

ESSAY:

**BLOCKCHAIN IN THE
ENTERTAINMENT INDUSTRIES & THE
LEGAL IMPLICATIONS**

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BLOCKCHAIN IN THE ENTERTAINMENT INDUSTRIES & THE LEGAL IMPLICATIONS

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ABSTRACT

This essay will critically assess the rise of Blockchain and its impact on the music industry. The potential legal issues associated with Blockchain, its barriers to entry and how these could be overcome will also be examined and evaluated.

INTRODUCTION

While the music industry was slowly beginning to adapt to the streaming era in the mid 2000's (Spotify was launched in Sweden in 2006, and the innovative website for streaming video content YouTube was founded in 2005), the concept for Blockchain technology was already being pursued by Japanese scientist Satoshi Nakamoto in their paper Bitcoin: A Peer-to-peer Electronic Cash System. A year later, Nakamoto had put their theory into practice (O'Dair, 2016a). Although Nakamoto is perhaps best known for the invention of Bitcoin, the popular cryptocurrency which is traded through online peer-to-peer networks, it is the Blockchain technology behind it that could prove to be most significant.

What makes Blockchain so appealing to creators is its structure, being a distributed ledger. The internet is traditionally built up of predominantly centralised and decentralised databases, but a distributed ledger means that a piece of data or work in a Blockchain is kept as exact, immutable copies in a large number of independent locations, with no central hub (Fig. 1). This means that records cannot be modified or altered (Arcos, 2018). Blockchain is also considered a foundational technology, rather than a disruptive one. For example, the surge of mp3 file-sharing at the turn of the century was disruptive to the music industry and its remuneration for products (Wikström, 2020), while a foundational technology allows for economic and structural growth (Khudnev, 2017). The value of this is clear and not necessarily limited to more effective, immediate commerce and transactional transparency as the peer-to-peer (P2P) networks remove the need for intermediators. Ultimately this creates a fairer financial distribution for artists compared to the centralised networks of streaming giants Apple Music and Spotify. Furthermore, Blockchain provides users with unique alphanumeric addresses that will give anonymity and easily allow the establishment of either private access to members only platforms, or public networks available to anyone at any time (Sitonio & Nucciarelli, 2018), while Nakamoto claims Intellectual Property or "Proof-of-Work" will be easier and faster to register (Nakamoto, 2008).

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Fig. 1 illustrates the differences between networks and distributed ledgers, while Fig. 2 displays the signal path of the Blockchain from consumer to content creator.

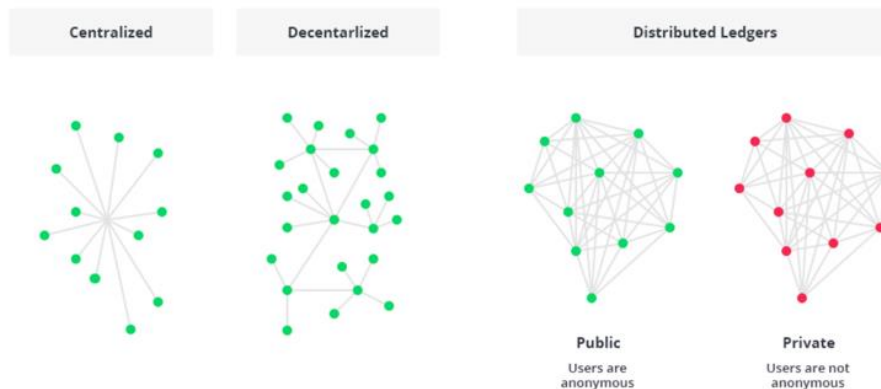


Fig. 1 (Lastovetska, 2020)

