# MONEY FOR NOTHING?: CAN NFTS SOLVE MUSICIANS' MONETIZATION PROBLEM?

Dan Ankenman*

**Abstract**: Despite the immeasurable value music provides society, finding ways to monetize their music is often an elusive and challenging prospect for musicians. The music industry has evolved into a consolidated "hits market" in which profits are highly concentrated in a small set of intermediaries and relatively few superstars. This "hits market" not only makes it incredibly difficult for most musicians to make a living with their music, it also fails to capture and compensate musicians who aren't extremely popular for the significant value they create. In the face of this deadweight loss, non-fungible tokens (NFTs) could be a means of disrupting the economic status quo and creating a superior set of economic incentives for musicians. This Article is the first in the legal literature dedicated to evaluating the viability of NFTs as an additional income stream for musicians. After detailing the economics of the traditional music industry and providing a framework for understanding NFTs' asserted value, this Article considers constraints imposed by contractual obligations and copyright law to analyze NFTs' potential to transform music monetization. Ultimately, this Article concludes that, notwithstanding their limitations, NFTs are likely to be an important new source of revenue for musicians who have been left behind by the popularity-driven economic incentives of the traditional music industry.

**Keywords:** NFTs, Blockchain, Music Monetization, Copyright, Web3

* J. Reuben Clark Law School, Brigham Young University

**Table of Contents**

## INTRODUCTION

In October 2007, British rock band Radiohead shocked the world by initially releasing their album *In Rainbows* through their website as a digital download available for the price of "whatever you want"—including nothing.[1] Radiohead's decision to offer their music to fans for free elicited praise from the likes of Bono and Jay-Z and scorn and disbelief from Oasis's Liam Gallagher and Kiss's Gene Simmons.[2] In the nearly fifteen years since the release of *In Rainbows*, the emergence of streaming services has proven prophetic David Bowie's prediction that "[m]usic itself is going to become like running water or electricity."[3] But another emerging technology makes Radiohead's experiment worth revisiting. Non-fungible tokens (NFTs) enable digital scarcity and facilitate new possibilities for artists to transact directly with their fans, offer fans ownership in digital assets, and invite fans to price assets themselves.

Despite their limitations, NFTs are likely to prove to be an important new source of revenue for musicians who can use them to create value for and capture value from their fans that the music industry has previously missed. The benefits of NFTs will be most pronounced for musicians who have been overlooked by the music industry's popularity-driven "hits market" as they take advantage of NFTs' potential for price tiering and community building to capitalize on their tremendous but historically underappreciated value. However, NFT enthusiasts should take care to note that contractual constraints and copyright law are likely to present barriers to NFTs' ability to transform music monetization. In navigating the application of contractual agreements and copyright law to NFTs, courts and practitioners would also do well to recognize that, though they are a transformative transactional technology, NFTs are distinct from the assets in which they represent ownership.

This Article proceeds in three Parts to examine music's current monetization possibilities and predict how NFTs may transform the landscape of music monetization. Part I analyzes the revenue streams, legal framework, and economic incentives that drive the music industry today to explain their impact on musician's monetization opportunities. Part II provides a framework for understanding NFTs and the new economic value many have placed in them by providing a background on the distributed ledger technology that enables NFTs and describing how NFTs derive and create value. Part III ties Parts I and II together by predicting what is likely to occur as the traditional music industry and NFTs collide and concludes that NFTs are poised to provide musicians with an additional income stream that will likely most benefit musicians who build strong communities around their NFTs and take advantage of NFTs' potential for granular price tiering to create and capture value the traditional music industry has previously missed.

## I. MUSIC MONETIZATION IN THE TRADITIONAL MUSIC INDUSTRY

It has never been easy to make it in the music industry. Many musicians struggle to generate income from their music; even fewer attain enough stability to be able to make a living off their music alone. As Billy Joel explained the musician's plight, "I am the Entertainer. And I know just where I stand. . . . Today I am your champion. I may have won your hearts. But I know the

[1] Hilary Lewis, *Radiohead's Innovative Approach Paid Off...Or Did It?*, BUSINESS INSIDER (Oct. 15, 2008, 12:54 PM), https://www.businessinsider.com/2008/10/radiohead-s-innovative-approach-paid-off-or-did-it-.
[2] Craig McLean, *Caught in the Flash*, GUARDIAN, (Dec. 9, 2007), https://www.theguardian.com/music/2007/dec/09/popandrock.radiohead1.
[3] Jon Pareles, *David Bowie, 21st-Century Entrepreneur*, N.Y. TIMES (June 9, 2002), https://www.nytimes.com/2002/06/09/arts/david-bowie-21st-century-entrepreneur.html.

game, you'll forget my name. And I won't be here in another year if I don't stay on the charts."[4] Music is ubiquitous in society, and technological developments have made it easier than ever for artists to create, release, and distribute music. In addition, customers are constantly consuming music in myriad settings including streaming services, social media, films, television, videogames, and more.

Despite the ever-increasing availability of music and the endless demand for music, financial success remains elusive for most professional musicians.[5] In the words of acclaimed songwriter, record producer, and musician T Bone Burnett, "[i]n the digital marketplace, everyone seems to have found a way to make a living off music except the creators . . . ."[6] As a result of limited economic opportunities, musicians must be creative professionally as well as musically to forge their own financial fortunes through a diverse set of income streams that are not purely musical and include tasks many musicians do not find artistically fulfilling.[7] A 2018 survey of musicians in the United States found that the median musician made between $20,000 and $25,000 annually from between three and four different musical sources of income with sixty-one percent of respondents reporting that "their music-related income is not sufficient to meet their living expenses."[8] Additionally, the survey found that only two-thirds of the average musician's annual income came from music-related activities.[9]

Though the picture looks bleak for everyday musicians, the music industry's future appears bright. The recorded music industry has surpassed its 1999 peak after being rocked by the advent of the internet and the digital age.[10] According to the analysis of Spotify's former chief economist, Will Page, the global value of music copyright was $39.6 billion in 2021, an increase of eighteen percent from the year before, notwithstanding the impact of the coronavirus pandemic.[11]

While this data demonstrates that there is money in music, the music industry, like other creative industries, is fundamentally a "hits market" in which investors face a "low risk of extremely high returns and a high risk of a complete loss."[12] To mitigate the costs of the high probability of failure and maximize returns on infrequent successes, Professor Jonathan Barnett has noted that institutional intermediaries (record labels and publishers in the music industry) tend to dominate creative markets.[13] These intermediaries enjoy economies of scale, diversify risk by having large portfolios of creative works, and can generate income internally to "finance future creative productions at a lower cost relative to any source of external capital."[14]

---

[4] BILLY JOEL, *The Entertainer*, *on* STREETLIFE SERENADE (Columbia Records 1974).
[5] *See* Li Jin, *The Creator Economy Needs a Middle Class*, HARV. BUS. REV., 2020 (Dec. 17, 2020), https://hbr.org/2020/12/the-creator-economy-needs-a-middle-class.
[6] T Bone Burnett, *Our Culture Loves Music. Too Bad Our Economy Doesn't Value It.*, WASH. POST (Dec. 18 2015), https://www.washingtonpost.com/posteverything/wp/2015/12/18/our-culture-loves-music-too-bad-our-economy-doesnt-value-it/.
[7] Liz Ansley, *Six Tips to Avoid a Life of Poverty as a Musician*, MUSIC INDUSTRY INSIDE OUT (Mar. 7, 2018), https://musicindustryinsideout.com.au/six-tips-avoid-poverty-musician/.
[8] MUSIC INDUSTRY RESEARCH ASSOCIATION, INAUGURAL MUSIC INDUSTRY RESEARCH ASSOCIATION (MIRA) SURVEY OF MUSICIANS, 1 (June 19, 2018), https://psrc.princeton.edu/sites/g/files/toruqf1971/files/resource-links/report_on_mira_musician_survey.pdf.
[9] *Id.* at 3.
[10] *U.S. Sales Database*, RIAA, https://www.riaa.com/u-s-sales-database/ (last visited May 3, 2023).
[11] Will Page, Global Value of Music Copyright Jumps 18% to a Record High of $39.6bn in 2021: Could it Have Been Even Higher?, TARZAN ECON. (Nov. 3, 2022), https://tarzaneconomics.com/undercurrents/music-copyright-2021.
[12] Jonathan M. Barnett, *Copyright Without Creators*, 9 REV. L & ECON. 389, 398–99 (2013).
[13] *Id.* at 401.
[14] *Id.* at 401–02.

Economic necessity has consequently caused the music industry to evolve into a consolidated market in which record labels and publishers assume the brunt of the risk of product failure but reciprocally capture a sizable portion of the value music generates. Because labels and publishers only profit on the exceptional instances in which an artist or songwriter is commercially successful (and thereby face notable uncertainty when signing unproven artists or songwriters), they must be able to capitalize on this success when it occurs. This is primarily accomplished through copyright law. Accordingly, music copyright and these intermediaries are deeply interconnected as each has shaped the development of the other. A basic knowledge of these intermediaries and a basic knowledge of music copyright thus go hand in hand and are essential for understanding how music can be monetized. This Part describes how musicians and intermediaries monetize copyrights in songs and recordings, gives a brief synopsis of musicians' income from sources other than copyright, and finishes with a summary of how musicians' dependence on different sources of revenue may shift over time.

## A. Copyright as a Monetization Tool

In the United States, copyright protection extends to "original works of authorship fixed in any tangible medium of expression."[15] Music copyright presents special complexity because music generally implicates two separate categories of works of authorship identified by the Copyright Act: (1) "musical works" and (2) "sound recordings."[16] Thus, there are separate copyrights in an underlying musical work or song, commonly referred to as the "publishing" rights, and the copyright in a sound recording, or "master."[17] For example, the copyright in the underlying musical work of Bob Dylan's "Make You Feel My Love" is separate from the copyright in Dylan's recording of the song. Recordings of the song by artists such as Adele, Garth Brooks, Billy Joel, and Timothy B. Schmidt each carry their own master use rights, but each implicates the same publishing rights in one underlying musical work.

Copyright holders enjoy a bundle of exclusive rights that include the rights to reproduce, adapt, distribute, publicly perform, and publicly display their copyrighted works.[18] Publishing rights and master use rights are rights in distinct works of authorship in the eyes of copyright law and often have different copyright holders.[19] Consequently, publishing and master use rights have discrete entitlements and monetization opportunities in addition to uses that require permission from and compensation to both the controllers of the publishing rights and the master use rights.[20]

### 1. Master Monetization

There are a variety of ways in which rights in recordings may be monetized. The exclusive rights pertinent to copyright in masters are the rights to reproduce, adapt, distribute, and publicly perform the sound recording by means of a digital audio transmission.[21] The largest players in the monetization of these recordings are record labels. Three major labels dominate the recorded music industry. As of 2020, Universal Music Group had a thirty-two percent market share; Sony Music Entertainment had a twenty-one percent market share; and

---

[15] 17 U.S.C. § 102(a).
[16] *Id.*
[17] KRISTELIA GARCIA, CONTRACTS AND COPYRIGHT: CONTEMPORARY MUSICIAN INCOME STREAMS, OXFORD HANDBOOK OF MUSIC L. & POL'Y 3 (Sean M. O'Connor ed. 2020).
[18] 17 U.S.C. § 106.
[19] GARCIA, *supra* note 19, at 3.
[20] *Id.* at 3–4.
[21] 17 U.S.C. § 106.

Warner Chappell Music had a sixteen percent market share in the recorded music industry.[22] Other "independent" labels frequently partner with one of these major labels for at least some functions, such as distribution and promotion, though there are some labels that are "true independents" and do not rely on major labels for these functions.[23] The following Subsections explore the fundamental bargain labels strike with artists, including an explanation of how each provides value to the other, and summarize the revenues that masters produce for labels and artists.

