

Blockchain Technology Policy Concerns

Berklee Online

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### **Abstract**

The author would like to build a platform that would help not only her friends but several roles within the music industry with regard to finding and developing talent, releasing and marketing music, and growing fan bases or revenue stream opportunities. Essentially, the platform will serve as a network, fulfillment and education hub where individuals can find resources and trade skill sets. The platform will be built on blockchain technology, which is a technology still very much in its infancy — especially with its application and adoption within the music industry.

In this paper, the author will explore the policies that may impact the launch of her company's new website and business model in terms of execution and adoption of the platform considering the current digital landscape and music industry players. Specific focus will be given to blockchain technology potential impact on policy — because if the framework or foundation has too many risks and ambiguity, the model itself will not be both viable and competitive in the marketplace.

The author needs to be careful with supporting policies that are too heavily weighted on one side. Although the platform is primarily for independent artists, the successfulness of the model is reliant on having readily available expert resources such as other industry professionals including producers, publishers, playlisters, distributors, marketers, independent labels and artist managers. This means the author has to be careful not to alienate those individuals by taking an extremist view.

### **Review of Policies**

Blockchain technology presents interesting policy issues related to registering and monetizing intellectual property, policing piracy, and creating and executing more flexible contracts between and among members in the music supply chain (De Leon and Gupta, 2017). Because a successful model

hasn't been fully adopted within the music industry, it's sure to bring about new policies or adaptations to current ones due to the fact it presents its own unique challenges and concerns.

### **Privacy Protection.**

A record on a blockchain is visible to all, even if individual elements of a transaction are encrypted and not publicly visible. For instance, a passport may be used as proof of validation without revealing the underlying private data. But where this can be a problem is that certain financial institutions are required by law to permanently remove data when required by a court via "right to be forgotten" laws. Blockchain technology doesn't allow data to be deleted, just updated in subsequent blocks (Gilmore, 2017). Whether blockchain technology platforms are exempt would need to be outlined in policy.

### **Assignment of Proper Ownership.**

Just because one is the first to register a copyright doesn't mean he or she is the rightful owner. Perhaps, guidelines for determining ownership will be similar to patents where the first to file is deemed as the owner, and digital signatures will be complementary, supplementary, or the only means needed of evidence to prove rightful ownership. A Nevada bill that deemed smart contracts and blockchain signatures acceptable records under law and an Arizona legislator wants to amend state law to make a signature on blockchain a legal signature under Arizona law (Gilmore, 2017).

The question is how much "trustiness" of ownership needs to be established before it's considered "trustworthy" and holds up in a court of law? Institutions currently involved in the verification process for IP would need to reform accordingly (De Leon and Gupta, 2017). The author imagines policies already around audio fingerprinting would be relevant for determining origin (Unknown, n.d.).

### **Accurate Illegal Act Prevention.**

Despite the encryption capabilities of blockchain, it might be hard to reduce piracy due to the fact pinning liability of infringement would be tricky once there's a decentralized network for which a pirate

version can be uploaded (De Leon and Gupta, 2017). The smart contract may not be set up with an algorithm “smart” enough to detect copyright infringement.

Smart contracts may not be programmed well enough to understand the context of illegal activity. It relates to a similar concern YouTube users have when they receive takedown notices for music that falls under fair use. On YouTube, users often upload and vari-speed tracks to escape its Content ID process. Digital audio workstations could work as next PROs but this could create a formality that Berne forbids in exercising exclusive rights under copyright (De Leon and Gupta, 2017).

Some suggest a contract can be split up, with more vague terms still being outlined in the traditional sense and only the less vague parts programmed as a smart contract, so that contextually based issues will still be handled by real people (Gilmore, 2017). But having to reference outside the smart contract brings an inefficiency in review that undermines part of the reason blockchain is so desirable to the industry — so some might believe it’s more of a hassle to adapt for than the value it can provide.

Because blockchain actions are automated, bonus funds could be anonymously dispersed into various accounts. In 2013, regulatory bodies responsible for preventing financial crimes introduced new regulations to bring bitcoin within the scope of its enforcement, but what about other tokens/currencies? Lawmakers in West Virginia deemed it a felony to use bitcoin or other cryptocurrencies for money laundering with an update to the state’s anti-money laundering statutes, creating a definition for cryptocurrency as a monetary instrument — but this is not a widespread protection (Gilmore, 2017).

### **Liability and Authority.**

This leads into a discussion if an illegal act is committed, who is held liable and who has the authority to pursue? Liability goes even deeper to the core of many discussions that policy makers currently have around AI and machine learning (Gluyas and Day, 2018). Since the smart contracts are meant to be self-executing, how to weigh fault and under what circumstances will need to be considered with some basic guidelines before being rolled out to the masses. For instance, if not executed well, who

is to blame? Does the fault lie with the platform provider, the developer of the formula, the parties utilizing the technology?

The difference between AI and smart contracts is AI could be fully autonomous while with smart contracts, someone is still responsible for the initial programming. However, it's not too far fetched to assume at some point we may want smart contracts to re-program based on what they learn in different contexts that would save a programmer time from setting up all the various rules imaginable.

If the blockchain is where the record information lives, but several individuals involved with the music are in different jurisdictions, certain smart contract rules may deny certain provisions subject to its own laws of jurisdiction. It then becomes a question of which jurisdiction has the authority to interpret and enforce the contract or prosecute its violation. Because the authority figure might shift depending on several minute details, making it overly complex, one could not declare a single authority in the rule (De Leon and Gupta, 2017).

