

Blockchain: Essay

Student Name: Lucan Mills

Student Number: 1906671

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Lecturer: Ian Penman

Blockchain is a form of distributed ledger technology (DLT) that appeared on the scene in 2008 (Wikipedia, 2020). It was derived by someone under the pseudonym Satoshi Nakamoto. Blockchain itself was based on the idea of a decentralised banking system that could make digital transactions secure making for a more transparent way to handle money. Blockchain works as a digital ledger that is copied and distributed to a network of systems that are on the same Blockchain. Each block on the chain is responsible for storing a certain number of transactions. When a new transaction is created on the Blockchain, it is then replicated across all the other user's records. "A simple analogy for understanding blockchain technology is a Google Doc. When we create a document and share it with a group of people, the document is distributed instead of copied or transferred. This creates a decentralised distribution chain that gives everyone access to the document at the same time. No one is locked out awaiting changes from another party, while all modifications to the doc are being recorded in real-time, making changes completely transparent" (Built-In, 2019).

One of the most significant selling points of Blockchain is its claim to have bulletproof security. As the payments in Blockchain are distributed far and wide, it would mean any change in the block, that had not been replicated elsewhere would flag that something had been altered. The more blocks that are added to the chain only further reinforces the security due to power in numbers. There have been many attempts at creating digital money services; however, the main downfall has previously been the safety of money and the transparency of where it is stored. "The prevailing issue is trust. If someone creates a new currency called the X dollar, how can we trust that they won't give themselves a million X dollars, or steal your X dollars for themselves?" (EuroMoney, 2020).

When Bitcoin was created in 2009, it utilised the blockchain system, allowing itself to take advantage of the fact that no single person was in control. This new system was now a shared and secure endeavour that would revolutionise how the currency would work going forward. The other key benefits of Blockchain are its speed and reliability. You no longer need to create multiples folders of financial ledgers that waste valuable working hours. In the current climate, we find ourselves in, much attention is being paid to company budgets, and Blockchain also helps with reducing costs. "With Blockchain, you don't need as many third parties or middlemen to make guarantees because it doesn't matter if you can trust your trading partner. Instead, you just have to trust the data on the Blockchain. You also won't have to review so much documentation to complete a trade because everyone will have permissioned access to a single, immutable version." (Hooper, 2018).

Since blockchains implementation, it is clear that it can change how businesses could run more effectively in the future. We are now aware of some of the benefits that distributed ledger technology (DLT) provides across all sectors of the world. It has been implemented in many areas, including land registry's, agriculture, and managing supply chains. This is also true for many developing countries, that have found, Blockchain is rapidly changing the way they operate at quite a pace. "As a revolutionary technology that is poised to create disruption as yet unseen, the impact of blockchain has been felt across the globe and in all sectors including consumers, governments, private industries and communities." (Omnitube, 2019).

With these vast commercial benefits in mind, it was natural that the music industry could, and should benefit from such a system. For years the system to many who work in it has been broken. The music industry

