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## The Next Frontier: Blockchain In The Music Industry

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## **The Next Frontier: Blockchain In the Music Industry**

By Manuel Manriquez

We live in an era where technology keeps advancing at a grandiose, exponential rate. It's no wonder that blockchain technology holds the potential to fix many of the current issues that plague the music industry today. Gone will be the days where up to 250 million dollars accumulate in unclaimed black box royalties, as estimated by *Billboard* in an article from June of 2019.<sup>1</sup> Companies and artists having to hire third-party distributors, publishers, and other middle-men may very well be a thing of the past; and the day that artists truly experience independence by embracing this technology shall arrive. Blockchain technology will *inevitably* revolutionize the music industry as we know it. This transition will become more apparent as the visionaries and innovators of the industry begin to understand how blockchain technology works and see the oceans of dormant potential that blockchain technology holds. Great fortunes can be attained by the entrepreneur that rides the boat of blockchain knowledge over the sea of potential propelled by the sails of action.

### Understanding Blockchain and How it Works

Understanding blockchain technology seems to be a daunting task for many because lots of technological jargon is tossed around quite liberally by those who understand the subject. Four business graduates from universities such as Falmouth University, Simon Fraser University, and the University of Victoria wrote an article on blockchain technology called "Beyond Bitcoin...." A portion of this article eloquently explains blockchain technology with minimal use of complicated jargon. In this article blockchain technology is defined as "a ledger of transactions, or blocks, that form to make a systematic, linear chain of all transactions ever made." Every block in a blockchain has a unique code that acts as the block's identity. This unique code is what blockchain experts call

a hash. Each block also contains data, and the nature of the data depends upon the types of transactions being made. A block forms and represents a single transaction. Substituting the word block with the word transaction may help provide some clarity throughout this paper's explanation of blockchain technology. Now that the idea of a block is understood, the concept of a chain of blocks may be conceivable. A chain is formed by having each block contain the hash of its previous block. Visualizing the creation of a new chain helps when attempting to understand how a chain functions.

With the birth of a chain, a first block known as the *genesis block* is created. The genesis block never links to a previous block because no transaction predates it. The genesis block is the first link of a chain. Every block after the genesis block has two hashes, the unique hash, and the preceding block's hash. The inclusion of those two hashes in every block effectively creates a blockchain. Blockchains can't be tampered with because they exist on a "peer to peer" network. Every person on the peer to peer network receives a copy of the active blockchain. If a hacker tampers the blockchain in the personal computer of an individual, there would still be untampered versions of the chain on the peer to peer network. A hacker would have to simultaneously tamper each block of all the chains scattered throughout the peer to peer network. Simultaneously tampering all the chains in a peer to peer network is inconceivable, especially if the network is global. Peer to peer networks are not the extent of blockchain technology security either.

Blockchain technology has another security feature called *proof of work*. Proof of work means it takes a certain amount of time and computing power to create a new block and validate its authenticity. If a hacker were somehow able to simultaneously tap into all the chains in a network, proof of work would render the hacker's efforts pointless.<sup>2</sup> Blockchain technology is so secure that it is referred to as *immutable*. Being immutable means it is unable to be changed or tampered

with. Blockchain has many security features, but it also has other features that do not pertain to security.

### Smart Contracts

Another feature in blockchain technology is known as the smart contract. Dr. Saifedean Ammous, an associate professor of economics at Adnan Kassar School of Business, and a foreign member of the Center of Capitalism and Society at Columbia University wrote an article (“Blockchain Technology: What is It Good For”) that explains the smart contract. Dr. Ammous describes smart contracts as “self-executing contracts.” When the conditions of a smart contract are programmed, the smart contract carries out its conditions indefinitely. Smart contracts can be highly effective for simple microtransactions like purchasing a song or a license. Companies would simply have to pay a programmer to make their smart contract once. After the smart contract is made it executes its conditions all on its own without having to be managed. Smart contracts being “self-executing” and taking on a life of their own means low transaction overhead cost. Low overhead is great for profit.

Smart contracts are not ready to be implemented for complex contracts with multiple variables. The art of programming complicated smart contracts still has a long way to go.<sup>3</sup> Programming smart contracts containing multiple variables is tedious because there must be no room for loopholes. If a loophole is found in a smart contract, its “self-executing” nature can be exploited making it a detriment instead of a good feature. Even though some features of blockchain technology are still being developed, its fundamental purpose as a ledger and use of smart contracts for simple microtransactions are enough to change the music industry as we know it.

