

## BLOCKCHAIN AND THE DISINTERMEDIATION OF MUSIC

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### Presentation Summary

For most of the 20th century, end-user misappropriation of copyrighted works—in contrast to counterfeit behavior—was not a serious threat to a copyright owners' economic success. The practical and technological barriers to wholesale misappropriation far outweighed the ability of an individual to supplant demand for the copyrighted work and negatively impact the copyright owner's financial interests. The reason is because end-users generally created copies for personal use.

Personal use, at that time, rarely substituted for purchasing a lawful copy. Further, personal use rarely reproduced or distributed misappropriated copies of copyrighted works on a mass commercial scale or at all. Such a formidable, industry-altering economic threat from end-users did not emerge until the 21<sup>st</sup> century. Unauthorized, private copying is, from the music copyright holder's point of view, now equated to, and combated with the same energy and concern as, commercial misappropriation by aggressive direct competitors. The music industry's dramatic shift to a more aggressive and proactive protection and enforcement model against end-users resulted due to the transformation in the technological capabilities of end-users to create perfect digital copies, exploit and adapt them, and disseminate them widely to known and unknown networks.

In addition to changing content creator behavior, the Internet and digital technology led to changes in purchasing and consumption behavior. With increased access to information about content and direct access to content creators, consumers were able to connect and remunerate directly, thus displacing the entrenched "middlemen" infrastructure of the music industry. This displacement is also referred to as disintermediation.

Disintermediation is "the process whereby marketers bypass traditional intermediaries, such as retailers, to sell directly to the final customer/purchaser." This process, certainly not limited to the marketing sector, was energized by the Internet and digital technology. Those quantum leaps in innovation empowered more than just marketers. Content creators, like musicians, songwriters, and performers, were also inspired to become self-reliant rather than relying solely on the traditional third-party studio producer, administrator, and distributor model to create and distribute their content.

In sum, there is little, if any, debate about the substantive, wholesale disruption of "business as usual" in the music industry by decentralized peer-to-peer computer networks like Napster, Grokster, Morpheus, and BitTorrent. But there is a new disintermediating software kid on the block, or rather, blockchain,

that basically just told the Internet and Web 2.0 to “hold my beer.” Translation? We haven’t seen *anything* yet.

The problem of creator’s rights in Web 2.0 is multifold. The Internet of information ushered in the global “free exchange of ideas” but failed to account for how digital technology would fundamentally alter notions of the nature of copyright ownership and property rights in a digital world. Creative content is easily duplicated and pirated even by the average end-user. Reproduction, adaptation, and distribution is accomplished without exhausting the original copy. Additionally, it is difficult, and sometime impossible, to distinguish a master copy from subsequent generation copies.

Additionally, content creators must negotiate with labels, publishers, and distributors to participate in downstream revenue or user data -collection and management. They must also engage other intermediaries (managers, agents, collectives, and other organizations) to track sales and other exploitations, collect and distribute royalties and revenue, and trust that each cog in the unwieldy wheel is acting as an honest broker even though each has a vested interest in extracting a premium for their services. Some intermediaries add value. Others engage in rent-seeking. Disintermediating the music industry is, from a content creator’s point of view, much-needed and long overdue.

The areas of improvement that may prove most impactful for music copyright creators and holders include copyright registration, proof of ownership (addressing the orphan works problem), immutable chain of title transfer, digital rights and content management, a new digital first sale right to counter the music industry’s hyper-licensing culture, self-executing micropayments via smart contract, access controls via technological protection measures, self-executing enforcement of licensing agreements, and the potential for increased value of cryptographically represented and secured rights over time created by digital scarcity.

In this presentation, I will: 1) provide a high-level overview of the technology; 2) highlight some of the chronic problems within the music industry that negatively impact artists and plague traditional intermediaries; note the practical applications of blockchain technology in digital content management and delivery; and 4) explore the policy considerations, concerns, and future of blockchain in maximizing the value of music for creators, improving the music experience for consumers and reducing friction, waste and fraud in the music industry, with or without the Music Modernization Act.

We have officially entered the second digital music revolution. Legacy players and systems like Sony, Universal Music Publishing Group, Warner, ASCAP, BMI, and Harry Fox Agency, as well as yesterday’s trailblazers like Spotify, SiriusXM, Apple Music, Amazon Music, and Google Play Music, must now contend with the latest wave of disruptive and transformative technological

innovation in distributed ledger technology and crypto assets. To be truly transformative, any reform based on blockchain's disruptive potential must necessarily be both effective and reputable to achieve legitimacy.

The measure of effectiveness and legitimacy will be dramatically simplified, empower creators, and disintermediate the industry. Such disintermediation will remove friction, increase transparency, and restore the direct connection between content creators and consumers, leaving only those essential music industry players among labels, publishers, and streaming services, that add value in the process of content creation, remuneration, and dissemination. The future is now.

### **About Tonya M. Evans**

On July 1, 2020, Professor Tonya M. Evans joined the Penn State Dickinson Law faculty to continue and expand her work in blockchain and cryptocurrency, data, technology, entertainment law and social justice. In 2020, she founded the Advantage Evans™ Academy and also hosts the Tech Intersect™ Podcast, a weekly podcast that highlights new and notable experts at the intersections of law, business and technology.

Before joining Dickinson Law, Professor Evans served as Associate Dean of Academic Affairs and Professor of Law at the University of New Hampshire's School of Law, where she created and directed the school's Blockchain, Cryptocurrency & Law online professional certificate program and developed its world-class instructor pool and curriculum.

Professor Evans is the chairperson for the MakerDAO Maker Ecosystem Growth Foundation, and member of the Bermuda Global FinTech Advisory Board, Consensus Grants Board, Emerging Impact Advisory Board and observing member of the Global Blockchain Business Council. She is also a member of the Intellectual Property Committee of the Advisory Council to the United States Court of Federal Claims.

## **Blockchain-based Music Projects**

Comprised of 200 members, the [Open Music Initiative \(OMI\)](#) is a nonprofit calling for open source protocol in the music industry.

[Tune.fm](#) provides seamless value exchange between music listeners and creators. Pay for what you consume and get paid for listening to promoted music around the world.

[Ujo's](#) decentralized platform creates a database of music ownership rights and automates royalty payments.

[Musicoin](#) is a music streaming platform that supports the creation, consumption and distribution of music in a shared economy.

[MediaChain](#) is a peer-to-peer, blockchain database for sharing information across different applications and organizations.

[eMusic](#) is a blockchain-based music distribution and royalty management platform that rewards both artists and fans.

[Mycelia](#) is a collective of artists, musicians and music lovers looking to empower creatives in the music industry.

[VOISE](#) is a blockchain powered app with its own personalized token based on Ethereum.

[Blockpool](#) is a blockchain firm that creates custom code, offers consulting services and helps integrate ledger technology into a business's current systems.

[MusicLife](#) is a blockchain-based music nonprofit that focuses on limiting piracy and establishing a new payment method for artists.

[BitSong](#) is the first decentralized music streaming platform dedicated to artists, listeners and advertisers.

[Digimarc](#) develops solutions for licensing intellectual property for audio, visual and image content.

[Audius](#) is a fully decentralized streaming platform with a community of artists, listeners and developers who collaborate and share music.