*a. Labels' Bargain with Artists*

Notwithstanding the dramatic changes the recording industry has undergone in the digital age, most artists still seek to partner with record labels to produce and commercialize their recordings. Historically, it was cost prohibitive for an artist to record, produce, mix, promote, distribute, and monetize recordings of their music without the financial support, infrastructure, and expertise of a record label.[24] But technological progress has made recording technology and distribution channels far more accessible. For instance, Billie Eilish and her brother and producer Finneas famously recorded Eilish's multi-Grammy-winning album *When We All Fall Asleep, Where Do We Go?* in a bedroom studio set up estimated to cost around $3,000.[25] In addition to advancements in recording technology, the internet has completely reshaped music promotion and distribution as streaming platforms and social media have overtaken traditional music distribution and advertising channels.

While some question the need for labels at all in today's music world, record labels have reinvented themselves and remain incredibly powerful and influential.[26] Indeed, the International Federation of the Phonographic Industry contends: "In today's dynamic global music ecosystem, the role of the record label as the leading investor in music and partner and collaborator with artists has never been more important."[27] Modern labels perform a wide variety of functions such as identifying talent, sculpting artists' public images, funding and overseeing recording projects, distributing recordings, promoting recordings, managing artist catalogs, and collecting royalties on behalf of artists.[28] Independent artists must fulfill these functions themselves and may not have the interest, expertise, or time to perform all of them. Many artists (including Eilish, who is with Universal's Interscope Records)[29] still find tremendous value in partnering with major labels. In addition to deep pockets, labels have a wealth of connections, experience, and staff that remain important for artists, especially those seeking to reach a large audience.[30]

---

22 Dylan Smith, *What Are the Biggest Record Labels? Here's a Quick Rundown*, DIGITAL MUSIC NEWS (June 18, 2021), https://www.digitalmusicnews.com/2021/06/18/biggest-record-labels-of-2021/.
23 DONALD S. PASSMAN, ALL YOU NEED TO KNOW ABOUT THE MUSIC BUSINESS 72–73 (10th ed. 2019).
24 *Id.* 1t 75.
25 Ashley King, *Billie Eilish's Bedroom Studio Costs Less Than $3,000—What's Your Excuse?*, DIGITAL MUSIC NEWS (Jan. 30, 2020), https://www.digitalmusicnews.com/2020/01/30/billie-eilish-bedroom-studio/.
26 LARRY S. MILLER, SAME HEART. NEW BEAT. HOW RECORD LABELS AMPLIFY TALENT IN THE MODERN MUSIC MARKETPLACE, MUSONOMICS 7, https://s3.amazonaws.com/cache.transmissionmedia.com/musonomics/MusonomicsModernLabelReport.pdf.
27 *Record Companies: Powering the Music Ecosystem*, IFPI, https://powering-the-music-ecosystem.ifpi.org/ (last visited May 3, 2023).
28 *Id.*
29 *Billie Eilish*, INTERSCOPE RECORDS, https://www.interscope.com/artist/billie-eilish/#/ (last visited May 3, 2023).
30 PASSMAN, *supra* note 25, at 77.

Although the terms of recording contracts vary widely, labels are not willing to perform these functions for free. Labels typically require that artists assign them the copyrights to their recordings in exchange for financing the recording process and the other services labels perform.[31] Though the Copyright Act provides a statutory process for terminating copyright assignments,[32] labels likely capture the vast majority of value generated by masters before the termination window begins as the economic value of sound recordings, including "blockbuster" records, tends to decline sharply within a year after its release.[33] Still, the specter of termination rights may empower artists with greater leverage to renegotiate more favorable terms,[34] while other artists may choose to recapture the rights in their masters to regain control or to assign the rights to someone else. Recording contracts also almost always contain exclusivity provisions[35] and restrictions on the artist's right to re-record songs recorded during the term of the contract.[36]

In return for these concessions, artists receive a portion of royalties generated by their masters. However, before artists receive any royalties, the artists' share of the masters must first generate enough revenue to recoup any advance artists received from the label.[37] Labels pay artists advances to cover the costs of producing recordings.[38] Artists are not be required to repay labels directly for advances, but artists will not receive any royalties from their masters until the label has recouped its costs.[39] Because advances may be substantial, records often do not generate enough revenue to recoup the advance.[40] This means that many artists, including those signed to major labels, do not receive any royalties from their recordings.[41]

Because labels do not recoup their investments in most artists, they must capitalize on revenue from the relatively few artists who defy the odds and are profitable by requiring artists to assign their rights in their recordings and taking a majority of the revenue generated by the recordings.[42] While this model enables labels to take a chance on unproven artists, all artists receive a lower share of revenues from their recordings as a result. Though established artists may be able to secure more favorable terms,[43] successful artists may feel undercompensated as much of the revenue they generate is used to finance the label and other artists. But that is the

[31] *Id.* at 198.
[32] Assignments made on or after January 1, 1978, may be terminated within a five-year window that begins thirty-five years after the date of assignment, 17 U.S.C. § 203, while assignments made before January 1, 1978 may be terminated within a five-year window beginning on the later of fifty-six years after the assignment or January 1, 1978, *Id.* § 304(3).
[33] Kristelia García, James Hicks & Justin McCrary, *Copyright and Economic Viability: Evidence from the Music Industry*, 17 J. EMPIRICAL L. STUD. 704–09 (2020) (finding that average album sales decline to five percent of "their initial peak only months after release and are negligible beyond the first year;" *Id.* at 704, that average track sales fall to twenty percent of "their initial peak after one year of release" and thereafter "slowly decline[] to a negligible volume;" *Id.* at 705, that streaming declines "more gently," with albums falling to about twenty-five percent of their initial peak after one year, before later "flatten[ing] out" at slightly under twenty percent of its initial peak; *Id.* at 706–07, and that "declines are remarkable similar" for "blockbuster recordings, *Id.* at 709.
[34] Kike Aluko, *Terminating the Struggle over Termination Rights*, 10 HARV. J. SPORTS & ENT. L. 119, 123 (2019).
[35] PASSMAN, *supra* note 25, at 166–69.
[36] *Id.* at 170.
[37] GARCIA, *supra* note 19, at 3–4.
[38] *Id.*
[39] PASSMAN, *supra* note 25, at 85–87.
[40] Mark Tavern, *An Artist's Guide to Royalties, Recoupment & Cross-Collateralization*, MARK TAVERN MGMT., (Aug. 1, 2022), https://www.marktavern.com/blog/2020/8/1/an-artists-guide-to-royalties-recoupment-amp-cross-collateralization.
[41] *Id.*
[42] *See* Barnett, *supra* note 14, at 405.
[43] PASSMAN, *supra* note 25, at 91–92.

nature of a "hits market" like the music industry where labels do not profit at all from the vast majority of artists and survive off of revenue from the rare artists who are profitable.[44]

*b. Master Revenue Streams*

Having established their respective rights, labels and artists are positioned to monetize their recordings. Masters generate revenue through royalties received from physical sales and streaming, royalties from digital radio transmission from services like Pandora and SiriusXM,[45] and synchronization license fees.[46] Because streaming is by far the most important of these, this Article focuses on that source of revenue.

Streaming revenue alone accounted for eighty-four percent of revenue for the recorded music industry in 2022.[47] Despite the significant revenue generated by streaming, most artists do not receive meaningful royalties from streaming of their recordings. Though per-stream numbers can be calculated retroactively, Spotify, like other streaming services, pays artists on a pro-rata—not a per-stream—basis.[48] This means that streaming services distribute a portion of revenue from a given period, typically around two-thirds of revenue per month, to record labels based on the "streamshare" associated with each label in that period.[49] The labels subsequently distribute royalties to artists based on their contractual terms. This prorated system distributes streaming revenue according to the relative share of streams an artist has and not by their absolute number of streams. While the number of artists generating significant income from streaming services is growing,[50] streaming revenue is nonetheless concentrated in a relatively small number of highly successful artists.[51] And because three major labels dominate the market, the major labels receive revenue from streams of known and unknown artists while revenues from streaming royalties are profoundly uneven for artists.

The prorated nature of streaming stands in stark contrast to the traditional model of physical sales (as well as digital downloads) in which artists received a fixed royalty per unit sold, regardless of how many times that unit was used. Streaming, on the other hand, rewards repeated and widespread use instead of sale of a particular good. While consumers benefit greatly from the convenience of accessing millions of songs an unlimited number of times for a fixed rate, this new model comes at a cost to artists who have a hard time competing in an increasingly congested market that rewards artists solely on their ability to break through the noise and become popular. No matter how ardently a small group of fans listens, today's model requires far more than a cult following to produce meaningful streaming revenues. But for labels and artists with substantial streamshares, streaming royalties make copyright in recordings highly profitable.

2. Monetizing Publishing Rights

---

[44] Barnett, *supra* note 14, at 398–99.
[45] *See* PASSMAN, *supra* note 25, at 314–15; *Digital Performance Royalties: The Basics*, SOUNDEXCHANGE, https://www.soundexchange.com/digital-performance-royalties/ (last visited May 3, 2023).
[46] For a brief synopsis of synchronization licensing, see *infra* Section I.A.2.C.
[47] Joshua P. Friedlander & Matthew Bass, YEAR-END 2022 RIAA REVENUE STATISTICS, RIAA 1 (Mar. 2023), https://www.riaa.com/wp-content/uploads/2023/03/2022-Year-End-Music-Industry-Revenue-Report.pdf.
[48] *Spotify and the Streaming Economy*, LOUD & CLEAR, https://loudandclear.byspotify.com/ (last visited May 3, 2023).
[49] *Id.*
[50] *Id.*
[51] Tim Ingham, *Spotify Dreams of Artists Making a Living. It Probably Won't Come True*, ROLLING STONE (Aug. 3, 2020), https://www.rollingstone.com/pro/features/spotify-million-artists-royalties-1038408/.

The second class of copyrighted works relevant to the music industry is the right in an underlying musical work, or the publishing right. Publishing rights generate revenue through the exclusive rights to publicly perform, adapt, and reproduce the work.[52] Songwriters often choose to assign copyright in their songs to entities called publishers who handle the administration of the copyright in exchange for a share of monies generated by the song.[53] Publishers work to promote and place songs, match songwriters with each other, collect royalties, and otherwise handle the administration of a song's copyright.[54] Universal, Sony, and Warner Chappell all have publishing arms, but the publishing market is much less concentrated than the recorded music market. Publishing companies are also generally organizationally simpler than record labels and do not require as much staff or financing to get off the ground. Though songwriters may also choose to self-publish, assigning copyright to a publisher allows a songwriter to focus on writing music instead of handling the administration and monetization of their copyrights alone.

The share of royalties that a songwriter receives is referred to as the "writer's share" while the portion received by the publisher is called, unsurprisingly, the "publisher's share."[55] If a song has more than one writer, each writer may have a different publisher. The number of writers and publishers with an interest in a musical work can consequently grow large very quickly, especially in today's world where songs frequently have many writers. Although compensation for publishing rights takes multiple forms, the most important revenue streams for songwriters and publishers are public performance royalties, mechanical license royalties, and synchronization license fees.[56]

*a. Public Performances*

Public performance royalties are the most significant source of income songwriters receive from the rights in their songs. Copyright holders have the exclusive right to publicly perform their works.[57] The Copyright Act's broad definition that "to 'perform' a work means to recite, render, play, dance, or act it, either directly or by means of any device or process . . ." encompasses a wide range of activities.[58] The Act's definition of a "public" performance tempers this slightly but is nonetheless expansive:

> To perform . . . a work "publicly" means—
>
> **(1)** to perform . . . at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or
>
> **(2)** to transmit or otherwise communicate a performance . . . of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display

---

[52] 17 U.S.C. § 106.
[53] PASSMAN, *supra* note 25, at 220–25.
[54] *Id.*
[55] *Id.* at 222.
[56] *Id.* at 225
[57] 17 U.S.C. § 106(4).
[58] *Id.* at § 101.

receive it in the same place or in separate places and at the same time or at different times.[59]

Public performances of music are thus ubiquitous, occurring not only at formal events like concerts but also online, on television, on the radio, in stores, in schools, and in social gatherings.

