emusic

Redefining Music Distribution Through Blockchain

04.02.2019

Contents

emusic

A Message from our CEO

eMusic launched in 1998 as the first legal, digital music store. During our long tenure, we've seen a LOT of change and faced a lot of challenges, but our core mission has been consistent: we aim to provide music fans with access to the best independent music at the best prices AND support the artists who create it.

eMusic - a fair-pay platform - is increasingly an outlier. Advancements in digital and streaming technology may have helped rescue the music industry but the corresponding commoditization of music by a few centralized players is a point of major concern.

Why is it that I can stream hours and hours of music, but in doing so I'm hurting the musicians I love because they're getting paid pennies on the dollar for each stream? Or that profit-driven algorithms deliver playlists and recommendations full of great music, but it only comes from a handful of labels?

So many of our great members tell us how they find eMusic to be as close an experience as going to a brick-and-mortar record store as you can find online. Flicking through crates for potential bargains or hidden gems… we want to preserve this cherished experience. Not, however if it means perpetuating industry-wide problems of compensation and choice. As music companies jockey to protect profits and limit competition, the resulting turf war is unnecessarily punishing. Both to artists and fans.

The industry is flawed and it's time for a change.
eMusic has a unique opportunity to turn the tide. We are going to show by example: a healthy music industry MUST ensure mutual success for creators, consumers and providers.

Join us!

Tamir Koch
CEO eMusic

emusic

02

Mission & Goals

FROM the time of creation until it's heard by the first fans, today's supply chain for music is full of blockers, middlemen, and inefficiencies.

"Our mission is to rebuild the music distribution infrastructure from the inside out to achieve balance in supply and rewards flowing between fans, artists and the platforms that serve them".

We will begin by giving eMusic members first access to the benefits that a decentralized, blockchain-drive music distribution platform provides before extending those benefits to the larger music industry.

Our project will result in:

- A brand new feature set and rewards program for eMusic members.
- A fully transparent music publishing system that can be used by any producer, creator or provider of music - from unencumbered/DIY individual artists right up to major labels with 1,000s of artists on their roster.
- A platform that transforms efficiency and automation into revenue gains, allowing music service providers and streaming services to enter more profitable agreements with existing content providers.
- A set of tools for managing music royalties and rights holders data that provides artists with quicker access to funds and the flexibility to redistribute rights.
- Establishment of infrastructure that allows for seamless integration of our vision of a re-shaped music industry with existing providers and retailers, requiring no change to listening habits for music fans (whether they stream music or download-to-own) and enabling artists and rights holders access to the largest potential fan bases.

With the wholesale adoption of blockchain technology and our application of it first to our music retail store then to the wider music industry, we have identified our high-level markers of success:

- Maintain the mission set forth by eMusic to support and promote independent artists and the general public's access to those artists.
- Dramatically increase the direct revenue received by artists, performers, songwriters and other music rights-holders industry-wide.
- Ensure the music industry can support a wide variety of music service providers regardless of business model.
- Protect and encourage consumer choice for music regardless of the mode of consumption.

About eMusic

SINCE 1998, eMusic has been a cornerstone of indie-focused music discovery and digital downloads, serving 47 million music fans in countries around the world and building tens of thousands of indie label relationships.

As a champion of independent artists and the fans that love them, we've been a part of personal music journeys for millions of members across the world, expanding access and reach through a combination of unexpected discovery, connections to relevant artists and affordable prices.

1998 eMusic, the very first mp3 download site begins selling downloads by subscription in 1998, 5 years before iTunes.

2006 Hits 100 Million MP3 downloads.

2008 Hits 250 million mp3 downloads, second only to iTunes.

2009 Begins to carry major-label content.

2014 Exits mainstream music business and returns to roots as an indie outlet.

2015 Launches cloud-enabled download storage and management system.

2016 Expands audio entertainment base with dedicated app for audiobooks (eStories).

2017 Rebrand, Redesign and Relaunch with all-new updated apps.
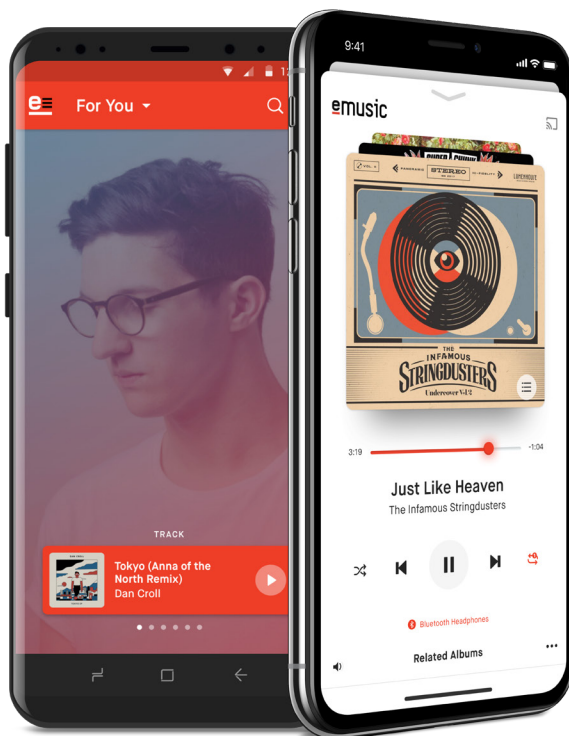
1998
World's first online mp3 music store.

2004
Introduced credit-based subscription model

2018
Leading the industry transition to blockchain

Industry Key Terms & Definitions

04

THIS document will discuss the infrastructure of today's music industry, as well as outline eMusic's vision of a re-shaped industry. The discussion will center around a number of key terms, the definitions of which we have listed below.

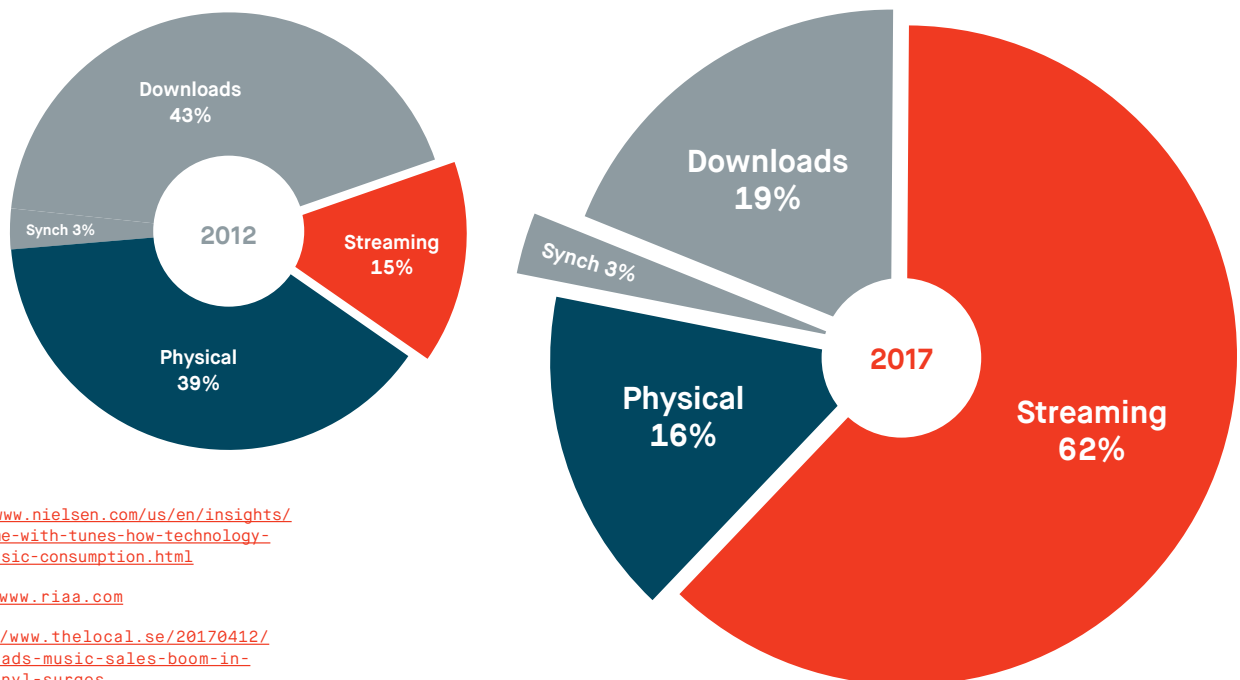|	
ARTIST	Using a shorthand here for any musician or group of musicians who create a piece of music. May include songwriters, composers and instrumentalists.
MUSIC ASSET	A song, album, EP or other format music release that is intended to become available for purchase, streaming or licensing.
LABEL	Administrative representative of an artist and/or music asset. Responsible for production and release-cycle promotion of a music asset. Often own master recording copyright of music assets.
PUBLISHER	Responsible for ensuring royalty payments for songwriters and composers are collected and distributed, as well as tracking commercial use and copyright infringements of music assets. Typically, artists will enter into a contract with a publisher that splits royalties between artist and publisher. Publishers receive mechanical royalty payments (from sales, streams) from a label and distribute payments to artists accordingly.
PRO (Performance Rights Organization)	As opposed to mechanical royalties generated through sales of a music asset, PROs are responsible for performance royalties- collected when music assets are broadcast or performed live in public venues such as retail stores or restaurants and bars.
DISTRIBUTOR	Distributors sign deals with labels to get their content into music stores/streaming services. While labels are working on the marketing and promotion of music on the platforms, a distributor makes sure the music is available on as many platforms as possible or permissible. Artists must go through distributors to get their music on Spotify, Apple Music, Pandora, etc. Compensation for their services vary depending on their business model, with some taking up-front fees and some a percentage of royalties. While most artists will have a distributor, only some will have a label.
SERVICE PROVIDER	Encompassing download-to-own digital stores such as eMusic, Beatport, 7Digital, iTunes as well as Streaming/radio services such as Spotify, Pandora, Deezer, Apple Music, YouTube, Amazon Music; a service provider is any customer-facing storefront offering music to the general public.