### How Blockchain Tech Can Change the Music Industry

Marcus O'dair, the Associate Dean of Knowledge Exchange and Enterprise at the University of the Arts London, wrote an article called "The Networked Record industry..." where he writes about many different ways blockchain technology can change the music industry. O'Dair says blockchain technology can provide the music Industry with *easily accessible copyright data*. Blockchain technology can make it easier to identify the owner of a song when you need to purchase a license from them. Blockchain will make the transaction easier for the purchaser and ensure that the copyright owner gets paid the money they deserve. O'dair even writes how a single *decentralized universal database* could be established for music copyright. Giving everyone access to the peer to peer network would reduce the possibility of this database having an error. This peer to peer database would save music corporations from having to make countless phone calls in attempts to fix an error. Marcus also writes that *blockchain technology can help royalties reach composers, and performers nearly instantaneously* using simple smart contracts. Whenever a song is purchased, or streamed, royalties could nearly instantly reach their dedicatee with the implementation of smart contracts. It can take excessively long periods of time for composers and performers to obtain their well deserved royalties, in part, because of the reserve withholding clauses record labels still use in their contracts.

What makes almost instantaneous distributions of royalties possible is the *low overhead cost of smart contracts* automatically distributing the royalties to their dedicatees<sup>4</sup>. A company would simply have to pay a programmer to program the smart contract and then the smart contract would execute the accurate distribution of royalties completely on its own.

O'daire also writes about how companies usually have to trust a third party middle-man to exchange information. Thanks to the *transparency, accuracy, and immutability* of blockchain technology there is no reason to distrust decentralized platforms programmed for the transfer of

information. Startup companies that see all this potential in blockchain technology have already begun to form.

### Startup Company Pioneers

A *Billboard* article from May 2018 (“How Jack is looking to...”) reveals there is no lack of startup companies trying to solve issues in the music industry using blockchain. A few of the startup companies this article mentions are, Dot Blockchain, JAAK, and Blokur. These are companies that are aiming to construct a decentralized database for copyrights. This *Billboard* article puts the startup company JAAK in the spotlight. JAAK has begun to obtain product and rights data to feed their private blockchain network “KORD.” JAAK is obtaining its data through companies such as Sentic, Phoenix Music International, and Outdustry. Companies providing data consist of publishing companies and consultancy companies. JAAK’s end goal is to eventually create a large public IP rights database that can be accessed by anyone to ensure that rights holders get paid the money they deserve. “Our focus is on making sure we are actually solving a real commercial problem,” is what the CEO of JAAK, Vaughn McKenzie-Landell, says. Landell is excited that there are many other startup companies striving to reach this same goal. <sup>6</sup> He says “we’re talking about a whole suite of solutions for different parts of the value chain, which ultimately I believe JAAK and KORD can really be a part of.” JAAK looked to launch its first product in 2019 and now employs people like D.A. Wallach (Spotify’s former artist-in-residence), and UMPG’s Dom Lovett. It also has the inventor of YouTube’s content ID, David King, as an advisor. <sup>6</sup>

Startup company UJO has been using blockchain technology to tremendously speed up the rate of artists and songwriters receiving their royalties. UJO is a decentralized platform where artists can distribute music and get paid their royalties instantly. Any other rights holder (such as a

songwriter, or producer) would also get their royalties due almost as soon as the transaction is made. Another service that UJO provides is the selling of licenses.<sup>7</sup> The rates of the licenses are all built into different smart contracts, one smart contract for each specified rate. The license purchaser can choose the license he needs and pay the required amount. Paying the set amount would meet the smart contract's demands and cause it to self-execute sending the payer the license. UJO is a great example on how smart contracts could be used to minimize overhead costs in both distribution and licensing. UJO's smart contracts not only drastically minimize overhead costs, they also minimize the time it takes for licenses to be granted. By using UJO's smart contracts, licenses are distributed instantaneously. The hassle of figuring out who owns the copyright and having to send emails or make phone calls will no longer have to be a thing. As if this were not convenient enough, royalties generated from a derivative work are also instantaneously channelled to the original singer, songwriter, etc for their share depending upon the license used in the derivative work. UJO also gives fans the ability to tip artists money or buy digital "Badges" of their favorite artists to support them financially. Talk about being artist-friendly! UJO has the potential to effectively cut out the middle-men of the music industry.