Because it is impracticable for songwriters and publishers to monitor and grant permissions for all public performances and collect these royalties themselves, Performing Rights Organizations (PROs) were formed to keep track of public performances, collect public performance royalties, and distribute these royalties to songwriters and publishers. In the United States, the primary PROs are the American Society of Composers, Authors and Publishers (ASCAP); Broadcast Music, Inc. (BMI); SESAC (formerly the Society of European Stage Authors and Composers); and Global Music Rights (GMR). Rather than require a license for each individual song in a PRO's catalogue, PROs offer blanket licenses that cover every song in their catalogues. ASCAP and BMI are the oldest and most dominant PROs and allow any songwriter to affiliate with them. Due to their concentrated control of performance rights, ASCAP and BMI have their prices governed by consent decrees set by the Southern District of New York and cannot refuse to grant blanket licenses.[60] In contrast, songwriters must be invited to join SESAC and GMR, who both charge higher prices based on their narrow focus on promoting elite catalogues. Songwriters may only affiliate with one PRO at once while major publishers generally have arrangements with all of the major PROs.[61] As a result, SESAC and GMR have more limited catalogues but generally charge higher prices based on the high caliber of writers affiliated with them (SESAC has artists like Bob Dylan, Adele, and David Crosby[62] while GMR, whose catalogue is much smaller, represents artists like Bruno Mars, Leon Bridges, and Bruce Springsteen).[63]

*b. Mechanical Royalties*

The second major source of revenue for songwriters and publishers is mechanical royalties. Mechanical royalties are a share of royalties record labels pay to use a song in a recording. Because a recording of a song is a derivative work and copyright holders of songs have the exclusive right to create derivative works, a mechanical license is necessary to reproduce and distribute a musical work as a recording.[64] Congress established compulsory mechanical licenses to prevent monopolistic abuse by publishing rights holders, though parties may also reach voluntary agreements.[65] Calculating royalties is much simpler for physical record sales and digital downloads than for streaming activity because mechanical royalties are

---

[59] *Id.*
[60] *See Antitrust Consent Decree Review – ASCAP and BMI 2019*, U.S. DEP'T JUST., https://www.justice.gov/atr/antitrust-consent-decree-review-ascap-and-bmi-2019 (last visited May 3, 2023). Songwriters and publishers argue that they are undercompensated in part because of the consent decrees. The Music Modernization Act sought to remedy some of the problems by moving to a "willing buyer/willing seller" review to model arm's length negotiations and alternating consent decree reviews between judges in the Southern District of New York instead of assigning all reviews to a single judge.
[61] PASSMAN, *supra* note 25, at 226–31.
[62] SESAC Inc, *SESAC Celebrates Songwriters and Publishers with 2021 Nashville Music Awards*, PR NEWSWIRE (Nov. 16, 2021), https://www.prnewswire.com/news-releases/sesac-celebrates-songwriters-and-publishers-with-2021-nashville-music-awards-301425938.html.
[63] *We Represent the Greatest & Your Favorite Music Creators*, GLOBAL MUSIC RIGHTS https://globalmusicrights.com/catalog (last visited May 3, 2023).
[64] BOB KOHN, KOHN ON MUSIC LICENSING 683–84 (5th ed. 2019).
[65] *Id.* at 700–01; 17 U.S.C. § 115.

set at a fixed rate for each unit sold. In the United States, the Harry Fox Agency is often enlisted by publishers to issue and enforce mechanical licenses and collect royalties, in exchange for a share of monies collected.[66]

In recent years, streaming services have greatly complicated the mechanical royalty landscape. One of the primary objectives of the Music Modernization Act, enacted in 2018, was to update the mechanical royalty infrastructure in light of the transformative effect of streaming services on music distribution.[67] Songwriters and publishers had brought infringement suits against streaming services that frequently failed to obtain mechanical licenses for songs and pay royalties and often had not even identified the rightsholders to songs.[68] To better ensure that songwriters and publishers received compensation and evade pending legal peril for streaming companies, Congress created the Mechanical Licensing Collective (MLC) to facilitate the payment of mechanical royalties to songwriters and publishers from streaming services.[69] The MLC established a publicly available database where rightsholders can register their shares in songs.[70] The MLC distributes royalties based on works registered on the site. If a song or a portion of the publishing rights remains unclaimed, the MLC is authorized to distribute unmatched royalties to songwriters and publishers on a market share basis after holding the royalties for three years.[71]

#### *c. Synchronization Licensing*

Finally, publishers and songwriters often license their songs to be synchronized with audiovisual works (such as films, televisions programs, music videos, and social media posts) in exchange for a fee. These licenses are referred to as synchronization or synch licenses. If the licensee is not using an original recording, they also need to receive permission from the label or whoever controls the master to obtain a synch license. There are no compulsory licenses for audiovisual works, so synchronization licenses always need to be negotiated. Licensing fees can be impacted by numerous factors including the value of a song, the importance of the song for its intended use, the scope of the intended use, co-publishing or songwriting agreements, and the budget of a project.[72] Together, these three revenue streams make up the most important sources of revenues for publishers and songwriters from copyrights in songs.

### B. Other Major Sources of Musicians' Income

While music copyright is worth more than ever before,[73] musicians are venturing more and more into income streams outside of music, such as television appearances, clothing lines, and sponsorships.[74] Not wanting to be left out, record labels have increasingly inserted

---

66 PASSMAN, *supra* note 25, at 231–32.
67 *See Id.* at 239–41.
68 *Id.*
69 *Id.*
70 *The MLC Public Work Search*, MECHANICAL LICENSING COLLECTIVE, https://portal.themlc.com/search (last visited May 3, 2023).
71 *See* 17 U.S.C. § 115(d)(3)(H)(i); *Historical Unmatched Royalties*, MECHANICAL LICENSING COLLECTIVE, https://www.themlc.com/historical-unmatched-royalties (last visited May 3, 2023).
72 KOHN, *supra* note 66, at 484–94.
73 *See* Will Page & Shannon Nitroy, *Global Value of Music Copyright is Bigger Now Than It's Ever Been*, TARZAN ECON. (Mar. 30, 2022), https://tarzaneconomics.com/undercurrents/copyright-2001-2020.
74 *See* Neil Shah, *From Rihanna to Kanye West: Why Music's Biggest Stars Aren't Focused on Actual Music*, WALL ST. J. (July 22, 2020, 9:00 PM), https://www.wsj.com/articles/from-rihanna-to-kanye-west-why-musics-biggest-stars-arent-focused-on-actual-music-11595466000.

themselves into these revenue streams through the emergence of "360 deals."[75] In a 360 deal, labels receive not only a portion of revenue generated by recordings, but also revenue from touring, sponsorships, songwriting royalties, television appearances, and potentially any income artists generate. Labels justify receiving shares of these income streams by asserting that, in today's music industry, they do not just make records but build artists' brands and deserve a piece of all revenue created by the brands they build.[76] Superstar artist brands have economic value far beyond musical activities. According to reporting by Neil Shah, music executives estimate that "[r]oughly 20% to 50% of a typical superstar's income now comes from revenue unrelated to music activities."[77] Terms vary based on the respective bargaining power of artists and labels, but these arrangements underscore the powerful positions of record labels today and their unwillingness to undertake risk in an uncertain market without ensuring a piece of any reward of that risk.

The internet has created other new revenue streams for musicians through services like YouTube, TikTok, Patreon, Twitch, and Instagram.[78] YouTube, TikTok, and Instagram all generate the bulk of their revenue from advertising. As a result, creators are compensated based on how much their content exposes users to ads. Patreon derives its inspiration from patrons of the arts who sponsored artists prior to the commoditization of art and allows creators to charge a monthly fee to users in exchange for access to exclusive content or access to the creator. Twitch is a livestreaming service that allows artists and fans to interact and also allows creators to collect subscription fees and tips from fans in addition to revenue available from advertisements. All these services require creators to satisfy criteria, such as having a certain number of followers, before they can monetize their content. In addition, these new content forms have illustrated the interactive relationship between technology and creativity in incentivizing or even constraining creators to make certain types of content to succeed on the platform.[79] Each of these forums enables creators to build a community of followers and interact with them and to receive compensation from the platform in exchange for the activity, and resulting user data, they produce for the website. Though these platforms have established a new source of income for creators, it remains the case that, as with traditional income streams for musicians, "wealth is concentrated at the top."[80]

## C. Overall Picture for Musicians

As noted, musicians often rely on a diverse set of income streams, many of which may not be directly related to copyright royalties and intermediaries. Though touring revenue steeply declined in 2020 as a result of the Coronavirus pandemic, a trend many are hopeful has passed,[81] it was historically a critical aspect of musicians' income with global touring revenues peaking in 2019 at $5.55 billion.[82] Other important revenue streams include sponsorships and social media, as discussed in Part I.B above. Still, 360 deals in many cases give labels a piece

---

[75] *See* PASSMAN, *supra* note 25, at 102–07.
[76] *Id.* at 102.
[77] Shah, *supra* note 76.
[78] Jin, *supra* note 5.
[79] *See* Rex Woodbury, *The Two-Way Mirror of Art and Technology*, DIGITAL NATIVE (Apr. 21, 2021), https://digitalnative.substack.com/p/the-two-way-mirror-of-art-and-technology.
[80] Jin, *supra* note 5; *see also* Herbert Lui, *YouTube and Patreon Still Aren't Paying the Rent for Most Creatives*, MARKER (Mar. 21, 2021), https://marker.medium.com/if-you-cant-afford-to-do-it-for-free-don-t-be-a-creator-569488f3ef72.
[81] Dan Gallagher, *Music Needs to Get the Show Back on the Road*, WALL ST. J., Feb. 28, 2022, https://www.wsj.com/articles/music-needs-to-get-the-show-back-on-the-road-11646049780.
[82] Marie Charlotte Götting, Global Music Tour Revenues 2011-2020, STATISTA, Nov. 9, 2021, https://www.statista.com/statistics/380120/global-music-tour-gross-revenues/.

of these income streams. Moreover, the importance of particular revenue streams may depend on the stage of an artist's career. Following a qualitative survey of artists at various stages of their careers, Professor Kristelia Garcia concluded that copyright-related income streams—stemming from recording, publishing, and synch—appeared to be most important at the beginning of an artist's career when the artist receives an advance and toward the end of a successful artist's career when artists may reclaim their masters.[83] Touring and other income unrelated to copyright thus seems to correspondingly make up the largest portion of income in the middle stages of an artist's career.[84]

This explanation of strategies for monetizing music highlights both the complexity of the music industry and the copyright law that drives it as well as the music industry's nature as a "hits market" in which there is typically little room between fame and fortune and poverty and obscurity. Although music that does not top the charts may still have great artistic value, the current model does not offer such music meaningful economic viability. A possible technological solution has recently emerged: non-fungible tokens (NFTs) enabled by distributed ledger technology (DLT).