An Imbalanced Music Industry

05

WE as music consumers are listening to more music than ever before—on our commute, at the gym, while we work, in bars and restaurants. We use our earbuds, our phones, our bluetooth speakers, our AI connected homes, our smart-watched wrists... music now occupies a larger place in our everyday lives than ever. A person in the US listened to an average of 32.1hrs of music per week in 2017, which is nearly eight hours more per week than just two years ago.[1]

The world is streaming

Streaming now dominates download and physical sales, accounting for 62% of US music revenue in 2017, a staggering 47% rise since 2012 when it accounted for only 15%.[2] In many other countries, streaming's dominance is even more pronounced, with Sweden perhaps leading the way, where an incredible 82% of music was streamed last year.[3] It's clear streaming is here to stay. There will always be a sizable percentage of music listeners who prefer to own their music, but mass market trends point clearly to a future of music as an on-demand commodity.

Fig.1 — US Music Market Share

Downloads 43%
Synch 3%
2012
Streaming 15%
Physical 39%

Downloads 19%
Synch 3%
2017
Physical 16%
Streaming 62%

1 // http://www.nielsen.com/us/en/insights/news/2017/time-with-tunes-how-technology-is-driving-music-consumption.html

2 // http://www.riaa.com

3 // https://www.thelocal.se/20170412/streaming-leads-music-sales-boom-in-sweden-as-vinyl-surges

But there's a problem

In a BBC3 video that recently went viral, Liam Gallagher laments that he is forced to make his own herbal tea backstage at one of his recent shows because "no one buys records anymore." The monologue, delivered in Gallagher's typical expletive-laden Manchester brogue is equal parts comical and poignant. Speaking of his tea and the preparation thereof, the rock and roll star goes on to complain that "...in the 90s I used to have about 4 people doing it."

As Mr Gallagher suggests, there once was a time when a hit record meant a wealth of riches for all parties involved in its creation, or at the very least, a decent living. This is increasingly not the case as habits of music consumption drift ever further towards fully digital all-you-can-eat experiences that leave working artists finding it difficult to make ends meet.

From vinyl through cassettes, CDs and into the digital age, the transaction between buyer and seller was relatively simple: you paid what the music asset cost and that money was distributed among all the participants in the supply chain on a scale that mostly represented their contribution proportionally. In this model, labels, artists, distributors and service providers have existed in a relatively harmonious symbiotic relationship. Labels rely on artists to fill their product roster, an artist, in return, is given the exposure and marketing clout to bring their talents to the masses—and distributors have the inventory that the service providers need to meet the demands of their customers.

The economics around unlimited streaming models are not so simple. Giving consumers virtually every piece of music ever recorded at their fingertips has come at a price for service providers in the streaming game on the one end and artists on the other. In the wake of losses sustained during the explosion of free and ad-supported digital music, major labels and their publishing partners have fought to maintain heavy financial control over the industry and the squeeze is felt on both ends of the supply chain.

In return for opening up their catalog of content for unlimited use, Sony, Warner and Universal (the Big 3) have built their contracts with streaming services to be among the most lucrative in the music industry. In 2011 for example, when Sony signed a contract allowing Spotify to use its content on their platform they were guaranteed over $42 million in yearly advances throughout the course of its three year lifespan, as well as over $9 million in ad revenue.[5]

Estimated number of streaming plays needed to earn

$ 1,472.00

(National minimum wage)

Google Play 216,471

Apple Music 230,000

Spotify.. 334,545

Pandora 1,132,308

YouTube 2,102,857

"Giving consumers virtually every piece of music ever recorded at their fingertips has come at a price for service providers in the streaming game..."

---

4 // https://www.facebook.com/bbcthree/videos/10155150996425787/

5 // https://www.theverge.com/2015/5/19/8621581/sony-music-spotify-contract

## And the money isn't going to artists - neither is it helping music fans.

On the surface, label guarantees and shares of ad revenue may seem like a positive for the industry - it gives them the cash to spend on producing more music and uncovering more artists. However, commercial needs of a major label we know do not necessarily dictate diversity. Instead, we increasingly see label profits growing and support reserved for only the most successful - read marketable - artists through playlists and featured/preferred placement. In 2017, 93% of streams in the US went to the top 2% of available music.

For a streaming service provider like Spotify, a rolling debt to major label shareholders represents a significant hurdle on the road to profitability - as their recent stock listing and associated documentation show.[7] The ascent of Spotify to its place atop the music consumption market has been fueled by capital injection rather than revenue. It's hard to believe that such a successful product operates at such a huge loss. We've already waved goodbye to Rdio and tremors have been felt by the likes of Pandora and Soundcloud. The situation is clear: in the current system, unless service providers have alternative sources of revenue to prop up a music streaming service, such as in the case of Apple, Google and Amazon, or are prepared to lean heavily on payola practices, they're facing an uphill battle. Either option will ultimately lead to massive restrictions on consumer choice.

If service providers are unable to turn a profit, it's no wonder the artists whose content they offer are struggling too. With per-stream royalty rates being tied up in calculations that are dependent on the service providers' total revenue (made tenuous through the balance between ad-supported and paid memberships), predicting how much you can make as an artist on streaming platforms becomes difficult. So much so that the most insight many artists get into their streaming royalties comes in the form of sporadic checks with a number next to "digital royalties."

Fig.2 — US Music Revenue
Source RIAA
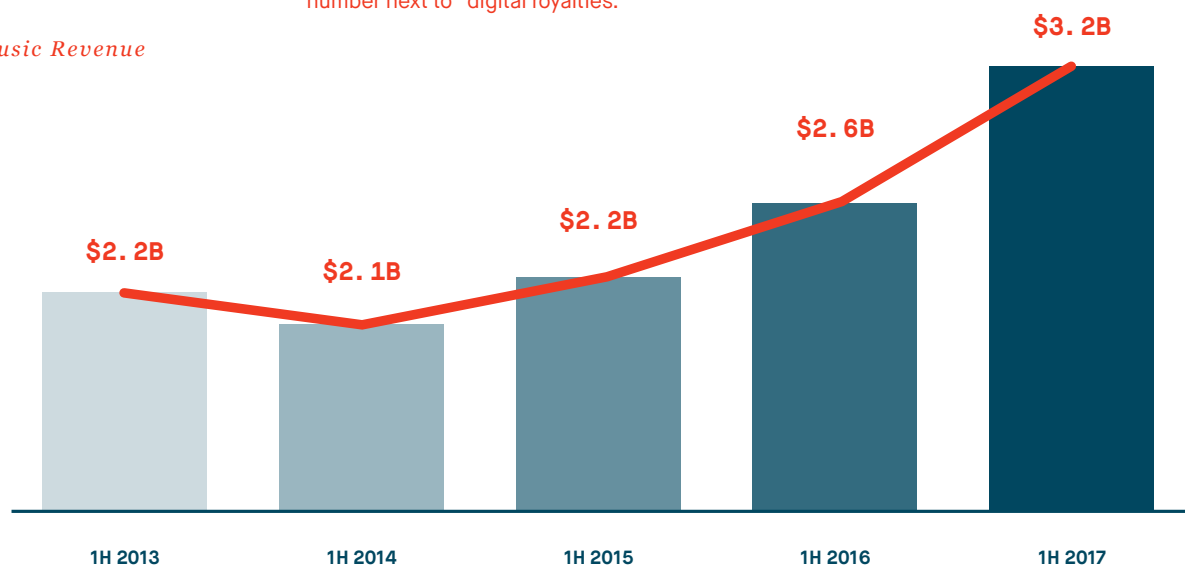
This lack of transparency and misalignment of compensation, illustrated by the hidden algorithms that govern payouts from streaming service providers, has so far made any attempt to untangle the labyrinthine process of bringing music to market and allow artists to work directly with service providers seem futile. Yet, 2017 music revenue in the US has hit a ten year high mark. People are spending money on music. The industry **_should_** be healthier.