### How Blockchain Technology Can Help and Empower DIY Artists

DIY Artists that do not want to sign to a label can benefit greatly from companies like UJO. In Donald Passman's "All You Need to Know About the Music Business", (often referred to as the music industry bible) it is made evident that some record labels take advantage of their signed artists. Some record labels charge artists senseless fees for breakage even though the music is now distributed digitally, and they reserve royalties for long periods of time even though SoundScan renders this practice pointless.<sup>8</sup> Companies like UJO will give DIY artists a decentralized means

of distributing music and getting 100% of their royalties due instantaneously without having to worry about pointless reserves, or senseless breakage fees. Companies based on UJO's blockchain model also provide DIY artists with an autonomous means of selling licenses directly to content creators and other artists. Selling licenses through a decentralized company such as UJO provides an appealing alternative to signing a music publishing deal and giving up 50% songwriter earnings to a publisher. Blockchain technology leaves almost no reason for the DIY artist, looking to keep 100% ownership of his work, to sign to a record label or publishing company. Blockchain companies like UJO effectively cut out unnecessary middle-men and will leave artists better off financially. The ability to have fans send tips directly to the artist at any given time using smart contracts is also great for DIY artists. The reason artists signed to major labels can't benefit from blockchain like DIY artists can is because they don't have the freedom to control their own content. Most signed artists don't have the freedom to put their content in decentralized blockchain platforms like UJO. This means DIY artists will be in a better position (to reap the benefits of blockchain) than signed artists will be.

#### EDM Artists are Loving Cryptocurrency

Cryptocurrency is digital currency based on blockchain technology. EDM artists seem to be crazy about cryptocurrency. <sup>9</sup> Amber Giles, also known as DJ-producer Mija, says that almost everyone she knows around the DJ world is investing in or researching cryptocurrency. Amber says, "think about our demographic, It's a bunch of fucking nerds that work on their computers all day, I feel like we're slightly more in touch with all the modern technology." Amber Giles is not the only DJ that has noticed the cryptocurrency trend around the EDM community either, DJ 3LAU has noticed it as well. DJ 3LAU is a member of a Twitter group of 50 DJ's that are all fans of cryptocurrency. He has admitted that many other EDM artists contact him daily to talk about



cryptocurrency. DJ 3LAU teamed up with SingularDTV in 2018 to launch the world's first cryptocurrency festival.<sup>10</sup> Fans were able to purchase tickets using cryptocurrencies such as Bitcoin, Litecoin, and Ethereum. Tickets for the festival sold out just thirty minutes after DJ 3LAU announced it! Since tickets were sold so fast DJ 3LAU was able to take all the cryptocurrency and liquidate it into U.S Dollars far before the festival was going to start. This means DJ 3LAU knew exactly how much money he had made on ticket sales within one hour of announcing the festival. DJ 3LAU's festival was not his only cryptocurrency endeavor either. On his 27th birthday he made a donation of \$5,000 worth of the Ether cryptocurrency to the nonprofit "Fuck Cancer." EDM artists are the cryptocurrency pioneers that are leading the way towards a blockchain oriented future.

#### Major Companies and Blockchain Technology

Major companies definitely see the potential that blockchain technology has. Companies including Warner Music Group, Warner/Chappell Music, BMG, Global Music Rights, and Red Bull Media House have all partnered with JAAK to provide them with music metadata (Blockchain Firm JAAK Makes Key...). Spotify purchased blockchain startup company Mediachain back in 2017. It seems like major companies know they must understand blockchain technology in case they have to adapt to it. Can you imagine the drastic changes the music industry would take if a Major company like Spotify bought UJO and heavily marketed it to artists and fans? UJO has proven to be effective, but it doesn't have the mainstream popularity that a company like Spotify has. If these two companies were to come together, it would definitely throw a wrench at all the "middle-men" companies such as music distributors, music publishers, and record labels. New artists would be less inclined to sign deals with any of those companies because they could be keeping a majority or all of their copyright, getting paid royalties instantly, and doing it through a

decentralized platform you can trust. If something like this were to happen record labels might not be able to say, “Sign this 360 deal or see yourself to the door,” and if they do the artist will happily see themselves to the door knowing the DIY path is looking very promising. Considering its tremendous benefits, it seems only a matter of time before blockchain becomes mainstream and completely revolutionizes the music industry.

### Conclusion

To the music industry, blockchain technology is like a ticking time bomb waiting to drastically revolutionize it and solve many of its problems. Key features like smart contracts cutting overhead costs and empowering DIY artists, immutability creating tamper-proof, reliable data, and the ability for blockchain platforms to be decentralized so that we don't have to worry about trust issues will usher in the new era of blockchain technology in the music industry. It's a perfect time to be an entrepreneur that understands how blockchain technology can impact the music industry. It's also a great time to be an investor looking to get an early stake in the blockchain market. The music industry has been innovating at more frequent intervals as technology keeps advancing. It has gone from vinyl to CD, to digital purchases, to streaming, and the next frontier seems to be blockchain. It will be interesting to see how long it takes for something to innovate the blockchain system once it establishes itself in the music industry. If history is any indicator, it won't take too long. Perhaps it will be the quantum computers that stir things up after blockchain. Perhaps the day will come where Elon Musk succeeds in colonizing Mars and music enthusiasts listen to their favorite music on the red planet with their best friend who happens to be an artificially intelligent robot. We are living in exciting times!

Endnotes

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