



Legal & Business Affairs: Essay

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This essay identifies the commercial uses and legal implications of the increased implementation of Blockchain technology in the music and entertainment industries. It will explore the various ways in which blockchain is currently being used industry such as NFTs and the benefits it can provide.

Introduction

A blockchain is a digital ledger of exchanges that is copied and dispersed across the whole organization of computer systems on the blockchain. 'Blocks' in the chain contain the information of various numbers of exchanges, and each time another exchange happens on the blockchain, a record of that exchange is added to each participant's ledger (Euromoney, 2021). A timestamp is created once a new block is formed and will be chained to the previous block in an irreversible chronological order. This makes it especially hard for hackers to corrupt the blockchain as they would need to change every block in a chain as people would be able to easily see the individual blocks that had been tampered with (Investopedia, 2021).

Over recent years, content creators have become increasingly disgruntled with how their intellectual property rights are being protected and the difficulty of obtaining appropriate royalties for their works. We have seen an increased implementation of blockchain technology in a variety of industries from sports to music to real estate as many feel that it will be a key part of business in the future (Nasdaq, 2017).

The most notorious use of blockchain in this time is with cryptocurrencies such as Bitcoin and Ethereum. They catapulted blockchain to the public eye and soon many innovators began thinking of other uses for it. The difference with those however is that they are simply currencies that operate on blockchains, and they also promote anonymity whereas blockchain as a whole has a plethora of uses and promotes transparency (Marr, 2021).

Firms have started using blockchain in healthcare, Banking (as seen with cryptocurrency), the government, and many more areas. Businesses can even use blockchain to monitor their supply chains and identify inefficiencies which is made easy by the chronological nature of transactions. It has been used for this exact reason on the HS2 rail line (Hakimian, 2021)

Commercial uses in the Music and Entertainment Industries

The Music and entertainment industries have especially seen an increase in the use of blockchain as a means of dealing with intellectual property rights, Royalties, NFTs and more. Many artists have issues with the current state of the system and smart contracts are one-way blockchain is assisting them.

Smart contracts are of the main methods businesses, and creators, operating in the music industry are integrating blockchain technology into their operations. They are "computer programs that are intended to automatically execute, control or document legally relevant events and actions according to the terms of a contract or an agreement" (Tapscott and Tapscott, 2016).

The way they operate is by following "if/when...then..." statements that are inputted into the blockchain's code. This means that an activity won't be executed until preordained conditions have been met and checked. These activities could be releasing funds to appropriate parties, vehicle registration, or sending notification. It is then refreshed when each exchange is finished. That implies the exchange can't be changed, and just gatherings who have been granted authorization can see

the outcomes (IBM, 2021). Many businesses who use smart contracts also have premade templates which make them an easy option for the average lay-person. They essentially can also be utilized anywhere contract law is usually involved.

Smart contracts are not only an easier method of establishing contractual agreements, but they are also a cheaper and faster option as they eliminate many of the intermediaries used in typical legal processes. In business, time is money, therefore the faster the process, cheaper it becomes. Cap Gemini Consulting (2021) states that smart contracts could cut costs by \$3 billion to \$11 billion in the US/EU retail banking markets and up to \$21 billion in insurance globally. This shows the huge potential for Blockchain's implementation in the music and entertainment industries.

One consideration does however need to be made when using smart contracts. The smart contracts themselves need to be in accordance with contract law and must follow the jurisdiction of the area of operation e.g. are they legally enforceable in the country/area you are operating in. In the UK there are no worries as both the UK Jurisdiction Taskforce ("UKJT") and UK Law Commission have both concluded they are legally enforceable (UK GOV, 2021). Problems may however arise in the United States as there is no federal contract law which means each state decides on the enforceability of smart contracts (Levi and Lipton, 2018). Each state will use common law test of identifying offer, acceptance, and consideration when deciding whether smart contracts are legally binding. Despite the elimination of many of the intermediaries, someone with experience in contract law still needs to assess the contract to make sure it has the framework to be legally enforceable.

NFTs, or non-fungible tokens, are essentially a digital certificate of authenticity for an asset. It can be real or virtual. This unique asset is stored on a blockchain, more specifically on the Ethereum Blockchain, and any changes in ownership are publicly logged and verified (Dean, 2021). It can also act as a symbol of virtual and physical ownership (Osbourne Clark, 2021).

Examples of NFTs are unique digital works of art, limited edition clothing items, or tickets to a secret gig. Many artists in the entertainment are using NFTs as a way to generate revenue and connect with fans. A famous example of the use of NFTs is the singer Grimes selling a collection of 10 digital assets named 'WarNymph' (Fortune, 2021). She generated approximately \$5.8 million in a matter of minutes (Fard, 2021). Another famous case involves English scientist Berners-Lee, the inventor of the world wide web, selling its original source code for \$5.4 million.

Smart contracts are often tied into NFTs to enable more control over the assets. The contracts, or codes, can be used to ensure the creator receives payment whenever their asset is distributed or that the asset's creator is paid whenever the asset is sold in the future (Osbourne Clark, 2021).

Problems arise when we look at Intellectual property rights in relation to NFTs. From the creator end, you need to ensure that you are aware of the stipulations of selling an NFT. A creator needs to be aware of the rights that they are selling alongside the asset e.g. ensuring that they do not sell away the intellectual property rights or outright ownership. A buyer should also be equally vigilant when purchasing NFTs. Many NFTs have smart contracts embedded in their code and this will not be apparent unless specifically found. For example, someone may purchase an NFT (in this case a mp3 file) with the intended purpose of using it in a YouTube video they will post. The smart contract embedded in the NFT could however restrict it from being used in such a manner. Generally, the original creator of the asset owns the intellectual property rights and copyright to the piece of work while the buyer is simply granted permission to display said asset.

