

Assignment: Essay

Legal & Business Affairs (BMTY7002)

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1. Introduction

The continuous evolution of the music industry has predominantly been influenced by technological advancements, that have introduced new opportunities for stakeholders to establish themselves within the market (Fountain, 2021). Emerging technologies have achieved to simultaneously improve certain obsolete processes and have completely disrupted other forms of how music is being produced and consumed. Valuing the use of new technologies is a crucial factor for companies and individuals to be at the forefront of the industry and for building a sustainable future for themselves. Labels and artists adopting new sustainable technologies have shown to have an actual advantage amongst their competitors.

The successful adoption and application of disrupting technologies, such as the internet, music streaming and social media, have filtered out seminal businesses and individuals from those failing to do so. A new disrupting technology, known as “blockchain”, has received high consideration in media, due to its potential for identifying ownership and the distinctiveness of assets. The inevitable critique of disrupting technologies and, as such, blockchain, is a beneficial practice for testing its robustness. This essay seeks to evaluate what value different applications of the blockchain technology have for stakeholders within the music industry and whether its employment provides a sustainable solution for exactly identifying relevant rightsholders of pieces of work, in order to guarantee continuously adequate remuneration.

2. Research Context

Amongst other media industries, the music industry has dealt with piracy and copyright infringement to a large extent and has continuously sought to counteract illegal actions through different approaches. Large amounts of data pools have emerged in consequence to the increasing digitisation of industries. These pools are characterised by their complexity and confusion in pinpointing certain data points. This complexity complicates accurate copyright information and the identification of relevant rightsholders of certain pieces of music. Copyright distinguishes between the sound recording and its associated composition. Currently, a standardised mapping for recordings and their respective compositions is non-existent and its accuracy solely relies on the information that record labels provide to DSPs (Rosenblatt, n.d.). Therefore, the remuneration for rightsholders has often been incorrect, where some have not received their rightful amount.

Blockchain utilises a P2P network, where information is added to a transparent chain of datapoints. Added blocks of data are encrypted and impossible to alter, which receive a form of digital signature. These guarantee the authenticity of the relevant datapoint and can involve “smart contracts”, which “execute contractual obligations automatically” (BCG, 2021). The aforementioned traits of this technology are the cornerstones of its foundation and seek to identify ownership, which assures rightsholders to be remunerated adequately. The objective of a successful implementation of blockchain technology is ensuring that rightsholders inherit their lawful ownership and safeguarding the intellectual property right for them.

Collecting societies, such as ASCAP, GEMA and PRS continuously search for standardised billing processes, in order to enhance their efficiency and counteract the obstacles of the identification of rightsholders. Blockchain technology has experienced an increasingly high consideration, as it offers a decentralised ledger, which can be accessed by multiple rightsholders (Ballhaus, et al., 2018).

3. Applications

3.1 Smart Contracts

The aforementioned key characteristics of blockchain can offer a basis for stakeholders to protect their lawful rights. According to (Applefeld Olson, 2021), DSPs, such as Spotify or Apple Music, have accumulated approx. \$424 million in “unmatched” royalties, which have been paid unpunctually to its rightsholders due to insufficient identification. In addition to their late payment, DSPs have supplied more than 1.3 terabytes of data concerning copyright information, which still must be analysed, in order to identify legitimate rightsholders (Applefeld Olson, 2021). Smart contracts have been postulated as a solution to these obstacles, as they are able to “ensure the payment of funds upon certain triggering events” (Lipton & Levi, 2018).

The upload of digital audio files that has emerged from the growing dependence on DSPs, facilitates the use of smart contracts, which can be embedded into the file itself. These distinguish themselves from conventional contracts in that they offer a solution to confusing ownership agreements that pose large difficulty for stakeholders of the creative process of a song to receive their lawful royalty (Takahashi, 2017). The non-fungible characteristic that is being implemented into digital audio files, clearly identifies intellectual property metadata, which secures an accurate and punctual remuneration for all rightsholders of a piece of creative work. As copyright is created automatically and is transferable, smart contracts assure stakeholders a continuous remuneration, as their contribution is being strictly embedded into the file. Companies, such as “JAAK”, utilise the Ethereum blockchain as a mean for rightsholders to “have the sole authority to insert, update and remove their information, creating a public record of rights and an immutable audit trail” (Cooke, 2018). Due to the smart contract’s versatility in terms of the types of triggers they should execute, stakeholders of a smart contract could include rewards for sharing their songs, which, in turn, would eliminate the need for expensive PR campaigns and increase the relationship to their customers (Alkaysi, 2019).