6 // http://www.buzzanglemusic.com/wp-content/uploads/BuzzAngle-Music-2017-US-Report.pdf

7 // https://www.sec.gov/Archives/edgar/data/1639920/000119312518063434/d494294df1.htm

So where is the money going?

Legacy agreements with artists and service providers never contemplated a world in which the great majority of music listening and revenue would come from streaming. In an industry driven by physical sales and digital downloads, all parties were aligned and shared proportionately in the revenue per sale. In an industry driven by streaming subscriptions, certain parties are guaranteed revenues while others—specifically the artists—are not. So, artists and songwriters are left to carve up what's left after everyone else takes their cut, which isn't much.
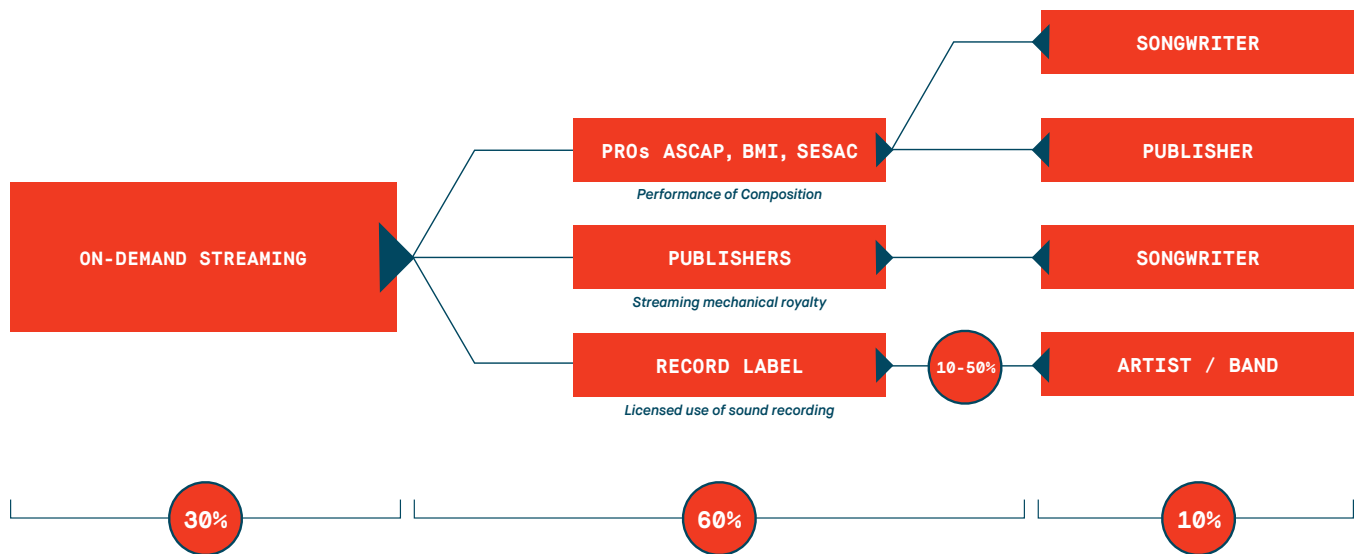
Fig.3 — Streaming Revenue Flow

ON-DEMAND STREAMING	PROs ASCAP, BMI, SESAC	SONGWRITER
	Performance of Composition	PUBLISHER
	PUBLISHERS	SONGWRITER
	Streaming mechanical royalty	
	RECORD LABEL	10-50% → ARTIST / BAND
	Licensed use of sound recording	

| 30% | 60% | 10% |

Fig.4 — The Current Split

RETAILERS

LABELS

ARTISTS

PUBLISHERS

10%   12%   48%   30%

eMusic Steps up its Role in the Industry

eMUSIC eMusic is among the top Independent providers of download-to-own digital music, with over 47 million customers served and 945 million tracks sold. Long seen as a go-to for music lovers of more discerning tastes - many of whom like to eschew the mass appeal of more commercially-minded storefronts such as iTunes, Google Play or Amazon mp3 - eMusic continues to be a profitable business in a world where very few players see meaningful revenue from music sales.

eMusic's success has stemmed from earning a position in the hearts and minds of members as a brand that stands for discovery, artist connection and value. In addition, the pre-paid subscription model has allowed for favorable revenue sharing agreements with labels and artists.

We are now more than ever committed to serving music fans who wish to download and own their music.

However, on-tap music has overtaken all other modes of consumption and will continue to dominate the market in the coming years. We are now poised to take on MORE than just being a node on the industry. We want to be the underlying infrastructure that feeds nodes like us, in a better way that encourages more profitability and more choice. We wish to amplify the power eMusic has as a trusted and durable brand dedicated to the independent music community. We anticipate an inevitable shift towards decentralization in the music industry. eMusic aims to innovate in this space and be the first major music platform to convert fully to blockchain and better serve our customers and the overall music ecosystem.

Blockchain evangelists will tell you that supply chains and other economic structures complicated by intermediary processes can be simplified and their efficiency increased by digitizing the transactions involved, distributing them on a public ledger and allowing the parties involved to interact with each other directly rather than having to go through a central node.

Perhaps no other industry exemplifies the problem blockchain was designed to solve more than the music industry. We believe untying the knot of contracts, transactions, assets and stakeholders that make up the music industry and realigning the threads into a more streamlined, transparent

"We anticipate an inevitable shift towards decentralization in the music industry. eMusic aims to be the first major music platform to convert fully to blockchain."

and autonomous structure will benefit everyone: not just musicians, labels and service providers, but music fans too.

We are conscious of the fact we share company in our pursuit of a decentralized solution with many projects of varying degrees of repute. Putting any questionable and unfortunate get-rich-quick schemes aside, you are left with a number of commendable projects with goals that very much align with ours: better serve music consumers, pay the artist more and cut out the middlemen.

"We strongly believe that widespread adoption will be fueled by the clear benefits that will be showcased by eMusic, an established brand and trusted service provider. "

However, many blockchain-based music projects simply ignore the economic realities of the music industry and pitch their platforms in direct competition with not just other start-up projects, but well-established services like Spotify, Apple Music, Amazon, QQ Music and KuGou . This is an approach that is unrealistic as success is dependent on luring enough users and content creators away from these providers to reach scale - a mammoth, nearing on impossible, task. Through the wholesale adoption of blockchain technology we seek to lead by example-proving the overwhelming benefits of blockchain to our existing customers. While our plans do extend to providing the infrastructure to mutually benefit all parties in the industry, not exclusively our own platform, our immediate goal is not to compete head-to-head with others, rather better serve our customers.

We strongly believe that widespread adoption will be fueled by the clear benefits of a blockchain-driven music industry that will be showcased by eMusic, an established brand and trusted service provider.

eMusic is uniquely positioned to adopt and introduce a blockchain solution:

- We have a receptive and active community of independent labels, artists and fans eager to support each other.
- We have an existing consumer service with access to an established and supportive community of music enthusiasts.
- We have an extensive catalog of content and existing relationships with thousands of music labels and organizations. ***Browse eMusic.com***
- We have a proven credit-based platform and plan structure that is easily converted to a token-based system.

Armed with the above we are prepared to write an entirely new chapter in eMusic's history.

eMusic Blockchain Distribution

07

THE central component of eMusic's blockchain adoption project will involve the introduction of a long-awaited feature - one which many of our members both past and present have been asking for for many years.

Using existing elements of our catalog delivery infrastructure and business relationships with content providers, we will be enabling a new self-publishing and distribution platform. This platform will power the eMusic Retail Store and evolve to providing seamless distribution through other popular service providers.

SUMMARY OF BENEFITS

	For eMusic Members	For Artists
AVAILABLE AT LAUNCH	• Increased spending power • New promotional incentives • Larger variety of music available and promoted through eMusic	• Retain more direct revenue • Instant access to royalty payments • Access to new distribution network • Fan base incentives
	• Removal of 'anti-streaming' sentiment • Use existing apps/services • Direct-to-artist funding • Revenue-sharing	• Easy rights management • Transparent sales/stream data • New funding channel

For Labels	For Service Providers
• Retain more direct revenue • Monetization of back catalog • Hands off reporting • Auditability • Fewer dependencies • Simplified contracts	• Retain more direct revenue • Seamless technical integration • Catalog diversity • Freedom from the 'Big 3' • Market parity

For eMusic Members

For current and future eMusic members, eMusic will continue to be a place to browse, sample and purchase music at discount prices, seek recommendations and interact with a community of like-minded music lovers. It will also continue to offer music cloud storage services, allowing you to sync and play your entire music collection on a number of different devices. The move to blockchain will only enhance our member experience with complementary features made possible by operational efficiencies in our back-office and improved economics around the business.

On top of the existing catalog, members will find the new distribution platform offers the opportunity to discover many new artists - independent at first, then more established as we expand. Savings made possible by switching to blockchain technology means more money will be funneled into attracting artists and labels to the platform and into the retail store.

"Independent music makers will find all the necessary tools—from tracking sales to managing royalties - to establish eMusic as a hub for catalog management."

The move to blockchain will facilitate robust discount incentives, allow users to accrue credit for retail purchases in the form of loyalty rewards and offer flexible payment options.

