Soundeon. Decentralized and Vertically Integrated Blockchain Music Platform

version 0.1

Abstract

In 2016, growth in streaming revenue grew by a staggering 60.4%, now making up 50% of the total recorded music revenue worldwide.[1] Whilst the likes of iTunes and Spotify explode in streaming volumes, this success often surpasses the actual artist, profiting cliques of powerbrokers through clandestine backroom deals. As an ever-growing share of artist's income derives from touring and events, intermediaries have caught up and plagued the simple process of ticketing into an extortion scheme victimizing artists and fans. Soundeon presents a step-by-step solution to not only invigorate the music business with fairness, transparency, trust and independence but unleash the value potential of merging recorded music and ticketing into a transcending fan-centric experience.

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[1] http://www.ifpi.org/downloads/GMR2017.pdf

This paper describes the world's first vertically integrated blockchain solution that transcends digital multimedia distribution and live event ticketing. Based on the proprietary Ethereum-based protocol, Soundeon utilizes its registered Creative Smart Contract ™ to create a trustless and transparent music rights management and ticketing environment that addresses the long-standing problems plaguing performing artists and fans alike.

Mission Statement

To discover new talent and empower creators to take control of their works by developing a blockchain-based digital media rights management and live ticketing environment that is uncensored, immutable, fair, transparent and fosters an ever-closer relationship between the artist and fan.

Vision

We envision a modern music industry that is revived with transparency and fair treatment that bridges the gap between the artist and fan. Where talent's success relies on merit and creators can solely focus on creating.

Artists' Manifesto

In line with this conviction, Soundeon prescribes to the principle of equal opportunity for all, independent of race, religion or family background. It is our shared responsibility to promote the arts across disadvantaged communities by contributing 10% of Soundeon's income to philanthropic endeavors.

The Problems

Introduction

The music industry is traditionally split between recorded and live music ticketing, each with their unique and inefficient practices nullified with the advent of the internet. Soundeon's novel approach to resolving the hurdles faced by artists and fans on and offline requires the blockchain platform to natively address these market frictions layer-by-layer. Hence below, we set forth to discuss the most pressing problems in recorded rights management and distribution, followed by, live event ticketing (otherwise known as touring). This section concludes with an explanation of the massive disconnect that exists between recorded and live music and the enormous value potential from using blockchain to integrate these traditionally segregated aspects of music industry.

Recorded Music

Recorded music dates back to the early 20th century with the advent of disruptive sound recording technologies. The industry as we know it today was formed in the 1960s as breakthrough communication technologies developed in World War II came to mass market. As music became big business, artist's record and publishing contracts grew more convoluted. To this day in the United States, royalty contracts fall into two categories: income/profit sharing model is used in publishing agreements governing authorship rights and the per-unit royalty model adopted by record companies. After a decade in decline the $15.7 billion music market is undergoing a resurgence.[2] However, much of this success has foregone the actual artists, as the

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[2] http://www.ifpi.org/downloads/GMR2017.pdf

Research Institute of the Finnish Economy put it: "royalty payments have moved from pennies-per-purchase to micro-pennies-per-stream."[3]
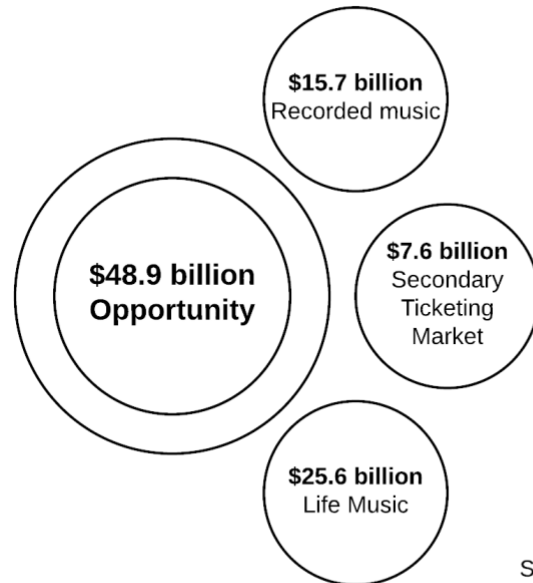
Source: PWC, IFPI

Music Publishing Agreements

Contemporary music publishing agreements contribute 65 to 85 percent of the aggregated net publishing income to the songwriter. Seemingly straight forward at first glance, and an improvement since the burdensome 50/50 profit split agreements that were common pre-1980. However, to this day the "cost deduction" clauses remain the favorite trade trick of publishing royalty sharks. Such clauses are infested with inflated or purely arbitrary terms which govern advances, administrative costs, and restrictions.

Publishing is further complicated by jurisdiction. For instance, in the U.S., the world's largest music industry market, the 1909 Copyright Act of Congress formed what is

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[3] https://www.etla.fi/wp-content/uploads/ETLA-Working-Papers-48.pdf

known in the music trade as "compulsory licenses" for mechanical rights[4] that are set by the Copyright Royalty Board for song reproduction. As of 2017, this license fee was set at 9.1 cents[5] (or 1.75 cents per minute for songs exceeding 5 minutes) for each reproduction[6]. Yet in practice, compulsory licenses are only used as pricing benchmarks for mechanical rights. Due to burdensome administrative provisions publishers find it easier (and often cheaper) to license their copyrights directly.

Labels often try to reduce publishing royalty obligations with various techniques, such as paying for mechanical licenses only on product sold rather than shipped (often with generous spoilage rates) or avoiding paying mechanical licenses altogether by for music sold through record clubs[7]. Such techniques not only reduce the optimally intended paychecks to songwriters but also stall payments for many months.

Mechanicals: Collecting Internationally

Having shown in this brief overview how clustered with loopholes complicated publishing contracts are, this complication is compounded as we expand to other jurisdictions. For instance, United Kingdom has no compulsory licensing and only the first mechanical license is required (rightfully obtained with copyright owner's permission). In the U.K., mechanical rights rates are a percentage of a records price (unlike in the U.S.) and are negotiated by the Mechanical Copyright Protection Society. MCPS collects 8.5%

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[4] Section 115 of the U.S. Copyright Act

[5] 26 January, 2018, Copyright Royalty Board has issued increases for mechanical and performance royalties to publishers and songwriters. Historically PROS (responsible for performance royalty collections received circa 50% of royalty pool, remainder going to publishers and song writers. CRB set the 2018 rate 15.1 percent of royalties, however the publisher/PRO split has not yet been announced.

[6] https://secure.harryfox.com/public/StatutoryReports.jsp

[7] https://www.bmi.com/news/entry/Understanding_Mechanical_Royalties

of the highest price paid by retailer for the record or 6.5% of retail excluding VAT. MCPS also categorizes licenses as AP1 or AP2 based on the creditworthiness of the licensee and this is where things get even more convoluted.

