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BLOCKCHAIN

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Blockchain is a tool to store records of value and transactions but of course much more complex, and it is currently growing as cryptocurrencies are becoming increasingly significant but blockchain actually already exists since 2009. Gates (2017) states that blockchain allows people to transact between each other with anything of value. This value could be for example be property, shares, money, digital files. Indeed, almost anything; there is no limit. However, nowadays there is still the need for so-called intermediaries for such transactions, to whom people must entrust their belongings in order to be able to carry out transactions at all. Though blockchain would eliminate the inefficiency, cost, and distraction of a middleman, especially one with faulty memory (Weber 2018). This would mean that a transaction would occur directly between the participants and with that, people would save money since the intermediaries would no longer have to be paid. This technology would be particularly relevant in countries where people cannot trust the government, banks and other intermediaries like Gates (2017) mentions that the blockchain “provides a clear audit trail back to the start allowing attempts at fraud to be easily identified and that this would solve many of the security issues in conventional systems.” In more detail, a transaction ever made with blockchain is in a verifiably, securely, transparently and permanently time stamp registered in a public ledger and further, in order to be able to distinguish transactions well (Holotescu 2018). The origin of the term blockchain comes from the various blocks which create a chain, meaning that with every transaction a new block gets attached to the chain and is traceable up to the first block, the genesis block. Furthermore, such a block consists of a timestamp, the hash value of the previous block and a nonce, which is a casual number for monitoring the hash, but before a block can be enclosed to the chain it needs to be verified by the majority of nodes in the network (Nofer, Gomber, Hinz & Schiereck 2017). Woodside (2017) mentions that fraudulent transactions are impossible with a blockchain network and users can trust that previous transactions are valid through the hash each block contains. Shortly, Subramanian (2017) describes it as a “decentralized e-marketplace, where traders transact with each other securely and directly, and the network of nodes validates and records each transaction.”

In the following, the topic blockchain will be dealt with more in detail, but in relation to the music and entertainment industries, regarding how blockchain could influence the definition, commercial uses, and legal implications. Below these individual factors will be analysed more precisely and with more depth attached to how blockchain could provide advantages and disadvantages for an established music and entertainment business.

Mason (2016) states that “if blockchain technology can help the commercial and contractual relationships in music keep pace with technology and communication between artists and fans then it could be truly revolutionary.” Though blockchain would have the power to enable much more such as to connect artists with fans in a completely new way, alone through the payment. Since it would happen directly between artists and fans, without any intermediaries. Engebretsen and Haugen (2018) explain that with the current complexity of licensing contracts, money runs in an endless chain of third-party suppliers before it gets to musicians and that the industry has issues with transparency and efficiency, and finally the musicians have to pay the price. In other words, on the way until the money arrives at an artist’s bank account, some percentage of the total amount gets lost and ultimately, the artist ends up getting far too little. However, blockchain could solve this problem as the advanced technology would provide trust and transparency while lowering the risk of a transaction. In addition to that there is no need for a third party (Gates 2017). The fact that a facilitator would not be needed anymore means that such a transaction through blockchain would automatically reduce costs as every intermediary or layer involved in a transaction incurs costs in recognising and transferring assets (Gates 2017). As a result, artists would have the possibility to earn extra money.

Anyhow, if blockchain technology is being implemented for copyright, in other words, the information from it would already be included directly in the song, “this would represent a radical shift that could transform cash flow for artists and songwriters” (Wright and De Filippi 2015, cited by O’Dair 2017). Since the money would be sent straight from the fans to the artists at the time of the download, the payment would ultimately be faster. The income would then automatically be divided between all the shareholders and distributed accordingly (O’Dair 2017). There are already companies which work with this blockchain method, such as Peertracks. This firm is a blockchain based music streaming platform where funding is given straight to the artist by the fans at the point of download. Then, the income is divided among all authors and further everyone is paid in a few seconds (O’Dair 2017).

Nowadays it is quite simple to record and produce songs at home due to the technology. Consequently, the competition is enormous. This competition could at some point increase to such an extent that artists would remain far down in “the long tail” (Anderson 2009, cited by O’Dair 2017). However, through the blockchain technology everything would be very transparent, making it visible if someone illegally downloaded music. Through this transparency, artists would actually get the money they deserve and further this transparency could also help artists to establish a career as it would be visible who is interested in the music. As a result, the target group can be addressed exactly.

Shortly summarized, payment by blockchain would mean for artists that they will be paid directly and faster, will get more money by the loss of the intermediaries, have the possibility to connect with the fans due to the straight purchasing process and can target the fans better thanks to the transparency coming with blockchain.

It is clear that blockchain brings many advantages with it as the technology could be truly revolutionary for the music and entertainment industry. However, the elimination of intermediaries such as record labels or music publishers could imply significant challenges. On the one hand, the work of the middlemen must continue to be done, although, it would be interesting here to know who would do the work then. On the other hand, the technology is so advanced that blockchain would do some work automatically, but not all the work of the intermediaries. In general, Heap (2015, cited by O'Dair 2017) believes that "there is still a role for record labels and music publishers in a blockchain powered record industry". Further, it could also be the case that labels, publishers, streaming platform plus artists, songwriters, musicians and fans benefit from the blockchain technology (Rogers 2015, cited by O'Dair 2017). There might be a possibility that the roles of the intermediaries will change a little but not be completely lost. Besides that, another factor that could arise is that not everybody feels comfortable with transparency. This could affect a record label which do not want to share internal information or artists who do not want people to see how much they earn. In this regard, O'Dair (2016) mentions that "major stars might wish to download their revenue, fearing that disclosure would make fans less willing to purchase their work". For instance, if it were visible to everyone how much Beyoncé earns, some might rather start supporting smaller artists who are more in need of money instead of transferring money to superstars. However, blockchain allows people to decide which information one wants to add. That means that it would be "possible for artists and managers to be able to view the full value chain without making that same information available to all users" (O'Dair 2016). This, in turn, would enable only certain persons to see specific information as the income or other data which is not intended for everyone.

