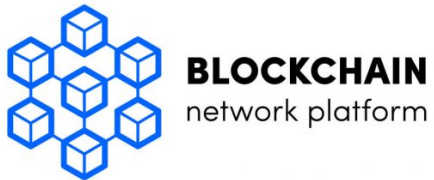


Legal and Business Affairs
BMTY7002

Lecturer: Ian Penman
Student: Jennifer Hukins
Student Number: 2020302



Explain the definition, commercial uses and legal implications of Blockchain on the music and entertainment industries.

1. Introduction

2. What is Blockchain?

3. The Impact on the music industry

4. Advantages of implementing Blockchain technology

5. Barriers to adoption

6. Conclusion

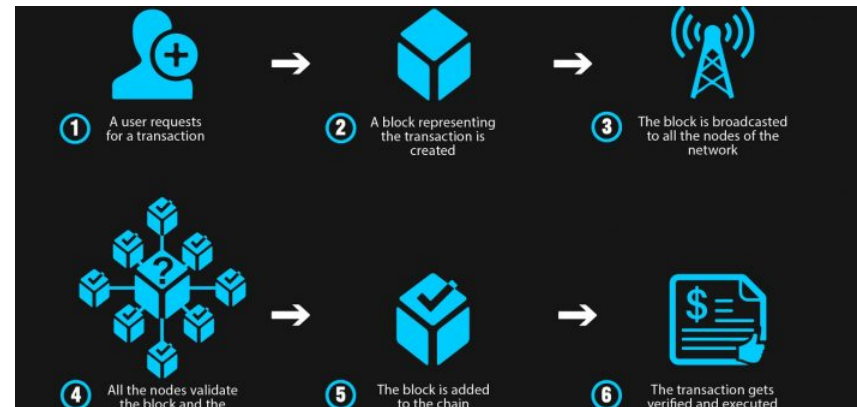
7. References

Introduction

Blockchain has been hailed as many things - revolutionary, groundbreaking and innovative to name a few - but what is it, and how does it work? In this paper we will discuss the impact the Blockchain technology could have on the music industry, including implications on IP and copyright laws. We will demonstrate an understanding of the history of copyright laws, and the issues felt by artists and songwriters following the advancement of technology and the introduction of digital streaming platforms. We will consider the impact Blockchain might have on various roles within the music industry, and the pitfalls of adapting to the system.

What is Blockchain?

The foundation for the cryptocurrency Bitcoin, Blockchain is a new type of technology which allows users to create a series of 'blocks' which can be shared with anyone in the world. Its positives are cited as it being impenetrable thus entirely secure, and its ability to store information means that there is complete transparency which enables origins to be tracked all the way through the supply chain. There is no need for any kind of external authority or verification which means that users can interact with someone they may never have met without relying on any third party. There is no need for a bank account which makes it more accessible around the world, and allows users to store not only money, but tokens and assets too. Mick Ayzenberg, security engineer at Security Innovation describes Blockchain as "a mechanism for recording information that is unalterable and does not depend on trusting a third party."



The system works through a series of steps; When party A wants to send money to party B the transaction is represented as an online 'block' which is broadcast to every party in the network. Those already in the network approve the transaction enabling the block to be added to the 'chain' which provides a transparent record of transactions. Following on from approval party B receives payment from party A. Though there appear to be a number of steps, payment is instantaneous.

Invented in 2008 by Satoshi Nakamoto, the technology has developed dramatically over the last decade to become one of the biggest ground breaking technologies with the potential to transform every industry. It wasn't until 2014 that people started to realise the value of Bitcoin and began to invest in it as more than a cryptocurrency. Now, companies around the world use Blockchain for supply chains, healthcare and contract management with nearly 15% of financial institutions currently using the technology (Marr, 2018).

Many predict that a shift in the tectonic plates of the music industry is long overdue and Blockchain provides a means for this to happen. For a long time now the industry has

been controlled by big record labels, publishers and streaming platforms, Blockchain provides an opportunity for those who create music to take back control.

