OpenJam

A blockchain-based collaborative ecosystem for all musical performers, professional, independent and amateur.

WHITEPAPER

Written and prepared by

Philippe **MATRAY**
Stanislas **POINDRELLE**
David **SCHMITZ**

Let's Imagine Together the Future of Music

A blockchain-based collaborative ecosystem for all musical performers, professional, independent and amateur.

OpenJam is a blockchain-powered ecosystem, proudly presented to you by a group of crypto-enthusiasts to serve musicians. We have experience in the world of music, IT, medias, artists, events and socio-cultural environments. We believe that transparent and open source projects can change the world as Wikipedia did before us. To offer the best to our community, we are launching OpenJam : a smarter solution to collaboratively compose music, discover new talents and better reward amateur musicians, artists and independent labels.

We offer you a new free space where you can contribute to a musical database, listen to and produce music. All the while being better remunerated, protected, and serving the diversification and richness of music. With an intuitive interface, OpenJam is a way to discover before anyone else the artists of tomorrow, the possibility to create solo or collaborative musical compositions and make money from them.

We aspire to establish mutual trust with our community; our various projects are hosted on GitHub under a GPL license and everyone's proposals are encouraged whether you are a musician, label, listener or just passing through. OpenJam is created with the community, for the community.
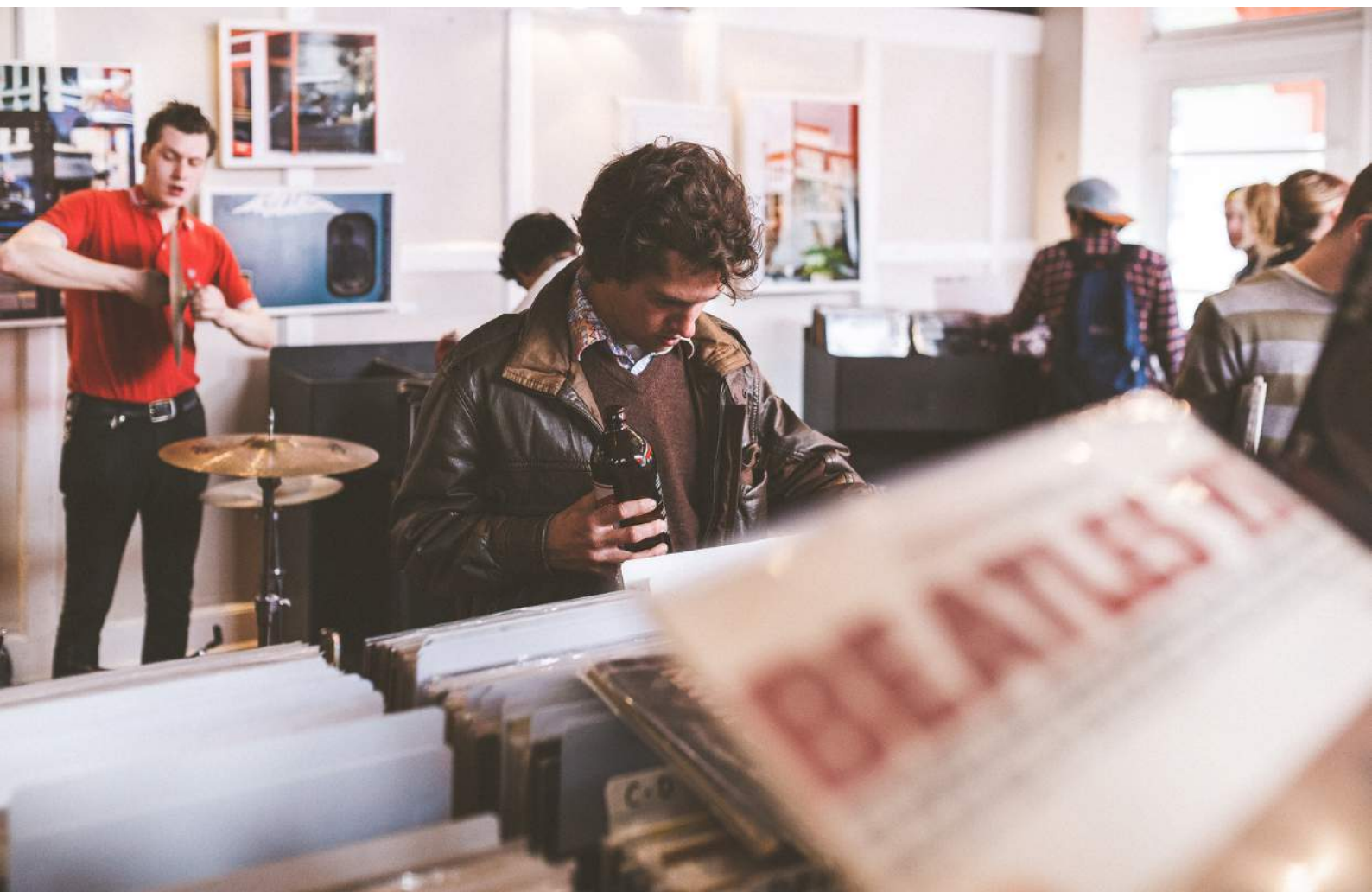
Introduction