## II. NFTS AND DISTRIBUTED LEDGER TECHNOLOGY

An NFT is a record of a "unique digital asset whose ownership is tracked on a blockchain . . . ."[85] In 2021, NFTs crawled out of the woodwork to amass a trading volume of roughly $21.5 billion that year.[86] The NFT market has since cooled down considerably, but NFTs accumulated approximately $24.7 billion in sales in 2022 despite steep declines in the NFT market and crypto assets generally later in the year.[87] Although NFTs have been especially popular in art and media, they are a transactional technology that can be used to represent any unique digital asset. While NFTs and other blockchain-based technologies have garnered significant public attention, and some are unabashedly "bullish" about how they may revolutionize practically every aspect of life,[88] NFTs and blockchain technology remain little understood by many. For example, it is easy to conflate an NFT with the asset whose ownership it represents. But NFTs only authenticate ownership; "an NFT is not the thing it represents."[89]

Fueling the rise of NFTs is a broader belief in a digital evolution to a "decentralized internet run on crypto tokens" known as "Web3."[90] Fed up with "giant tech gatekeepers profiting off everyone's creativity and data,"[91] believers posit that—powered by DLT systems—Web3 will decentralize and democratize everything on the internet and enable users

---

[83] GARCIA, *supra* note 19, at 17.
[84] *Id.*
[85] Linda Xie, *A Beginner's Guide to NFTs*, MIRROR, Jan. 4, 2021, https://linda.mirror.xyz/df649d61efb92c910464a4e74ae213c4cab150b9cbcc4b7fb6090fc77881a95d.
[86] The Rise of NFTs, CRYPTOSLATE (Jan. 14 2022, 3:30 PM), https://cryptoslate.com/the-rise-of-nfts-footprint-analytics-annual-report-2021/.
[87] Andrew Hayward, *NFT Sales in 2022 Nearly Matched the 2021 Boom, Despite Market Crash*, DECRYPT (Jan. 4, 2023), https://decrypt.co/118438/2022-versus-2021-nft-sales.
[88] Andrew Steinwold, *Crypto Will Change Value, NFTs Will Change Society*, SUBSTACK (Jul. 19, 2020), https://andrewsteinwold.substack.com/p/crypto-will-change-value-nfts-will.
[89] What is an NFT?, ECONOMIST (Oct. 15, 2021), https://www.economist.com/the-economist-explains/2021/10/12/what-is-an-nft.
[90] Ephrat Livni, *Welcome to 'Web3.' What's That?*, N.Y. TIMES (Dec. 5, 2021), https://www.nytimes.com/2021/12/05/business/dealbook/what-is-web3.html.
[91] Ephrat Livni & Eric Lipton, *How Venture Capitalists Think Cryptocurrency Will Reshape Commerce*, N.Y. TIMES (Nov. 2, 2021), https://www.nytimes.com/2021/10/29/us/politics/crypto-currency-venture-capitalists.html.

to steal back control of the internet from overgrown intermediaries.[92] Yet, as part of a movement predicated on disintermediation and decentralization, terms like blockchain technology, NFTs, and cryptocurrency have in many ways become "meaningless buzzwords."[93] Lacking a "genuine and universal definition," they leave many, both expert and novice, confused and with "unrealistic expectations."[94] Still, an attempt at a basic conceptual framework for the technological ecosystem NFTs inhabit is necessary to analyze their potential utility and economic value. To lay the groundwork for analyzing how NFTs could revolutionize the monetization of music, this Part provides an overview of the DLT systems that enable NFTs, explains what NFTs are and what makes them valuable, and concludes with a summary of common critiques of DLT systems and NFTs and typical responses NFT enthusiasts give to these criticisms.

## A. What is Distributed Ledger Technology?

Cryptocurrencies, blockchains, and NFTs are all built around DLT systems. Although the phrases "DLT system" and "blockchain technology" are frequently used interchangeably, blockchain technology may be thought of as a type of DLT system "that uses a particular data structure consisting of a chain of hash-linked blocks of data."[95] DLT systems take many forms but are fundamentally "a system of electronic records that enables independent entities to establish a consensus around a shared 'ledger'—without relying on a central coordinator to provide the authoritative version of the records."[96] One group of scholars proposes that a true DLT system is a system of electronic records with five elements: (1) a consensus mechanism; (2) an "authoritative ordering of cryptographically-validated ('signed') transactions" resulting from the consensus mechanism; (3) transactions must be recorded and "made persistent" by replicating the data across a network of computers, each a "node;" (4) transactions must be linked by cryptographic hashes to make them "tamper-evident;" and (5) a shared authoritative record of the results of the consensus process—the "ledger."[97] These interconnected characteristics of DLT systems may be best understood by illustrating them through an example: the Bitcoin blockchain.

In 2009, the pseudonymous Satoshi Nakamoto created the first cryptocurrency: Bitcoin.[98] Arguing that reliance on third parties to transact and communicate over the internet raises transaction costs and leads to the ever-present specter of reversed transactions, Nakamoto proclaimed the need for "an electronic payment system based on cryptographic proof instead of trust . . . ."[99] This substitution of cryptographic proof for trust is accomplished through a DLT system based on blockchain technology that provides a decentralized and publicly available record of all transactions. Bitcoin can be created in two ways: (1) by

---

[92] *See* Livni, *supra* note 92; Livni & Lipton, *supra* note 93.
[93] Michel Rauchs, Andrew Glidden, Brian Gordon, Gina Pieters, Martino Recanatini, François Rostand, Kathryn Vagneur & Bryan Zhang, DISTRIBUTED LEDGER TECHNOLOGY SYSTEMS: A CONCEPTUAL FRAMEWORK, CAMBRIDGE CENTRE FOR ALTERNATIVE FINANCE (Aug. 2018) 92, https://www.ssrn.com/abstract=3230013 [hereinafter DISTRIBUTED LEDGER TECHNOLOGY SYSTEMS].
[94] *Id.* at 20.
[95] *Id.* at 15.
[96] *Id.* at 23.
[97] *Id.*
[98] Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System*, BITCOIN (2009), https://bitcoin.org/bitcoin.pdf.
[99] *Id.* at 1.

someone purchasing Bitcoin and (2) by someone "mining" Bitcoin. But Bitcoin's source code caps the eventual supply of Bitcoin at twenty-one million.[100]

"Mining" is the consensus mechanism employed by Bitcoin to verify the authenticity of transactions. Miners verify transactions on the blockchain proposed by users by solving "cryptographic proof of work problems."[101] These problems require an intense amount of computing power as, through trial and error, miners solve a hash function to verify transactions and add blocks to the chain.[102] In other words, miners provide the cryptographic proof upon which Bitcoin is premised. These hash problems are described as "proof of work" because their complexity dictates that someone could only find a solution by putting in the work.[103] The solutions to hash functions (1) have a predetermined length (64 characters for Bitcoin, which uses the SHA-256 algorithm), (2) cannot be solved in reverse, and (3) are changed dramatically even by only slight changes in the input.[104] Miners compete to be the first to solve these cryptographic hash functions and are rewarded with Bitcoin if they are the first to solve a problem and verify a transaction. The ledger is not held in any centralized server or source but is shared across the network of computers of Bitcoin miners.[105] Additionally, the ledger builds upon itself and relies upon the history of past transactions to authenticate new transactions.[106] Because each Bitcoin's full history is recorded on the ledger, and new transactions are predicated on approval through the "proof of work" consensus mechanism, it is virtually impossible to double spend Bitcoin or reverse Bitcoin transactions.[107] All of this is accomplished through reliance on cryptography and computer code rather than trust in third-party intermediaries.

Many other cryptocurrencies have been developed since Bitcoin, and these newer currencies use a variety of approaches to engineering a DLT system. The Ethereum blockchain is second only to Bitcoin in its current economic value. Ethereum was developed to be a highly customizable "blockchain with a built-in . . . programming language" and uses self-executing "smart contracts" to give users the power to create their own systems and use cases.[108] Eventually, programmers devised the ERC-721 standard to allow non-fungible assets to be recorded and exchanged using the Ethereum blockchain.[109] The smart contracts Ethereum employs are not conventional legal contracts but rather "computerized transaction protocols" that are self-executing and "minimize the need for trusted intermediaries."[110] A sort of "digital vending machine," smart contracts guarantee specified output if given the right input.[111]

---

[100] David Canellis, *Here's Why Satoshi Nakamoto Set Bitcoin's Supply Limit to 21 Million*, NEXT WEB (Jul. 8, 2019, 12:42 PM), https://thenextweb.com/news/heres-why-satoshi-nakamoto-set-bitcoin-supply-limit-to-21-million.
[101] Ritchie S. King, David Yanofsky & Sam Williams, *By Reading this Page, You Are Mining Bitcoins*, QUARTZ, (Dec. 17, 2013), https://qz.com/154877/by-reading-this-page-you-are-mining-bitcoins/.
[102] *Id.*
[103] *Id.*
[104] *Id.*
[105] *Id.*
[106] *Id.*
[107] *Id.*
[108] Vitalik Buterin, *Ethereum Whitepaper*, ETHEREUM.ORG (May 1, 2023), https://ethereum.org/en/whitepaper/.
[109] *ERC-721 Non-Fungible Token Standard*, ETHEREUM.ORG (Apr. 7, 2023), https://ethereum.org/en/developers/docs/standards/tokens/erc-721/.
[110] Nick Szabo, Smart Contracts (1994), https://www.fon.hum.uva.nl/rob/Courses/InformationInSpeech/CDROM/Literature/LOTwinterschool2006/szabo.best.vwh.net/smart.contracts.html.
[111] *See Introduction to Smart Contracts*, ETHEREUM.ORG (Apr. 11, 2022), https://ethereum.org/en/developers/docs/smart-contracts/.

Programmers can code smart contracts to execute virtually any transaction, including royalty payments.[112]

## B. What is an NFT?

Like fungible cryptocurrencies such as Bitcoin and Ethereum's "Eth," NFTs are built upon DLT systems. But unlike Bitcoin or Eth, NFTs represent "non-fungible" digital assets. Fungible assets are "[c]ommercially interchangeable with other property of the same kind."[113] For example, dollar bills are generally interchangeable with each other as are cobs of corn. In contrast, assets like art or land are typically not commercially interchangeable—each piece of art or land is seen as unique and could not be substituted for another. Though some insist that the term NFT can only accurately describe a token that represents ownership in a completely unique good, fungibility can be both "relative" and "subjective."[114] Furthermore, the decentralized nature of the blockchain means that there is no single authority on what criteria a good must satisfy to be an NFT. As such, NFTs are used to represent assets that are truly one-of-a-kind as well as assets that are limited in supply. Although the digital assets NFTs represent may easily be duplicated, the decentralized ledger enabled by blockchain technology purports to make ownership of the assets scarce and verifiable.

### 1. What Makes NFTs Valuable?

Because many of the assets NFTs represent ownership in can be easily duplicated and shared, many find it difficult to see what utility or value there is in an NFT. NFTs connect ownership of non-fungible assets to an ostensibly immutable[115] and publicly available record on the blockchain. But, as with fiat money and cryptocurrencies, this link only has value to the extent that there is "a fundamental agreement about what holds monetary value" between members of a group.[116]

Even if the assets they represent can often be easily duplicated, NFTs possess several characteristics that have, so far, motivated some to place sometimes astronomical monetary value in them. While the source of an NFT's value may depend on the NFT or the preferences of a particular owner, NFTs derive their value from three broad attributes: (1) provenance and collectability; (2) utility associated with ownership of the NFT; and (3) making the internet ownable by turning digital assets into "things." The introduction of scarcity to a class of goods that is widely accessible underpins each of these sources of value.