Blockchain also amplifies the voice of fan community in the promotion of artists and albums to the industry. Knowing that funds are going directly to the rights holders when a purchase is made on the eMusic distribution platform, music fans are contributing more directly to the long term success of their favorite artists and the overall sustainability of their artistic vision. At present, only concert ticket and merchandise sales compare in terms of the type of direct-to-artist transaction we believe are key to a healthy music industry.

As more content is distributed through the distribution platform to external service providers, the more the promotions and plays will follow what the fans want to hear and discover vs. what the labels and algorithms have negotiated in their contracts. This will be particularly attractive to the small but vocal population of music consumers who have thus far conscientiously resisted giving their business to streaming platforms. Our strategic vision involves reaching a place where they will be able to do so without feeling like they are hurting their favorite artist.

For Artists

Artists will be able to upload, store and control the distribution of their music to service providers. They may sell their content immediately via the eMusic store and as the platform grows, eventually distribute through a large network of service providers, including both streaming and download-to-own services.

After registering with the platform and paying a small fee to cover costs involved in the storage/hosting of files, as well as the administrative costs involved in maintaining and updating blockchain infrastructure, an artist will be able to upload (or otherwise ingest/link to) their music assets, complete standard metadata requirements and select how and where they wish to distribute their content.

The inherent ledger capabilities of blockchain technology will allow content owners to record rights holder identities and the percentage of royalties from future earnings owed

to each individual or group of rights holder(s). Opportunity to invite collaborators/rights holders to the platform will be given, with ample instruction available on how to complete set up. Alternatively, owners may choose to use a single rights holder record and ultimately distribute royalties among songwriters, producers, etc outside the eMusic platform.

The owner's music asset exists in reference to an immutable record on our blockchain. Any and all updates to this entry are recorded publicly on the blockchain, thus ensuring total transparency.

Independent music makers will find all the necessary tools - from tracking sales to managing royalties - to establish eMusic as a hub for catalog management. Self-publishing on the eMusic Retail store has long been a request from our community of users - many of whom are musicians themselves.

A dashboard-like interface will allow the asset owner(s) to manage all aspects of their catalog: select which service providers they wish to distribute their content to, whether it can be streamed, downloaded or licensed, and how much it should cost.

By distributing via the eMusic blockchain platform, the asset owner(s) agrees to a simple 50/50 revenue split with the eMusic retail store and any onboarded external retail platforms on which they wish to be published. Asset owners may at any time update the details of rights holders A small platform fee will apply for storage/hosting of files, maintaining and updating blockchain infrastructure (not to scale of plays or distribution activity).

Sales on the eMusic store and external service providers are recorded by the platform and asset owner blockchain ledger entries are updated on a regular daily cycle — ensuring that rights holders get a continuous flow of fully transparent data and revenues.

The eMusic blockchain platform will provide rights holders immediate access to royalty payments. This level of liquidity is in direct support of the majority of musicians and creative professionals that need the funds to sustain a living wage as a musician. Most artists can't afford to wait the months or years it currently takes for royalty payments to finally flow into their pockets.

Fig.5 — The New Split

50%
50%

ARTISTS & LABELS

SERVICE PROVIDERS

SMART CONTRACTS

Why 50/50?

Independent artists today can distribute their content through any number of distributors and receive up to 70% (occasionally more) of revenue from sales/streams of their music. Getting more of the proceeds has not translated into more plays or promotions - as playlist supremacy continues to be maintained by the major labels.[8] The platform and our vision must serve both the needs of the artist and the service provider, to provide the right incentive to promote independent music. Sharing gains from efficiencies removed from the process and equitably splitting the proceeds and sharing in the reward is the underpinning of beginning to shift the conversation and incentives away from the current Major Label contracts, to whom many of the service providers are deeply indebted. By championing an equitable split of revenue, artists distributed through eMusic can better-negotiate promotional support and will be given more weight in profit-driven algorithms that drive music recommendations on major retail platforms.

For Labels

Initially, we see the eMusic distribution platform scaling through the distribution of unrepresented artists/bands. As we expand, we expect to attract independent, major-affiliated and eventually major labels to the platform by offering larger-scale batch ingestion tools. For thousands of existing eMusic label partners, this process would be rather seamless as we already have their catalogs ingested into our systems.

To tackle the legal challenge of delivering entire label catalogs through our platform, we will be working closely with music rights lawyers and other industry specialists to establish a clearing house service that would enable us to incorporate any back-catalog content, and we will work with associated rights agreements to ensure the flow of royalties remains uninterrupted.

Distributing content through eMusic gives labels the benefit of an entirely hands-off royalty reporting/distribution system where music asset data can be inputted once and the flow of royalties continually updated - per territory - without the need for costly and slow manual royalty reporting.

Labels are free to work with external publishers and PROs off-chain for back-catalog content, however the role of the publisher will inevitably be diminished as the transparency and auditability made possible by blockchain reduces the need for supervisory administration.

With this arrangement, eMusic will act as a label's distributor and we will offer access to our distribution network of all major service providers, ensuring any label who chooses to distribute through eMusic has its music available on as many platforms as possible.

Bringing music to market is complicated. Each step along the way eats into the profitability of a music asset for a label and delays or even inhibits its release. MusicWeek in 2016 concluded that it takes an average of 4.53 writers to make a top 100 hit.[9] Add in the numerous musicians, producers and technicians involved in its creation and any one of no less than seven different types of songwriter and music publisher agreements, a single song has already navigated an ocean of intermediaries before it even reaches a service provider, never mind an entire album.

A blockchain-based system of distribution not only reduces the release process to 2 simple contracts: one for the label and one for the service provider, but serves labels
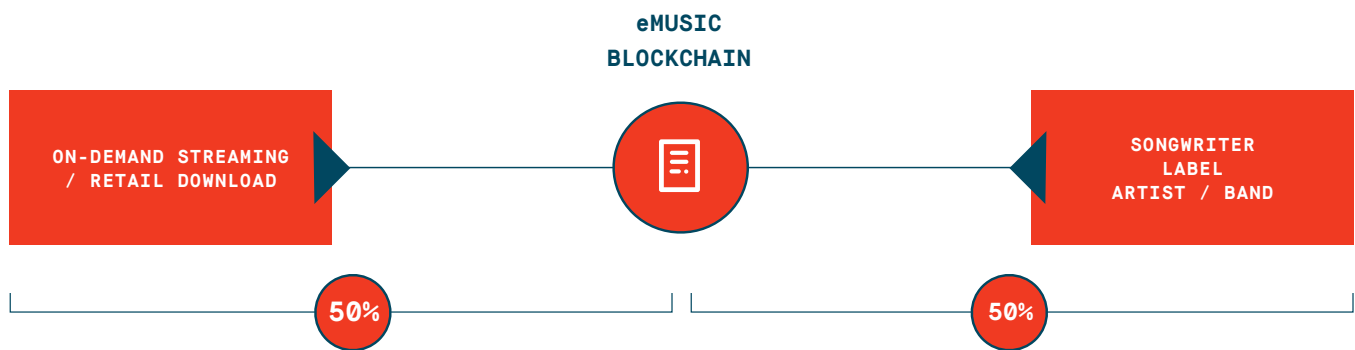
8 // https://gallery.mailchimp.com/364c74469991394a30cb4601f/files/listomania_Winners_Losers_Battle_Spotify_Playlist_Supremacy_2_.pdf

9 // http://www.musicweek.com/publishing/read/songwriting-why-it-takes-more-than-two-to-make-a-hit-nowadays/068478

with the potential to save on a multitude of 3rd party service providers such as payment processors and external reporting services. Ultimately funneling more revenue back to the label and the artists they represent.

Sales are tracked in a publicly distributed database, accessible at any time and by anyone—offering an unprecedented level of transparency. See exactly how and where your music is being bought and listened to in near real time.

Fig.6 — eMusic Royalty Flow

eMUSIC BLOCKCHAIN

ON-DEMAND STREAMING / RETAIL DOWNLOAD

SONGWRITER LABEL ARTIST / BAND

50%   **50%**

For Service Providers

Accepting eMusic as a distribution partner will be seamless for service providers as we intend to work with existing catalogs and distributors. In order to work with eMusic's distribution platform as a service provider, it will suffice to 1) have means of sending payment to the platform in cryptocurrency (i.e. have a compatible wallet) and 2) have a way of interpreting a basic API we provide that will expose the catalog inventory a particular service provider has the right to sell based on the distribution choices made by content creators. This process is not unlike working with any current distributor or aggregator of music, except for the fact that payments are transferred directly between parties and in real time.

We wish to create a true two-sided industry: One in which service providers are not restricted in the content they promote to users based on preferential label agreements they have in place. If all content is equal, then the music industry as a whole becomes more healthy both financially and in terms of musical diversity. In keeping with our mission of balance and equity, service providers will receive a 50//50 split on revenue generated through sales/streams of content distributed by the platform. This we see as an enormous incentive to work with us and serve customers the varied catalog we aim to offer instead of being beholden to a handful of major labels through which they only receive around 30% of revenue.