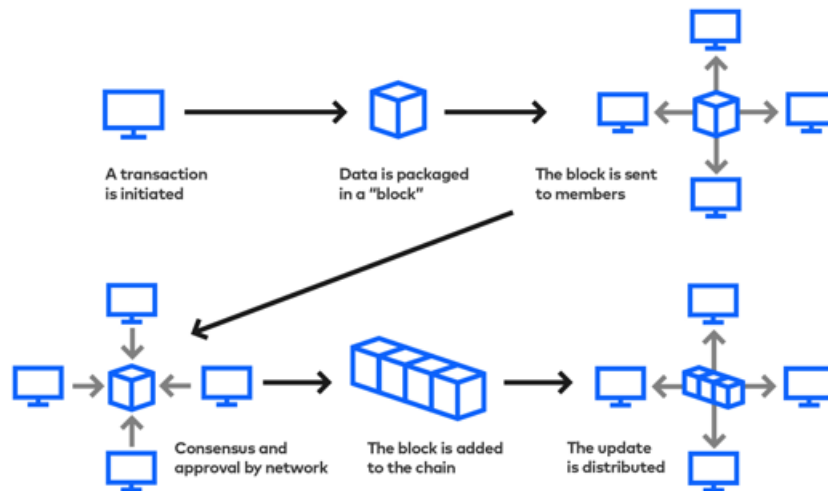


Fig.2 (Martin, n.d.)

Although Nakamoto's paper is over a decade old, it is still difficult to determine the full scope of Blockchain's possibilities. This is in part due to his densely scientific terminology being complex and difficult for the layperson to fully comprehend, and the 'teething problems' all technology faces when attempting to realise a theoretical invention.

There have already been a plethora of music companies venturing into the blockchain world. The likes of UjoMusic, Bittunes Peertracks and Aurovine were all frontrunners (O'Dair, 2016b), and now, according to tech blog BuiltIn, as of April 2020 there are as many as seventeen companies using this technology (Daley, 2020). MediaChain, Choon and Mycelia are prominent examples from the listed article, all of whom are trying to capitalise on this growing market.

HOW BLOCKCHAIN COULD AFFECT THE MUSIC INDUSTRY

In the music industry's current state, when an artist's music is performed or broadcast, a royalty payment is generated. However, the delay in artists receiving this payment from Performance Rights Organisations (PROs) such as PRS in the UK, Harry Fox Agency in the US or SESAC in France could take, at best, 9 months in their native region and potentially years from sub-publishers collecting royalties in foreign territories (O'Dair, 2016b). These sub-publishers also take a percentage cut before distributing the net proceeds to the main publisher, who also take their percentage, before the net proceeds are distributed to the artist. It should also be noted that an artist will receive these royalty payments from PROs once every six months. With blockchain, this royalty payment could be as efficient as a debit card transaction at a local retail outlet, without giving up a percentage to a third-party organisation like a sub-publisher in Asia, India or South America, for example.

The same could apply to streaming and downloading content. Every time an artist's track is played/downloaded by the consumer, a micro-payment is made directly to the record label or creator. This could eradicate the outdated format of the artist waiting for an online distribution company giving monthly statements, or only making funds available when a particular threshold is met. Blockchain would fully optimise revenue streams through data transparency, by making these payments immediate and direct. Furthermore, the artist has complete control over the pricing of their product, whereas existing models like Spotify or Apple Music allow no flexibility or dynamic in their price-per-stream model. This price control could even boost the overall worth of the industry (De Leon & Gupta, 2017).

It is not only the music creators which could benefit. The implementation and tracking of metadata, copyright holders, percentage splits on song writing royalties, licensing samples, and the wealth of contract agreements between various parties within the music industry can create a significant amount of costly and time-consuming administrative work. With blockchain's smart contracts – multiple relationships governed by a single algorithm (De Leon & Gupta, 2017) - all of this information would be easily accessible, safely stored through the P2P private network, immune to hacker takedowns or edits, and streamline the process of lawsuits and contract negotiations.

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Blockchain could also be applied to the wider entertainment industry. Where many predominantly focus on how this technology will shift power back to the artists by focussing on the immediate and accurate micro-payments of royalties, as well as the “direct-to-fan” model that blockchain enables, there is a much broader impact of how this could re-organise the behind-the-scenes work processes of every aspect of the entertainment industry - and perhaps even the functionality of the internet as a whole (Arcos, 2018). Films, TV series, literature, books, video performances, news articles and ticketing systems are just a few examples of what could become part of these distributed ledgers. Price can be automated by creators and remunerated instantaneously when consumed by another user. Add in the industry elements of agency contracts and publishing schedules etc. the blockchain could act akin to an easily accessible hyper-cloud system which stores every piece of relevant data without the privacy risks of storing it all in one network or server.