The Impact on the Music Industry

The music industry is protected by intellectual property(IP) law which protects the products of peoples skill, creativity, labour or time and is covered under the Copyright, Designs and Patents Act 1988 (CDPA) and gives creatives moral and economic rights over their works. The CDPA prevents work from being copied, distributed for free, rented or lent out and from being performed in public without consent from the creator. In the music industry there are two types of copyright - Publishing rights, and Master rights - both of which are protected by law for a substantial period of time up until 70 years after the death of the creator. PRS and PPL are the main bodies which oversee the implementation of this law and ensure that creators are reimbursed for the use of their works. Specifically, PRS provides services for the songwriters and composers of musical works, whilst PPL provides support to the record labels and performers on any musical works. In order to benefit from the service provided by both societies the individual must register songs with PRS before any royalties can be collected. For almost a century this system has worked, providing financial reparations for those who create music as a means of earning living and paying back £746 million in royalties in 2019 and processing over 18.8 trillion uses of music. PRS and PPL, as well as ASCAP(USA) could be considered to hold the widest database of information on musical compositions and recordings, but there are still some musical creators who would not appear on any database - for example those recording and producing from their bedrooms.

Founded in 1914 PRS gave artists and creators not only the opportunity to monetise their work, but also enabled them to be recognised for these works. Under the current system overseen by PRS artists have been able to earn a living off of their musical creations, record labels have been able to be reimbursed for facilitating the recording of music, and publishers and distributors have been able to access their cut of royalties too. Due to the number of members PRS has it deals with an incredible amount of data reporting in 2016 an increase of 80% on the previous year taking the total number of music processed to over 4 trillion (prsformusic.com).

The current penalties in the UK for breach of IP law range from a £5,000 fine and up to 10 years imprisonment, depending on the severity of the violation (gov.uk). Legal proceedings can be brought through the Intellectual Property office, or through the courts with some types only able to be filed through the courts.

However, the current system for protecting intellectual copyright is not cast iron; There have been numerous cases regarding the breach in copyright in the instance of piracy such as 'R v. McPhillips' (2011), 'R v. Langley, The Phil Collins Case' and 'R v. Malone' (Harrison 2017) which are all instances where individuals who had made a large amount of money selling bootleg copies of recorded music before being brought to justice.

The CDPA protects all or part of an artist's work from being copied or distributed without permission and many have brought cases to court under this clause. Perhaps the most notable is the case against Robin Thicke and Pharell Williams in 2015 in which Marvin Gaye's family sued for almost \$5 million (O'Connor 2018) in copyright infringement. Following on from this Ed Sheeran has been taken to court twice over

claims two of his tracks have had similar song structures to those of 'Let's get it on' and 'Amazing (Townsend v.s Sheeran 2016, Leonard and Harrington v. Sheeran 2017) respectively. Although the cases against Sheeran were dismissed, the case against Thicke and Williams demonstrates the holes in the legalities of the current IP laws. The Thicke case in particular has been criticised by many as the track didn't directly plagiarise any of the musical content of Gaye's classic, rather the 'feel' of the song.

In 2015, a case was brought against Justin Beiber by Devin Copeland who argued that copyright law had again been infringed as Beibers track 'somebody to love' was substantially similar to one of his own. In this case Copeland had sold his track to Sangreel, who recruit artists for record labels including Island records and Sony music and presented it to Usher. Within a few months Usher had posted a demo of a track called 'Somebody to love', and whilst he never commercially released the track, allegedly he brought it to Bieber who later went on to release a track of the same name on his debut album in 2010. In this case the judge dismissed Copelands claim and ruled that no reasonable jury could find the 'total concept and feel' of each two songs similar. (Cronin 2018)

There has been some debate surrounding the way in which record companies collect royalties for some time now with artists being paid only 12% of industry revenues (Chan, 2020).

In addition to this the music industry has been battling with the rise of the DSP and the knock on effect of the value of a per-song stream with the value of a single stream sitting at as little as \$0.00402 (Ditto, 2020). The success of the music streaming industry is apparent in the figures of monthly users

with streaming numbers topping one trillion in 2019 (mn2s, 2020) and an estimated 80% of revenue being generated through streaming. At the end of 2020 there were an estimated 400 million music subscribers (statista 2021). Currently, the top 10 DSPs have more than 250 million monthly customers. However, artists continue to seek a fair deal as one million streams only earns \$7000. After paying various crew, producers, distributors and publishers, this figure drops dramatically to just \$2100 for the artist.

