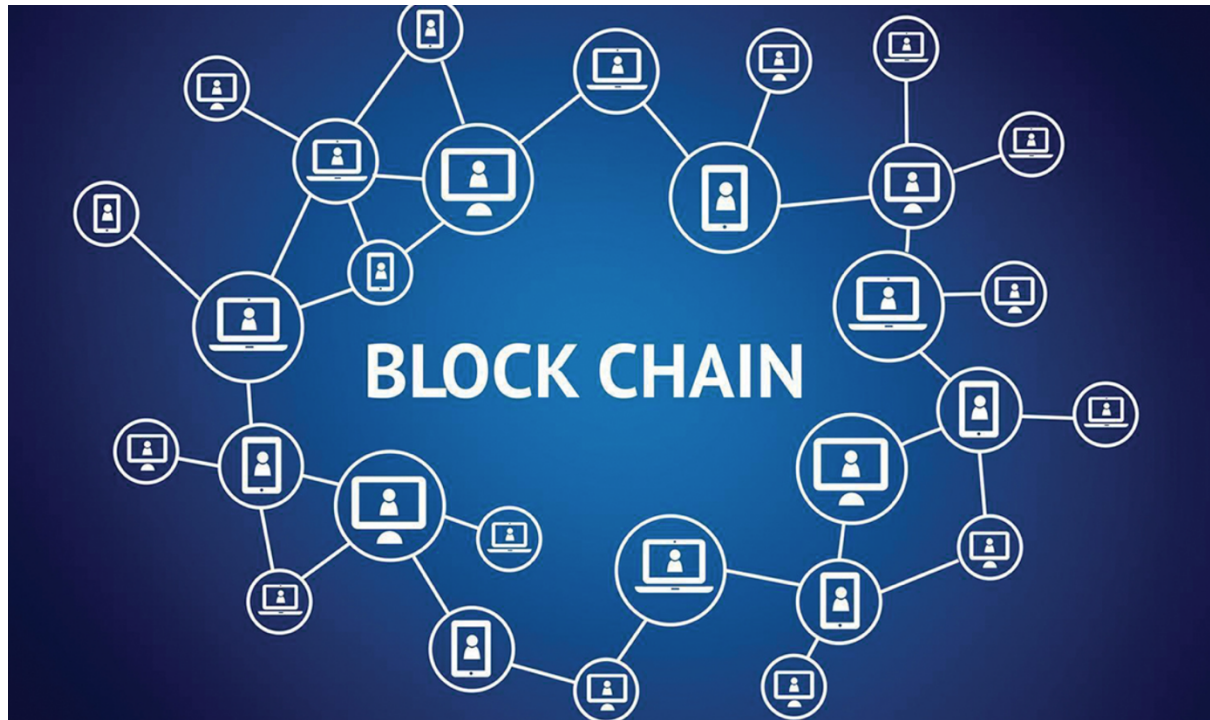


BLOCKCHAIN

THE LEGAL IMPLICATIONS OF ITS TECHNOLOGY IN THE MUSIC INDUSTRY



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Blockchain Technology

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1. INTRODUCTION:

For this assignment, I will be analysing Blockchain and its involvement in the music industry in a negative and a positive side. Although this technology is in the very early days, we have seen different music organisations trying to explore the opportunities. “New technologies can be applied to radically simplify the way music rights owners are identified and compensated, resulting in sustainable business models for artists, entrepreneurs and music business alike”. (Panay, 2016). This implies to us, that blockchain might possibly have the power to be a disruptive force in the music industry. It has the potential to create new foundations for our economic and social systems, however it will take decades to seep into this infrastructure. (Lakhani, 2017). Blockchain has the power to enable payments between peers, making it a peer-to-peer service. Consumers can view the data but cannot alter it unless granted access by the owners.