Blockchain has also been used in tandem with cryptocurrency and there are now businesses that offer to use the virtual currency as a means of paying their artists. Ujo Music, a US based firm, offers

a decentralized cryptocurrency-based distribution and royalty system for their artists. They provide artists the opportunity to receive 100% of their payments instantly and to self-publish, license, and distribute their work (Ujo Music, 2021). As previously mentioned, reducing the number of intermediaries and amount of time spent saves artists money and makes businesses like this an attractive place, especially for upcoming artists (Patrick, n.d.).

Using blockchain and cryptocurrency is very beneficial from an artist perspective as they can receive payments relatively instantly and can track streaming due to its transparent nature. Using cryptocurrency however does not come without its disadvantages. The main negative of a cryptocurrency-based business model is the volatility of the market. A set revenue cannot be guaranteed as the price is constantly fluctuating and at the mercy of massive crashes (Forbes, 2021) as seen in the 2018 cryptocurrency crash where the price of Bitcoin fell by approximately 65% in the space of a month (Popken, 2018). Another drawback to using cryptocurrency is that it is not a registered currency, it is a commodity or asset. It has been classed as too volatile to be a proper currency so does not have the same legal standing as the British Pound would (Peetz and Mall, 2017).

With regards to royalties, blockchain has many uses to ensure artists are paid correctly. Content creators can protect their creations through using blockchain as it is tamper-free and can show a clear path to who created, uploaded, and has rights to that asset. Many artists do not receive the recognition or payment they deserve from works they create or are unaware of where their royalties even come from (Gheorghe, 2018). This is partly due to the divisive nature of producing a track. Many creators can face issues obtaining the appropriate credit and payment due to there being multiple people who have contributed to the making of an asset and this makes the process significantly lengthier. The use of blockchain is meant to combat this issue.

The main way that royalties can be protected on the blockchain is through embedding the relevant creative credits, accounting information and usage rights (Royalty Exchange, 2021). This is called metadata. This means that there is no ambiguity regarding who receives payment, what types of content have permission to use a track or creative asset, and the information can be easily identified when looking through the blocks. Many firms who operate blockchain-based music distribution have databases which clearly shows both the creators and contributors of an asset. This transparent information makes it easier for the appropriate people to be paid and essentially eliminates the theft of an asset. One thing to consider is that human intervention is still needed to ensure that the artists information is entered correctly into the metadata. For example, if Adele released a song on the Blockchain but the metadata stated that 'Edele' sang the song, she would not necessarily receive the correct royalties due to it appearing as someone else.

Another business that has entered the market in recent years and aims to revolutionize the way creators are paid using Blockchain is called Audius (Daley, 2021). It is an upcoming Blockchain-based music platform that, according to Twitter, aims to give artists 90% of the revenue earned. It will also use smart contracts, as mentioned above, to ensure artists receive their payments in a fair and prompt manner (Rolling Stone, 2021). The idea is that artists will receive more revenue due to there being less fees and bureaucracy.

Audius aim to provide artists with approximately \$0.35 per stream (Linkedin,2021) which is significantly higher than its potential competitors. The table below (Table 1) shows the pay per stream (PPS) for the major music streaming platforms and shows how Audius' royalty payments would eclipse all other platforms. Audius would pay more than ten times what Napster would.

Artist-centric platforms such as this are the reason for the drive to implement blockchain in the music and entertainment industries.

<u>Platform</u>	<u>PPS in \$</u>
Napster	0.019
Tidal	0.01284
Apple Music	0.00783
Deezer	0.0064
Spotify	0.00437
Amazon Music	0.00402
Pandora	0.00133
Youtube	0.00069

Table 1 (Tapscott and Tapscott, 2016)

Blockchain also has the capability to be used in the music and entertainment industries for live events. More specifically, the ticketing systems they require for them. This has been seen before but mainly for sporting events such as football matches. West Bromwich Albion FC, an English football club, have partnered with ticketing platform TixNGo to implement blockchain technology for its 21/22 season. The platform offers encrypted tickets that are tamper-proof and constantly logged which makes it easy to track suspicious selling or create price ceilings to reduce overpricing (Leisure Insights, 2021).

Another method seen in UEFA matches involves making tickets accessible to attendees via Bluetooth once they reach the stadium as opposed to hours or days before. This could be easily executed at big venues such as the o2 arenas in the UK where they have the capability to secure the funding to implement it through their existing o2 app. The use of blockchain can greatly benefit the live entertainment industry by greatly reducing, if not eliminating, ticket touts and scammers when reselling tickets as tickets.

Conclusion

It can be easily seen that further implementation of blockchain technology in the entertainment industries would greatly benefit content creators and provide many with the means of gaining appropriate payment or acknowledgement for the works they create. It can also help businesses develop new capabilities and provides the opportunity for a range of blockchain based enterprises to enter the market.

One consideration should however be made for the future of the industry. One purpose of the blockchain is to reduce the number of intermediaries but what happens to those intermediaries, which are business themselves and require sustainable revenue, if the utilization of blockchain became widespread and their roles became obsolete. Those firms should plan as their roles in the industry could be replaced by artist-centric platforms like Ujo Music.

Platforms such as Audius are necessary to revolutionize the way creators are credited and paid for the work they create and should encourage larger firms like Apple and Spotify to reconsider the ways in which they pay their artists.

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