Across Europe, the Bureau International de l'Edition Mecanique (BIEM) negotiates rates on behalf of 55 societies across 59 countries (including EU members), charging 9.009% of PPD for mechanical rights.[8] These jurisdictional variations are the bread and butter of mechanical rights collectors whose administrative fees vary from 5% to 20% of collections. Once the publisher collects their approximate 50% stake in mechanical royalties, and administrative fee is paid, the songwriter is left with peanuts.

Massive Unclaimed Mechanical Royalty Market

Delays in rightful payments by public rights organizations (PROs) to songwriters is a longstanding fact. Payments may be made regularly, however, these disbursements may reflect uses years previously. Unclaimed royalties are placed in escrow, pooled and ultimately divided arbitrarily by those who claim their royalties[9]. Within the music business this appropriation and distribution is simply called the "black box."

Beyond registering with every mechanical rights organization in the world or going through an intermediary administrator who often charges up to 20% in collection fees, the rights owner needs to undergo through a separate and burdensome process to collect royalties from interactive players.

Interactive players constitute those which play songs on-demand, the likes of Spotify and Deezer (excludes Pandora and radio) which pay royalties based on the geographic location of the stream occurring. In the U.S., this figure stands at $0.0008 per

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[8] compulsory mechanical licenses 20/20
[9] https://www.etla.fi/wp-content/uploads/ETLA-Working-Papers-48.pdf

stream.[10] However, the artist will not receive this additional income stream unless he or she registers directly with the interactive streaming platform since no complete publishing rights platform exists in the world – as Spotify found out in 2017.

In 2017, Spotify reached a $43.45 million class-action settlement in *Ferrick v. Spotify USA Inc*. to compensate songwriters and publishers for streaming unlicensed compositions. In 2016, a similar situation occurred when Spotify agreed to a private settlement with The National Music Publishers' Association for $30 million. This situation exemplifies the broken system of mechanical rights management in the U.S. Whereas performing rights are managed by the PROs (BMI, ASCAP, SECAC and GMR) – mechanical rights are governed by the statutory licenses. The lack of a single comprehensive database of rightful mechanical rights owners means that the streaming platform need to identify each owner manually. An incomprehensible feat for a purveyor of 30 million tracks.

Having been sued over the years for $1.6 billion dollars,[11] Spotify is turning to blockchain for the solution. In 2017, the streaming service acquired Mediachain, a Brooklyn-based startup developing a decentralized rights management system[12]. So far Spotify has been under fire as the posterchild representing the booming streaming industry. According to IFPI, digital streaming revenues in 2016 alone surged by 60.4%, the trailblazer behind a 5.9% global recorded music market growth,[13] – the highest rate in history. The National Music Publishers' Association estimates that as much as 25% of U.S. streams are unlicensed.[14] Unpaid publishing rights remains a broken system and as physical sales fall and online streaming takes center stage, songwriters and publishers are shortchanged.

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[10] https://www.tunecore.com/blog/2012/11/how-were-getting-your-mechanicals-from-streams.html
[11] https://www.theguardian.com/technology/2018/jan/03/spotify-sued-for-16bn-in-unpaid-royalties
[12] https://techcrunch.com/2017/04/26/spotify-acquires-blockchain-startup-mediachain-to-solve-musics-attribution-problem/
[13] http://www.ifpi.org/facts-and-stats.php
[14] https://techcrunch.com/2017/04/26/spotify-acquires-blockchain-startup-mediachain-to-solve-musics-attribution-problem/

In late January 2018, the Copyright Royalty Board has increased the mandatory publishing payment for interactive streamers to 15.1% (from 10.5%) of revenue[15]. An achieving for the songwriter. However, that makes proper and swift mechanical royalty administration ever more important.

There are hundreds of copyright collection societies and companies worldwide that focus on publishing rights, not to mention hundreds more that cover public performances and neighboring rights (our next discussion). Industry pioneers are turning to blockchain for the solutions to problems barring industry's growth, namely rights administration. In this low trust environment, a decentralized immutable ledger presents a real use case in this environment deprived of trust.

Record Company Contracts

Over the past two decades, the mass adoption of the internet has transformed both, the way media is recorded and distributed. Not all media industries have embraced new opportunities arising from novel technologies to their fullest potential. Case in point, the $15.7 billion recorded music industry stumbles to shred their archaic, inefficient and convoluted practices and evolve into modernity.

Over a decade in market decline, consolidation and monopolization has aggravated the music industry's competitiveness. Today the so called "major labels" or "Big Three" (Universal, Sony, Warner Brothers) control 68.7%[16] of the industry. In turn, each of the "big three" own their distributor jointly known as "major distributors." As with record labels, consolidation left only three "major distributors" one for each

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[15] https://www.reuters.com/article/us-copyright-streaming/u-s-to-make-streaming-services-pay-more-for-music-idUSKBN1FH01E

[16] Music Business Worldwide "Global Market Shares 2016": https://goo.gl/dxmCVT

"major label." This points to the extremely immense degree of supply chain control these incumbents can and do exhort. Major distributors distribute on behalf of their in-house labels, as well as major-distributed independent labels. Even independent distributors are owned by major labels (RED by Sony, ADA by Warner, etc.). Marketing strategies intended to portray uniqueness and appeal to specific music genre fans coat the degree of to which the recorded music industry, by in large, constitutes a mass market factory line, controlled by an oligopoly.

In part, this oligopoly was formed due to the high administrative and legal costs associated with running a label or distributor with global ambitions. More accurately these high costs are the consequence of market frictions within recorded music industry as a whole. The lack of transparency, trust and accountable data (as we've previously shown with publishing rights) within recorded music rights management not only allows but promotes for this extraordinary concentration of power in the hands of few.

Universal, Sony, Warner Brothers not only control nearly 70 percent of the label market, their oligopoly permeates the entire recorded music market. Let's look at how harmful the status quo is.

Oligopolistic behavior – archaic market frictions exacerbated by industry's inability to keep up in the digital age has led to a de facto oligopoly where true independent artist face difficulties in staying independent. Singing to a major label, often on disadvantageous terms, remains the right of passage for up and coming and discovered artists. Those that were able to remain independent are faced with the challenge of outmaneuvering majors, their distributors and other related entities on a daily basis. Case in point, placing their albums on storefronts, both digital and offline. This is because the most discoverable shelves are presold to major distributors.

Another favorite trick of the "Big Three" is the concept of "breakage", dubbed the "black box" (there is more than one in the music business). Namely, the labels sign contracts with streaming and digital storefronts (including Spotify, Google Play) that oblige up-front payment to the label. At the end of the contract there is a difference between the advance and actual use. Labels tend to pocket this difference as they renegotiate new agreements.