2. A BRIEF HISTORY OF BLOCKCHAIN

In the past 20 years we have seen a lot of changes in the music industry of how people consume music but something that has not changed yet is how the creators get paid. Starting from the unfair album deals and licensing, blockchain is a foundation for the cryptocurrency bitcoin and its payment system. The technique was originally described in 1991 by a group of researches to timestamp documents so it is not possible to backdate them or to temper with them. However, it went by unused until Satoshi Nakamoto started discussing it in 2008 and implementing it the following year. Nakamoto's most important innovation was not bitcoin but its underlying blockchain technology although bitcoin was ingenious. Blockchain allowed payments made on its network to be paid directly to the user without a third party to verify the authenticity of the transaction. Blockchain has two major features that make it highly attractive as a store of data. Firstly, data written to it is immutable which means that it provides an auditable record of events that cannot be modified and secondly, an exact copy is maintained in a large number of independent locations. Also, there is no central point of failure. Simplified, blockchain is a chain of value blocks that contain information and a distributed ledger open to anyone. Each block contains some data, the hash, and the hash of previous blocks. Blockchain has something called “proof of work” which is a mechanism that slows down the creation of new blocks.

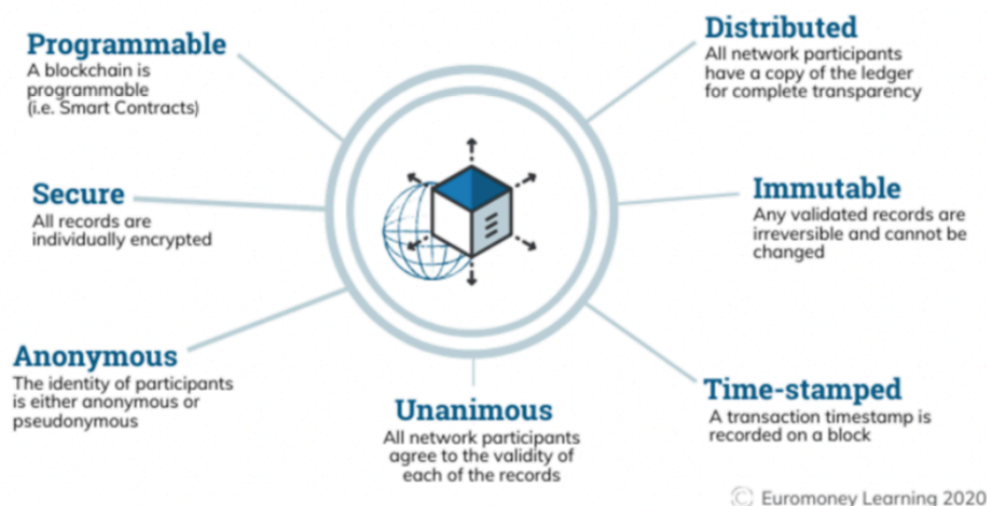
3. COMMERCIAL USES

We have seen and heard quite a few industry professionals, songwriters and artists getting frustrated with the way that payments are sent out, taking between 9-36 months. Blockchain claims that it would bring a “fair trade” music ecosystem and that the artists would have control over pricing and terms of use. It also claims that is likely to bring about the demise of performance rights organisation and record labels. The creation of the blockchain technology has picked up a lot of interests. The most affected creators which are songwriters will be the first ones to want to make it work since the payments take months and sometimes years to reach them. These creators clearly see blockchain as a saviour of the music industry. Their work is the first one to be used and they are the last ones to be

paid. They also have no access to information of how the data is collected and how royalty payments are accumulated although in most scenarios big managers do have access to this information.

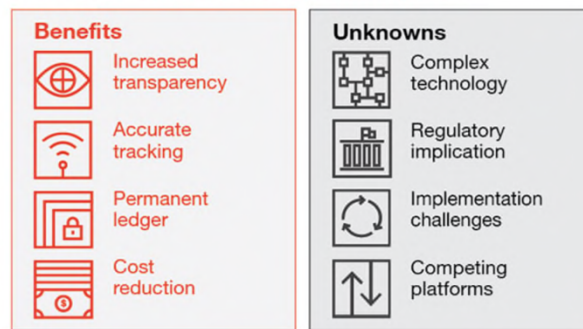
Some of the most essential points that I believe blockchain will have a great impact on will be cutting out the third party, offering transparency through the value chain and facilitating fast. Taking the first point into consideration also means that quite a few agencies that work as a third party to do transaction will be highly affected if blockchain will be approved. They will still be needed from some labels to negotiate payments however they might not be needed in an administration capacity. A very important factor in the music industry is also data and blockchain can be very useful to work as a networked database for music copyright information. The rights owner must have an account with blockchain for the payment to be made automatically and immediately in hard currency. Blockchain also claims that it can store medical records, e-notary and collecting taxes. Technically, since blockchain is a cryptocurrency we also come to the realisation that it is immune to counterfeiting, don't require central authority and is protected by strong and complex encryption algorithms. Blockchain could also be beneficial on storing the database for copyright info via a cryptographic hash. Blockchain and cryptocurrencies are two different things. (Musically, 2017). The benefits in general are tangible for labels, publishers, artists and content creators. The distributed ledger technology is decentralised with the benefits that Blockchain will be private or publicly distributed.