We are under no illusion that convincing established service providers, such as Pandora or Spotify, to incorporate our blockchain platform will be easy. To ensure full coverage and connection to all platforms, eMusic will invest significant resources in working with

> *"eMusic will continue to be a place to browse, sample and purchase music at discount prices, seek recommendations and interact with a community of like-minded music lovers... The move to blockchain will enhance our Member experience with complementary features."*

participating service providers off-chain.

Going forward we hope to integrate all service providers we work with at a foundational level, onboarding them fully to a blockchain-based system, whereby all the content they offer through eMusic is administered entirely on-chain. Blockchain integration to service providers will be available on day 1 of the project. The eMusic retail store will pilot this initiative. External service providers moving their reporting to eMusic to blockchain will also see an increase in share of revenue and reap the inherent benefits of the technology: auditability, security, autonomy and peer-to-peer transactions – allowing them to reduce expenses in the same way eMusic will.

For the eMusic retail store, the distribution platform represents an exciting new opportunity to attract music makers from around the world and bring a wealth of new music to our users.

In addition to making it easy for existing, established service providers to distribute eMusic content, we hope to attract and encourage the development of new service providers and startups, adding to the variety, competition and consumer-choice to benefit music fans.

Blockchain Overview

ALL components related to eMusic's blockchain platform will run on the Ethereum network. There are two codependent facilitators of all interactions on the blockchain detailed below: Smart Contracts and the eMusic Token.

Smart Contracts

Blockchain economies function thanks to what are referred to as "Smart Contracts." These are simple computer programs (in that they have inputs and outputs) that exist as immutable records, shared to a public database. They may contain whatever permutation of data is needed for a particular transaction.

As it relates to music assets, we envision 2 distinct Smart Contracts needed to fuel the new eMusic ecosystem. Both contracts fulfill a key role in the supply chain between artists, labels, service providers and music consumers.

Smart Contracts bring autonomy, reliability, security and are based on peer-to-peer transactions. The associated data is first established as a legal accord between 2 parties and is continually updated or executed in real time.

Smart Contract 1 - Content

The central Smart Contract for the distribution platform is the 'Content' Smart Contract. The distribution platform will rely on this Smart Contract to maintain record of a music asset, where and how that asset may be published to each service provider, who the rights holders are and the percentage of the generated revenue each rights holder is eligible to receive.

The main use for the Content Smart contract is enabling an artist to publish an asset on the eMusic distribution platform for sale/streaming.

The artist/label will sign the Content Smart Contract and the associated asset will receive an ID to be used in reference to the platform and other Smart Contracts.

With current blockchain performance limitations, it would not be practical to simply send the revenues to the right holders' wallets automatically, this is why we have opted for an 'on-demand' withdrawal mechanism.

Smart Contract 1 - Content (cont...)

Rights holders will access the Content Smart Contract to withdraw funds. The Content Smart Contract itself contains no funds, rather is white-listed to withdraw funds from other Smart Contracts.

Fig.8 — Smart Contract #1 (Content)
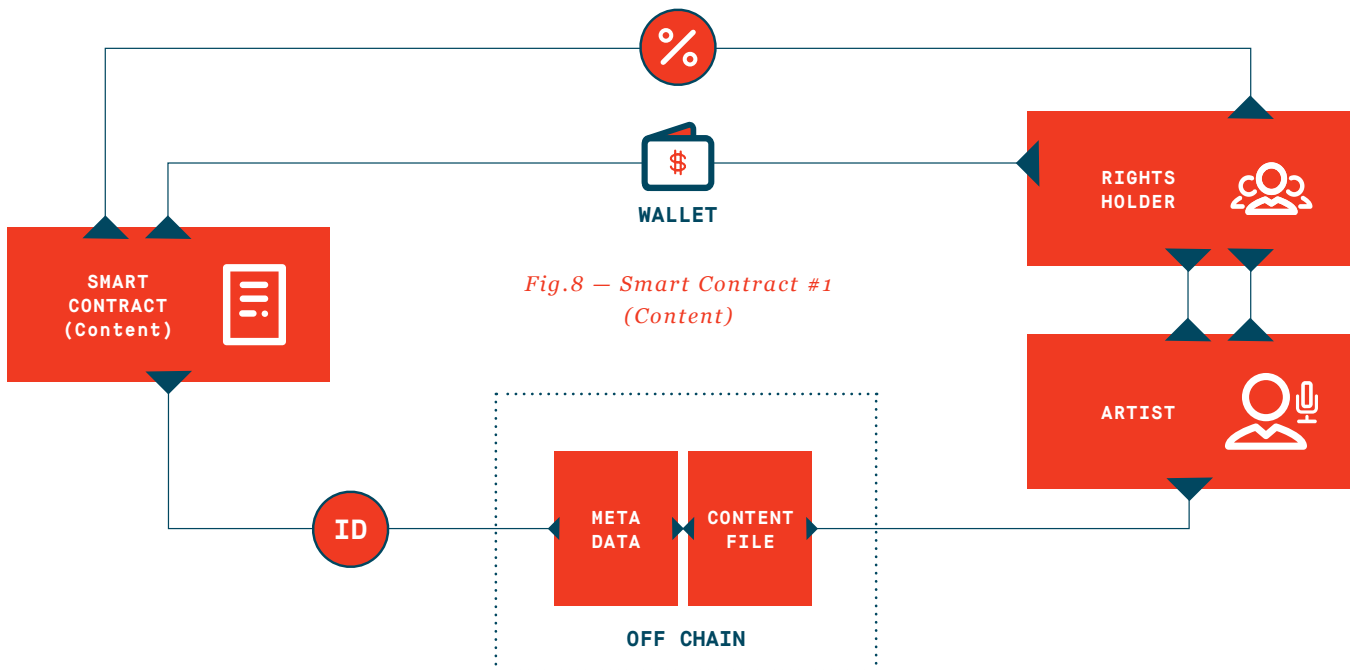
Smart Contract 2 - Sales

Sales Smart Contracts will capture and report on service provider data and funds for the assets that are sold or streamed through their service(s).

On day 1, this process will be piloted by the eMusic Retail Store. When a sale or stream is made on a retail outlet, the data is recorded off-chain to a database containing music asset ids. On a regular schedule (daily in the case of eMusic retail store) the service provider will update a Sales Smart

Smart Contract 2 - Sales (cont...)

Contract, sending the funds generated by the sale/stream of each music asset along with the IDs, as well as the fiat value per asset and number of sales/streams per asset for that period.

Once funds have been reported and sent to the Sales Smart Contract, the payouts are calculated per music asset id and saved in the Sales Smart Contract.