Aside from demanding huge-prepayments and ultimately pocketing the unearned revenues, the sheer scale of "Big Three" publishing houses gives Universal, Sony, and Warner Brothers, according to Forbes, $300 million[17] in revenue from "un-attributable" publishing royalties (though the arbitrary process previously described).

Simply put, it is nearly impossible for an artist to reach their fan and generate sales, on a global scale, without entering the labyrinth of middlemen paying dividends to the "Big Three."

Aggressive merger & acquisition strategies – Albeit that the recorded music business generates a steady flow of entrepreneurially minded startups striving to create a fairer, and more transparent music business, their potential is often curtailed by incumbents' aggressive acquisition strategies. Such behavior is manifested in both, demanding equity for use of services as well as buying startups at inflated (hence usually undisclosed) valuations. Whatever the strategy is, the startup's threat of disrupting the industry is *prematurely neutralized*; whether done so intentionally or due to misaligned incentives.

Policing our culture – controlling 68.7% of a socially important market that is the music business means that the "Big Three" are systemic institutions in our culture.

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[17] https://www.forbes.com/sites/zackomalleygreenburg/2015/04/15/revenge-of-the-record-labels-how-the-majors-renewed-their-grip-on-music/2/#200ea18d306c

By default, this volume of control dictates the world's contemporary cultural agenda, our access/comprehension of past culture, and future trendsetting. Fully independent artists, publishers and labels are marginal in scale and lack the cohesion required to serve as counterweights to the establishment within the music business. This subject deserves an in-depth anthropological study of its own right and falls outside the scope of this study.

Concentration risk – even with the best intentions, allocating 68.7% of a global industry in the hands of 3 companies may immediately lead to systemic industry failure (i.e. in cases of bankruptcy).

Live Event Ticketing

Scalping

Ticketing industry can be divided into two main segments: primary market and secondary market. The primary market is straight forward, event organizer sets a ticket price based on previous experience or an optimization algorithm. To ensure a full house and to make culture more accessible to the masses (often a policy motive of non-profits), face value of tickets is usually set lower than the market is willing to pay. This dynamic generates an economic incentive for "bad actors" within the $8 billion[18] secondary event ticketing economy, a third of the primary market. Namely, scalpers or ticket touts (as they are known in U.K.) see a mismatch between the selling price of tickets and the audience's willingness to pay a higher price. Alternatively, ticket scalpers employ bots to synthetically eradicate the supply of tickets, hence taking on a monopolistic grasp on an event and inflating prices.

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[18] The war on ticket bots is unlikely to be won, The Economist
https://www.economist.com/news/united-states/21713869-2016-bots-tried-buy-5bn-tickets-or-10000-minute-ticketmasters-website

Legislation

The parasitic behavior of scalpers has long been under scrutiny of local and in some jurisdictions, national lawmakers. The exacerbation of the ticketing black market has forced renewed efforts to tackle the problem, without success to date. For instance, in the U.K. it is illegal to resell tickets without the football club's permission.[19] In the U.S., city councils attempt to tackle scalping by prescribing scalping-free zones within a venue's perimeter. So far, these efforts led to simple and more effective circumvention measures, such as utilizing secondary ticketing portals such as Stubhub, Razorgator, or Ticket Liquidator.

Makeshift efforts

This industry-wide problem and the failure of Ticketmaster amongst other industry leaders to resolve it is leaving leading artists to come up makeshift solutions. Adel, the British singer, took it into her own hands to fight scalpers by creating her own IT infrastructure to fight computer robots and fake identities for online purchases; however, this approach becomes useless for in-person sales. Identifying the purchaser and making the sale easy for genuine concertgoers is not only difficult but also costly.

Flawed solutions

This ticket scalping plagues the most sought after events across the world, from the Bolshoi Theater ballet to U2 concerts.[20] In various performance venues, this issue is dealt with differently. The commonality between existing ticketing solutions is their lack of practicality. A popular measure employed to battle ticket resells requires ticket holders to show their identification document, which must match with the

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[19] Section 166 of the Criminal Justice and Public Order Act 1994, United Kingdom
[20] https://elpais.com/elpais/2018/02/14/inenglish/1518606708_792088.html

printed name on the ticket. This process is extremely time consuming, creates huge queues and limits the rights of eventgoers. The issue of transferability is key for genuinely fair ticketing. For instance, if the ticket purchaser falls sick and unable to attend a performance, he or she should have the right to gift the ticket to their friend with ease.

Fraud

With the transition from hologram box office tickets to print-at-home PDFs ticket fraud has become ever so easy. Resellers are able, with ease sell different people the same ticket, or altogether produce a counterfeit. Albeit the market size of fraudulent event tickets remains a guess, the police efforts in metropolises suggest that it is a serious public concern. Existing solutions on resell portals such as Stubhub attempt to mitigate the lack of trust in authenticity of resold tickets by guaranteeing tickets through their FanProtect GuaranteeTM, but this comes at a cost – 10% of the ticket from the buyer and 15% from the seller.[21] A whopping 25% on ticket resale value (not face value) is a hefty transaction cost.

Recorded Music and Ticketing Disconnect

Music sold at record shops and streamed online has always for various purposes been an industry in its own right, separate from touring or live event ticketing.
As the recorded music industry moves from cents earned from physical record sales to pay-per stream micro-pennies, touring income is becoming an ever-important income stream for the artist. According to PWC media outlook report, music business is undergoing a systemic shift where "user experience takes center stage."[22] An industry players which traditionally focused on content and distribution now focuses on user experience as the key value-chain component.

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[21] www.stubhub.com
[22] https://www.pwc.com/gx/en/entertainment-media/pdf/outlook-2017-curtain-up.pdf

Fan-centric businesses, enabled by new technologies allow for listener engagement, growth and monetization an established market. However, despite leaps in fan identification and unique experience engagement, the recorded music and live ticketing industries remain by in large separated. This disconnect constitutes a significant foregone value-chain gap for the fan-centric music business model.

A single vertically integrated music platform, that is both on, and offline carries the following benefits:

- More accurate and insightful fan marketing. Empowering artists to distinguish between core fans and casual users, understand fan preferences and, ultimately strengthening and growing more than one fan base.
- Improved user experience and improved ability to elevate casual listeners to concertgoers at a fraction of traditional cost. Offer existing avid concertgoers tailored experiences.
- Built in reward mechanisms that uphold long-term relationships with fans over short-term profits. A committed fan should not compete with ticket scalping robots or physical resellers, but should be rewarded for their loyalty by the artists rather than the venue or credit card points.

The Soundeon Solution

Soundeon is a decentralized blockchain-based musical and multimedia platform built on the Soundeon ecosystem – a protocol for the modern media. The Soundeon venture constitutes a consortium of blockchain experts, artists, software developers, intellectual property practitioners, and media executives that are already shacking up business as usual within the media industry.