Of course, with all technological advances and shifts in consumer habits, there are inevitably winners and losers. It is clear the artist *could* come out favourably using this format, redistributing the wealth of the industry back into their hands, and increasing their potential bargaining power. Blockchain acts as a synchronising agent to all publishing, recording, audio files, ownership rights, metadata and licensing information (TNW, 2018). Labels and publishing companies would favour a modernised and more accurate, up-to-date set of records and accounts, while any legal disputes could subside drastically. With regards to copyright infringement or contract breaches, all relevant contracts, files and correspondence would be clear and promptly accessed.

Blockchain would, however, heavily impact the revenues of third-party personnel. In his 2018 TNW Conference presentation, dotBlockchain Music CEO Benji Rogers states that blockchain “would hurt those who profit from a lack of transparency, privacy, or the slowing down of payments to rights holders,” (TNW, 2018). Sub-publishers and distribution services, who have to date been invaluable assets in tracking airplays in specific territories and drip-feeding back the royalties generated, certainly fall into this category. If the industry fully adopted and integrated this system, these third-party positions would soon become redundant. As blockchain grows in popularity within the wider society, it could easily threaten the monopolistic hold that streaming services currently have on the industry. This will certainly provide some food for thought to some well-established stars who have

previously condemned the likes of Spotify for their meagre royalty rates. But even if such a shift begins, it is unlikely that the likes of Spotify and Apple Music to simply concede their positions of power. In fact, Spotify obtained MediaChain Labs back in 2017 (Music Business Worldwide, 2017), so it is already attempting to assert itself into the Blockchain market.

LEGAL IMPLICATIONS & OBSTACLES

One of the biggest questions surrounding blockchain is, what are the legal implications? The majority of papers on this subject highlight the technological potential, but rarely go into details over how legal frameworks would apply. If a P2P network is a distributed ledger, there is no fixed location for a creative work. Under which jurisdiction do laws apply: the location of the supplier, or the customer? An added layer of complexity to creative works is copyright because Copyright and Digital Rights laws are not globally homogenous but rather region-specific. Furthermore, with this lack of legal jurisdiction also comes a possible lack of legal and financial regulation. This poses questions over how these transactions will be taxed, where they will be taxed to, and what rates would apply.

For consumers, there is currently likely to be a question mark over the legitimacy of blockchain, given its association with BitCoin and the volatility of cryptocurrencies over the past few years - most notably the recent crash in late 2018/early 2019 where the market value decreased significantly (Chalmers, Matthews & Hyslop, 2019). Add in the lack of clarity over governance or legal jurisdiction, it could still be some considerable time before consumers feel comfortable moving towards a practice which has long been cast in the shadows of the 'dark-web' due to its unpredictability in the financial markets. By 2018, over half of the ICO (Initial Coin Offering) cryptocurrency start-ups had already failed (TNW, 2018).

If a particular cryptocurrency does become widely accepted by consumers and international law, how are these micro-payments to be distributed? Banks can't transfer or acknowledge fractions of pennies for each song stream, and streaming sites only distribute payments in whole units when they are eventually reached. So, will artists need to trade in a cryptocurrency and then decide to "cash-out" into the more traditional pound, dollar or euro when a substantial enough sum is reached? If so, the problem here is that this could be difficult for the artists to undertake, given

that the current system is already complex and catered for by the aforementioned third parties of sub-publishers and online distributors.

The direct-to-fan model isn't exactly a new concept. From Radiohead's pioneering pay-what-you-want *In Rainbows* release on the band's website in 2007 to well-established music distribution sites like BandCamp, is another model that other artists can already use. Their merchandise or 'rare' releases can be available for a limited time, giving the artist ultimate freedom over the uploading and removal of their content, instead of it being available eternally in the chain. And fans can choose from a plethora of *lossless* file formats – WAV, AIFF or FLAC, mp3, ALAC, AAC etc. A recent example of this is indie-rock band DIIV, who made the demos of their third album *Deceiver* available for 24 hours only via BandCamp. This might not be possible using Blockchain technology.

Another issue facing blockchain is the popularity of streaming services. Spotify, Apple Music and TIDAL are still growing in subscribers and show little sign of stagnation, let alone decline. The rate of subscriptions are certainly slowing in territories like the US, while parts of Europe are coming close to capacity (Towse, 2020), but with recent deals between Spotify and China's Tencent, and the growing markets and partnerships in the Indian and African territories (Ingham, 2020), Towse's case is essentially dismissed - at least for the time being. Streaming is still increasingly a global phenomenon, despite its well-documented shortcomings with regard to artist remuneration.