#### *a. Provenance and Collectability*

First, NFTs are digital collectibles inextricably linked to their provenance, or proof of their origin and authenticity. Although many of the assets NFTs represent may be replicated

---

[112] *See* James Beck, *Can NFTs Crack Royalties And Give More Value To Artists?*, CONSENSYS (Mar. 2, 2021), https://consensys.net/blog/blockchain-explained/can-nfts-crack-royalties-and-give-more-value-to-artists/.
[113] *Fungible*, BLACK'S LAW DICTIONARY (11th ed. 2019).
[114] Devin Finzer, *The Non-Fungible Token Bible: Everything You Need to Know About NFTs*, OPENSEA (Jan. 10, 2020), https://opensea.io/blog/guides/non-fungible-tokens/.
[115] Gideon Greenspan, *The Blockchain Immutability Myth*, COINDESK (Mar. 6, 2023, 7:53 AM), https://www.coindesk.com/markets/2017/05/09/the-blockchain-immutability-myth/ (explaining that "the bitcoin blockchain and its ilk are not immutable in any perfect or absolute sense" but "immutable so long as nobody big enough and rich enough decides to destroy them.").
[116] Christian Catalini, Ravi Jagadeesan & Scott Duke Kominers, *Bitcoin and Beyond*, PROJECT SYNDICATE (Apr. 23, 2021), https://www.project-syndicate.org/onpoint/bitcoin-and-new-digital-ledger-applications-by-christian-catalini-et-al-2021-04.

easily and endlessly, NFTs purport to make ownership in these assets scarce and verifiable. For example, while a picture may be electronically duplicated thousands of times and shared across the internet, blockchain technology allows the creator of that picture to record and sell ownership of the original through a single NFT. Though there would be thousands of instances of the asset, the blockchain would record one owner of the canonical original "minted" or created by the author. The publicly available ledger would further make the full ownership history of the picture accessible to anyone on the internet anywhere in the world, and anyone could look to verify the ownership status of the asset at any point in time. Thus, although the picture could be duplicated through a simple copy-paste function, ownership of the NFT would remain tied to the cryptographically encrypted blockchain that is designed to be a secure and irreversible record of ownership. NFT owners often argue that the value of an NFT grows as it is "shared and seen online"[117] and consequently frequently retort that those who duplicate and distribute their images are "actually doing free marketing" and increasing the NFTs value, not stealing or duplicating the NFT.[118]

The tokenization of ownership through an NFT creates "a truly unique version of the asset" inextricably linked to its provenance.[119] By tokening unique assets on a blockchain, "NFTs are able to instantly verify who created what, when, and where" and keep a complete history of subsequent transactions.[120] NFTs thus serve as their own "proof of authenticity," obviating the need for third-party authenticators of unique assets. Furthermore, the ownership history of an asset may itself increase its value. For instance, some might find value in knowing that they owned the same digital asset that was previously owned by someone else, such as a celebrity or well-known collector.

In addition to being a "proof of authenticity," NFTs could also serve as a "proof of passion."[121] Because "the when and what, and for how much" of an NFT purchase "all are indelibly and universally established" on the blockchain, NFTs may imbue early support of creative projects with new economic and social value as support of a project is memorialized on the blockchain.[122]

*b. Utility*

Second, NFTs often come bundled with utility beyond ownership of the underlying assets they represent. NFT creators can grant NFT owners exclusive access to content or private chat rooms, deliver new assets directly to NFT owners, or even give NFT owners a voice in the creative process. Combining this utility with NFTs' value as collectibles offers NFT creators a unique opportunity to build a community around their NFTs. In many cases, membership in one of these communities could be at least as valuable as the underlying assets NFTs represent.

---

117 Jesse Walden, *NFTs Make the Internet Ownable*, VARIANT FUND (Feb. 15, 2021), https://variant.mirror.xyz/T8kdtZRIgy_srXB5B06L8vBqFHYlEBcv6ae2zR6Y_eo.
118 Jack Morse, *NFT Owners Insist They're Totally Not Owned by "Right-Click Savers,"* MASHABLE (Aug. 19, 2021), https://mashable.com/article/non-fungible-tokens-nfts-right-click-save.
119 Shin Hyung Choi, *Proof of Provenance: Why NFTs Can Be Valuable*, MEDIUM (Apr. 12, 2021), https://shinhyungchoi.medium.com/proof-of-provenance-why-nfts-can-be-valuable-1489ed1395fd.
120 *Id.*
121 Tal Shachar & Jonathan Glick, *Proof of Passion*, TRENDS, ANALYSIS, LIES & STAT. (Mar. 1, 2021), https://tals.substack.com/p/proof-of-passion.
122 *Id.*

The Bored Ape Yacht Club (BAYC) illustrates how NFTs' value can stem both from their status as collectibles and from their utility. To date, the BAYC has generated over $2.5 billion in all-time sales,[123] and its members include celebrities such as Stephen Curry, Shaquille O'Neal, Snoop Dogg, Eminem, and Jimmy Fallon.[124] Descriptively named, BAYC NFTs represent ownership in one of a collection of a set of 10,000 unique images of cartoon-like apes, each programmatically generated from a set of over 170 possible traits.[125] More than just representing ownership in an image, the NFTs are also "Yacht Club membership card[s]" that grant[] access to members-only benefits."[126] These benefits include access to an exclusive BAYC channel on the Discord social media platform, additional airdropped NFTs (including serum to create mutant apes and NFT dogs), real life events, a collaborative community art space called "the Bathroom," and an Apes v. Mutants mobile game.[127] BAYC members also received early access to a new cryptocurrency launched by the BAYC called ApeCoin.[128] Additionally, while the BAYC retains ownership of the BAYC brand, NFT owners are granted the personal use rights to "use, copy, and display" their own Bored Apes and the commercial use rights to "use, copy, and display [their Bored Apes] for the purpose of creating derivative works . . . ;"[129]

Some BAYC members have already begun using these commercial use rights. After carefully selecting an ape they thought had "something to say," two friends purchased Ape 1798, which they named Jenkins the Valet.[130] The friends developed Jenkins into his own character and gave him an identity as the BAYC's valet and the "eyes and ears of the BAYC."[131] Jenkins has inspired a new lore around the BAYC and a tell-all memoir, which was minted and sold as an NFT, authored by New York Times bestselling author Neil Strauss.[132] Jenkins's book inspired the issuance of a set of "Writer's Room" NFTs that give owners a voice in the development of "Metaverse-defining stories" and enable owners to "turn their own avatars into interesting characters and then license them to appear in the works."[133] In another application of these commercial rights, Universal Music Group's 10:22PM label has formed Kingship: a "supergroup consisting of rare Bored Apes and a rare Mutant Ape."[134] Kingship grant fans access to their world through five thousand Key Card NFTs tied to "music, exclusive

[123] *Bored Ape Yacht Club Sales Volume Data, Graphs & Charts*, CRYPTOSLAM!, http://cryptoslam.io/bored-ape-yacht-club/sales/summary (last visited May 3, 2023).
[124] *List of Celebrities who own Bored Ape NFTs*, COINCU NEWS, (Mar. 7, 2022), https://news.coincu.com/54001-celebrities-who-own-bored-ape-yacht-club/.
[125] BAYC, https://boredapeyachtclub.com/#/home (last visited May 3, 2023).
[126] *Id.*
[127] Cryptonite, *What Is Bored Ape Yacht Club? + Why The NFT's Are So Popular*, HACKERNOON, (Feb. 7, 2022), https://hackernoon.com/what-is-the-bored-ape-yacht-club-and-why-the-nfts-are-so-popular.
[128] Hannah Miller, *Bored Ape's New ApeCoin Puts NFTs' Power Problem on Display*, BLOOMBERG, (Mar. 19, 2022, 9:56 AM), https://www.bloomberg.com/news/articles/2022-03-19/nft-bored-ape-yacht-club-s-apecoin-benefits-backers-like-andreessen-horowtz.
[129] BAYC, *Terms and Conditions*, https://boredapeyachtclub.com/?ref=hackernoon.com#/terms (last visited May 3, 2023).
[130] *Jenkins - Jenkins the Valet*, COLOSSUS (Mar. 18, 2022), https://joincolossus.com/episodes/1087607/jenkins-jenkins-the-valet.
[131] Jenkins the Valet, *How the Valet at the Bored Ape Yacht Club Teamed Up with A 10x New York Times Bestselling Author*, MEDIUM (Nov. 12, 2021), https://jenkinsthevalet.medium.com/how-the-valet-at-the-bored-ape-yacht-club-teamed-up-with-a-10x-new-york-times-bestselling-author-80db25da0fbc.
[132] *Bored & Dangerous*, JENKINS YACHT VALET, https://www.jenkinsthevalet.com/bored-and-dangerous (last visited May 3, 2023).
[133] *Writer's Room*, JENKINS YACHT VALET, https://www.jenkinsthevalet.com/writers-room (last visited May 3, 2023).
[134] KINGSHIP, https://www.kingship.io/ (last visited Feb. 6, 2023).

content, utility, community, and token-gated experiences . . . ."[135] Following the announcement of Kingship's founding, NFT collector Jimmy McNeils, who furnished the bored apes to 10:22PM, emphasized that his collaboration with 10:22PM shows "how powerful commercial rights are for collectible NFT projects and their collectors."[136]

#### *c. Turning Digital Assets into Things*

Third, NFTs also introduce a new paradigm for internet ownership for both consumers and creators. When a creator posts content on an internet service, the content becomes subject to the provider's terms of service—often resulting in the platform obtaining some rights in the posted content.[137] With the "potential to invert media ownership on the internet," NFTs create a practically immutable record of ownership and new transaction possibilities.[138] The tokenization of unique assets and recording of these assets on a distributed ledger might alter market dynamics in a way that makes it possible for creators not to rely so heavily on large internet service providers. Rather than having all content be subject to a dizzying number of terms of service, NFTs could be a "modular" property system that could greatly simplify the transactional infrastructure and decrease information costs.

Advocating for a theory of property with "thing-based baselines" that are enriched by—not composed of—a bundle of rights,[139] Professor Henry Smith argues that modular property systems manage complexity and reduce the need for information costs.[140] The boundaries of modular ownership in a thing are more easily defined in goods like real property or personal property than in information "where interacting rights cannot be spatially separated."[141] Modularizing intellectual property is particularly difficult because licensing agreements are prone to "conflict . . . more easily" in intellectual property than in physical assets.[142] Although NFTs do not replace the current regulatory regime of intellectual property, cryptographic tokenization makes it more feasible to establish ownership of assets—including information and intellectual property—online, independent of centralized internet services. NFTs could thus be a liberating alternative to the wide-ranging terms of service to which online content is typically subject as NFTs' provenance permits authentication of NFT ownership across internet platforms. Tokenization of an asset through an NFT consequently causes the asset to more closely resemble a modular "thing" than a fragmented bundle of rights.

## C. Critiques of NFTs and DLT Systems

To some, the decentralization of authoritative ownership records from intermediaries serves to simplify transactions and replace reliance on fallible institutions. Evangelists of DLT systems argue that, as "trust moves from institutions — like banks and regulators — to the apolitical ledger,"[143] control will move from intermediaries and institutions to consumers and creators. While some proclaim that Web3's democratization and decentralization of the internet

---

[135] *Id.*
[136] *10:22PM Forms Kingship, the First-Ever Group Consisting of NFT Characters from Bored Ape Yacht Club*, UMG (Nov. 11, 2021), https://www.universalmusic.com/1022pm-forms-kingship-the-first-ever-group-consisting-of-nft-characters-from-bored-ape-yacht-club/.
[137] *See* Walden, *supra* note 119.
[138] *Id.*
[139] Henry E. Smith, *Property as the Law of Things*, 125 HARV. L. REV. 1691, 1694 (2011).
[140] *Id.* at 1703.
[141] *Id.* at 1711.
[142] *Id.* at 1712.
[143] Tressie McMillan Cottom, *The Strange Allure of the Blockchain*, N.Y. TIMES, (Jan. 24, 2022), https://www.nytimes.com/2022/01/24/opinion/crypto-blockchain-nfts.html.

will fundamentally alter every aspect of life, others insist that DLT systems "inevitably have a pyramid-shaped economic structure" and are high-tech multilevel marketing operations.[144]

Despite their potential benefits, NFTs are not without their costs. First, courts, creators, and consumers should all be careful not to conflate the novel technology of NFTs with the underlying assets they represent. Many may find it difficult to recognize that NFTs are tokens that represent ownership in an asset and are separate from the asset itself. Second, the flexibility of NFTs could make them highly complex. Creators and consumers alike might find this landscape difficult to navigate without regulations and intermediaries to help ensure the validity of transactions and manage consumer expectations. For example, an NFT could include commercial rights to use intellectual property, or it might simply be a license to a copy with no intellectual property rights. Without standardization or centralization, unsophisticated parties may not realize what they are selling or what they are buying when they transact using NFTs. While infringement and misrepresentation resulting from the assets NFTs represent would presumably give rise to legal causes of action, this is largely uncharted territory. The immutability of blockchain transactions further complicates what can be done if someone sells something they did not have the right to sell. And the pseudonymity of the blockchain makes it more difficult for aggrieved parties to identify from whom they should seek recourse.