Soundeon tackles foremost problems plaguing the performing arts industry with radical transparency, equitable ownership rights management, enhanced artists funding mechanisms and fair event ticketing.

We help artists regain control of their creations, monetize their talent and offer fans an ever-closer connection with their artists. As the music industry struggles to resolve the problems in digitally recorded music rights management and live event ticketing, Soundeon presents a layer-by-layer use-case approach.

At its core, novel technologies within blockchain computing such as self-executing smart contracts and immutable ledger technology enable Soundeon to create a functioning, stable, secure, and adaptive environment to solve practical problems in digital media and ticketing. The platform covers all aspects of the music industry. From the creation and copyright of a work to contractual resale of both existing and future music assets, to concert organization and ticket sales.

Soundeon utilizes a multipronged approach to eliminating inefficient and archaic market practices adversely affecting both, the artists and their fans alike, on- and offline.

Through the native adoption of proprietary technology – the CSC *(Creative Smart Contract)* Soundeon Protocol resolves earlier presented problems by developing the following initial application layers:

- **Music Token Sale** – An opportunity for artists to launch Token Sales and finance personal projects through the support of the Soundeon community.

- **Soundeon Exchange** – A tokenization tool and a decentralized exchange of intellectual property where everyone can buy or sell their royalty income with an opportunity to create diversified personal music royalty portfolio.

- **Soundeon Tix** – fan-centric blockchain-based smart ticketing platform is natively embedded on the Soundeon environment. Dynamic QR codes and Creative Smart Contracts^{TM} eliminate ticket scalping, fraud and empower organizers to take full control of ticket resells both on primary and secondary markets.

- **Soundeon Monitor** – Royalty data aggregation from Soundeon and third-party providers, with integrated data analytics that covers all aspects of the artist's creative output (including: copyright, royalty collection, ticket sales)

- **Soundeon Player** – A music player that utilizes blockchain technology for transparent royalty distribution.

The elegant architecture of the platform and our API allows for 3rd parties to further grow the environment.

Soundeon Monitor
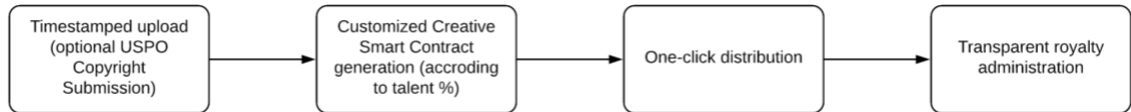
Soundeon Monitor provides an opportunity to register copyright for their work and have access to all royalties that have been generated through Soundeon, as well as other third-party providers. Furthermore, our deep data analytics mechanism combines all aspects of the musician's creative output and puts it into a clear and easy-to-read format (copyright, royalties, and ticket sales).

Music fans can track and analyze the performance of their music portfolios (royalty accumulation) and receive the most accurate information that will allow them to make informed decisions regarding the purchase of other music assets. Our specially designed data analysis mechanism will allow to evaluate concert attendance and help to discover future monetization channels.

Submission and New CSC Generation

Based on the Creative Smart Contract, each new artist work is time stamped and given the optionality to submit to the copyright registration authorities (e.g. U.S. Copyright Office) for additional third-party re-assurance. Further, at the its creation, the CSC can be split according to percentages agreed amongst creators. This addresses the common problem surrounding legal disputes and supporting artists within a work not receiving their fair share of income. The click and drop publishing rights contract creation allows the independent artist to avoid paying hefty attorney fees or spending days on makeshift efforts that are legally inadequate.

Distribution and royalty collection

Online music distribution is not novel by any means – Soundeon's approach is. Artists are faced with lots of options, from "Big Three" distributors to progressive independents such as TuneCore, AWAL, or CDBaby that for a fee upload your creations to Spotify, Google Play, Deezer and many others. At Soundeon we are tackling the problem of lack of transparency and royalty payment delays by building a scalable royalty rights administration layer that is easy for third parties (including PROs and streaming platforms) to adopt. By providing an API for third-parties, we are demonstrating our understanding that to be an effective blockchain environment, we must ensure a level of compatibility with legacy systems widely used today. Having full integration with our own proprietary – Soundeon Player and Soundeon Tix from day one, we are able to signal to the wider market of the possibilities that arise from a transparent royalty rights administration and deeper fan-centric analytics.

Music Token Sale

Soundeon takes a leap forward from outdated royalty rights management techniques by *adding not only transparency and trust into the equation, but also artist-oriented flexibility in funding their works*. Traditionally, artists were limited to private music brokers, generalist crowdfunding platforms and auction platforms. However, no viable solution exists within this $8.8 billion market.[23] Private music brokers lack the transparency and market liquidity to offer songwriters and performers a fair, low transactional cost model for rights sales. While general crowdfunding platforms such as Kickstarter, Crowdcube or

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[23] https://www.billboard.com/articles/business/6465777/cisac-2015-global-collections-report-royalties-remain-stable-at-88-billion

Indiegogo introduce fan engagement, these solutions lack the operational focus and execution mechanisms to cope with complex music rights management administration. Royalty Exchange, on another hand, has the expertise in music rights sales. However, this pioneer's business model only allows for a single music lot winner, requiring a single payment of tens of thousands of dollars.[24] Hence alienating much of the avid listeners eager to collectively chip in smaller amounts.

On the platform, artists can gain financing and realize their creative visions (record a new album or track, shoot a music video, etc.) by organizing their own Token Sale.

Music fans can try themselves out as music producers by vesting into talented musicians and becoming co-owners of the copyright, ultimately receiving returns on future royalties and other revenue streams (music streaming services, concerts, other public performances and etc.). Soundeon's Music Token Sale is a feature based on the platform's marketplace layer – the Soundeon Exchange.

Soundeon Exchange

Delivering a transparent, equitable, immutable place of settlement of royalty rights constitutes a perfect use case where advantages of blockchain technology are exploited to their fullest potential. Artists, songwriters and other rights owners who register their creations on the Soundeon Monitor are able to sell fractions or entire future earnings of their works. Exchange occurs in-kind, in fiat, the Soundeon Token, or other leading cryptocurrencies.

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[24] https://www.royaltyexchange.com/faq

Utilizing modern fintech techniques, including micropayments and securitization, hardly previously introduced into the music business, Soundeon Exchange evens out the playing field for truly independent artists to compete with big labels. At the same time, it is an excellent opportunity for fans to create diversified personal music royalty portfolios that are uncorrelated to traditional asset classes and provide diversification from market volatility.

Soundeon Exchange takes at twofold approach to value-creation within rights management:

1. Connecting with fans on a deeper level with built-in reward mechanism.
2. Converting fans into stakeholders and participants of the artists' success story.
3. Providing funding flexibility for artists by monetizing on their existing and establishing advances for future works –completely on the artists' terms.