Description

OpenJam is a blockchain-powered music collaborative ecosystem. It offers musicians the JamCoin utility token as a reward for their music composition activities, selling merchandise or helping their peers.

We believe that recognizing and fairly rewarding the work of musicians is the key to creating the most active and fastest growing independent music community in the world.
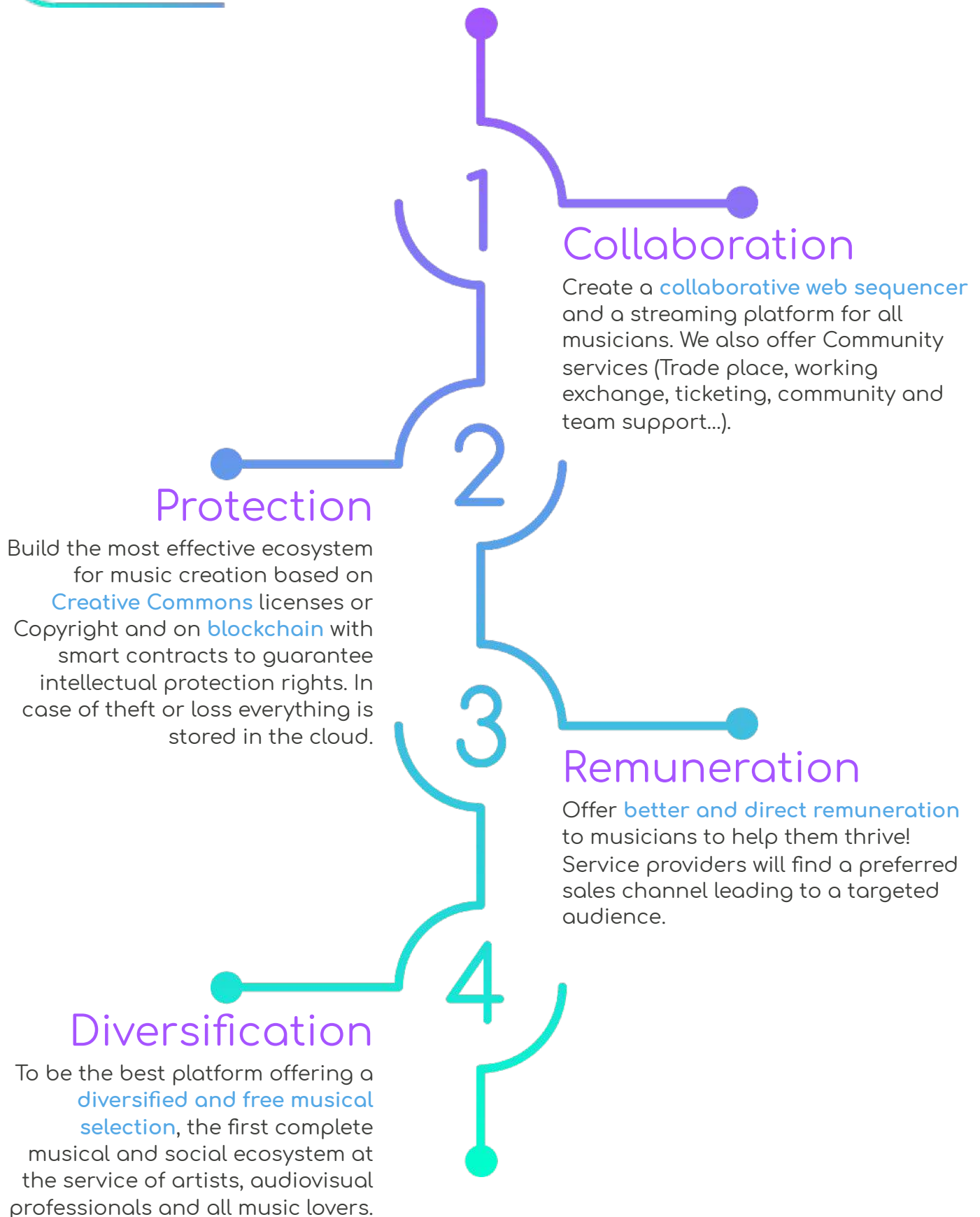
Through our collaborative music sequencer, musicians are able to demonstrate and promote their work.