The Properties of Distributed Ledger Technology (DLT)



Over the years, we have also seen the evolvement of Bitcoin and cryptocurrencies which are well spoken about. Blockchain is the technology that enables the existence of cryptocurrency and Bitcoin is the name of the best-known cryptocurrency, the one for which blockchain technology was invented. Cryptocurrency is a medium of exchange, such as US dollar however is digital and uses encryption techniques to control the creation of monetary units and to verify the transfer of funds. (Likens, 2020).

Blockchain's benefits and unknowns



How Blockchain works

The way that Blockchain works is that when someone requests a transaction it is broadcasted to a P2P network consisting of computers, known as nodes. After that, the network of nodes validates the transaction and the user's status using known algorithms. A verified transaction can involve cryptocurrency, contracts, records, or other information. The transaction is then completed, and a new block is added to the chain that is permanent and cannot be altered. After is verified, the transaction is combined with other transactions to create a new block of data for the ledger. The potential applications so far are huge and some of them state that blockchain will be automotive which means that the consumers could use it to manage frictional ownership in autonomous cars. They also claim that it will help on the financial services side by having faster, cheaper settlements. Using a blockchain code, people could also be able to vote via a smartphone or computer resulting in immediately verifiable results. Another important factor is the healthcare section, which patients encrypted information could be shared with multiple providers without the risk of privacy breaches.

Problems with Blockchain

Some of the main reasons that blockchain has not taken off yet is because it lacks an authority or standard that firms can refer to as well as it is not well researched for organisations to trust it. The risk of flaws might be high hence why the number of companies experimenting with it is low. Before blockchain can be called secure, there still remain opportunities for fraud in fields such as customs handling. Furthermore, blockchain might bring unwanted transparency to the supply-chains which means that it might be easier to verify different data such as country of origin, climate friendliness and fair trade. This technology requires a large number of organisations to invest on it for it to take off however the network issues also remain an important factor. (Button, 2018). Blockchain also has environmental costs which relies on encryption to provide the security which requires a lot of computer power. This technology can be slow due to the complexity which also means that the users can find it hard to navigate. A source from Forbes states that enterprise blockchain project has been given a high failure rate of 92%. Their main point of failure is the general lack of cyber hygiene that was present in many early blockchain projects. (Disparte, 2019).

Top Blockchain Companies and Case Study

This technology has become promising and tech giant IBM has invested more than \$200 million in research (Daley, 2020) and 90% of European and US banks are researching these options. Blockchain claims that many fields will be revolutionized such as personal identity security, finance, insurance and government. Some of the top general blockchain companies that have already started to experiment these opportunities are SALT Lending, Mythical Games, Coinbase, Circle, IBM, Steem, Shipchain and so on. Some can also be categorized as blockchain companies and some are just paving the way for the future. Linking it back to the music industry, the companies that use blockchain are Bittunes, Ujo, Mycelia, Dot Blockchain Music, Internet Music, Peertracks, K Tune however it has still not achieved the widespread of users since blockchain is not dedicated fully to the music industry. The case study that we are going to use is Musicoins which is a 'pay to play' blockchain platform where users can also build their music distribution platform for rewards. There are no third parties involved and the platform is free for listeners. It claims that currently it is paying musicians higher than any other streaming services. This platform has implemented UBI which secures musicians income from PPP on the platform. The fans can support musicians directly by buying digital and collectible badges, tip artists and build permanent connections.