Critics also point to the immense financial and environmental costs of maintaining and transacting on DLT systems. Despite the fact that maintaining DLT systems consumes astronomical amounts of electricity, crypto-enthusiasts claim that all transactions have an environmental cost and that the environmental impact of DLTs will diminish as technology develops.[145] In addition to the environmental costs, the monetary costs of transacting on DLT systems make small transactions infeasible as the transaction costs may exceed the value of the NFT.[146] Transaction costs also vary with traffic on the blockchain and similar factors. The day may come when transaction costs are more manageable and predictable, but this currently limits the economically feasible application of NFT technology to large transactions.

A common critique of NFTs in particular is that, while NFTs themselves reside on blockchains, the majority of the assets NFTs represent do not. This is because the high costs of using and storing data on the blockchain make it impractical for most assets NFTs represent ownership in to be stored on a blockchain, or "on-chain."[147] As a result, the underlying assets are generally stored "off-chain," meaning they are stored somewhere on the internet not on a blockchain through some sort of centralized service. If this service fails, the NFT owner may not be able to access the underlying asset, and it is not clear what value the NFT would retain. Some NFT projects are completely "on-chain," but current storage costs make this impossible for a majority of NFT projects.

In addition, skeptics assert that cryptocurrencies and NFTs are simply a bubble waiting to burst. Some fear that this bubble will have a disparate impact on economically vulnerable investors. Paul Krugman cautioned that he sees "disturbing echoes of the subprime [mortgage]

---

[144] Christopher Mims, *NFTs, Cryptocurrencies and Web3 Are Multilevel Marketing Schemes for a New Generation*, WALL ST. J. (Feb. 19, 2022, 12:00 AM), https://www.wsj.com/articles/nfts-cryptocurrencies-and-web3-are-multilevel-marketing-schemes-for-a-new-generation-11645246824.
[145] *See* Romano Santos, *What Is the Environmental Impact of NFTs?*, VICE (Mar. 3, 2022, 12:08 AM), https://www.vice.com/en/article/bvnp95/what-nft-environment-impact-climate-crypto-explainer.
[146] *See* Griffin Mcshane, *What Are Ethereum Gas Fees?*, COINDESK (Jan. 13, 2022, 7:18 AM), https://www.coindesk.com/learn/what-are-ethereum-gas-fees/.
[147] *See* Dan Kahan, *Do You Really* Own Your NFT? Chances Are, You Don't*, DEFIANT (Mar. 31, 2021), https://thedefiant.io/do-you-really-own-your-nft-chances-are-you-dont/.

crisis" that led to the great recession as many investors in cryptocurrencies "don't know what they are getting into and are poorly positioned to handle the downside."[148] This concern is exacerbated by the recent collapse of FTX and other major crypto institutions along with plunging prices of crypto assets as crypto critics assert that belief in Web3 may not just be misplaced but could also result in "waste on an epic scale" if the current "crypto winter" turns out to be an eternal one.[149]

Lastly, buying NFTs remains a foreign and perplexing experience to many. While some vendors allow NFT purchasers to use fiat money, the vast majority first require buyers to separately convert cash into cryptocurrency. Buying an NFT also requires the use of a crypto wallet, and purchasers must keep track of their cryptographic key or lose all of their crypto assets.[150] If cryptocurrencies continue to grow in popularity, these processes could become more user friendly and integrated, and how to transact on the blockchain may gradually become common knowledge and practice. Meanwhile, courts and policymakers must contend with how NFTs will integrate with existing contractual constraints and copyright law as NFT creators seek to usurp the traditional music industry and revolutionize music monetization.

## III. NFTS AS A MUSIC MONETIZATION TOOL

Having examined the current monetization opportunities for musicians and equipped with a basic framework for understanding NFTs and their potential value, we turn to the question of whether NFTs provide a viable additional income stream for musicians notwithstanding the obstacles presented by the traditional music industry, particularly contractual constraints and copyright law. With the promise to construct "a new music ecosystem founded on principles of fairness and transparency"[151] and "maximiz[e] the value of music for creators, improv[e] the music experience for consumers and reduc[e] friction, waste, and fraud . . . ,"[152] music NFTs have already generated high-profile use cases. These include Universal's virtual band Kingship[153] and Kings of Leon's 2021 album *When You See Yourself*.[154] Notwithstanding the uncertainty surrounding many aspects of NFTs and the applicability of contractual provisions and copyright law to them, NFTs appear to provide a budding new revenue stream for musicians. NFTs will likely have the greatest impact on musicians who can build strong communities and take advantage of the potential for granular price tiering. This Part begins with a discussion of how NFTs offer a superior economic model for musicians compared to the traditional "hits market" and concludes with a discussion of how

---

[148] Paul Krugman, *How Crypto Became the New Subprime*, N.Y. TIMES (Jan. 28, 2022), https://www.nytimes.com/2022/01/27/opinion/cryptocurrency-subprime-vulnerable.html; *see also* Cottom, *supra* note 146; David Gerard, *The Cryptocurrency Crash Is Replaying 2008 as Absurdly as Possible*, FOREIGN POL'Y (May 12, 2022, 3:53 PM), https://foreignpolicy.com/2022/05/12/cryptocurrency-crash-2008-financial-crisis/.
[149] Paul Krugman, *Blockchains, What Are They Good For?,* N.Y. TIMES, (Dec. 2, 2022), https://www.nytimes.com/2022/12/01/opinion/blockchains-what-are-they-good-for.html.
[150] Joanna Stern, *I Gave My Mom a Crypto Wallet: A Simple Guide to NFTs, Blockchain and More*, WALL ST. J. (Dec. 13, 2021, 9:00 ET), https://www.wsj.com/articles/i-gave-my-mom-a-crypto-wallet-a-simple-guide-to-nfts-blockchain-and-more-11639404001.a
[151] Arya Taghdiri, *How Blockchain Technology Can Revolutionize the Music Industry*, 10 HARV. J. SPORTS & ENT. L. 173, 194 (2019).
[152] TONYA M. EVANS, BLOCKCHAIN AND THE DISINTERMEDIATION OF MUSIC, OXFORD HANDBOOK OF MUSIC L. & POL'Y 2 (Sean M. O'Connor ed. 2021).
[153] UMG, *supra* note 138.
[154] Sam Moore, *Kings of Leon Have Generated $2 million from NFT Sales of Their New Album*, NME (Mar. 12, 2021), https://www.nme.com/news/music/kings-of-leon-have-generated-2million-from-nft-sales-of-their-new-album-2899349.

these improved market incentives may be hampered by common contractual constraints and copyright law.

## A. Improved Economics for Musicians

NFTs not only provide new collectible assets and utility for consumers but might also be game changing for creators seeking to monetize unique creative assets. Drawing upon Kevin Kelly's theory that creators only need one thousand "true fans" to make a living,[155] Chris Dixon suggests three ways in which NFTs "offer fundamentally better economics for creators:" NFTs (1) "remov[e] rent-seeking intermediaries" (or at least "force [them] to earn [their] fees"); (2) "enabl[e] granular price tiering;" and (3) "mak[e] users owners."[156] Each of these reasons rings true for musicians seeking a more favorable set of economic incentives in the Web3 world.[157]

Dixon's first contention—that NFTs will "remov[e] rent seeking intermediaries"[158]—suggests that, by using NFTs, musicians will be able to pocket a larger portion of the revenue they generate instead of giving most of it away to labels and publishers. To engage with users, creators today have little choice but to go through services controlled by Alphabet (Google), Apple, Amazon, or Meta (Facebook). Creators receive a fraction of the revenue generated by their content but must submit to the intermediaries' terms if they wish to reach users. Even partial disintermediation of transactions could result in creators retaining more of the value they create, which could have a "multiplier effect on creator disposable income."[159]

NFTs could provide musicians a viable path to financial success that does not require them to partner with intermediaries like labels and publishers. Beyond being financially liberating, this could endow musicians who feel constricted by contractual relationships with labels and publishers[160] with greater artistic freedom. Labels and publishers may also gain expertise and connections that could help NFT creators "optimize their revenue options" in the "brave new universe" of Web3,[161] but NFTs may nonetheless make joining a label feel more like one of multiple workable options instead of a financial necessity. If signing with a label were one of a few feasible paths, musicians could amass greater negotiating leverage that might shift the balance of power in musicians' favor.

Still, the prospect of disintermediating the music industry is clouded by doubts of the Web3 proposition that blockchain technology will obviate the need for intermediaries coming to fruition. NFTs are a "cultural and economic wave [labels and publishers] are determined not

---

[155] Kevin Kelly, *1,000 True Fans*, TECHNIUM, https://kk.org/thetechnium/1000-true-fans/ (last visited May 3, 2023).
[156] Chris Dixon, *NFTs and a Thousand True Fans*, FUTURE (Feb. 27, 2021), https://future.a16z.com/nfts-thousand-true-fans/.
[157] *Id.*
[158] *Id.*
[159] *Id.*
[160] *See, e.g.*, PJ MORTON, *Claustrophobic (feat. Pell)*, *on* GUMBO (Morton Records 2017) ("I'm claustrophobic. I have a hard time trying to fit into your small mind."); TORI KELLY, *Unbreakable Smile*, *on* UNBREAKABLE SMILE (Capitol Records 2016) ("Sayin' 'Tori this'll sell more records.' But I'd rather make 'em yawn than be a pawn on your chess board.").
[161] Murray Stassen, *Warner Music Boss Steve Cooper: 'The Emergence of Web3 is Going to Further Amplify the Importance of Music Labels and Publishers.,'* MUSIC BUS. WORLDWIDE (Feb. 15, 2022), https://www.musicbusinessworldwide.com/warner-music-boss-steve-cooper-the-emergence-of-web3-is-going-to-further-amplify-the-importance-of-music-labels-and-publishers123/.

to miss," and labels and publishers are already investing heavily in a Web3 future.[162] In the parlance of The Who, it may be an instance of "[m]eet the new boss same as the old boss"[163] where Web3 continues to be dominated by the same intermediaries. This fear goes beyond the music industry. As Twitter founder Jack Dorsey cautioned Web3 enthusiasts, "[y[ou don't own 'web3.' . . . It's ultimately a centralized entity with a different label."[164] In reality, decentralization is unlikely to happen overnight or be an all-or-nothing proposition. But even slight disintermediation could pay powerful dividends in boosting musicians' disposable income and requiring intermediaries to reinvent themselves or give back power to creators.[165]

Dixon's second idea—that NFTs "enabl[e] granular price tiering"[166]—is an exhilarating concept for musicians who are not and may not want to be famous. While large intermediaries target the median consumer,[167] NFTs create a new transactional tool for creators to monetize consumers' "enthusiasm" and engage in "granular price tiering" tailored to their true fans.[168] The "long tail" effect posits that large internet vendors recognized in the early days of the internet that, if aggregated, sales of "the lowest selling obscure items would equal or in some cases exceed the sales of the few best-selling items."[169] Though internet vendors track user data and have created algorithms to tailor advertisements to consumer tastes, creators themselves are arguably better suited to "find and deliver niche audiences."[170] This means that there might be tremendous value large internet vendors are unable to capture because of their need to appeal to the masses. By enabling digital scarcity, NFTs produce market dynamics that ask buyers to pay what a unique asset is worth to them instead of an aggregated market price. This price tiering effect enables creators to reach portions of the demand curve large intermediaries have not.[171] This could shift economic incentives in a dramatic way by compensating creators for making works with obscure appeal in addition to incentivizing the creation of popular works.