> Enabling everyone to create a masterpiece and to manage their bands, licenses, skills, shops, publicity and revenues.

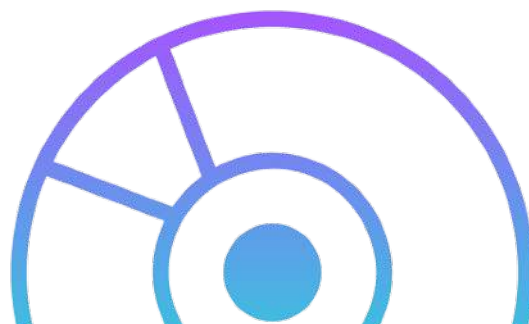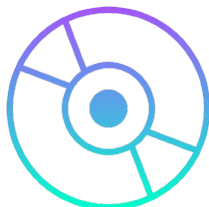So that each musician can collaborate, develop his talents and earn a living from them.

Goals

1 Collaboration

Create a collaborative web sequencer and a streaming platform for all musicians. We also offer Community services (Trade place, working exchange, ticketing, community and team support...).

2 Protection

Build the most effective ecosystem for music creation based on Creative Commons licenses or Copyright and on blockchain with smart contracts to guarantee intellectual protection rights. In case of theft or loss everything is stored in the cloud.

3 Remuneration

Offer better and direct remuneration to musicians to help them thrive! Service providers will find a preferred sales channel leading to a targeted audience.

4 Diversification

To be the best platform offering a diversified and free musical selection, the first complete musical and social ecosystem at the service of artists, audiovisual professionals and all music lovers.

Summary

State of the industry

In brief

- **The streaming platforms** Google Play Music, Tidal, Napster, Apple Music, Spotify, Deezer, YouTube, Pandora Premium are used to listen to music or watch video versions of songs have a total of 1.273 billion users.

- If you remove the billion YouTube users alone you'll reach 273 million for the seven pure audio streaming services.

- Of the 1.273 billion users, 93 million have chosen the paid version of these services.

- Some users are making the choice between a free version and a subscription, like Spotify or Deezer, other platforms only have a paid version (Napster and Apple Music).

- Spotify alone captures more than half of the 93 million paid market with 50 million paying subscribers.

- Google and Apple do not make their figures public. The other sixstreaming services all lose money every year: from $27 million for Deezer to $250 million for Pandora.

- YouTube pays independent artists only $0.0006 per listen. The most generous is Napster with $0.016 in pay per wiretap.