Soundeon Tix

Transcending the barrier between recorded music rights and distribution, and live event ticketing constitutes a bold move within traditionally segregated industries. In order to gain a competitive advantage in today's crowded, attention deficient music & entertainment environment, artists must excel not only in their performance talent but also in orchestrating unique, personable, fan-centric user experiences.

A novel approach: *what if the concert organizer was able to control not only the primary market but also the secondary?*

The versatility and practicality of Soundeon's Creative Smart Contract contributes to its intrinsic value. Natively, the CSC may take form of a ticketing smart contract that is transparent, and easily verifiable. The self-executing feature of the CSC allows for fan loyalty incentives when used on compatible platforms such as the Soundeon Player or third-party *API* integrated providers. This feature allows musicians to identify and reward their most avid online listeners to experience a live event.

Tractability of the CSC and its dynamic in-app QR code eradicates unauthorized reprints and forged tickets amongst other commonly used fraud methods. Transactional transparency allows performing artists to not only oversee the primary ticket sales, but also govern its secondary market.

The recently developed improvements in blockchain technology now allow for a holistic approach to ticket sales. Now, not only are venues empowered to set limits and rules for primary ticket sales, but also for resells. The immutable general ledger technology validates each transaction across a decentralized network governed by the rules which the event organizer prescribes. *Game theory is at the core of this computational logic*. As an added benefit, the ticketing website becomes much more difficult to hack than commonly used centralized systems.

Beyond streamlined sales, natively-integrated loyalty scheme and a secure environment for reselling authenticated tickets, *Soundeon Tix unleashes an entirely new and highly profitable revenue stream.*

Soundeon Player

Previously mentioned, the platform will have a native player that is currently under development. We believe that it is imperative for a genuinely vertically

integrated music environment to support the artists from sheet music to his or her fan's headphones. This approach not only extends from ideals but from practicalities. To date, there is not a single player that can provide us with the deep level data that we require to build a truly fan-centric loyalty environment. Artists participating on the Soundeon Monitor may elect to distribute their works via the Soundeon Player, Blockchain music player that collects data on how many plays a particular track has. The data is then entered into a validated and immutable decentralized registry. This facilitates a fair royalty distribution for all Soundeon members and provides highly accurate listener analytics. Listeners on the other hand will be able to circulate their Soundeon Tokens enjoy high-quality daily-curated playlists.

The Soundeon Token

The Soundeon protocol token – the Soundeon Token is a vital utility tool used to align economic incentives amongst platform participants. Specifically, Soundeon Token is used to incentivize and reward early adopters that add value to the platform through network effects.

Soundeon Token's technical and economic characteristics provides a highly liquid and low transactional cost form of exchange on the platform. The key use-cases for Soundeon Token existence include:

- The Soundeon Token constitutes a utility prepayment mechanism for services rendered within the platform (Music Token Sale, Soundeon Exchange, Soundeon Player, Soundeon Tix) as well as through partner channels that are integrated with the Soundeon environment.
- Soundeon Token ensures the frictionless nature of tokenization
- The Token allows for micropayment with low transaction cost for more accurate splits, greater value for the listener and a liquidity facilitation mechanism for artists (who then may use token across other layers and platform partners)

In addition to the Soundeon Token, alternative forms of payment will be permitted on the Soundeon environment; namely, major cryptocurrencies and fiat currency.

Soundeon System Architecture

Main incentive for Soundeon to develop a distributed application is to ensure trust and fair play. Hence, all value transfers are performed on the blockchain, and blockchain smart contracts are used wherever possible.

Soundeon is heavily focused on users' privacy, keeping all sensitive data outside of publicly available storages and introducing industry leading standards in governance and cyber security.

Soundeon Layers Stack
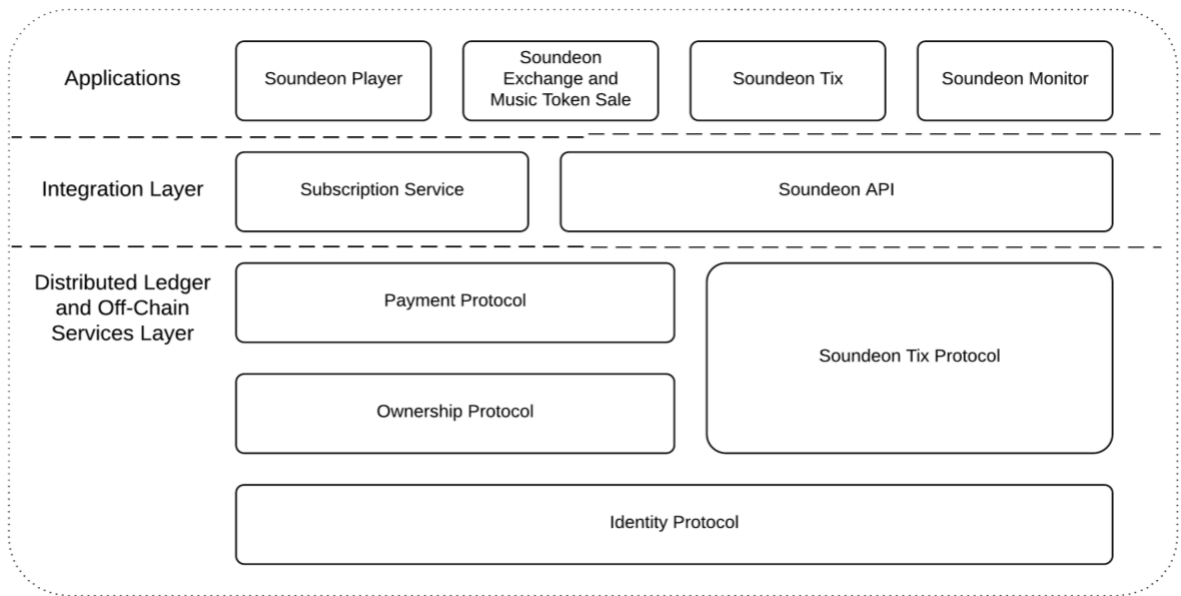
On the technical level, Soundeon layers could be represented as a stack of protocols, based on a core functions of the Platform, such as maintaining identity and rights governance.

Protocols are designed to cover selected areas of business and build from bottom up. Upper layers benefits from bottom, which provides basic functionality. Soundeon Identity Protocol.

Identity Protocol implements the way Soundeon Monitor perform governance of user accounts. Protocol allows to register new accounts and verify it via KYC service providers. It's also possible to link external accounts

Verified accounts called Identities. Identities are the cornerstone for the entire system and directly or indirectly participate in all activities. Soundeon works with identities in mixed manner: on-chain all actions are performed with anonymous data and private information not disclosed. Off-chain Soundeon also maintains processing anonymous when possible.