3.1.1 Limitations and Legal Implications

Certain contracts have to be recorded in forms of signed agreements and written terms, in order to ensure their validity, where the sole reliance on smart contracts would neither have the desired effect, nor the necessary legitimacy. As exclusive licenses require written terms, which have to be acknowledged by the rightsholder or the recipient of a transferred license, smart contracts would have to be used in conjunction with traditional text agreements (DMLP, 2021). Therefore, smart contracts may be used as vehicles to enforce agreements within licenses, through which they can “effectuate certain provisions of a traditional text-based contract” (Lipton & Levi, 2018).

In order for these “ancillary” smart contracts to become effective in the realms of the music industry, streaming data, known as “off-chain resources”, have to be incorporated into the smart contract. As smart contracts are not able to retrieve these resources by themselves, they are being collected by third-party services, known as “oracles”. However, this would add another middle man to the supply-chain, which would counteract the decentralised benefit that the blockchain technology offers (Lipton & Levi, 2018).

Due to the current immutable nature of smart contracts, it would become increasingly difficult to amend or terminate existing ones. In case of the bankruptcy of certain shareholders or oracles, smart contracts do not offer the necessary flexibility to consider such changes that require immediate amendments. If a party breaches a contract or is insolvent, the objective nature of smart contracts would pose an obstacle to the need of negotiations and the desired resolution. The immediate execution and its immutableness that smart contracts offer are double-edged traits, which can only be solved through assigning a more amendable characteristic to smart contracts. However, this would counteract the initial purpose of smart contracts, where stakeholders should critically evaluate if smart contracts offer an effective benefit for them (Lipton & Levi, 2018).

3.2 Intermediaries and Transactions

The IFPI argues that “parties should be free to agree to terms of their licensing agreements” (IFPI, 2020). Interference and the addition of intermediaries could create disincentives within the market, as they, too, seek to partake in the supply chain, which, in turn, may disrupt its growth (IFPI, 2020). Privately-owned and centralised databases are often incomplete and include conflicting information about ownership and rightsholders, which hinders them to receive their legitimate royalty.

The decentralised nature of blockchain technology has the potential to transform data from privately-owned pools into the public domain, which could create an incentive for companies to harvest this information, in order to develop tools for identifying and matching rightsholders. Pieces of creative work are attributed with a resale right, which states that a rightsholder is entitled to receive a percentage share of every following resale price (Touring Artists, n.d.). Furthermore, artists may venture into selling NFTs, such as exclusive behind-the-scenes content, where they receive a share of every resale along the chain. Hereby, the necessity for intermediaries, such as banks or collecting societies, could be eliminated, as the artist directly receives a share of their song’s or NFT’s sale, depending on the agreements with their label or publisher. Similarly, value that a musical piece inherits could be easily defined as well, due to the fact that stakeholders are able to view the amount of revenue their product has generated at any given point in time (Takahashi, 2017).

3.2.1 Limitations and Legal Implications

While the elimination of intermediaries may offer a larger share of generated revenue for artists and would grant them more control over their work, their absence could impede the accessibility of their music. Streaming services offer a large audience to creatives, which is an opportunity valued by some more in the short run than the revenue they can generate. In contrast, UjoMusic’s business model distinguishes itself through the sale of music directly to consumers, eliminating the subscription model. Consumers pay through micropayments for what they are listening to and don’t pay a recurring fee. As music has transformed into a digital good and does not involve as high production costs as prior to the dependence on DSPs, its marginal cost has approached closer to zero (Schmidt & Müller, Berlin). However, these micropayments are often considered as uneconomical.

Sebastian Hentzschel, CTO at BMG Rights Management, considers micropayments as too expensive in the long run, as each transaction involves a minor fee (Ballhaus, et al., 2018). Considering the high number of uploaded songs on Spotify per day (60,000), a platform offering micropayments with a similar amount of streams per day would require a high degree of utilisation and generate a large amount of accumulated fees for all micropayments (Kumar, 2020). In addition, these micropayments have to take place as simultaneous as possible, to ensure the desired immediate payment for rightsholders. Currently, the blockchain technology is not at a stage where it can ensure a large amount of transactions within a short period of time. Therefore, the potential latency of calculations and transactions may undermine the use of micropayments instead intermediaries, such as Spotify, that ask for a recurring fee. The use of an “off-chain” layer, which would handle transactions externally, could ease the process (Takahashi, 2017). However, this would introduce yet another intermediary, that the use of blockchain technology seeks to prevent.