- The number of times a song must be played over a month for an artist to earn the equivalent of the American minimum wage ($1,472) ranges from 77,474 times for Napster to 2,133,333 times for YouTube.These are obviously unattainable figures for the vast majority ofartists.

- Of the €10 monthly subscription fee paid to Spotify only €0.46 goes to artists… to be distributed among all those you've listened to in a month!

Artist revenue per play	Total users (millions)	% free users	Plays needed to earn min. wage ($1,472)		total annual	annual loss per user
NAPSTER $0.0190	5	0%	●	80k	$35m	$7.78
TIDAL $0.0125	4	72%	● ●	120k	$28m	$6.67
APPLE MUSIC $0.0073	27	0%	● ●	200k	no data	no data
GOOGLE PLAY $0.0068	10	50%	● ● ●	220k	no data	no data
DEEZER $0.0064	16	57%	● ● ●	230k	$27m	$1.69
SPOTIFY $0.0044	140	57%	● ● ● ●	340k	$194m	$1.94
PANDORA $0.0013	81	95%	● ● ● ● ● ● ● ● ● ●	1.1m	$250m	$3.20
YOUTUBE $0.0007	1,000	99.9%	● ● ● ● ● ● ● ● ● ● ● ● ● ●	2.1m	$174m	$0.17

Signed Artists Major music streaming services compared - Last update: June 21th 2017

Money Too Tight to Mention?

Audio streaming with or without subscription is saving the music industry.

Most artists are present on all platforms and hope that the combined income will support them. However even with this considered only the biggest names in music can hope to make a living through streaming.

For most artists, whether independent or not, this study confirms that live music through concerts and festivals is the only viable option in 2017.

The sale of CDs is in decline, vinyl sales are anecdotal. From the consumer's point of view, the audio streaming + live music equation now seems to be ideal!

By offering a more direct stream of remuneration to the musician and rewarding the work of all those active in the independent musical ecosystem OpenJam proposes a more effective approach to the remuneration of artists.

In 2019, OpenJam will offer amateur and/or independent musicians a new source of income.
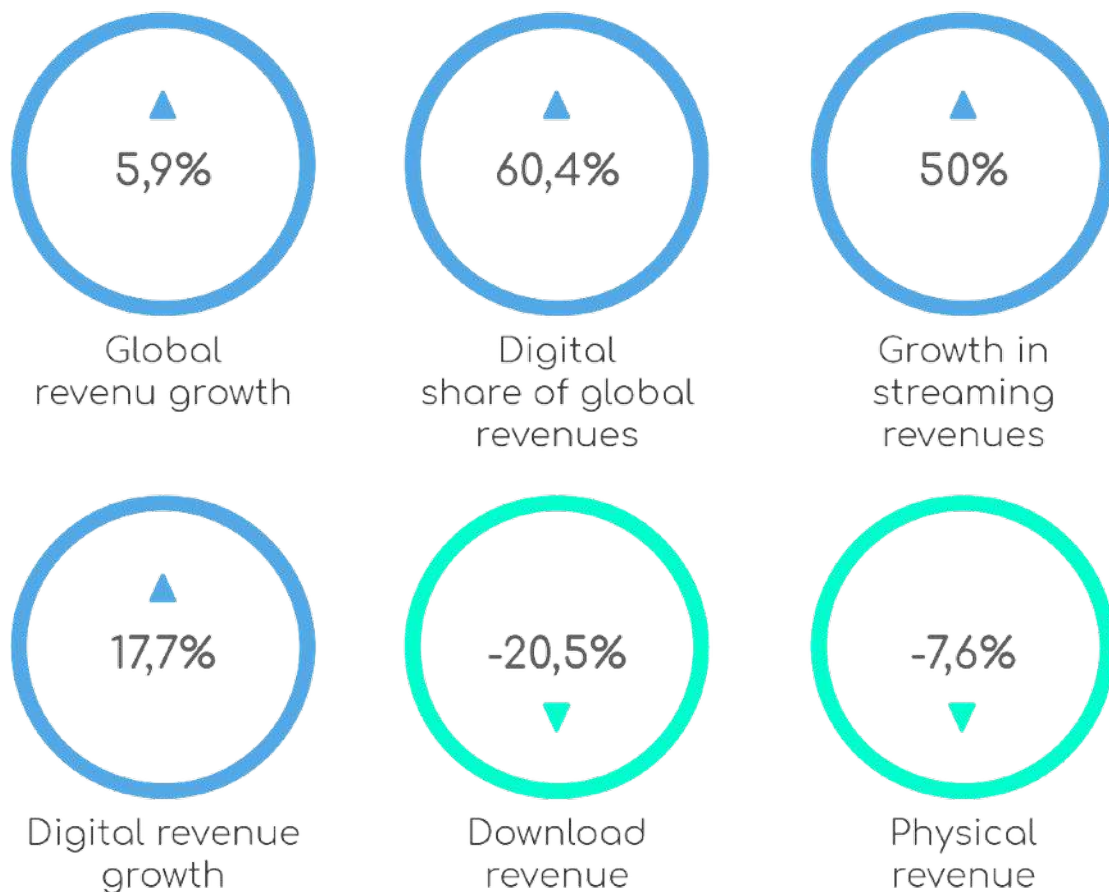
Market analysis