When the above is complete, the funds are available for rights holders to withdraw. On withdrawal by a rights holder, the Content Smart Contract retrieves the payout from the sales smart contract and awards the allotted percentage of funds to the rights holder.
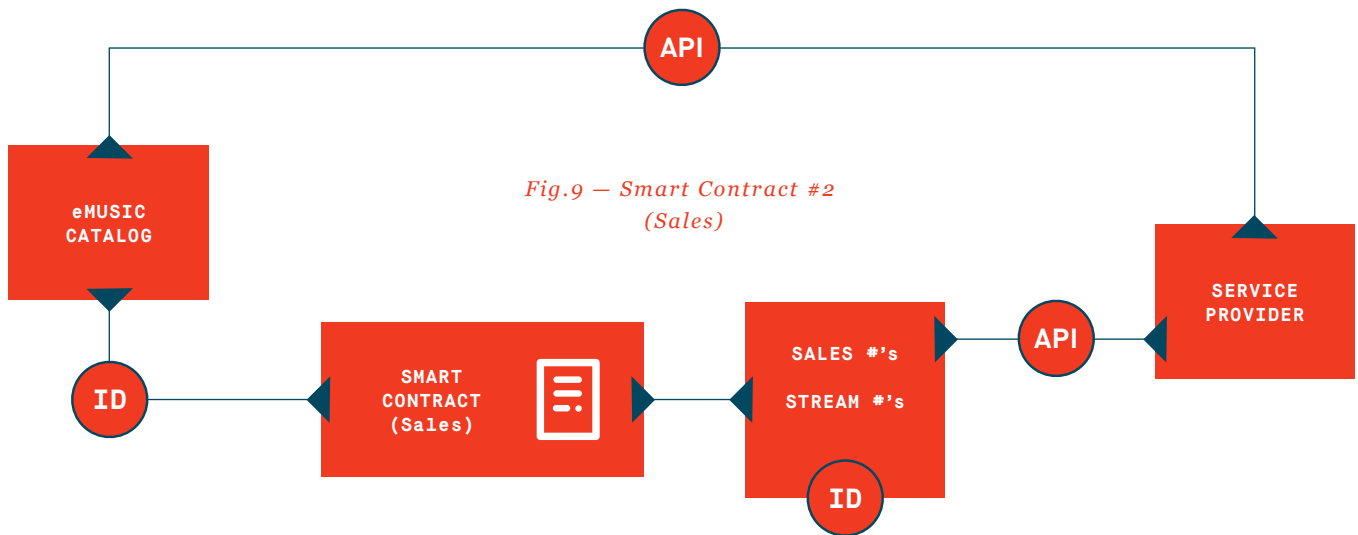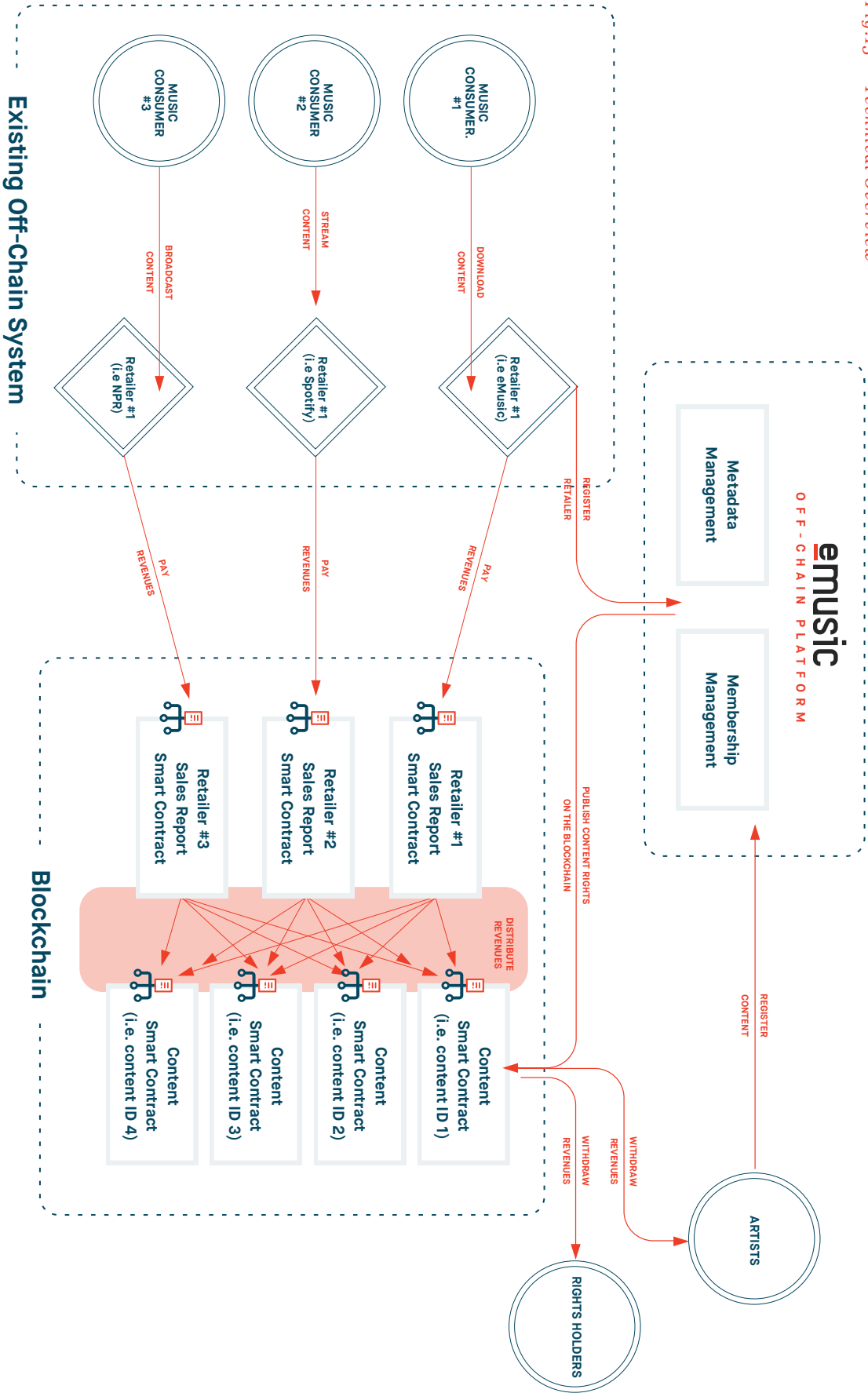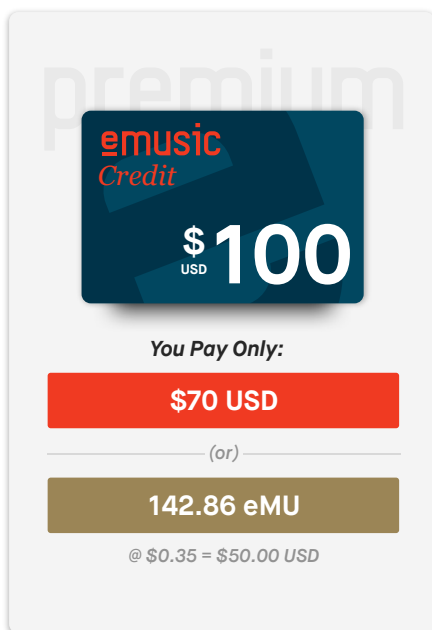
Fig.9 — Smart Contract #2 (Sales)

API

eMUSIC CATALOG

ID

SMART CONTRACT (Sales)

SALES #'s

STREAM #'s

ID

API

SERVICE PROVIDER

Fig.13 — Technical Overview

Existing Off-Chain System

MUSIC CONSUMER #3

MUSIC CONSUMER #2

MUSIC CONSUMER. #1

BROADCAST CONTENT

STREAM CONTENT

DOWNLOAD CONTENT

Retailer #1 (i.e NPR)

Retailer #1 (i.e Spotify)

Retailer #1 (i.e eMusic)

REGISTER RETAILER

PAY REVENUES

PAY REVENUES

PAY REVENUES

emusic

OFF-CHAIN PLATFORM

Metadata Management

Membership Management

Blockchain

Retailer #3 Sales Report Smart Contract

Retailer #2 Sales Report Smart Contract

Retailer #1 Sales Report Smart Contract

PUBLISH CONTENT RIGHTS ON THE BLOCKCHAIN

DISTRIBUTE REVENUES

Content Smart Contract (i.e. content ID 4)

Content Smart Contract (i.e. content ID 3)

Content Smart Contract (i.e. content ID 2)

Content Smart Contract (i.e. content ID 1)

REGISTER CONTENT

WITHDRAW REVENUES

WITHDRAW REVENUES

ARTISTS

RIGHTS HOLDERS

introducing the emusic token

To facilitate transactions and interactions on a blockchain platform it is necessary to pass currency from one party to another.

premium

emusic
Credit

$100
USD

You Pay Only:

$70 USD

(or)

142.86 eMU

@ $0.35 = $50.00 USD

To update a smart contract - in the event of entering new sales data, amending rights holder information, or to release a new music asset for example - currency is required. The cryptocurrency Ether and its associated blockchain has stood out in this regard as a standard-bearer, powering as it does, the majority of new blockchain projects. The key feature of an Ethereum blockchain is its flexibility in terms of application. It allows developers to use the foundational structure of its blockchain and build out entirely new applications using unique interfaces in the form of digital assets called "tokens." In other words, Ethereum allows developers of all different disciplines and industries to adapt its technology to suit their needs and create their own digital currencies.

eMusic will introduce a proprietary Ethereum-based ERC-20 token - a digital asset that can only be used in our new music ecosystem.

A critical first step in moving the current eMusic system architecture to one based on blockchain technology is to initiate a migration of customers from the current system, in which purchasing power is obtained via subscription resulting in non- transferable "credits" that expire on a monthly basis, to a token-based system, in which cryptographic tokens that do not expire can be purchased in large or small amounts, offering eMusic customers more choice and greater flexibility for purchasing music and engaging with other artists and fans.

eMusic Members that are also eMusic Token holders will be able to convert their tokens at any time to eMusic retail store credit. Converting eMusic tokens to store credit will carry bonuses (over fiat) that increase a Members spending power - enabling them to buy even more discounted music. Plus, unlike store credit, eMusic tokens never expire, so Members can stock up on eMusic tokens and use them to boost their eMusic credit balance at any time.