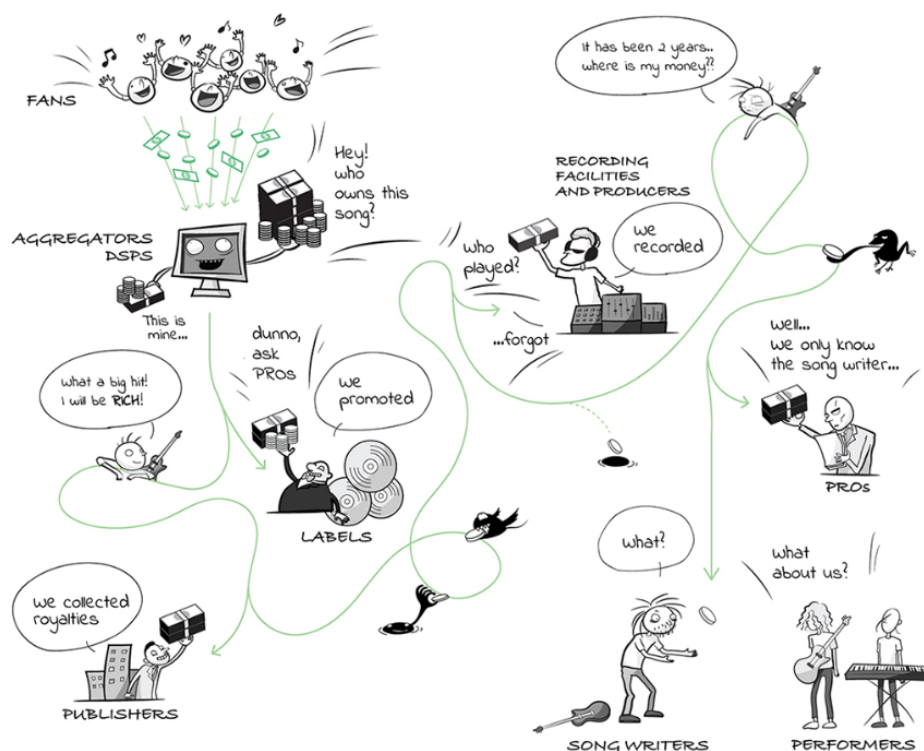
generated \$20 billion last year. "This figure was up 8.2% on the prior year (\$18.7bn), according to official industry data revealed in the latest IFPI Global Music Report today (May 4)." (Ingham, 2020). These figures may astound many, but there are many underlying issues regarding royalties payments, metadata, and intellectual property that occur due to an outdated ecosystem that has many flaws. With estimations in the billions, lost revenues for songwriters, and copyright owners is an issue that needs to be addressed, (WesternUnion, 2020). With nearly half of all royalties due each year never reaching the correct rights holders, along with many labels and publishers paying in different intervals and currencies it has caused all sorts of issues that have been far from transparent. "Royalty payment distribution hasn't changed much over the past 50 years: the systems for managing payment information are out of date; payments are often delayed or lost; payees have no control over how they receive their earnings. In an industry burgeoning with creativity, few organisations have implemented a royalty payment process that puts artists first—and that needs to change." (Butler, 2018).

The music industry has battled to move into the modern era when it comes to payments, and since the digital boom and the overwhelming amount of music in the world, it has made it even harder to manage. Digital streaming changed the industry again with a plethora of new music. "20,000 to 24,000 tracks are uploaded to Spotify, Apple Music, Napster and other streaming music service every 24 hours. That's 1 million tracks every 6 weeks. Let that number sink in for a moment and imagine how hard it is to break through that much clutter." (Houghton, 2018).

Since the old 'mechanical' method of paying royalties is somewhat redundant, along with the fact that most new streaming services are still unable to make a profit, it is clear that we have still not found a suitable way

to address the issue. Another major problem to solve is the time it takes to get paid. The delays that are caused by many anomalies, including those above, can take royalty payments up to two years to reach the intellectual property owner, sometimes even longer. Imagine being able to receive all royalties every single day, in a uniquely tracked way, with the correct metadata, acting as your digital fingerprint. Most people recognise that change is needed, and Blockchain, I believe, is that change.

There are different ways that the music industry can utilise Blockchain; one of which is smart contracts. "What if the new music industry was a distributed app on the blockchain, where I, as a songwriter, could post my song onto the blockchain with a smart contract specifying how it is to be used?" (Tapscott, 2016). These contracts are just the same as any previous agreement we are used to; however, they are written into code in the Blockchain.



(ScalaBlockchain, 2020).

