2022)

Smart contracts present many benefits:

- Speed, accuracy and efficiency
- Security
- Savings
- Transparency and Trust

VI. How blockchain could change the industry.

Blockchain offers solutions to most of these issues. According to economist Carlo R.W. De Meijer: “Blockchain and the use of smart contracts could revolutionise and fundamentally change the music industry by removing third party middlemen from music sales and centralised music streaming platforms, put the power and control back into the creators’ hands from an economic and creative perspective.”

Here we will analyse these hypothetical solutions in paragraph and judge in paragraph **IV** if they could really work.

The most important solutions this could bring to the industry are:

- Improving copyrights & intellectual property management
- Instantaneous micro-payments
- Transparency and traceability

(De Meijer, 2022)

Blockchain offers a tonne of promises for the music industry, particularly for managing copyrights and intellectual property. Through the introduction of music rights marketplaces and royalty management platforms, the technology could help in the reliable management of music rights by bringing transparency to music ownership rights and royalties. By having an extensive peer-to-peer database that has complete intellectual property and copyright information, blockchain could give artists direct administration of copyrights and intellectual property. This could be achieved through the use of smart contracts, which guarantee that the appropriate parties are paid for using the content and contain up-to-date information that anybody can read and verify (De Meijer, 2022).

Artists frequently don't understand the payments and accountings they receive since data provided to them with royalty payments is frequently opaque. Intermediaries like streaming platforms or record labels may profit from this opacity. (Rethink Music, 2015).

Instant micropayments via blockchain and smart contracts could potentially address the issue of fair compensation for artists and rights holders. Using blockchain's smart contracts to optimise automatic payments would prevent middlemen from delaying or pocketing a piece of the payment. The conditions for downloading and using the music as well as the share of revenues going to each copyright holder might be set by them. The process of royalty payments could be completed in a matter of seconds rather than over the course of several months if smart contracts were used to pay musicians for tiny fractions of a cent after each sale or stream. This method also opens the door for a new method of delivering on-demand music services, in which customers select their preferred album and pay the artists directly with royalties and profits. (De Meijer, 2022)

Concerning transparency and traceability, this would address the long-standing problems of consumers downloading, duplicating, and modifying digital content. Because music is stored on the ledger with a distinct ID and time stamp it prevents lyrics or melodies from being stolen or copied. Due to its immutability, inalterability, and transparency, this enormous database would offer advantages and chances for collection societies, distributors, and labels in terms of better marketing and curation, as well as the verification of the data itself. (De Meijer, 2022)

VI/. The limits Blockchain.

Smart contract conditions are laid down in terms of "if" and "else." These blockchain-based contracts automatically carry out when the required conditions are satisfied; a third party is not required to confirm a transaction. This calls into question whether such contracts can actually be enforced in court. (Lexology, 2022)

In cases of human error, whether mistaken or intentional, the additional question of responsibility needs to be addressed. The blockchain can still be compromised, even though it cannot be changed. There is nothing stopping a hack if a smart contract's code is not written properly (Corragio, 2019).

The problem of remuneration per crypto-currency is also found in the exceptional fluctuation of it. In November 2021 Bitcoin reached the price of \$69.000 per token, a year later in November 2022, a bitcoin is worth \$16.000 (430% less). There is therefore a real risk for artists if they accept such remuneration. (Smith, 2022)

However, some artists may be tempted by crypto-currencies, as was the case with singer Imogen Heap, who is offering the purchase of her song in exchange for the public sending of ETH (Ethereum), or the artist Björk who offers her album for sale in exchange for payment by BTC (Bitcoin) or ETH (Ethereum). (Damiani, 2017)

Because no third party or institution has exclusive authority to resolve legal issues involving cryptocurrencies, those issues are likely to grow even more. For instance, in a conventional financial transaction, a party's financial institution (such as a bank) can act as an intermediary and settle the issue if they claim that their account credentials were stolen and that money was fraudulently moved from their account. However, because cryptocurrencies are decentralised and lack intermediary financial institutions, there is currently no system in place to resolve a similar scenario on a blockchain network. As a result, those who have had their crypto currency stolen are unlikely to have any legal recourse to recover their losses. (Freeman Law, 2020)

VIII. Companies using blockchain.

The objective to become the leader of music streaming on the blockchain is a very concurrent market with many companies entering the market offering innovative situations previously explained. (Daley, 2021)

Here we will focus on one of the market leaders: Audius.

Audius is a decentralised digital streaming service which operates on the blockchain. It is an entirely community-owned music-sharing mechanism. It functions by directly putting fans in contact with musicians so that they can hear exclusively new songs. As a result, it offers an alternative to the world's current streaming services, like Spotify, Deezer, etc. Its goal is to grant everyone the freedom to listen to, share, and make money from their favourite tunes. Audius supports artists by publishing, monetizing, and directly distributing their music to audiences (ZebPay, 2022).