Soundeon Rights Protocol

Rights protocol is a complex procedure regulating registration of intellectual property and ownership verification. Soundeon performs Due Diligence as a part of rights registration.

Once registered in the system, property can be tokenized. Rights cloud be sold partially or in a whole because of dividable nature of tokens.

Rights Protocol is implemented on the blockchain level by Rights Register smart contracts. This set of smart contracts responsible for tracking rights for all intellectual property registered on the platform. Rights Protocol benefits from disintermediation and automated governance, which guarantee fairness.

Soundeon Exchange

Soundeon introduces Exchange service powered by blockchain and protected by Soundeon Rights Protocol. Exchange servers multiple purpose:

- Allows licensee to tokenize existing music rights;
- Serves as a platform to conduct Music Token Sales;
- Provides a marketplace for tickets issued on Soundeon Monitor;
- Serves as a secondary peer-to-peer market for all tokens issued on the platform.

Soundeon Exchange is fully integrated with the platform.

Different types of trades may enforce vesting period on traded tokens.
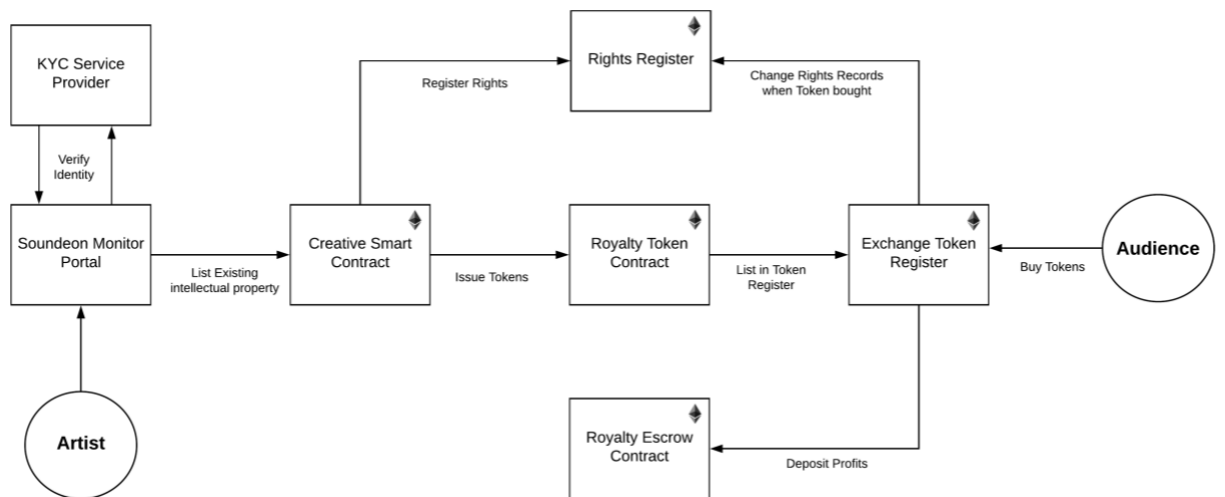
Soundeon Music Token Sale

Music Token Sale available for registered artists, which are passed KYC, and want to fund their work, inviting fans and general audience to become a part of creative process.

Artist uses Soundeon Platform to create Music Token Sale Roadmap based on one of existing templates and standard blocks. Visual constructor allows to set timings, goals and funding for each production phase, as well as conditions to unlock next tranche. Entire roadmap is published as a set of smart contracts. At this moment, MTS Tokens become available for sale and audience can start funding special MTS wallet. If DAO model chosen to unlock tranches, backers will be invited to vote for unlocking new tranche if artist declares milestone goal reached.
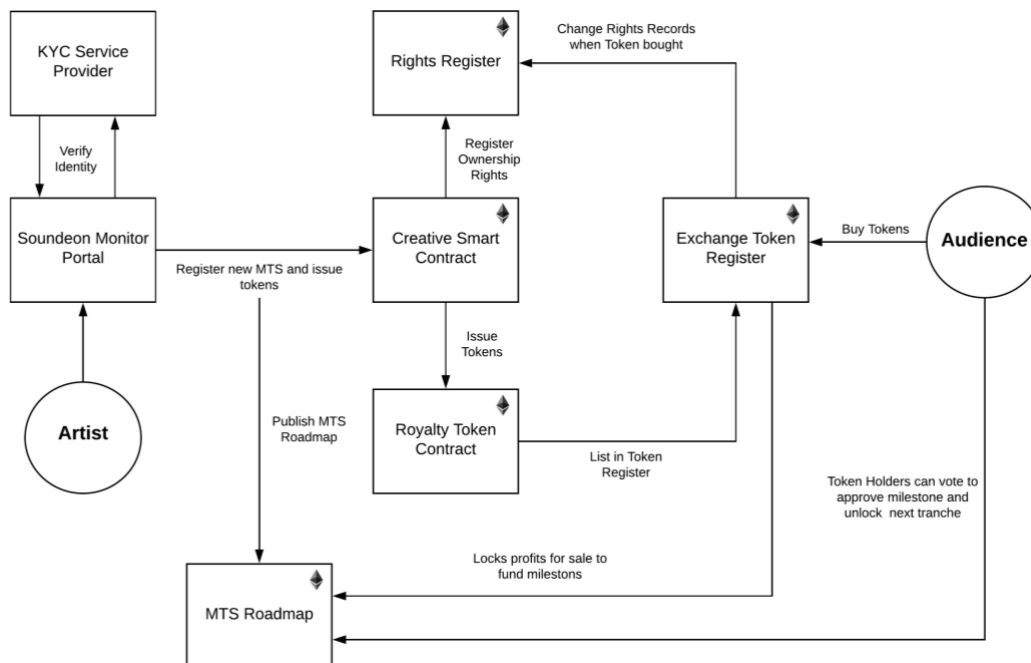
With MTS Tokens backers receives a right to collect royalty that will generate use of the intellectual property created by artist. Rights Register start tracking this information for future use.

By using Soundeon Monitor artists can create tailored license for their needs, choosing from available categories. Each category implemented by its own set of smart contracts.

License categories:

- Regional license
- Restricting types
- More categories can be added to the system later.

It's also possible to combine different non-contradicting categories.

Soundeon Tix

Soundeon Tix allows artist to issue tickets and control distribution process with the smart contracts.

Visual constructor helping to create program, specifying compositions that will be played. Soundeon Monitor ensures that royalties will be split correctly afterwards. Smart contracts step in to determine limitations and to hold box office on protected escrow wallets. Smart contracts could be configured in a way that will take in account different expenses and reserve proper amount of funds to cover all costs.

Separate Expenses Wallet available for concert organizer to pay for necessary equipment etc.