3.3 Authenticity and P2P Network

The potential for authenticating data using blockchain technology offers a solution to a variety of stakeholders within the supply chain in the music industry. Even though data is transformed into the public domain, unlawful and foreign users can not view explicit information, due to the blockchain’s encryption. The transparency and authenticity that blockchain offers have the potential to disintermediate companies that capitalise on verification, which could lead to a reduction in the cost of goods sold (Bender, et al., 2019).

Illegal bots buying out a large amount of tickets have led to users turning to the black market for acquiring tickets, where disproportional prices for tickets are being charged. According to ticketing technology vendor Aventus, “about 12 percent of people report they have purchased a concert ticket online that turned out to be a scam”, which has had a serious influence on the revenue of festivals and artists (Leonhardt, 2018). Swiss company “ELCA” utilises blockchain technology for its product “TIXnGO”, which seeks to counteract the abovementioned threats posed to its industry. The objective behind the product is the implementation of encrypted tickets on the blockchain, through which the entire journey from acquisition to transference of tickets can be comprehended thoroughly (Musik Woche, 2020). This authentication within a P2P network has the potential to undermine the use of black markets and ensure festivals and artists to exhaust the full amount of potential revenue.

3.3.1 Limitations and Legal Implications

Primarily in the realms of verification and payment processes, blockchain takes advantage of network effects. These gain exponentially in value with the growing usage of the technology among all stakeholders. Similarly, without the necessary user base, the concept does not have the potential to disrupt. In order for the technology to flourish within the music industry, anchor participants, such as major labels and publishers, are required to agree to the standards that the technology sets to create proof of concept (Bender, et al., 2019). As the three major labels (Universal, Sony and Warner Music) inherit a combined global market share of about 70%, they act as essential gatekeepers for any norms within the music industry (Music Business Worldwide, 2015). Due to the oligopolistic situation within their distinctive industry, the adoption of new technologies, such as blockchain or streaming, can only be fulfilled once the gatekeepers have inherited these new standards.

Due to the immutableness of existing entries on a blockchain, the accuracy of information is a crucial factor for the final remuneration of stakeholders. A typical characteristic of the music industry is the transfer of licenses and copyright between different stakeholders, such as artists and record labels, once a deal between both parties has been closed. Due to the decentralised nature of blockchain technology, liability claims may be more difficult to be enforced, as it may be unclear who the contractual partners are and who is held liable. Blockchains “pose a compliance barrier”, as their attributes do not fully comply with the GDPR within in EU territory (Foley & Lardner LLP, 2021). According to Article 17 of the GDPR, personal data inherits the “right to be forgotten”, once a user decides to eliminate his or her account for example. However, due to the immutableness, this trait of blockchain technology may impede this obligation. Hence, a new set of regulations for a decentralised standard may come into play, as traditional contracts and agreements may not inherit the necessary requirements in order to be lawful (Ballhaus, et al., 2018).

While entries are safe from various kinds of manipulation, they require verification prior to their upload. A potential solution to ensure their authenticity may be collecting societies performing “clearing” prior to the entry of data about rightsholders and their revenue share, in order to guarantee an adequate amount of remuneration for every stakeholder (Ballhaus, et al., 2018).

4. Conclusion

As a standardised form of identifying essential rightsholders is non-existent and DSPs, such as Spotify and Apple Music, receive information about rightsholders in different forms, the decentralised and immutable characteristic of blockchain technology may ensure consistency and accuracy of essential data, through which stakeholders can receive an adequate amount of remuneration.

Due to their far-reaching contacts and agreements with other companies across the supply chain, major labels are in a position to act as ecosystem integrators (Bender, et al., 2019). In order for the blockchain technology to be enforceable, it requires key participants within the music industry, whose decisions have extensive effects upon other stakeholders across the supply chain. While blockchain technology offers a range of improvements to outdated and obsolete process intrinsic to the music industry, such as the identification and adequate remuneration of rightsholders, its immutable and decentralised characteristics are double-edged and may both improve and impede certain processes. Only through further development of the technology and a critical amount of adopters will it effectuate improvements and create an actual value for participants in the supply chain of music.

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