The "hits market" economy of the music industry anticipates that the vast majority of music will be an economic failure and rewards only exceptional hits. By recognizing and remunerating music based on its performance in the market as a whole, this economic model largely does not account for the personal value music may have for a smaller group of fans. An artist's music may be worth far more to a fan than the cost of a Spotify subscription, merchandise, or even a concert ticket, but the "hits market" approach leaves this idiosyncratic value uncaptured. But NFTs provide a transactional innovation to address the deadweight loss the "hits market" creates because while "[a]ds monetize attention[,] NFTs monetize enthusiasm."[172] Monetizing enthusiasm potentially opens the floodgates for artists whose fans want to give more.

---

[162] Eamonn Forde, *Web3-Casting: Music Companies Preparing for the Next Revenue Boom*, SYNCHTANK (Mar. 16, 2022), https://www.synchtank.com/blog/web3-casting-music-industry-preparing-for-the-next-revenue-boom/.
[163] THE WHO, *Won't Get Fooled Again*, *on* WHO'S NEXT (Polydor Ltd. (UK) 1971).
[164] @jack, TWITTER (Dec. 20, 2021, 8:51 PM), https://twitter.com/jack/status/1473139010197508098.
[165] Dixon, *supra* note 160.
[166] *Id.*
[167] Kelly, *supra* note 159.
[168] Dixon, *supra* note 160; *see also* Kelly, *supra* note 159.
[169] Kelly, *supra* note 159.
[170] *Id.*
[171] Dixon, *supra* note 160.
[172] @cdixon, TWITTER (Dec. 7, 2021, 9:39 AM), https://twitter.com/cdixon/status/1468258846363717633.

Radiohead's initial release of *In Rainbows* to fans for "whatever you want," though not an NFT sale, illustrates the power of price tiering.[173] Although a majority of downloaders opted to pay nothing for *In Rainbows*,[174] Radiohead made more revenue from *In Rainbows* than from their prior release *Hail to the Thief*, and because they independently released the album, the income from "pay what you want" downloads "dwarfed all the band's previous digital publishing income . . . ."[175] Though a majority of listeners eagerly consumed the music for free, thirty-eight percent chose to pay an estimated average global price of six dollars.[176] NFT price tiering is different because it introduces digital scarcity thus allowing musicians to tap into their fans' enthusiasm to incentivize them to pay for unique exclusive assets. For price tiering to work, musicians need to build fans' enthusiasm around their NFT projects. This is no simple task when people are constantly bombarded with content to consume. But for musicians who successfully captivate their fans, NFTs enable them to monetize this enthusiasm in an unprecedented way.

Third, Dixon suggests that NFTs' ability to "mak[e] users owners" unlocks a new set of economic incentives for creators and their fans.[177] NFTs alter market economics by turning users into owners. Buying an NFT is not just purchasing a product: it is "angel investing in culture."[178] NFTs align creators' and consumers' incentives because both can profit if the NFT becomes more valuable. With the ability to resell the scarce digital assets represented by NFTs, consumers have real "skin in the game."[179] Creators may also be able to share in resale royalties facilitated by smart contracts or see the value of new NFTs rise with the success of past NFTs.

Musicians commonly turn to services like Kickstarter and Indiegogo to ask fans to help them fund projects. To thank fans for supporting the project, creators determine and provide rewards for supporters (such as a copy of an album, an invitation to a release party, or a private concert) based on the level of supporters' contributions. Although this model has funded some successful creative projects, it has significant limitations. First, creators need to follow through on the rewards they promised supporters. Producing these benefits can require significant time and money, and creators must also execute the administrative tasks of keeping track of and delivering rewards to fans. Second, these rewards do not compensate contributors for their support. Though supporters do receive something in return for their contribution, the goal is to support and fund the project and not to benefit the supporter. NFTs are more akin to investments than contributions. They align creator and consumer incentive because NFT owners "actually own a piece of what [they] helped to create."[180] NFT owners could potentially resell their NFTs at an appreciated value if the project is successful. If an NFT owner decides not to resell, owning the NFT may serve as a "proof of passion" to memorialize the NFT owner's support. Of course, NFTs could be coupled with the rewards Kickstarter and Indiegogo

---

[173] Lewis, *supra* note 1.
[174] RADIO X, *How Much Did Radiohead Make from In Rainbows?*, (Oct. 25, 2021, 11:08), https://www.radiox.co.uk/features/the-most-unusual-album-releases-of-all-time/.
[175] Lewis, *supra* note 1.
[176] Sheila Marikar, *Radiohead Lets Fans Set CD Price; Most Say $0*, ABC NEWS (Nov. 6, 2007), https://abcnews.go.com/Entertainment/story?id=3826638&page=1.
[177] Dixon, *supra* note 160.
[178] @evabeylin, TWITTER (Feb. 24, 2021, 11:00 AM), https://twitter.com/evabeylin/status/1364636214008061952.
[179] Dixon, *supra* note 160.
[180] *A Primer on NFTs*, COLOSSUS (Mar. 22, 2021), https://joincolossus.com/episodes/5917632/walden-a-primer-on-nfts.

campaigns provide, but the aspect of ownership transforms the economics of supporters by turning them into stakeholders instead of mere contributors.

## B. Obstacles to Integrating NFTs into the Music Industry's Infrastructure

Notwithstanding the disruptive economic incentives NFTs could have on the economics of music, the traditional music industry is likely to present significant obstacles to music NFT creators independent of labels' Web3 activity. Music NFTs must inevitably come to a head with the infrastructure of the traditional music industry. Contractual agreements and copyright law are especially likely to present challenges and complications for music NFT projects.

### 1. NFTs and Contractual Restrictions

First, musicians who have or negotiate recording contracts will need to consider how these agreements may impact their freedom to create and profit from NFTs. The exclusivity provisions of recording contracts and re-recording restrictions are especially likely to limit artists' ability to make NFT projects, and 360 deals are likely to cut into the economic benefits of NFT projects. The exclusivity provisions of recording contracts prohibit artists from making recordings for other record labels.[181] The standard definition of a "recording" in these contracts is expansive encompassing "any kind of delivery of [the artist's] performances for consumer use, whether sound alone or with visuals."[182] Although labels may agree to some exceptions to exclusivity provisions, artists will need to know enough to ask for exceptions.[183] Moreover, though it remains unclear how labels will view exceptions for NFTs, it seems likely labels will be reluctant to grant exceptions for NFTs if they become reliant on revenue from NFTs themselves. Exclusivity provisions are also likely to complicate, if not prohibit, artists' efforts to collaborate on NFT projects.

Even if the exclusivity provisions of a recording contract have terminated, music NFTs may qualify as re-recordings of songs recorded during the term of a recording contract, which standard recording contracts prohibit for an agreed upon time without the label's permission. Re-recording restrictions have received unusual attention recently as Taylor Swift has had a public feud with her former label, Big Machine Records.[184] In 2019, Big Machine—along with the rights in the recordings Swift made for the label—was acquired by Ithaca Holdings, which is owned by prominent music manager Scooter Braun.[185] Swift described the news as her "worst case scenario" and claimed to have been a victim of "incessant, manipulative bullying" at Braun's hands.[186] Swift claims to have unsuccessfully sought to purchase her masters from Big Machine before the acquisition, and subsequently decided to re-record the albums she made while signed to Big Machine as her contract with Big Machine permits.[187] These re-recordings, dubbed "Taylor's versions," of Swift's albums have had remarkable commercial

[181] PASSMAN, *supra* note 25, at 166.
[182] *Id.* at 78.
[183] *Id.* at 166–69.
[184] Raisa Bruner, *Here's Why Taylor Swift Is Re-Releasing Her Old Albums*, TIME (Mar. 25, 2021, 5:06 PM), https://time.com/5949979/why-taylor-swift-is-rerecording-old-albums/.
[185] *Id.*
[186] taylorswift, TUMBLR (June 30, 2019), https://taylorswift.tumblr.com/post/185958366550/for-years-i-asked-pleaded-for-a-chance-to-own-my.
[187] Bruner, *supra* note 190.

success and struck Swift's current label Universal with enough fear to cause Universal to extend the length of re-recording restrictions in its standard artist contracts.[188]

Although the success of Swift's re-recordings are a testament to the impact of Swift's music and her ability to engage her large and devoted fanbase, streaming technology likely also played a substantial role in making the success of Swift's re-recordings possible. Before streaming, Swift would have had to ask her fans to purchase new recordings of old music. Many of Swift's fans seem willing to have done this, but thanks to streaming, Swift did not need to ask fans to pay anything more than they were already paying to stream her music; fans simply had to listen to the new recordings and boycott the old ones.

This shows how re-recordings, even if not made by someone as prominent as Swift, may present a greater threat to labels today than they have in the past because they are now cheaper to create and consume. NFTs present new opportunities for artists to recast their music and potentially use old music to create new experiences for their fans. Because labels already seem to be alerted to the threat re-recordings might increasingly pose to their profits, re-recording restrictions could continue to become more stringent. NFT creators who are subject to re-recording restrictions should be aware of how these restrictions are likely to limit their ability to reuse music they have previously recorded even if the music is not released through another record label.

Additionally, 360 contracts may entitle labels to a portion of their artists' NFT-generated revenue. Like an actor who had a successful acting career before signing with a label is typically able to exclude acting revenue from 360 deals,[189] musicians who have successful NFT projects prior to signing with a label should be more likely to successfully exclude revenue from NFTs from their 360 deals. On the other hand, musicians who wish to venture into the NFT world after signing with a record label will more likely be required to share a portion of revenue from NFTs with their labels. Over time, contractual terms are likely to contemplate the specific risk that artists may create NFTs. but courts will need to grapple with how contractual language that predates NFTs should apply to the nascent technology.

Though it ultimately settled on undisclosed terms, a dispute between filmmaker Quentin Tarantino and Miramax Studios over Tarantino's announcement of a series of NFTs based on the film *Pulp Fiction* exemplified the types of contractual interpretation questions courts will likely confront as NFTs become more commonplace in the entertainment industry. Tarantino announced in November 2021 that he would release seven "exclusive scenes" NFTs through the blockchain platform Secret Network, granting owners exclusive access to previously unknown secrets about *Pulp Fiction* along with digitized excerpts from the original script and audio commentary from Tarantino.[190] Miramax promptly filed suit in the Central District of California, alleging that Tarantino's announced NFTs breached Tarantino's contractual agreement with Miramax and infringed upon Miramax's intellectual property rights.[191]

---

[188] Anne Steele, *As Taylor Swift Rerecorded Her 'Red' Album, Universal Reworked Contracts*, WALL ST. J. (Nov. 12, 2021), https://www.wsj.com/articles/as-taylor-swift-rerecorded-her-red-album-universal-reworked-contracts-11636741201.
[189] PASSMAN, *supra* note 23, at 103.
[190] Taylor Dafoe, *Quentin Tarantino is Minting Seven 'Pulp Fiction' Scenes as NFTs That Will Reveal New Secrets About the Film*, ARTNET NEWS (Nov. 3, 2021), https://news.artnet.com/art-world/quentin-tarantino-is-minting-seven-pulp-fiction-scenes-as-nfts-that-will-reveal-secrets-about-his-vision-for-the-film-2029816.
[191] Complaint, Miramax, LLC v. Tarantino, No. 2:21-cv-08979 (C.D. Cal. Nov. 16, 2021).