Soundeon lowers ticket scalping risks and ensures that artists or right owners will receive max revenues allowing audience to sell and buy tickets on the Soundeon Exchange.
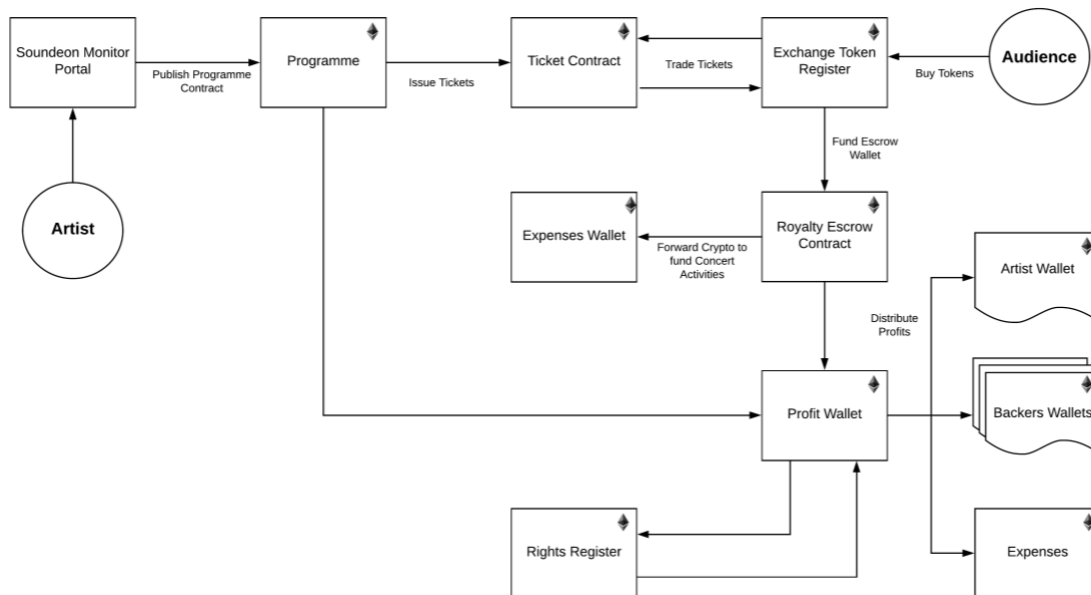
Soundeon Subscription Protocol

Soundeon Subscription Protocol is defined by Creative Smart Contracts^{TM} and defines rules how artists could choose to distribute their works by using Soundeon Media Player. This protocol takes full advantage of Soundeon Payment Protocol and Soundeon Content Subscription Channels, allowing to monetize each action

Soundeon Subscription Protocol could be extended with different subscription models in the future.

Soundeon Payment Protocol

Soundeon Payment Protocol based on the Ethereum blockchain and ensures that all value transfers are performed in a secure and trustless way, there are no hidden charges, and profits are distributed in accordance with owned rights.

At the current stage blockchain networks could not fulfill all demands of complex decentralized applications like Soundeon CSC, so Soundeon chose another approach, moving complex computations off-chain. This approach requires two other techniques: Verification procedure and so-called payment channels.

Verification procedure performed by a set of scripts that will be available for public to download from our repository. Those scripts will be distributed as open source software, therefore signaling its trustworthiness.

Verification scripts run against anonymous usage data Soundeon publish to IPFS. This data contains verifiable proofs-of-usage for every artist and composition that was played. In combination with the data stored on the blockchain inside CSC and Rights Registers it will provide enough intel on how profits should be distributed among artists.

Soundeon Content Subscription Channels

Soundeon uses state-of-art technology of Payment channels in a form of fully functional Content Subscription Channels™ (CSC). CSC's a unilaterally channel that requires confirmation only from one counterparty to close it. This technique is based upon original concept known as Poon-Dryja payment channels. Soundeon Subscription Service performs all routine to open and close this channels with subscriber when needed, require only a confirmation from user side. CSC allows Soundeon to provably record user content request.

Soundeon opens CSC with user at the time when monthly fee is paid. At the start, monthly fee is placed in Channel's Escrow contract. This contract guaranties that payments will be distributed among artists in trustful way in accordance with Soundeon policies and rules defined by CSC.

After Channel is open, user is free to access any content covered by the subscription. Each content request is signed by user's personal key and placed inside CSC. Channel accumulates usage data without a need to pollute blockchain with microtransactions.
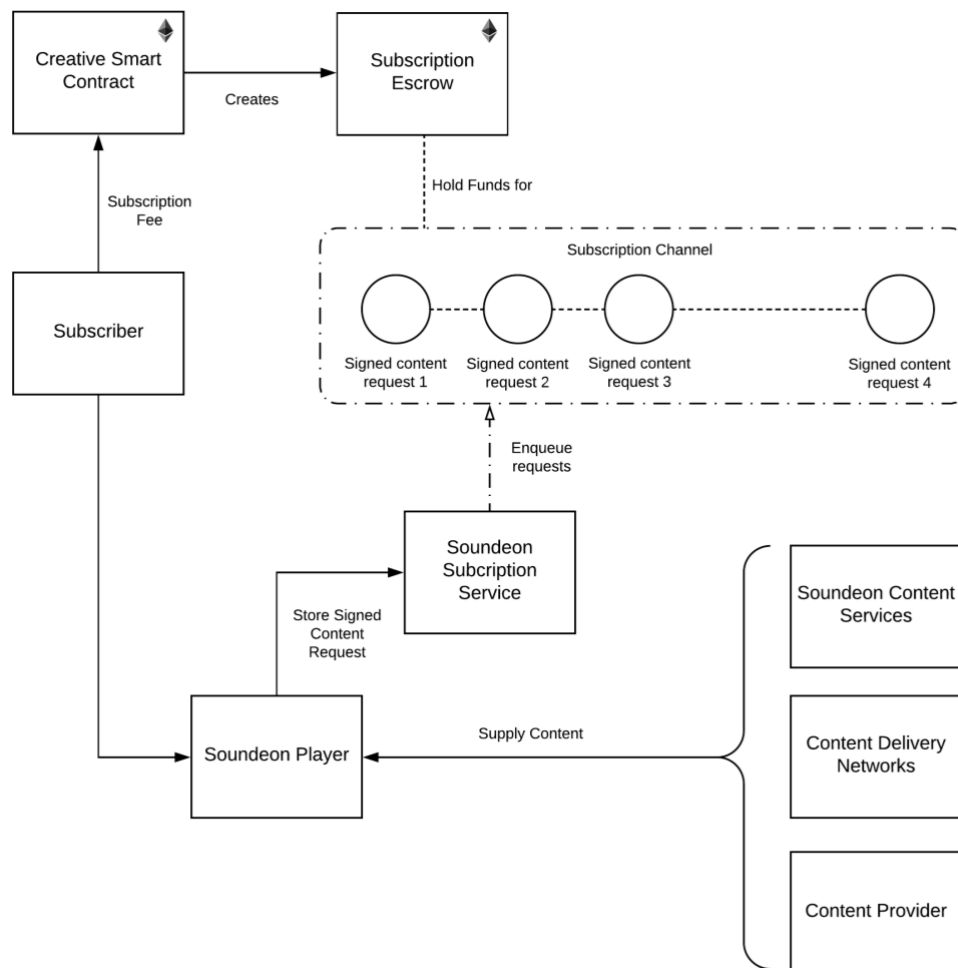
When channel is closed manually or it's time to pay royalty, Soundeon Subscription Service synchronize channel with the blockchain. Synchronization performed in 3 steps:

1) All content requests are written in a trusted publicly available storage (IPFS). Information written in a public storage contains only anonymous data.