According to research conducted by CISAC and UNESCO the music industry has an annual turnover of $250 billion USD.

96% of the world's Internet users listen to licensed music, whether through audio or video streaming, physical or digital purchase or radio (on-line broadcasting). 98% of 16-24 year olds listen to music in this way.

45% of the world's Internet users consume music via a paid audio streaming service, up 8% this year from 2016.

Music market: digital music and record music

In 2016, global recorded music revenues totaled US $15,7 billion, improving significantly on the previous year. This represents an increase of 3%

▲ 5,9%	▲ 60,4%	▲ 50%
Global revenu growth	Digital share of global revenues	Growth in streaming revenues

▲ 17,7%	-20,5% ▼	-7,6% ▼
Digital revenue growth	Download revenue	Physical revenue

Source : IFPI GLOBAL MUSIC REPORT 2017

A sustainable market over the long term

13-15 year olds have a high level of musical commitment. **85% of teens use a streaming platform to access music**, 79% use a video service and 67% use an audio platform. Of the 67% using an audio platform 37% use a paid service and 62% use a free service with advertising.

Of the 37% who use a paid service 33% have subscriptions on their own and 36% are part of a family subscription.

53% of 13-15 year olds also purchased physical and digital music, with a preference for paid downloading.

15-25 year olds represent **11% of the French population, for 73% of them music is the first cultural activity they pursue**. The Internet is becoming increasingly important but radio and television remain the major channels of discovery.