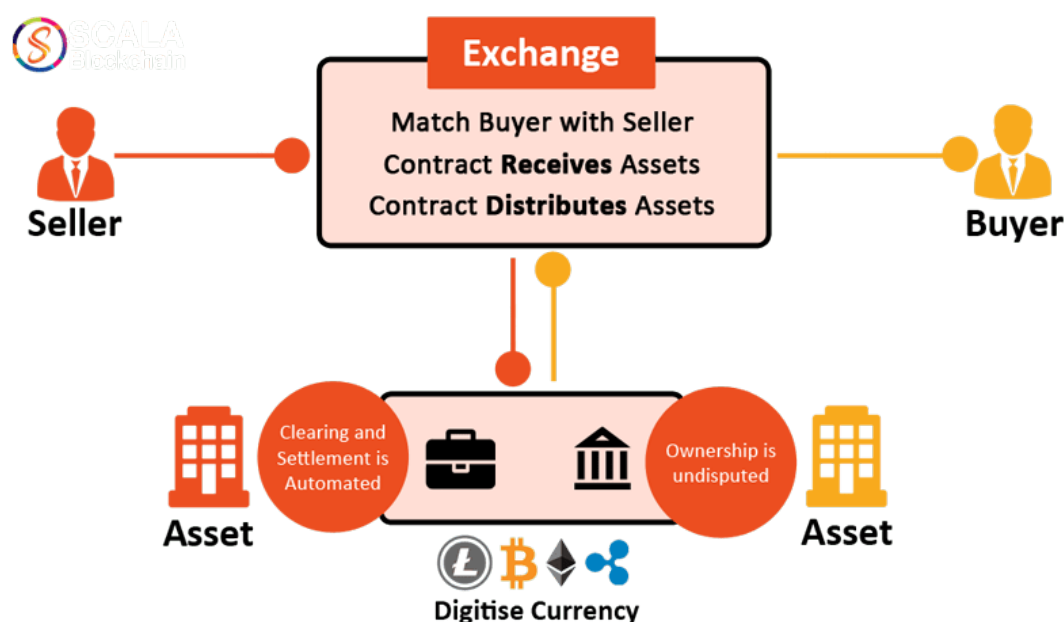
This allows for complete trust and transparency when it comes to any deal in question, and its arrangements. These smart contracts remove the need of third parties, as any agreement will self execute once all the conditions of the agreement have been met. This helps prevent fraud and any chance of it being breached from either party. For example, the smart contract would give you the ability to add all the details and splits of the contributors to your song. That self-execution means everyone involved would be paid instantly upon revenue income. This would transform the way royalties are collected and how quickly they could be paid. It would also help solve the infamous black box issue as it is known in the industry. The black boxes are where all the of the unclaimed royalty earnings from a record with no information stored end up. They estimate that this could account for two and a half-billion dollars a year in lost income for artists and songwriters.

Smart contracts could also push the envelope further, and naturally, you could get creative with how you utilised it. "An artist can also include rules that reward listeners for sharing their songs or albums. Rewards can include a percentage of the revenue generated from the referral, encouraging fans to create playlists and share. This powerful referral program lowers the need to hire promoters and allows us, the listener, to work hand in hand with the artists as their promoters." (Alkaysi, 2019).

Blockchain was also given the ability to finally solve the issue of a single central database when it comes to intellectual property and copyright. So far, this has never been managed, and Blockchain could be the answer. Every single product that is created could be input with all the correct data and sit in one place, providing an extensive timeline of a song's history. You would be able to go back to its creation and see the ownership changes, and other information over the years. The only criticism of this is that it raises issues in

terms of who enters the information in the first place, and if there are mistakes made on inputting that information then changing that in a blockchain would cause significant issues, of which most are permanent.

Another benefit for Blockchain in the music industry is simplifying the connection between artist and consumer. For many years the current set up has created a disparity in the industry, but Blockchain could simplify this, and besides, the artist would also retain more of their earnings. This table from Neil Pollock at Smashing Ideas shows a good illustration of how this all looks.



(Pollock, 2020).

These implementations could save the music industry billions of pounds every single year and would save legal costs, as well as the lost income of many songwriters and artists that never see their income at all. Blockchain also provides the ability to open up other revenue streams due to the entire business model being very transparent. It would allow labels and investors to analyse business choices more carefully and see outcomes quicker. The artist, in turn, would see the results from your latest release and instead of

wondering if that streaming money from Spotify was on its way in a few months, they could receive that money faster and reinvest that money straight into their current campaign. This is something that everyone could benefit from when funds or investment may be minimal. It is especially true for upcoming artists. An artist could even allow some of their earliest super fans to earn a cut of future earnings based on the level of their support and investment.