From a business perspective the eMusic Token represents, in part, the pre-purchase of music. It allows eMusic to keep the membership pricing elements of the business intact and evolve our business model beyond recurring subscriptions, which limits the choice of certain consumers.

premium	plus	basic
emusic *Credit*	**emusic** *Credit*	**emusic** *Credit*
$ USD **100**	$ USD **50**	$ USD **25**
You Pay Only:	*You Pay Only:*	*You Pay Only:*
$70 USD	**$35 USD**	**$17.50 USD**
(or)	*(or)*	*(or)*
142.86 eMU	**71.43 eMU**	**35.71 eMU**
@ $0.35 = $50.00 USD	*@ $0.35 = $25.00 USD*	*@ $0.35 = $12.50 USD*

*Prices Not Final
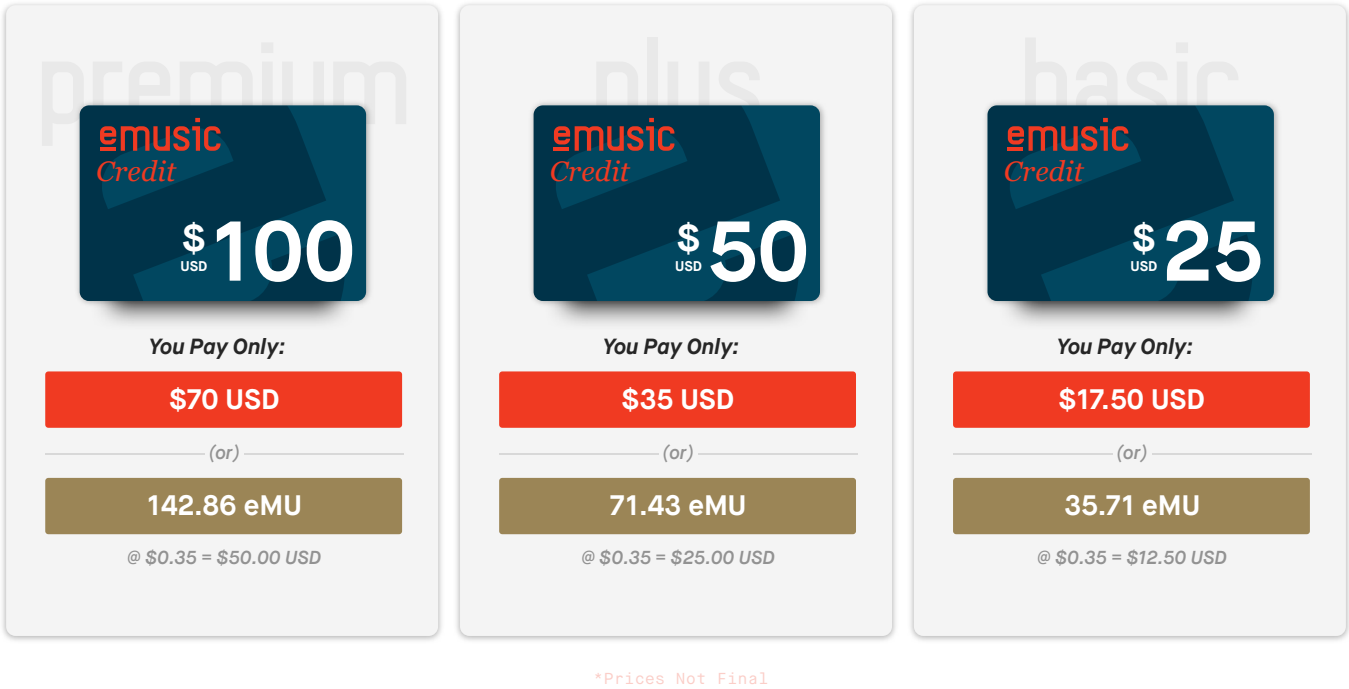
Fig.11 — Pay with Tokens

In addition to the use of tokens to provide an alternative to - and eventual replacement for - the existing credit system, we also see tokens as powering our new ecosystem for the music industry, in which tokens can also be used in ways that "credits" would never have accommodated. We believe that we can accelerate the growth of this new ecosystem by offering existing and future customers an immediate use case for tokens (the downloading or streaming of millions of musical tracks available on the Platform and new and exciting types of fan engagement),

In addition to using tokens to purchase music downloads token holders using the Platform will, from the time of token issuance, benefit from the following additional features (the "Initial Features") available immediately:

Initial Features

— *Token-only Sales:* eMusic will periodically offer selected musical tracks or albums at sale pricing exclusively to token holders.

— *Exclusive Content:* eMusic will make certain content only available to token holders.

- *Cloud Storage:* Purchasing a predetermined amount of tokens will give customers unlimited cloud storage for their music collections for a predetermined period of time (previously, this feature was available only to customers that purchased certain monthly credit subscriptions).

- *User Rewards:* Customers will be awarded additional tokens that will allow them to boost their spending power on the Platform the more they interact with others (e.g., through "playlisting"- the creating and sharing of music playlists) and when they refer others to the Platform.

- *Wishlist Grants:* eMusic will launch exclusive competitions, only available to token holders, where token holders can win a portion of their "wishlist" (up to, e.g., five full albums).

- *Self-Publishing:* eMusic will enable the first part of this feature on the day the Platform is launched. We will reward uploads with tokens (at a rate to be determined) in an initial pilot scheme. All content uploaded during the initial period following launch will become available on the eMusic retail store when the rights management functionality is built. eMusic token holders will then be able to vote on self-published content that will be featured on the "front page" of the eMusic online store.

- *Customer Support:* eMusic will provide customer support for existing customers converting their credits to tokens, as well as customers new to the Platform. This support will include, but will not be limited to, assistance in working with digital wallet software, instruction on sending and receiving tokens, and best practices related to personal cryptographic key management.

Supplemental Features

In addition to the Initial Features, we will develop certain supplemental features around token use (the "Supplemental Features") including:

- *Rating Reviews and Enhanced User Interaction:* Using tokens, customers may rate the quality of reviews provided by other customers and industry experts. Customers may receive tokens from eMusic as a result of contributing to community discussions, providing valued reviews, ensuring the quality of the Platform by flagging incorrect data, or referring new artists to the Platform.

- *Promotion:* A set amount of tokens may be provided to artists to distribute through the Platform as a unique marketing tool to give to aspiring fans. Artists could use the tokens to incentivize fans and rally their fan base in any number of ways that have not previously been possible.

- *Rights Exchange:* Tokens could be used on the Platform by parties who are interested in trading music-related assets, particularly artists' rights, music scores, and memorabilia, for rights to access other music-related assets available through the eMusic Platform. This would enhance the eMusic Platform's self-publishing feature. Artists and labels would be able to use tokens to publish and manage their music through smart contracts available on the eMusic Platform. Using this system, associated royalty payments would be accounted for, auditable and transparent, in stark contrast to the current highly opaque system. In time, rights holders may choose to retain all or a portion of their royalties in tokens to be used on the Platform however they wish.

- *Rights Tracking:* The ability to digitally "watermark" downloaded content will allow copyright holders using the eMusic Platform to identify pirated music.

- *Rent-a-Platform:* Third-party (non-affiliated) retailers, such as independent brick-and-mortar stores wishing to have a greater presence online and who are not currently within the eMusic ecosystem, could participate in and, through the use of tokens, add content to, the eMusic catalog sold through a separate "storefront," using the Platform as a fulfillment mechanism.

- *Quick Mobilization:* The Platform will give artists the ability to use the Platform rapidly to create and distribute songs that are donated by artists, with the proceeds used for charitable fundraising for disaster relief or other urgent causes.
- *Crowdfunding:* Development of a crowdfunding platform that would allow artists to create new works (or utilize existing works for which they control the rights) to raise money through an SEC-registered crowdsale, requiring a fee paid with tokens to be able to participate in the purchase of these rights.

Third-Party Features

Separate from any Supplemental Features we may add, the eMusic token will enable additional functionalities provided by unaffiliated third parties, similar in concept to a digital "agora" or open marketplace for participants in the music industry. Integration of external application program interfaces ("APIs") will enable the expansion of the eMusic ecosystem, without the involvement of, or the use of resources provided by, eMusic and will encourage peer-to-peer interaction. Non-affiliated businesses will be able to create APIs for the Platform in order to allow their users to interact with the Platform for products and services, such as the purchase of concert tickets, obtaining (or providing) music news, and sales of artist-oriented merchandise, among others. Other preferential third-party features (the "Third-Party Features") could include:

- Using tokens to facilitate activity that may be able to be achieved without tokens, but in a much more cumbersome way. For example, third parties can make their APIs connecting to the Platform available to everyone with Internet access, but then allow discounts or other benefits solely to holders of eMusic tokens. This may be done for cross-promotional purposes or as the result of a wider strategic alliance that provides mutual benefits for all relevant parties.
- Third parties can use APIs to allow payment for their goods or services through the Platform. (e.g. tickets, merchandise, synch opportunities, etc).
- Similar to paper-based coupons, eMusic tokens may be transferred directly between parties such that any third party can accept eMusic tokens in exchange for goods or services with no further systems integration required (as the eMusic tokens are based on the widely used and understood ERC 20 standard). This works for both general third parties and any third party eMusic partner with a permanent or time-limited arrangement that might be targeted to a specific type of content or promotion.