2) Content requests are processed by using applicable rules defined by the Subscription Contract and total usage written to a public blockchain with corresponding identifier for raw data stored at step 1. This approach allows us to keep blockchain usage at required minimum, and at the same time providing necessary transparency and support imposed by Soundeon Payment Protocol requirements.

3) Soundeon Subscription Service requests settlement process to start. Settlement process covers several activities, including contacting Rights Register to obtain applicable list of accounts which should be rewarded.

4) Funds are distributed among accounts in accordance with rights distribution mechanism.

Content Subscription Channels allows Soundeon to minimize on-chain traffic and keep transactional fees low, providing better experience for end users and artists.
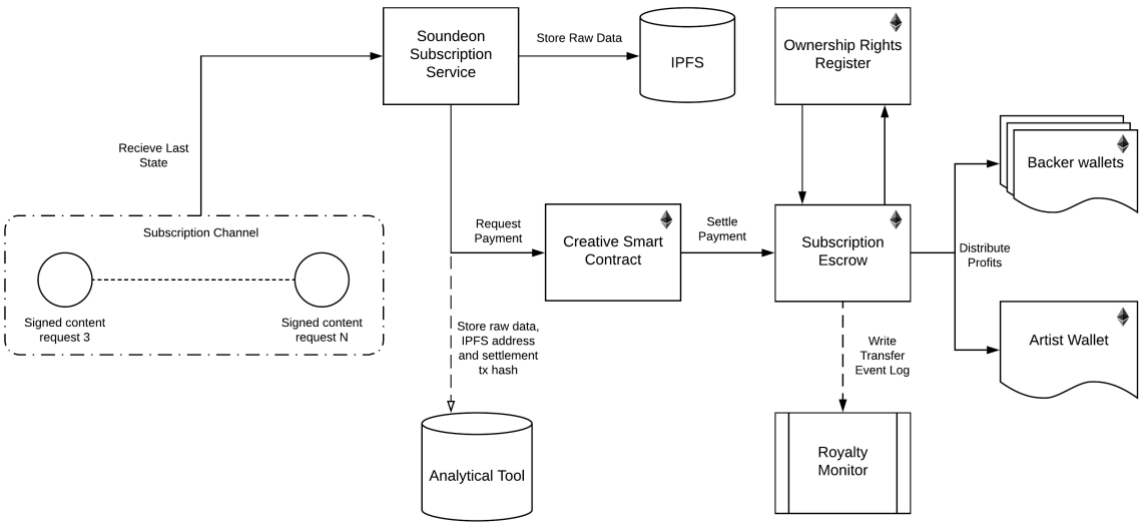
Token Sale Details

A special smart contract will be developed to automate the Initial Token Sale process. The Initial Token Sale smart contract parameters include:

- **Soft Cap:** The contract will have a safety measure for contributors. Should the soft cap of the offering not be reached, Soundeon will not have the ability to access these funds. Furthermore, a full refund will be made to the contributors.
- **Hard Cap:** Soundeon strongly believes in efficient use of resources, hence we are against uncapped token sales. Only the amount required to reach roadmap goals should be raised. From existing case studies, we observe a harmful dynamic of uncapped projects driven by greed and facilitated by the hype.

Soundeon takes on a holistic a holistic approach to improving both existing practical deficiencies within the music and ticketing businesses as well as creating a blue ocean of music tokenization. In order to achieve this ambitious feat, Soundeon undertakes a disciplined and layered approach to its crowdsale, with uniform alignment to its realizable project development cycle. Hence, depending on the amount raised in the crowdsale, we intend to approach specific layers as outlined here:

Crowdsale amount raised (in million USD)	3 to 8	8 to 16	16 to 27	27 to 32	32 to 37
Music Token Sale	+	+	+	+	+
Soundeon Exchange		+	+	+	+
Soundeon Monitor	+	+	+	+	+
Soundeon Tix			+	+	+
Soundeon Player				+	+
Soundeon Protocol for External Services					+

Our Soft Cap: $ 3 million

Our Hard Cap: $ 37 million

At Soundeon we know that a great idea is just an idea without execution. This is why we are heavily product and technical development focused. Our commitment to product development led us to establish a more restrictive 10-phase budget allocation cap model:

Budget allocation	>3 mln	>5 mln	>8 mln	>12 mln	>16 mln	>20 mln	>22 mln	>25 mln	>29 mln	>32 mln	>35 mln
Software and infrastructure development	55%	50%	48%	45%	42%	38%	35%	33%	31%	29%	27%
Marketing	20%	23%	25%	25%	25%	27%	28%	28%	29%	28%	28%
Business Development and Partnerships	10%	10%	10%	12%	15%	15%	17%	19%	21%	23%	24%
Legal and Administrative	10%	10%	10%	10%	10%	10%	10%	10%	9%	9%	8%
Community engagement	5%	7%	8%	8%	8%	10%	10%	10%	10%	11%	13%

Should the minimum cap of $3 million not be reached, the funds will be refunded to the contributors. In the case that the marketing phase is not reached, the roadmap will adjust accordingly to ensure platform longevity and tokenomic sustainability.

Unsold tokens will have lockdown period of one year to ensure the contributors that the Soundeon team is committed to the longevity of this media environment, after which they will be used for Soundeon global marketing campaign.

<u>Token Distribution:</u>

- **65%** of tokens sold during the token offering will be used in product development, operations, and global marketing expansion.
- **14%** of tokens will be held by the project founders that are making this project a reality. Founders will be reverse vested for 18 months with monthly cliffs.
- **4%** of tokes will be given to early backers – the visionaries of this project that allowed us to kickstart this endeavor. Early backers will be reverse vested for 12 months.
- **6%** of tokens will be held by our advisors and ambassadors that helped our team with their industry-specific expertise.
- **3%** will be intended for the bounty pool
- **2%** reserve fund
- **6%** of the tokens will be allocated for philanthropic programs promoting the arts in disadvantageous communities

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