4. LEGAL ASPECTS OF BLOCKCHAIN

Blockchain technology will have great legal implications in the music industry. This will include fields such as copyright infringement, royalties, live performances, licensing and so on. However, this technology will have an impact in all industries in general. Since skilled cybercriminals will not take more than a few minutes to steal our sensitive online data, blockchain can prevent theft of credit card details, phone numbers, addresses and passwords. Since our online information could be distributed but not copied, blockchain will make sure that fraudsters will not be able to alter any information. Blockchain will have ownership over our own data by keeping our online information secure. (Mercy, 2020). It will also be an enhancement of the fraud entry barrier so when they try to make their first attempt with the help of PKI (Public Key Cryptography) it will decentralize the whole digital infrastructure. Some of the high-level benefits or unique selling points of blockchain are the low cost, the offering of the secure transactions, the heightened privacy that gets offered to users, the speed of the transactions and the open source that will be like a virtual machine to run applications.

Smart contracts

Although it's based on crypto currency, one of the most recent development is the creation of smart contracts. Smart contracts are simple programmes that are stored on the blockchain and can be used to automatically exchange coins based on certain conditions. In the music industry significant funds are often paid to the wrong party and large royalty revenues end up in a black box. This technology can help artists who prefer to go down the independent route without the need for a major label by using smart contracts which can independently monitor the development of an artist career. The contract includes an agreement between the buyer and seller being directly written into lines of code (Macrinici, Cartoceanu and Gao, 2018). Smart contracts can be enforced in courts and are capable of

satisfying the requirements of English Law contract forming principles. (Bowles, 2020). Despite everything, third parties such as courts would still be needed. If the targets are not met by the artist which the terms and conditions are set by the investor, then the smart contracts can protect the investor by guaranteeing a return on investment. Blockchain will also have an effect on crowdfunding.

Intellectual Property

Intellectual property (IP) refers to creations of the mind – from art to inventions, computer programs to trademarks and other commercial signs. (WIPO, 2020). By using blockchain we will also be able to identify and find who owns the recording of a piece without the need of a third party. The copyright Designs and Patents Act 1988 is the current copyright law which gives the creators of literary, dramatic, musical and artistic works the right to control the ways in which their material may be used. (Copyright Service, 2020). With blockchain, music cannot be released illegally as when the actual music is published it gives out a unique ID and timestamp. Blockchain will add value to IP rights holder by having this digital ledger to automatically track when a digital asset is created or logged into. Major labels have seen record sales dropping drastically but an increase in streaming services which currently have also led to many lawsuits. Blockchain uses tamper-proof technology to fight copyright infringement.

Blockchain and Brexit.

Technology based solutions such as blockchain could be used to deal with the complex predicament which Brexit has brought to the border of the UK however the questions of capacity and time constraints mean that technological solutions are actually unworkable altogether. (Botton, 2018).

5. CONCLUSION

In conclusion, the digital world has become a challenge. As someone who is highly involved in the music industry as a consumer and as a creator, we have all faced problems and delays when it comes to receiving payments from third parties. This not only has affected artists financially, but it has also affected their creative side. I believe that this technology has a lot of potential to change the music industry and transform the way that royalty payments are sent out for recorded music. Likewise, every new product, people find it hard to understand, trust as well as invest on it. Since the streaming services have overtaken the physical sales, this new technology might help the industry rather than hurting it by being a great proof of ownership and a quick way of receiving payments from streaming services. The traditional data structures will be outweighed by blockchain and music creators can stop worrying about scams and frauds. This can only be achieved if the right amount of innovation and collaborations is put together and invested on blockchain. The hard truth is that with the fact that every agreement, payment or signature will have a digital record there will not be a need for the middle-man which are lawyers, brokers or bankers which will lead on these people being taken out of business. I believe that blockchain will be a saviour of the music industry especially with the great impact that COVID-19 has had on music due to the destruction of live events.

6. BIBLIOGRAPHY

Sparrow, J. (January, 2020). Can Blockchain Tech Have a Second Coming for Music? , [online] , Source from Musically, Available at: <https://musically.com/2021/01/11/music-ally-startup-files-bitfury-surround-after-the-initial-hype-disappointed-can-blockchain-tech-have-a-second-coming-for-music/>

Pearse, S. (July, 2017). Blockchain; The Music Industry Saviour or a False Prophet? [Online], Source from Musically, Available at: <https://musically.com/2017/07/10/blockchain-music-industry-saviour/>

Arcos, L. (2018). The blockchain technology on the music industry. Brazilian Journal Operations & Production Management, 15(3), 439-443, [online], Available at: <https://bjopm.emnuvens.com.br/bjopm/article/view/449>