There is also talk of expanding on Blockchain in music in the same way other businesses utilise an ever-changing market to gain more revenue and awareness. "Similarly to what happens in other businesses, like with flight tickets, the price of buying music or streaming it could depend "on the time of the day, streams per person, the total number of streams/downloads, and even region of the consumer". That could be done by analysing the data recorded by the Blockchain and, for instance, making more expensive a song during the time of the day when it is streamed/downloaded the most, or making it cheaper for those who stream it more often." (Skiaky, 2019).

It can also translate in to live tickets for shows, by making it a lot safer and fairer to buy tickets to your favourite shows without risk of tickets being copied. This, in turn, can be used in merchandise, ticket income revenue, and any deals or negotiations that you included in your smart contract. This could again allow the industry to be a lot quicker in responding to good spikes in their projects or anything that needs improvement with instant data.

Critics of Blockchain, including some media outlets like the BBC who claim Blockchain has not quite hit the mark. "Blockchain: The revolution that hasn't quite happened." (Baraniuk, 2020), claims its infancy works against it and that a lot more needs to be discovered about the way the system

operates before we throw all our eggs into one basket, however after reviewing many of the top financial firms like PWC, and Deloitte the response to blockchains financial impact on the music industry, is very optimistic. British singer and songwriter Imogen Heap was one of the first to see the future potential in Blockchain but starting a company called Mycelia. Her argument is that distribution of a product is never the issue, but instead, it is the information and revenue coming back the other way that is the issue. "Blockchain is the catalyst for change in the industry. It's a new piece of technology, in the same way MP3 was. It's a step in the right direction," said Heap. (Mycelia, 2020). An article on digitalmusicnews.com in 2015, cites Imogen discussing how Blockchain could store the new DNA of the music industry. Her company is not alone, as there are others like Choon, Blokur, and Viberate who are seeking to revolutionise the way we use Blockchain to solve all the issues above.

For artists and songwriters working in the music industry, it has become clear there is a large issue when it comes to royalty payments and transparency. These same creatives are also trying to navigate services like PRS, MCPS, and PPL, while trying to figure out which labels owe them mechanicals for their work. This can cause untold amounts of stress, confusion and lost earnings and if you are an emerging artist, then every penny of income counts. You cannot help feel a system in which people have to register their music and store copyright information currently is slightly archaic and that something needs to change. Having a blockchain that stored all the relevant information from songwriters to original copyright owners, and beyond would mean a one-stop-shop of information for money, usage and deals. One singular database containing one QR code that links to one record and all of its metadata would mean all songs that are used get the recognition they deserve. Lost money from misplaced revenues would be a

thing of the past, and you would not have to wait for those few payouts a year that come intermittently, especially when you need them most.

Taking the setbacks of Blockchain into account and its infancy as mentioned earlier, I believe in time that Blockchain will grow and develop in a short space of time and find even more ways to be utilised for the good, not only in the music industry but worldwide. The pros for our industry certainly outweigh the initial cons, and this is a perfect sign.

With a seamless royalty payment system, centralised database of copyrights, and a transparent blockchain that can be trusted without being contaminated by the past, the music industry would have successfully leapt forward into the twenty-first century. It will have taken advantage in technology like never before. It may take time for the industry to come on board and fully realise blockchains potential but out has already begun. Nothing worth having comes easy, as this is true for so many aspects of the music industry. After years of massive revenues and successes, it is now time to invest in the future and make sure we have done it in the right way. No one likes change, and naturally, there will always be some losers, but for far too long, the losers have been the very beating heart of the industry. Without the songwriters and artists, there would not be a music business at all. Now there is an opportunity to get that right.

Word Count: 2569

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