In its complaint, Miramax contended that, except for specific "reserved rights," Tarantino granted Miramax "all of his rights to *Pulp Fiction*" in a 1993 agreement.[192] Accordingly, Miramax alleged that Tarantino's announced NFTs infringe upon its rights in *Pulp Fiction*. In response, Tarantino argued that the 1993 agreement explicitly reserved for Tarantino the right to "screenplay publication" and gave him "every right to publish portions of his original handwritten screenplay . . . ."[193]

The parties seemed to recognize that this was, at its core, a contractual dispute. Although NFTs are a new transactional tool and are likely to impact future contractual arrangements, they do not alter principles of contract law and contract interpretation. Tarantino appeared to abandon his NFT project after the sale of only a single NFT,[194] and the case settled in September of 2022.[195] While they did not disclose the terms of the settlement, Tarantino and Miramax released a joint statement sharing that they "agreed to put this matter behind them and look forward to collaborating with each other on future projects, including possible NFTs."[196]Although this lawsuit eventually settled, future cases involving similar agreements are likely to emerge given NFTs' growing prominence in the entertainment industry. The new market dynamics NFTs introduce will very likely affect the terms of future contractual agreements. Until then, though NFTs may not be explicitly mentioned, NFTs and their creators will be subject to existing contractual constraints as courts and practitioners seek to discern how NFTs fit into these agreements.

2. NFTs and Copyright Law

In addition to contractual constraints, NFT creators should be aware of the impact of copyright law on their ability to make and create NFTs. NFTs provide a new means of transacting in digital assets; however, they do not change what is and is not protected by copyright. In the United States, the Copyright Act extends copyright protection to all "original works of authorship fixed in any tangible medium of expression."[197] The extent to which NFTs themselves enjoy copyright protection is not clear, but it is well established that many of the assets in which NFTs commonly represent ownership are subject to copyright protection. Because copyright holders' exclusive rights include the rights to reproduce, adapt, distribute, publicly perform, and publicly display their copyrighted works,[198] NFT creators who do not own the rights to or have permission from the rightsholders of any copyrighted works implicated by their NFTs may be liable for copyright infringement. In short, NFTs do not make it legal for someone to sell an asset they do not have the right to sell.[199]

---

[192] *Id.* at 2.
[193] Answer, Miramax, No. 2:21-cv-08979, at 2.
[194] Eduardo Próspero, *What Happened to Tarantino's "Pulp Fiction" NFT Collection? The Strange Finale*, NEWSBTC (Feb. 2022), https://www.newsbtc.com/crypto/what-happened-to-tarantino-s-pulp-fiction-nft-collection-the-strange-finale/.
[195] Notice of Settlement, Miramax, No. 2:21-cv-08979.
[196] Dominic Patten, *Quentin Tarantino & Miramax 'Pulp Fiction' NFT Legal Dust-Up Ends; Director & Studio Look Forward To "Future Projects,"* DEADLINE (Sept. 8, 2022, 1:16 PM), https://deadline.com/2022/09/quentin-tarantino-lawsuit-pulp-fiction-nft-auction-miramax-letter-1234907552/.
[197] 17 U.S.C. § 102(a).
[198] *Id.* § 106.
[199] While courts have yet to rule directly on how copyright law applies to NFTs, early cases relating to trademark claims seem to affirm that the novelty of the technology underlying NFTs does not narrow the reach of intellectual property laws. Yuga Labs, creators of the BAYC NFTs, recently prevailed in its motion for summary judgement convincing the judge that Yuga Labs owned a valid trademark in the BAYC (notwithstanding its grant of commercial and personal use rights for BAYC members' respective apes) and that

This is illustrated by a dispute between Roc-A-Fella Records and former Jay-Z collaborator Damon Dash. Roc-A-Fella Records brought suit in the Southern District of New York in June 2021 to prevent Dash from selling the copyright in Jay-Z's 1996 debut album *Reasonable Doubt*, arguing that Dash had "no right to sell" the album rights through NFTs because, though he was a minority shareholder in Roc-A-Fella Records, Roc-A-Fella Records—not Dash—owned the copyright in the album.[200] In July 2021, the court issued a preliminary injunction barring Dash from minting or selling NFTs of *Reasonable Doubt*.[201] In his answer, Dash admitted that he did not own any copyright in *Reasonable Doubt* but asserted that he had the unqualified right to sell his one-third interest in Roc-A-Fella Records.[202] The case remains unresolved (though the parties filed a joint letter on March 15, 2022, stating that they are in settlement talks to end the dispute),[203] but it affirms the importance of NFT creators ensuring that they have valid rights in the assets they seek to transact in using NFTs. As such, it appears that Dash could validly sell his own ownership rights in Roc-A-Fella Records through an NFT; however, he could not sell the copyright in *Reasonable Doubt* using NFTs because NFTs do not give Dash the right to sell what he does not own. Given the lack of regulation of NFTs, consumers would also do well to engage in due diligence to verify the authenticity of the assets they buy using NFTs and verify that those selling NFTs actually own or have rights to the underlying assets.

The unregulated nature of NFT markets exposes consumers to a high risk of deceit. SEC chairman Gary Gensler has described crypto assets as "rife with 'fraud, scams and abuse.'"[204] OpenSea, the largest NFT marketplace, drew scrutiny both when reporting revealed that thousands of NFTs are created daily using images without artists' permission and the company responded by limiting users to creating five NFT collections, each with fifty or fewer items—a restriction that was ultimately lifted after prompting outrage from Web3 enthusiasts who believed such centralized oversight was "antithetical to the blockchain movement."[205] While a purchaser of an infringing NFT may be able to bring a fraud or misrepresentation claim, and the copyright holder could presumably bring a copyright infringement claim, this remains largely uncharted territory—leaving the legal ramifications of creating infringing NFTs unclear.[206]

Even though DLT systems are intended to obviate the need for trust, the current lack of regulation and unclear availability of legal recourse make trust and reputational costs NFT purchasers' primary protection. If an NFT seller makes infringing NFTs or does not deliver

---

a set of Ryder Ripps Bored Ape Yacht Club NFTs, which pointed to the same images as the original BAYC NFTs, was likely to confuse consumers. Yuga Labs, Inc. v. Ripps, No. 2:22-cv-04355, 2023 U.S. Dist. LEXIS 71336, at *23–31, (C.D. Cal. Apr. 21, 2023). In another case, a jury found that an artist's series of "MetaBirkins" NFTs infringed Hermès International's trademark in the luxury Birkin bag brand, unpersuaded by the artist's contentions that the use was artistic expression protected by the First Amendment and that the NFTs were unlikely to create consumer confusion. Zachary Small, *Hermès Wins MetaBirkins Lawsuit; Jurors Not Convinced NFTs Are Art*, N.Y. Times (Feb. 8, 2023), https://www.nytimes.com/2023/02/08/arts/hermes-metabirkins-lawsuit-verdict.html.

200 Complaint, Roc-A-Fella Records, Inc. v. Dash, No. 1:21-cv-05411 (S.D.N.Y. June 18, 2021), at 3.

201 Stipulation & Order, Roc-A-Fella Records, No. 1:21-cv-05411.

202 Answer, Roc-A-Fella Records, No. 1:21-cv-05411, at 4.

203 Joint Letter, Roc-A-Fella Records, No. 1:21-cv-05411.

204 Paul Kiernan, *Crypto 'Wild West' Needs Stronger Investor Protection, SEC Chief Says*, WALL ST. J. (Aug. 3, 2021, 6:21 PM), https://www.wsj.com/articles/sec-will-police-cryptocurrencies-to-maximum-possible-extent-chair-gary-gensler-says-11628007567.

205 Justin Scheck, *OpenSea's NFT Free-for-All*, WALL ST. J. (Feb. 12, 2022), https://www.wsj.com/articles/openseas-nft-free-for-all-11644642042.

206 *Id.*

what is promised, the value of any future NFTs they sell is likely to plummet. Still, it is difficult to know how the reputation-based informal enforcement of the NFT market will play out if the space becomes more congested. As Professor Jonathan Barnett observed:

> Reputation-driven norms exert no force against one-shot or other participants that have no rational interest in accumulating reputational capital and . . . can be expected to exhibit declining force in general as any market exhibits increased group size, economic values, capital-intensity requirements and variation in innovative capacity.[207]

It is thus possible that NFT traffic will outgrow the capacity of trust and a decentralized ledger to monitor. The specter of fraud and copyright infringement invalidating transactions could make NFT markets susceptible to exploitation by one-shot participants or other opportunists who can evade the harm of reputational costs. As a result, NFTs seem best suited for close-knit communities that can effectively protect themselves from opportunism and enforce reputation-based punishments.

"Music is a world within itself"[208] and is uniquely positioned to establish these kinds of communities. Many genres of music that are disadvantaged by the economics of the traditional music industry, such as jazz, blues, bluegrass, folk, and gospel, bring together their own communities of fans and musicians rich with traditions and norms. Fans of these styles of music tend to be aware of these norms and traditions and engaged with the larger musical community. As such, artists who incur reputational harm are likely to face especially steep consequences. In addition, reputational capital within their musical community is particularly valuable to musicians in these genres because they typically do not enjoy the same popularity and financial success of stars in many other genres and must rely on their communities to support them. Fans of these genres of music may also be incentivized by the opportunity NFTs provide to invest in artists and musicians, especially if they feel that the music they love has often been undervalued by the traditional music market. NFTs could simplify transactions with copyright implications because of their unprecedented ability to make intellectual property rights modular. While this simplicity is a double-edged sword given the ease with which NFT creators can infringe others' rights or sell what they do not own, the benefits are likely to outweigh the risks in markets where reputational costs are a powerful enough deterrent for opportunists and bad players.

## CONCLUSION

Even if labels maintain their dominance, NFTs may still allow artists to directly transact with fans in a way that could produce valuable additional income. Any added income would be incredibly helpful to most musicians who often struggle to find a way to monetize their music. While contractual constraints could impede or delay some NFT projects, NFTs might provide musicians more leverage in negotiating with labels by enabling musicians to demonstrate their economic viability in a way other than having a large social media following or an astronomical number of streams. Musicians with significant NFT income would also not be so dependent on joining a label to make a living and receive an advance. For those already with a label, NFTs could generate additional income and provide added value to and interaction with fans even if musicians must share part of that revenue under a 360 contract. Despite the complications copyright law imposes on the unregulated NFT economy, reputational costs are

---

[207] Jonathan M. Barnett, *The Illusion of the Commons*, 25 BERKLEY TECH. L.J. 1751, 1754–55 (2010).
[208] STEVIE WONDER, *Sir Duke*, *on* SONGS IN THE KEY OF LIFE (Motown Records 1976).

likely to temper the risk of fraud and infringement, particularly in music markets for genres with tight-knit communities.

Realistically, the old "hits market" is unlikely to go away, but NFTs may provide an alternative path for musicians. Instead of requiring a large following to generate meaningful income through music, NFTs could create a new set of incentives that would reward idiosyncratic preferences and community building, not just going viral. This could be especially game-changing in genres where musicians are unlikely to gain a large following but may nonetheless have highly devoted fans. Musicians will likely continue to rely on a variety of revenue streams, and making a living on music alone may remain a difficult proposition. Even so, NFTs might be a source of additional income that could be a steppingstone towards or an important addition to other revenue sources. Perhaps most significantly, NFTs could allow musicians to monetize further along the demand curve and find new ways of generating income from and giving value to dedicated fans. Only time will tell, but for struggling musicians, the NFT space seems to provide promising potential and little risk. As Crosby, Stills & Nash might ask, "[w]hat have you got to lose?"[209]

[209] CROSBY, STILLS & NASH, *Suite: Judy Blue Eyes*, *on* CROSBY, STILLS & NASH (Atlantic Records 1969).