Silver (2016) believes that "many inside and outside of the music industry believe that the architecture of the industry is fundamentally in need of reform and that they are hungry for solutions to long-complained of problems such as lack of transparency or questionably royalty trails". Although the big issue in the music and entertainment industry is that everybody wants to see a change but if such a shift would be happening

then nobody is ready for it. In other words, blockchain generally is in discussion, meaning it is talked and debated about, but yet it is not being used that much.

In the music and entertainment industry more and more points of criticism come to light where someone is not satisfied with the intermediaries because there is a lack of fairness as well as corruption. Engebretsen and Haugen (2018) mention that “contracts and split sheets between the different players are hidden between each joint in the chain”. This is because there is no global copyright register and no collaborative platform for licensing creative work (Engebretsen and Haugen 2018). Though, blockchain has the potential to eliminate this problem. According to Fairfield (2014, cited by O’Dair 2017) the technology would be “a revolution in how to keep track of rights”. This potential could be used to “create a single, universal database of music copyright” (Wallach 2014) like using blockchain to build a global database of rights in order to solve problems with ownership, payment and transparency (Rogers 2015, cited by O’Dair 2017). Everyone would have access to it and could look at authors of different works. This, in turn, would give artists more power because they would have the opportunity to see exactly how the copyright is distributed, precisely through transparency.

There are already companies in the music industry where their work is based on blockchain technology. These forerunners try to make it “easier to locate the owners of a piece of recorded music, and to obtain a license to use it” (O’Dair 2017). In addition, there are several ways to add information, for example, “to surround each piece of music with data relating to lyrics and photographs” (Bartlett 2015, cited by O’Dair 2017). The distribution of unauthorized content would be identified rapidly by encoding tracks of an album on the blockchain which will guarantee a unique record every time when the song is played (Vaughan 2018).

Another advantage blockchain offers is the possibility to appear favourably on crowdfunding as nowadays artists try to raise money for different things like recording an album or creating artwork. Blockchain could bring this to the next level by allowing artists to create their own digital tokens that can be purchased by fans and further, those coins then can be invested into artists’ projects and that would generally make it much more convenient to financially support an artist (PYMNTS 2018). After all, Raine

(2017) thinks that “by giving artists more control over their careers, they have more power to not only do business with people who bring value but also cut out those who do not”. In other words, nowadays there are some middlemen in the chain who would not necessarily be required but due to the complicated structure of the music industry, it is impossible to ignore those people. Particularly, some of these intermediaries earn money from artists but they do not necessarily deserve it, rather it is exploitative. With a blockchain technology it would be harder for the people who profit from missing transparency or the diminishment of payments to artists (Rogers n.d., cited by Raine 2017). Overall, blockchain would have the power to change the general database of copyrights as the technology could add information right away to a song and through transparency, artists, in general, would have more power over their works.

According to Dickson (2017), blockchain will not be the subtle solution to all the problems that the music industry is facing but generally one should keep in mind that it could be the start of solving a few issues the music industry is facing. Mainly, blockchain is a perfect tool for new artists trying to establish a career as one can publish music on their own and further monetize it through the technology. The payment occurs directly between fans and artists, which speeds up the transaction and further, more money will be left over as there would not be any middlemen to pay. Additionally, why blockchain is more preferable for unsigned artists is because if someone wants to get songs legally into a blockchain-based system it requires the approval of all rights holders (Raine 2017) and that could be problematic with artists signed to a major label. Furthermore, major labels may not be as enthusiastic about this new technology as independent artists since they would lose a lot of power, if not jobs. However, King (n.d., cited by Raine 2017) states that in his opinion cutting out all the intermediaries is not going to happen. Therefore, a middle way could be a solution as there would also be the possibility that labels would work with blockchain based technology and further, they could still provide their work just in a more transparent manner. Companies such as Spotify are interested in blockchain as Spotify recently invested in a blockchain technology-based company called 'Mediachain Labs'. This acquisition was explained by the Mediachain team as "to further the streaming leader's journey towards a more fair, transparent and rewarding music industry for creators and rights owners" (Music Business Worldwide 2017). Besides Spotify, the leader in live event ticketing 'Ticketmaster' has also already invested in a blockchain technology-based company called 'Upgraded' "to prevent fraud often associated with paper or pdf-tickets" (Music Business Worldwide 2018). Here one can see that blockchain is in any case in circulation and will spread even wider. Yet, Sharmin (2018) states that "until now, no concrete legislation has been issued by country which supports the use of blockchain for improved copyrights management". To sum up, the music industry could benefit from the blockchain technology a lot "as it helps in implementing enforceable copyrights, secure payments and facilitate transparency around royalties" (Vaughan 2018) but, in general, according to Granados (2018) blockchain will trigger substantial transformation

in the industry in the long run. Thus, the general introduction of blockchain technology is expected to require 10 to 15 years (O'Dair 2016).

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