HOW THESE CAN BE OVERCOME

Benji Rogers brands himself a "Believer and a sceptic at the same time" regarding blockchain but argues all of the issues it faces are challenges, not "show-stoppers" (TNW, 2018, 00:22-00:28, 02:21-02:24). Currently companies like Ujo Music require payment in their digital currency (in Ujo Music's case – Ether), but this is limiting its ease of access to consumers actively wanting to pay via credit or debit card. First, cryptocurrencies will need to be recognised as legitimate currencies to accomplish this, solving a lot of the issues in the process. Companies will need to communicate and co-operate with governing bodies in national, regional and global markets to firmly establish these financial and legal details. The social media giant Facebook is constantly battling governmental regulatory pressure, particularly in the US, while Spotify's business model is coming under scrutiny from British MP's

regarding its fairness to writers and performers (Snapes, 2020). If the blockchain system can show a solid degree of consistency, this should provide a strong foundation. The Business Blockchain author William Mougayar perhaps sums it up best. This is an excerpt from the transcript where he spoke at the Blockstack Decentralizing the World Conference in Hong Kong, January 2019:

Getting to decentralization is full of compromises. Decentralization maximalists want everything to be on-chain, including the governance aspects. You could say that in an ideal world, we'd have everything decentralized and on-chain, but that world doesn't exist today. Except the DAO, and it crashed. Let's be careful with everything being on-chain... blockchain transactions are irreversible by design. But decision-making wants optionality and flexibility. You cannot replace human judgement with automated logic which is what smart contracts are. So, we need to design the right balance between different degrees of decentralizations and on-chain vs. off-chain linkages. And that is the essence of a good design for blockchain architecture. (Voight, 2019)

Second, its usability is imperative to its success. The chain's interface has to be as easy (if not easier) to navigate than existing platforms for both the artist AND consumer. This should not be too onerous a task given some market research and how quickly streaming services and social media sites have adapted their functionality with fast and efficient software updates to suit consumers needs and tastes in recent years. If this can be achieved, there is no reason why artists and consumers alike would not move towards this technology.

Creators need to get ahead of the streaming service oligopolies who are already investing into this technology. But Benji Rogers is sceptical. He doesn't believe companies like Spotify can survive in this arena because they are already well-established centralised businesses. Blockchain is designed to *remove* the gatekeepers, not accommodate them (TNW, 2018). If enough artists and consumers begin utilising blockchain regularly, this will inevitably tip the scales away from centralised streaming mechanisms and make this concept a globally mainstream one, which could be quickly adapted to.

CONCLUSION

Despite blockchain's many drawbacks and hurdles to overcome at the present time, it nevertheless appears inevitable that it will be adopted by the music industry in the coming years, as its impact on how it affects the supply chain of products is indisputable (Arcos, 2018). The fact that there has been increasing amounts of interest and investment into blockchain technology from venture capitalists, governments and research centres over the last decade illustrates a clear appetite for this kind of transparency (Wikström, 2020). Established acts such as Imogen Heap have already run reasonably successful release campaigns this way, which shows promise to other artists who are receiving meagre rewards from streaming services, dwindling physical sales, and a completely obliterated live sector due to COVID-19.

Even though it is often seen as a utopian 'saviour to artists', their content will still rely on the same tried-and-tested strategies of the music industry in order to be heard above a crowded market of music-makers all wanting to be discovered. Thus, although a fairer share of proceeds should be making a more direct, unfiltered route to the creator, their popularity will still depend largely on effective promotional campaigns, investing in marketing, sponsorship deals and touring to increase their brand's awareness to potential fans, and ultimately monetize their art.

If Blockchain technology can eradicate the uncertainty surrounding its usability, consistency and legality as a platform, among other issues, we could see it become integrated into our daily lives. But given the externalities it still needs to tackle, Sitonio and Nucciarelli predict it could take years before it changes economic infrastructures. Lakhani and Iansiti believe it could even take decades before Blockchain becomes fully operational in our society. In conclusion, I would argue that if Mougayar's comments on the need for compromise are accepted, the progress of Blockchain's implementation will be advanced greatly.

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