A paper issued by Middlesex University (O'Dair 2016) splits the potential of blockchain into four areas;

- *A networked database for copyright information*
- *Fast, frictionless royalty payments*
- *Transparency through the chain*
- *Access to alternative sources of capital.*

The greatest implications for the adaptation of Blockchain within the music industry would be for the artist and songwriter. Not only would a transparent network allow for faster and more frictionless royalty payments, it would provide the artist with the chance to sell their music directly to fans, cutting out the middleman completely and transforming the relationship between artist and fan. Furthermore, this would give back creative control to the artist allowing them to take back creative control, setting their own prices and terms of use. Utilising a Blockchain would enable copyright information to be stored via a cryptographic 'hash' with no central network. The secure nature of Blockchain would mean that attributing work to musicians would be more effective, and that information within the chain could not be altered or removed.

Blockchain also has the potential to allow venues to curb counterfeit ticket sales and record companies to trace streams faster.

Advantages to implementing Blockchain technology

Utilising a Blockchain within the music industry would mean that a worldwide database could be created, where information about who made what part of a song would be available and therefore royalty payments would not only be simpler, but much faster. The rate at which royalties are paid out is notoriously slow with payments taking months and sometimes years - on a Blockchain every contributor to a song would be paid instantly.

On a Blockchain smart contracts could be utilised to streamline the agreement process and whilst as many stipulations can be added as necessary, the ultimate goal would be to enable faster payments to music creators without the need for any third party. A smart contract is a Blockchain application which is a code run on a decentralized network that guarantees ownership of assets and enforces rules for how to exchange them. Potentially this could cause some individuals within the music industry to no longer be required to do their job, as artists and creators would be able to literally cut out the middleman. This would mean the artist could earn a greater amount of money from their works, without money first needing to go to the record label, publisher, distributor and others in the supply chain before filtering down the artist at a measly 10-12%.

The immediacy of Blockchain would also allow outdated constructs such as advances to be replaced giving artists much more control over the direction they wish to take. Artists would be able to organically grow their fanbase without needing to give up any rights to their music and would take full control over publishing and distribution. Blockchain would give artists scope to get creative with their marketing and sales for

example by selling digital signed artwork as demonstrated by Radiohead when they released their album 'In Rainbows' back in 2007. In this instance Radiohead received more money from the one direct to fan release than from all of their albums put together (Anderson, 2008).

There are already a number of companies using Blockchain such as Choon, Musician and GRMTK and even Spotify acquired a Blockchain startup in 2017. Imogen Heap has been hailed as a pioneer of the Blockchain era, releasing 'Tiny Human' in 2015 and being paid in Ethereum and now founding the platform Mycelia. PRS have noted the value in Blockchain technology and have reportedly begun looking into implementing a system to streamline their catalogue of data.

Barriers to adoption

The foremost issue with Blockchain surrounds copyright protection. Though, on paper, a Blockchain sounds like a revolutionary idea and cutting out the middleman would create room for faster payments, who would then be in charge of ensuring correct copyright attribution? Without a system in place to automatically recognise copyright infringement - such as the Content ID system YouTube uses - Blockchain could be susceptible to issues there. Additionally, the setup of Blockchain means that information cannot be altered, which would mean there would be no way of rectifying such infringements as creators would not have the power to remove copyrighted material which could cause issues in resolving disputes.

Without the need for collection societies and publishers there would be questions surrounding the integrity of data on the chain in terms of copyright. With no regulatory bodies able to monitor data who would decide what is included?

In addition to potential copyright infringement issues, there is a question surrounding the fluctuation in the value in these cryptocurrencies. Choon proves us with an example of this - having over 45,000 original songs uploaded just over a year after its launch in 2018 (Chan, 2020), the value of its cryptocurrency plummeted to worthlessness causing investors to pull out and the site to close.