The jurisdiction concern extends to what kind of tokens, bitcoins or other currencies might be used on these platforms. If bitcoin is a commodity, then the Commodity Futures Trading Commission (CFTC) in the U.S. has jurisdiction over local bitcoin exchanges. And one has to consider whether certain transactions can be taxed. There's a unanimously back proposal from senators in Nevada that would block local authorities from instituting taxes or fees on blockchain use — but a more widespread standard would want to be set (Gilmore, 2017).

### **Fair Compensation Calculations.**

Even when one has smart contracts in place, which could be seen as several direct deals, if this is taking place in a large scale, there's only so much pie or split to go around. Which just like we have seen with streaming platforms and the Music Modernization Act, we no doubt will see legislation drafted for what rates are fair on the blockchain to make sure all parties, especially authors, are compensated fairly.

Although there's little doubt that smart contracts would improve fairness of artist compensation overall, it does not eliminate artists from being persuaded into bad deals. Thus, in the early phases of smart contracts, greater oversight to ensure adequate protections to parties with weaker negotiating power should be considered. Existing guidelines such as royalties fixed by consent decrees would need to be reevaluated (De Leon and Gupta, 2017).

The problem lies not within the technology itself in this case, but those who would abuse it.

### **Standardization.**

On the flip side, parties can be in agreement but the technology may not be able to handle the complexity of relationships, dynamically changing triggering options for specific benchmarks or modifying royalty rates depending on the popularity of a composition (De Leon and Gupta, 2017). It makes the industry heavily reliant on those who understand the technology and it would be a tedious process to program and reprogram a formula. Still, do we hold up progress and practically applying the technology? No technology is ever perfect and will be constantly undergoing updates.

That being said, this will require policy as to who creates the formula, how often can it be changed given such reliance — especially if we're looking at this on a larger scale platform that would be universally adopted. One can look to the Global Repertoire Database to find failures with trying to develop something like this, which will hopefully give some insight into where policies can be improved (Milosic, 2015).

It is likely that an algorithmic standard will be developed over time with those programming having to execute in a variety of mimicked real-life scenarios and it becomes the greatest battle since MP2 vs MP3. It would almost seem there would need to be several off-the-shelf standards to make the adoption of it more efficient.

But standardization can be tricky. New legislation requires the party charged with violations have intent and/or actual knowledge. The lack of direct communication between the parties could be a problem

as financial services usually need to comply with rules pertaining to knowing one's customer.

Blockchains and payment networks may soon be exempt, so some countries have severely restricted or banned cryptocurrencies (Gilmore, 2017). If the author's platform is global or cross-country network, this could be a huge issue. It seems more reliable to utilize the network with an already federally approved currency for which many guidelines and governing parties have already been developed.

### **Anti-Trust Protections.**

Looking ahead to how consolidated not only labels and PROs have been but also how consolidated the top players in music streaming are — and how many are becoming more vertically and horizontally expanding (e.g. Apple and Amazon), the same concerns can be said for blockchain platforms. Right now, there are only a few players in the music space. There are discussions of the need to come together to set a standard, because it's harder to get adoption when each platform has its own tokens. So thought to antitrust issues for blockchain monopolies needs to be addressed to keep them in check (De Leon and Gupta, 2017). And we're back to the age old question: how much regulation and control is too much?

One might think that with labels wanting to keep their "black box", blockchain providers will never get too big as they need major content for the end user who is spending the money to buy in. If you follow the money up the supply chain from end user to distributor all the way back up to author, demand will determine supply.

But the major players may be forced to refute or accept claims made at various points on a platform when they're pulled in by mere mention. Just like with iTunes when labels took drastic reduction in prices (upward of one-third), entrenched entities may take a less ideal position in the supply chain as more demand for the technology makes what they offer obsolete.

And they have become wise based on the experience with the digital transition. Spotify purchased MediaChain , a blockchain start-up and PROs like ASCAP and SACEM partnered with IBM to explore

blockchain. PROs are so hamstrung by consent decrees that artificial intelligence – enabled pricing would have to be approved by the Department of Justice, because it may be seen as involving collusion. But the progressive use of blockchain in the music industry may push those decrees to be modernized (De Leon and Gupta, 2017).

### **Conclusion**

At least seven states have enacted or adopted laws that reference blockchain: Arizona, Delaware, Illinois, Nevada, Tennessee, Vermont, and Wyoming. A search for “blockchain” in the legislation-tracking database LegiScan pulls up five bills that were last acted on in 2017 and 19 that were acted on in 2018. Hawaii, New York, Colorado, Nebraska, Vermont, Virginia, Florida, Maryland, and North Dakota are among the states considering bills around blockchain or cryptocurrencies (Jeffries, 2018).

Some more notable policies are a bill in Vermont that made records verified through blockchain technology admissible in court (Gilmore, 2017), or a Wyoming decree that some cryptocurrencies issued on blockchain will not be regulated under state securities law (Jeffries, 2018).

All that said, the consistency across the nation and globally is a bit trickier and lawmakers could be passing bills without truly understanding the technology. Still, it signifies that policy makers are thinking about what might need to be adapted and taking steps in the right direction.

The author will still be in a testing ground with development for many years before the company will see positive revenue due to the investment in R&D as well as the dependency on law and policy makers rulings. But there’s definitely an opportunity to be part of a select group of first movers who are applying blockchain within the music industry — so it’s a matter of high risk, high reward.



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