

Essay:

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

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Introduction

Blockchain (BC) is a newly found technology that has caused a huge wave of change to almost all industries. There has been a lot of speculation and optimism surrounding BC, the group who is unknown to many described it as a decentralized peer-to-peer linked structure, whilst several industries agreed that it would bring about many issues as a relatively new and unidentified system. Deloitte suggests it is the “open source technology which offers an alternative to the traditional intermediary for transfers” where the crypto-currency Bitcoin can be used. Though Bitcoin and the concept for blockchain is closely associated with the financial industry due to its offering of traceability, security and speed it has in recent years emerged in other industries, automotive, music, government, healthcare, travel and so forth. There have been many attempts to explain its full extent and applicability (Zheng *et al*, 2016) and the different variants in which it operates in, but the most useful definitions in its simplest form are offered below:

“Blockchain is a term that actually describes a collection of complementary technologies”

Peter Fuchs, Mercer, 2019

A blockchain is, in the simplest of terms, a time-stamped series of immutable records of data that is managed by a cluster of computers not owned by any single entity. Each of these blocks of data (i.e. block) is secured and bound to each other using cryptographic principles (i.e. chain).”

Ameer Rosic, Blockgeeks, 2017

Whilst seemingly a new concept, blockchain was thought to be introduced in 2008, around the same time as Bitcoin. The relevant white paper written by Satoshi Nakamoto remains a source for reference. He claimed that it proposed a ‘solution to solve double spending and maintain the order of transactions’ (Nakamoto, 2008) The paper which began to circulate in 2008, early 2009 made some interesting and valid points at a time that was plagued with uncertainty concerning financial institutions.¹ He is thought to be instrumental in outlining “how e-commerce relied almost exclusively on financial institutions acting as trusted third parties to process payments”, though this traditional method for most transactions worked well enough, he thought that this method of centralization had several weaknesses and sought to remove the need for intermediaries. Taking a stance on liberalism (freedom of choice) seemed like an appropriate agenda to reconnoitre considering the collapse of financial institutions that left much of the population in ruin. Nakamoto saw the potential of BC ultimately bypassing the financial mainstream, which at the time seemed rather preposterous and far-fetched but in hindsight looking on it now makes a lot of sense. Some economists would argue his method was far too advanced for a system that did not look see the potential of technological advancement specifically on industries like finance but as we enter the year 2020, it seems as though the interest in bitcoin and blockchain technology has magnified but there still remains elements of mystery and lack of knowledge.

When researching ideologies on blockchain there are various online sources and a plethora of exploration found but a lot has happened in 12 years since the publication of Nakamoto. While Bitcoin (the cryptocurrency) is more well-known than it was a decade ago, it still isn’t mainstream as he would

¹ Refer to the financial crisis 2008: the impact of the global crisis and the international emergency that ensued, Ben Chu, economic editor at The Independent (2018) offers a review of what happened

have suggested and the question of whether the industry has evolved the way he would have predicted remains unanswered? Is the world ready for what blockchain has to offer, and could it ever replace mainstream financial institutions?

Peter Fuchs; Mercer (2019) offers an overview on blockchain and refers to three key ideas that summarizes blockchain and its importance to certain industries. His simpler version of what it is and how it could operate is described, he also mentions the ability to fully understand the basic concept of 'value exchange' before comprehending BC.

1. Data can act just like a physical object
2. There can be a single version of truth that everyone can agree on
3. Intermediaries are not needed

The way in which people can exchange and receive information has changed dramatically over the last few decades and it's easier to do so thanks to the internet. These changes include long distances and among unfamiliar or untrusting parties though several challenges remain such as cyber threats, security, recovery and all of which would be found in a computer and internet setting. Unlike before, blockchain makes it technically possible for the first time in history to 'ensure the integrity of information and the process of exchanging it'. It then becomes plausible to see how effective blockchain technology can be valuable in so many industries operating in this way, it just happens to cut out the middlemen entirely allowing for the currency to be passed through less systems and people; offering immediate exchange. Perhaps it is a new brilliant system that will be advantageous but with it still in its infancy it may also be quite problematic. Out with the process of digitizing and in comes the building blocks that determine how value is stored and transferred.