There is also a question of trust. Though cryptocurrencies are not a new concept, there are many who would be dubious in entrusting valuable data and monies to them. Perhaps the older generation of songwriters might not be as confident with the technology, or even as computer literate and the principle of the industry using a Blockchain only becomes revolutionary once everyone is on board: there could still be holes in the information on a Blockchain.

Finally, there have been claims that Blockchain could bring about the demise of the record company causing a number of job losses and the extinction of certain job roles.

Conclusion

Blockchain has the potential to create opportunities for artists to take back a lot of creative control over their musical works, connect with fans and come up with new ways of making money without the supervision of record labels. It allows individuals to take back some of the monopoly held by the bigger labels and could create a more level playing field for indie labels.

However, Blockchain and cryptocurrencies are still a relatively new concept with a future that is difficult to predict. For the average lay person the concept behind the technology is a confusing mine field susceptible to value fluctuations and cyber attack - no matter how much its impenetrable nature

might be reiterated - and whilst these are not the people who need to understand how it works, they are a vital cog in the big machine of global change.

Blockchain has its merits, but its imperfections could be argued to outweigh its potential benefits until it is certain that there is no room for error. In my opinion, the success of Blockchain technology boils down to one thing - trust - and only time will tell if the technology is resilient enough to earn this.

References

Marr, B (2018) Enterprise Tech; A brief history of Blockchain

Copyright, Designs and Patents Act 1988, sections 1(1)(b), 3(1)(d), 17(2), 18 and 96

Prsformusic.com. Protecting music. Found here - <https://www.prsformusic.com/what-we-do/protecting-music>

Gov.uk, (2017) Intellectual Property Offences, Copyright, Designs and Patent Act 1988 (2.1). Found here - <https://www.gov.uk/government/publications/intellectual-property-offences/intellectual-property-offences>

“R v. McPhillips” (2011), ‘R v. Langley, The Phil Collins Case’ and ‘R v. Malone’

Harrison, A (2017) Music, The Business p.344, p.346, p347

O’Connor, R (2018) The Independent; Thicke, Williams v. Gaye. Found here - <https://www.independent.co.uk/arts-entertainment/music/news/blurre>

[d-lines-final-verdict-copyright-case-court-robin-thicke-pharrell-marvin-gaye-payout-a8681381.html](#)

Townsend v.s Sheeran 2016, et al -
<https://www.lostinmusic.org/Cases/Detail/12-estate-of-ed-townsend-v-s-sheeran-and-others>

Cronin, C (2018), Music Copyright Infringement Resource; 'HaloSongs, Inc., Thomas Leonard and Martin Harrington v. Sheeran et al. 2017,' Found here -
<https://cpb-us-w2.wpmucdn.com/blogs.law.gwu.edu/dist/a/4/files/2018/12/Sheeran-Complaint-zm80e6.pdf>

Cronin, C (2018), Music Copyright Infringement Resource; 'Devin Copeland v. Justin Bieber, et al.' Found here -
<https://blogs.law.gwu.edu/mcir/case/devin-copeland-v-justin-bieber-et-al/>

Chan, K (2020) Forkast News; *Blockchain*

Ditto Music (2020) *How much do music streaming services pay musicians in 2021.* Found here -
<https://dittomusic.com/blog/how-much-do-music-streaming-services-pay-musicians/>

mn2s, (2020) *How is streaming changing the music industry?* Found here -
<https://mn2s.com/news/label-services/what-is-streaming-music-changed-industry/#:~:text=And%20it's%20become%20so%20popular.music%20was%20generated%20by%20streaming.>

Statista, (2021) *Streaming music subscribers worldwide 2015-2020.* Found here -
<https://www.statista.com/statistics/669113/number-music-streaming-subscribers/>

O'Dair, M (2016) *Music on the blockchain*, Middlesex University. Middlesex University

Anderson, N (2008) Ars Technica. *P2P vs Radiohead's "free" Rainbows: why P2P can be a hard habit to break.* Found here -
<https://arstechnica.com/uncategorized/2007/10/p2p-vs-radioheads-free-rainbows-why-p2p-can-be-a-hard-habit-to-break/>