In order to register assets to the Audius network, the platform is made to produce time-stamped records for creative works. Blockchain technology protects and verifies metadata attributions in a decentralised network. Audius enables users to find new content that can be authenticated using its attribution system. (Golden, Unknown)

Audius cuts out the middlemen from the traditional music industry by placing musicians in direct contact with their audience. The artists are the exclusive owners of the music, and they are free to decide how to monetize it on the site. They have the option of giving out their music for free or charging people to access the premium content. (Binance, 2022)

With seven million monthly users in 2022, the platform weighs in the balance of the transition of the music industry. (Hayward, 2022)

VIII/. Conclusion

Vladimir Zamfir, one of the key Ethereum blockchain developers, has already issued a warning against this technology, which he defines as "experimental and immature." (Zamfir, 2017). The severe drawbacks of the blockchain-based music industry may outweigh the benefits. Despite the popularity of businesses like Audius, neither one is even close to being a threat to the major labels or drawing a sizable number of artists to the platform. A future on which the entire music industry relies its transactions is to be distrusted simply because of the volatility and unpredictability of cryptocurrencies. Today, it seems that blockchain has more theoretical solutions than a ready application for the music industry. There are serious risks involved in treating it like an absolute saviour for every issue in the business.

In fine, even if the music industry has to drastically and urgently improve in many areas, blockchain cannot and should not be viewed as a complete and infallible answer.

Bibliography:

- Academy, B. (2022) *What Is Audius (AUDIO)?* Available at: <https://academy.binance.com/en/articles/what-is-audius-audio>.
- Audius (no date) *Audius - Wiki*. Available at: <https://golden.com/wiki/Audius-5KKK455>.
- Bargfrede, A. (2015) *Fair Music: Transparency and Payment Flows in the Music Industry*. Available at: <http://www.rethink-music.com/research/fair-music-transparency-and-payment-flows-in-the-music-industry>.
- Big Z (2022) *How Web 3.0 Will Change The Music Industry Forever*. Available at: <https://www.youtube.com/watch?v=6QbR268Wq08>.
- Caprioli, E. (2016) *La blockchain ou la confiance dans une technologie*. Available at: https://convention-s.fr/wp-content/uploads/2016/12/La-blockchain-ou-la-confiance-dans-une-technologie_E.Caprioli.pdf
- Coraggio, G. (2019) *Legal issues of blockchain and how to deal with them*. Available at: <https://www.technologysleage.com/2019/09/legal-issues-blockchain/>.
- Daley, S. (2021b) *Blockchain in Music: 17 Examples Reshaping a Changing Industry*. Available at: <https://builtin.com/blockchain/blockchain-music-innovation-examples>.
- Damiani, J. (2017) *What Björk's Cryptocurrency-Paired Album Means For The Music Industry*. Available at: <https://www.forbes.com/sites/jessedamiani/2017/11/07/what-bjorks-cryptocurrency-paired-album-means-for-the-music-industry/?sh=22a9586f13d8>.
- De Meijer, C. (2022) *Blockchain and the Music Industry: Singing the Blues again*. Available at: <https://www.finextra.com/blogposting/22732/blockchain-and-the-music-industry-singing-the-blues-again>.
- Freeman Law (2022) *Legal Issues Surrounding Cryptocurrency*. Available at: <https://freemanlaw.com/legal-issues-surrounding-cryptocurrency/>.
- Gonzalez, B. (2022) *All you need to know about Music Royalties: A clear guide*. Available at: <https://blog.groover.co/en/tips/all-you-need-to-know-about-royalties/>.
- Gorlon, M. (2022) *Understanding The Music Supply Chain - Mike Gorlon*. Available at: <https://gorlon.medium.com/understanding-the-music-supply-chain-d276f600b603>.
- Hayes, A. (2022) *Blockchain Facts: What Is It, How It Works, and How It Can Be Used*. Available at: <https://www.investopedia.com/terms/b/blockchain.asp>.
- IBM. (no date) *What are smart contracts on blockchain?* Available at: <https://www.ibm.com/topics/smart-contracts>.

- Irwin, K. (2022) *How Web3 Music Platform Audius Hit 7.5 Million Monthly Users*. Available at: <https://decrypt.co/110710/how-web3-music-platform-audius-hit-7-5-million-monthly-users>.
- Lexology. (2022) *Top 15 Legal Issues to look out for your Blockchain Start-up*. Available at: <https://www.lexology.com/library/detail.aspx?g=e2ccba98-930b-454d-8687-f402db0296f5>.
- Lindvall, H. (2009) *Why artists should retain ownership of their recordings*. Available at: <https://www.theguardian.com/music/musicblog/2009/jan/29/recording-copyright-ownership>.
- Ministry of Culture (2014) *Chiffres du marché du secteur de la musique enregistrée*. Available at: <https://www.culture.gouv.fr/Espace-documentation#content>
- PWC (2019) *Blockchain: Recording the music industry How Blockchain technology could save the music industry billions*. Available at: <https://www.pwc.co.uk/entertainment-media/publications/blockchain-recording-music-industry.pdf>
- Saidani, M. (2016) *L'impact des évolutions technologiques sur l'industrie musicale*. Available at: <https://lesmondesnumeriques.wordpress.com/2016/01/30/limpact-des-evolutions-technologiques-sur-lindustrie-musicale/>.
- Smith, H. (2022) *Bitcoin crash: what's behind crypto collapse?* Available at: <https://www.thetimes.co.uk/money-mentor/article/is-bitcoin-crash-coming/>.
- Vlad Zamfir on (2017). Available at: <https://twitter.com/vladzamfir/status/838006311598030848?lang=en>.
- ZebPay, A. (2022) *What Is Audius (AUDIO) & How It Works* | Zebpay. Available at: <https://zebpay.com/blog/what-is-audius>
- Zolynski, C. (2017) *Blockchain et smart contracts : premiers regards sur une technologie disruptiv*, *Revue de Droit Bancaire et Financier*, pp. 85-88.