Mercy, CBN Nation. (February, 2020). 3 Ways Blockchain Technology can prevent Identity Theft. Powered by Blue 16 Media. [online], Available at: <https://rescue.ceoblognation.com/2020/02/15/3-ways-blockchain-technology-can-prevent-identify-theft/>

Iansiti, M. And Lakhani, K. (2017). The Truth About Blockchain. [online], Available at: <https://hbr.org/2017/01/the-truth-about-blockchain>

Likens, S. (2020). Making Sense of Bitcoin, Cryptocurrency and Blockchain. [online], Available at: <https://www.pwc.com/us/en/industries/financial-services/fintech/bitcoin-blockchain-cryptocurrency.html>

WIPO. (2020). What is Intellectual Property? [online], Available at: <https://www.wipo.int/publications/en/details.jsp?id=4528>

Steven. (2019). What is the Value Proposition of Blockchain Technology? [online], Available at: <https://leftleads.com/blog/what-is-the-value-proposition-of-the-blockchain/>

Botton, N. (2018). The Implications of Blockchain for Trade and Brexit. [online]. Available at: <https://encompass-europe.com/comment/the-implications-of-blockchain-for-trade-and-brexit>

Daley, S. (2019). 31 Blockchain Companies Paving the Way for the Future. [Online]. Available at: <https://builtin.com/blockchain/blockchain-companies-roundup>

The UK Copyright Service (2020). The Copyrights, Designs and Patents Act 1988. UK Copyright Law, an Introduction. [online]. Available at: https://copyrightservice.co.uk/copyright/uk_law_summary

Birch, D. (January, 2021). Most Blockchain Pitches I Hear Make No Sense, Yet I am Sure That Blockchain Will Transform Businesses. [online], Available at:
<https://www.forbes.com/sites/davidbirch/2021/01/17/most-blockchain-pitches-i-hear-make-no-sense-yet-im-sure-that-blockchain-will-transform-business/?sh=7215a41574ab>

Disparte, D. (May, 2019). Why Enterprise Blockchain Projects Fail. [online]. Available at:
<https://www.forbes.com/sites/dantedisparte/2019/05/20/why-enterprise-blockchain-projects-fail/?sh=d211a024b96b>

Camila, S. (2018). The Impact of Blockchain in the Music Industry. [online]. Available at:
<https://www.econstor.eu/handle/10419/184968>

Gupta, I. (November, 2017). The Impact of Digital Innovation and Blockchain on the Music Industry. [online], Available at :
<https://publications.iadb.org/publications/english/document/The-Impact-of-Digital-Innovation-and-Blockchain-on-the-Music-Industry.pdf>

O' Dair, M (July, 2016). Music On The Blockchain. [online], Available at:
<https://eprints.mdx.ac.uk/20574/1/Music%20On%20The%20Blockchain%201.0.pdf>

Nofer, M., Gomber, P., Hinz, O. (June, 2017). Blockchain. [online], Available at:
<https://link.springer.com/article/10.1007/s12599-017-0467-3#citeas>

Gheorge, P. (October, 2017). Blockchain And Smart Contracts In The Music Industry – Streaming Vs. Downloading. [online]. Available at:
<https://search.proquest.com/openview/f39efd295eff3c133edf4e17744cbf36/1?pq-origsite=gscholar&cbl=2032215>

Crosby, M. (June, 2016). Blockchain Technology, Beyond Bitcoin. [online], Available at:
<https://j2-capital.com/wp-content/uploads/2017/11/AIR-2016-Blockchain.pdf>

O' Dair, M., Owen, R. (January, 2019). Financing New Creative Enterprise Through Blockchain Technology, Opportunities and Policy Implications. [online]. Available at:
<https://onlinelibrary.wiley.com/doi/abs/10.1002/jsc.2242>

Adams, R., Parry, G., Godsiff, P., Ward, P. (September, 2017). The Future of Money and Further Applications of the Blockchain. [online]. Available at:
<https://onlinelibrary.wiley.com/doi/abs/10.1002/jsc.2141>

O' Dair, M., Owen, R. (February, 2019). Monetizing New Music Ventures Through Blockchain: Four Possible Futures? [online]. Available at:
<https://journals.sagepub.com/doi/abs/10.1177/1465750319829731>