Figure 1: Concepts of Bitcoin Blockchain, Nitin Sood (2018)

Implications and limitations of Blockchain in the music industry

Moreover, as explained before the latest technology presents both limitations and progresses for operating in most certainly all industries, but the focus here will draw on examples in the music and entertainment industry whilst referencing others for comparison. It will also look at the commercial use of blockchain in combination with the challenges it may face and whether the usage of blockchain technology is appropriate in various scenarios. If you search the internet now, you will find *a lot* of articles on blockchain and its influence on the music industry, a lot more than one would have imagined. One must question why that is, as a relatively new idea being introduced in the music and entertainment industry there seems to be many sceptics of the idea depending on who you ask, yet many are enthusiastic about the prospect of cutting out unnecessary go-betweens. This is particularly relevant in the case of receiving royalties as discussed in the lectures offered by Ian Penman. Examples such as Mycelia and Ujo Music are just a few that make up the eco-blockchain system in the music industry.

Koksas (2019) mentions the ability to share profits in a simpler way in his Forbes article, he introduces K-Tune, a Korean company which aims to break down the barriers of traditional methods in the industry for music creators by using block chain technology.² It is designed to combat issues and allow for those not in the industry to partake by using a platform referred to as an 'Arena' where these musicians can exchange information. This is one of many companies that are finding ways to combat the needs of the industry, they are seeking to revolutionise by allowing avoiding plagiarism and unfair revenue sharing through a system based on the sharing of copyright. With recent guest lectures such as Karen Emmanuel (Key Production) and Julian Wall, reporting increased sales figures in music industry, it is relevant to examine the system that it operates within, i.e. rights, recording, royalties and community network. How bureaucratic is the current system and how would technology like blockchain be instrumental to changes?

Furthermore, payment of rights, low costs and services seems to be the dominant feature of introducing blockchain to the music and entertainment industry. For many creatives and musicians, the industry has been known to have a negative reputation when it comes to the royalties system, whether that be the commission or payment of works often taking 3 – 6 months. It has been known to exploit many and not give musicians their fair share of royalties. And the system operating now seems outdated, slow and inaccurate. There are many case studies and stories of this, more recently the Lion King composer, Solomon Linda vs. Disney Studio over the origin of the theme song. The industry is plagued with copyright, trademark and infringement issues so the ideology of blockchain to create a centralised system, give artists more control, introduce a fair system and provide an alternative source of capital seems progressive. But how successful that can be is undetermined?

The system that blockchain creates claims transparency, every transaction that on the network is encrypted. When any changes are made an algorithm is recorded and verifies that the ledgers all contain the same series of records. This is then available to anyone on the network who can access a live version of the same ledger. According to PWC (2019), artists and consumer need to embody trust which enables value exchange. Though blockchain could be a powerful self-publishing channel for music-makers and rights owners, it also focuses on security issues, the vulnerabilities of relying on a system of trust. The ideology of a centralised system is always seen as positive but technical aspects of blockchain design such as consensus protocol may pose a huge problem if parties do not agree with

² Operates an open market called 'Arena' where all users can sell their work – track, instrument arrangements, lyrics. users are at liberty to set their own price and control licensing rights. Furthermore, users are at liberty to set their own price and control licensing rights.

one another. It is also not controllable as there many agents allowed to operate freely combined with the value rise bitcoin so does the threat of criminality.

Unlike the other industries, the banking sector and insurance were rather ahead with the integration and inception of blockchain occurring a lot quicker despite its immaturity. Seamless transactions, automation of internal and external processes, decentralization and the element of agents like payment networks are elements of BC that the finance sector favours but as mentioned before it is important to analyse the technology and its advances for one industry but to also acknowledge that it may produce different results for another. There needs to be further insight offered by blockchain experts besides just the advantages before it can even be truly given the potential to replace a wider, trusted traditional format.