We recognize that it will take some time to migrate fully all customers from the current credits- based system to a wholly token-based platform. Although it is impossible to predict with certainty, our current projection is that all customers will be migrated to the token model and the current credit system will be discontinued approximately one year after launch of the initial features. In the meantime, we will continue to support fiat-based credit subscriptions.

eMusic Feature	eMusic Token	Fiat
Á La Carte Purchase	(e)	Yes
Subscription	(e)	Yes
Convert to Credit ad-hoc	(e)	No
Purchase Extra Credit	(e)	Yes
Loyalty Rewards	(e)	No
Referral Bonus	(e)	No
Access Exclusive Features	(e)	No
Royalty Payments	(e)	Yes
Incentivize Fan Base	(e)	No
Participate in Crowdfunding	(e)	No
3rd Party Integration	(e)	No

AVAILABLE AT LAUNCH

The Sunshine Makers (Original Motion Picture Soundtrack)
The Heliocentrics

Member Price: $4.99
As a member you save 30% off retail

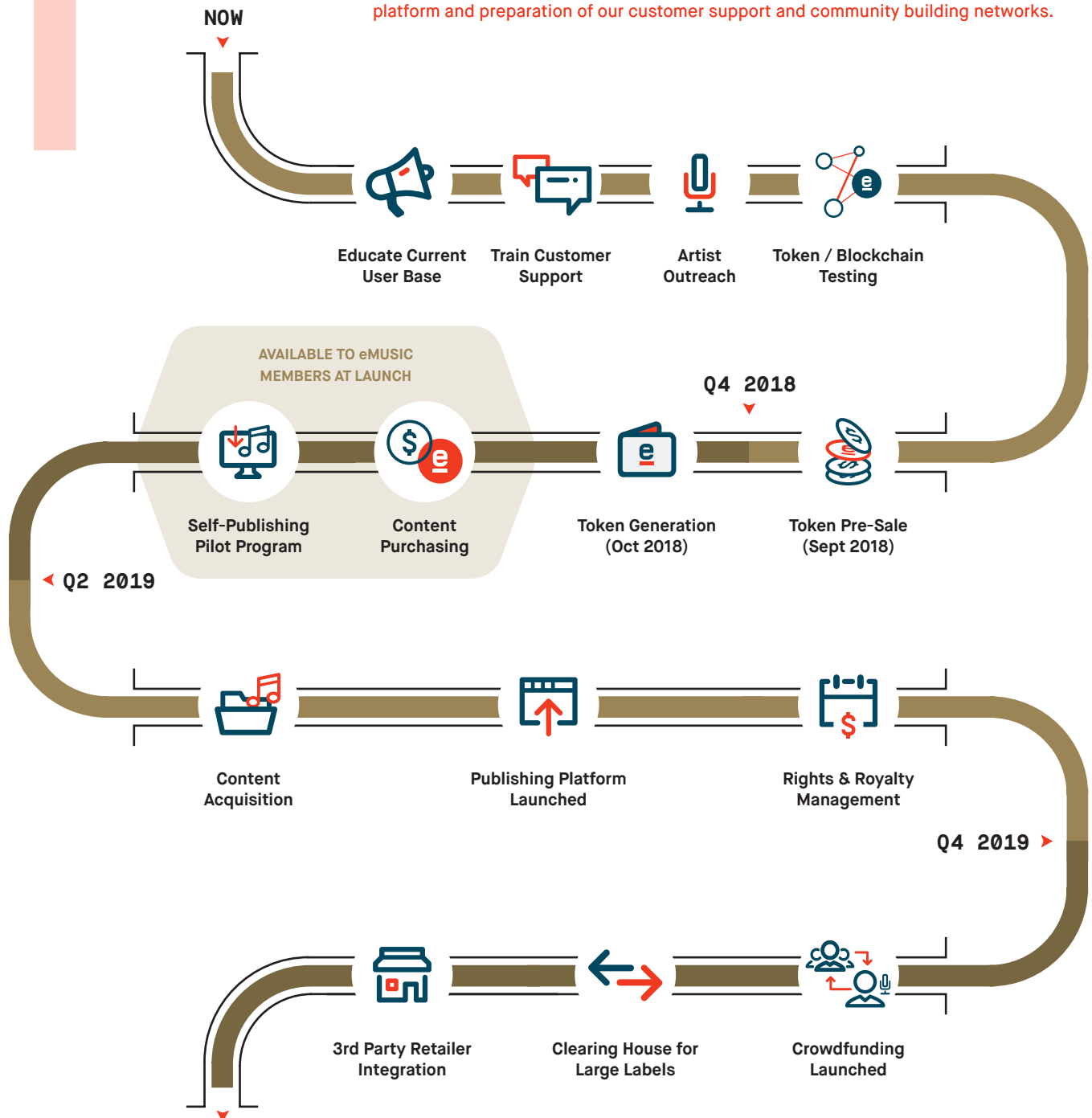(e) **12 eMU**   @ $0.35 = $4.20 USD

CANCEL   CONFIRM PURCHASE

Fig.12 — Token as Payment

Roadmap

Immediately following token generation and distribution, token holders will be entitled to purchase music on the eMusic Platform. Focus in the lead up to the generation of eMusic tokens will be split evenly between research, development and testing of the platform and preparation of our customer support and community building networks.

NOW

Educate Current User Base

Train Customer Support

Artist Outreach

Token / Blockchain Testing

AVAILABLE TO eMUSIC MEMBERS AT LAUNCH

Self-Publishing Pilot Program

Content Purchasing

Token Generation (Oct 2018)

Q4 2018

Token Pre-Sale (Sept 2018)

Q2 2019

Content Acquisition

Publishing Platform Launched

Rights & Royalty Management

Q4 2019

3rd Party Retailer Integration

Clearing House for Large Labels

Crowdfunding Launched

Our Team

Led by CEO Tamir Koch, our core team and advisors have collectively been responsible for over $1billion in exits and funding and have been involved in over 30 blockchain projects including: *Wepower, Adhive, Elysian, Wemark, INS.world, Cool Cousin, Tron, Change Bank, iOlite, Blackmoon Crypto, Zeex, Tatatu, Wings, Bancor, Firmo network, Matchpool, Flixxo, Orbs, Cartesi, Blox, Coinstarter, Liberdy, MW, Adex.network, HighIOT, Capitalise.*

12

Tamir Koch
CEO
23 years of entrepreneurship and leadership; Two previous successful exits.

#Eclectic

Michael Juskiewicz
CFO
Over 15 years investment banking experience. Specialty in public and private capital raising and M&A.

#Alternative

Matt Downing
CMO
More than 20 years of experience, including launch of SiriusXM Streaming Services.

#80sAlternative

Nir Peled
CTO
More than 16 years leading software and engineering teams.

#ProgRock

Matt Robinson
AVP Product
Multi-platform product specialist. 10 years experience bringing B2C software to market.

#90sHipHop

Bryan Farevaag
Creative Director
10+ years of UX/UI experience, Oprah Magazine, guesterly and Random House. Faculty at SVA.

#Dadrock

Lara Peterson
AVP Marketing
10+years marketing for consumer brands. Amex, XM Radio, ooVoo

#HipHopHero

Ori Erez
Blockchain Expert
10 years leading technology projects in the fintech industry including invest.com.

#RootsRevival

Sam Zelitch
Community Manager
#Experimental

Brandon Schmidt
Label Relations
#Post-Punk

Ricardo Cabret
Lead Front End Developer
#JazzLover

Eric Chang
UX Designer
#TeenyBopper

Daniel Karni
System Architect
#Hamilton #OnRepeat

Adriana Gunczler
UX Jr. Designer
#IronicTeenyBopper

Ashi Atlas
Product Manager
#Metalhead

Guilherme Birk
Mobile Developer
#ShuffleButton

Shauli Bracha
QA Engineer
#EvenMoreOfAMetalhead

Advisors

13

Bill Campbell
Founder Barefoot Media. Former head of digital for Sony Music, later UMG.

Richard Blackstone
Former Board member of Avex, Inc.(Japan), Worldwide Chairman/ CEO Warner/Chappell, CCO at BMG, President Zomba Music.

Jeff Van Driel
Former CEO Naxos of America and Executive Producer at Suite 28 Records.

Sean Koh
Head of Asia & American Entertainment, founder of Koherent Record.

Mike Belitz
CEO and President of Ultimate Support Systems and Radial Engineering.

Yaron Adler
Founder We Group, Incredimail. Chairman of Crowdfunding platform Exit Valley.

Oded Federbusch
Crowdfunding expert. Advisor Exit Valley. Founder We Group. Owner, f.r.a.l.y holdings ltd.

Sebastian Stupurac
Co-Founder WINGS; Adviser to AdEx, Blackmoon Crypto, INS.world.

Stas Oskin
Co-Founder WINGS, Technology strategy and partnerships.

Daniel Santos
CEO Token Advisors. Former executive Citigroup, Barclays and Renaissance Capital.

Julia Della Scala
Blockchain expert and Far East community leader.

Ran Sharon
Serial Entrepreneur, Founder of Clariter, Internet Investment Fund, and Kornelius Group

Legal & Compliance

14

David Rabbi
International Blockchain Regulatory/Compliance Expert. Business Lawyer with specialization in cryptocurrency and smart contract practices as well as all aspects of ALM/KYC.

Susan Joseph
Legal consultant, Thought Leader and Blockchain Advisor. Executive Director Diversity in Blockchain.

DLX Law
Corporate law firm specializing in blockchain and distributed ledger technology. Advising primarily on SEC compliance

Walder Wyss
Lead advisors around compliancy with FINMA and other international regulatory bodies

Accounting

EY
Building a better working world