An example of the intermediates removed by using blockchain in the music industry is shown below:

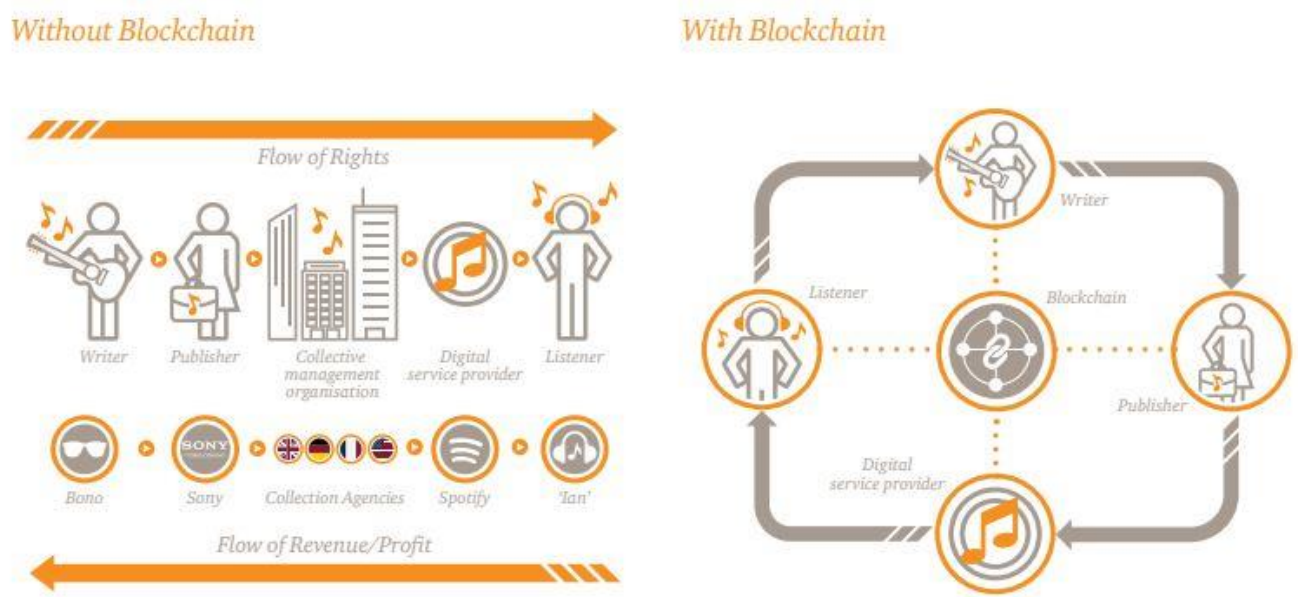


Figure 2: PWC, Blockchain: Recording the music industry, 2019

Just to reiterate, Bitcoin is one of several blockchain financial models, according to Firica (2017, p.16) “they are often difficult to replicate in another environment than that they have been created in. This approach is a potential challenge in generating a holistic digital ecosystem. Without standardization and interoperability, the technology will be impossible to scale up, to reach the promised automation level”. The risk associated to this is the fact that the necessary regulations would have a global impact and therefore require the impact of governance and regulation. Who will then decide on the integrity of the data and what should be included?

Despite this, blockchain technology still characterises a fast-paced system, it is expected to reduce costs, some risks and create a transparent ecosystem that would be applicable to all industries, the change nowadays seems inevitable even if some are reluctant to adopt it.

Conclusion

The aim was to define blockchain but if like me, you have less questions than what you started with then that objective has been somewhat accomplished. Whilst offering many definitions for BC there is no singular phrase that could truly define it. As a relatively new technology, there has been a lot of money put into this area of research particularly for those who think it has a lot of potential and could generate powerful economic forces. Even with all the research done, it may not be applicable for years to come as we rely on technology that exists today whose to say it wont change again. It is not uncommon to still have questions about blockchain as it can seem complex but once you have a basic understanding of how it works it becomes easier to see the impact of it in any industry or organisation.

On one hand it is easy to consider the successes of the technology that could potentially be a positive influence on society but with that also comes the consideration of risks as each industry operates differently so this would need to be weighed up and analysed accordingly. The legal issues identified above which include the legal status of self-governing, liability, trust, regulatory, complexity and privacy are problems that may well be rectified if enough research is conducted as with any system that newly introduced, a matter of trial and error. Again, in its earlier stages there is room for uncertainty and therefore opening a gateway for criminal activities until a secure regulator can be determined.

Whilst there is a generous amount of potential for blockchain to be a prominent force in the music industry, with all the risks involved at an early stage it may be useful for it to act as an alternative payment rather than the adoption of a broader commercial use until these problems can be resolved rather than .

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