Generations Y (25-45 year olds) and X (15-25 year olds) consume music in the same way; it is the era of the **success of streaming**.
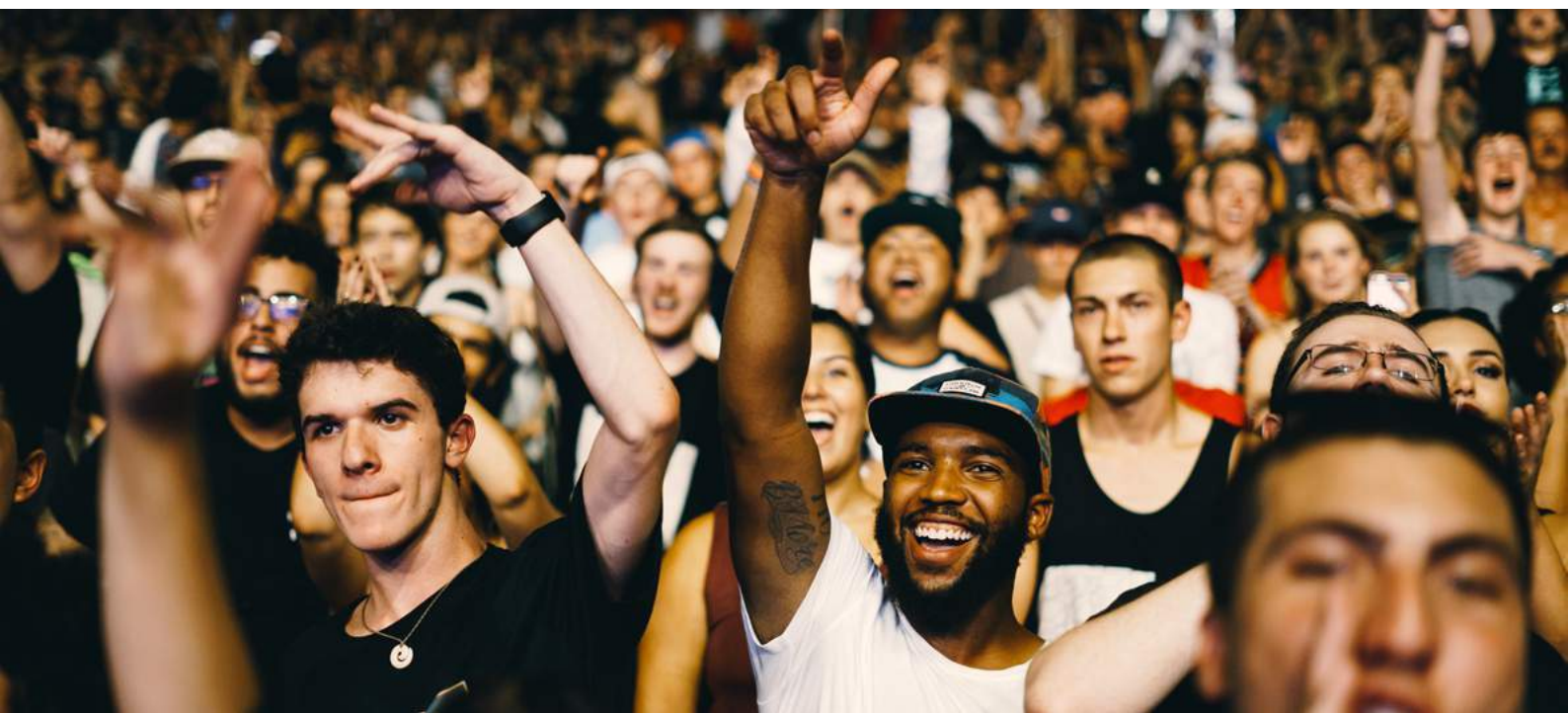
Digital music and emerging countries

For many emerging countries the digital market and thus the assisted musical creation market can be a **real vector of future development**. For example the Nigerian distributor of African digital music, iRocking, has 75,000 listeners and 35,000 indigenous titles. It is aiming to have 10 million listeners by 2018.

We can also think of India, Mexico or Brazil which are dynamic countries with a large number of inhabitants. In these countries there are large bases of young people and a sense of expectation that everything is yet to come.
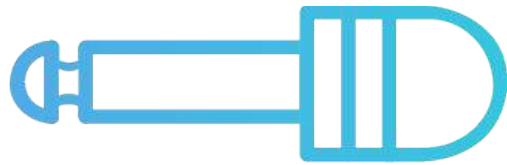
"This should be great news for music creators, investors and consumers. But there is good reason why the celebrations are muted; it is simply that the revenues, vital in funding future investment, are not being fairly returned to rights holders. The message is clear and it comes from a united music community; the value gap is the biggest constraint to revenue growth for artists, record labels and all music rights holders. Change is needed and it is to policy makers that the music sector looks to effect change."

Frances Moore,
CEO, IFPI - April 12th 2016

Independent market

Both historically and today independent labels have functioned as a channel for «alternative» content to the rest of the industry. In part this is because they target specific genres of music, niche markets and/or distinctive individual artists. Independent labels cultivate cultural difference. Conversely major labels and media organisations seek economies of scale by reducing cultural difference and promoting « global » superstars to a global market.
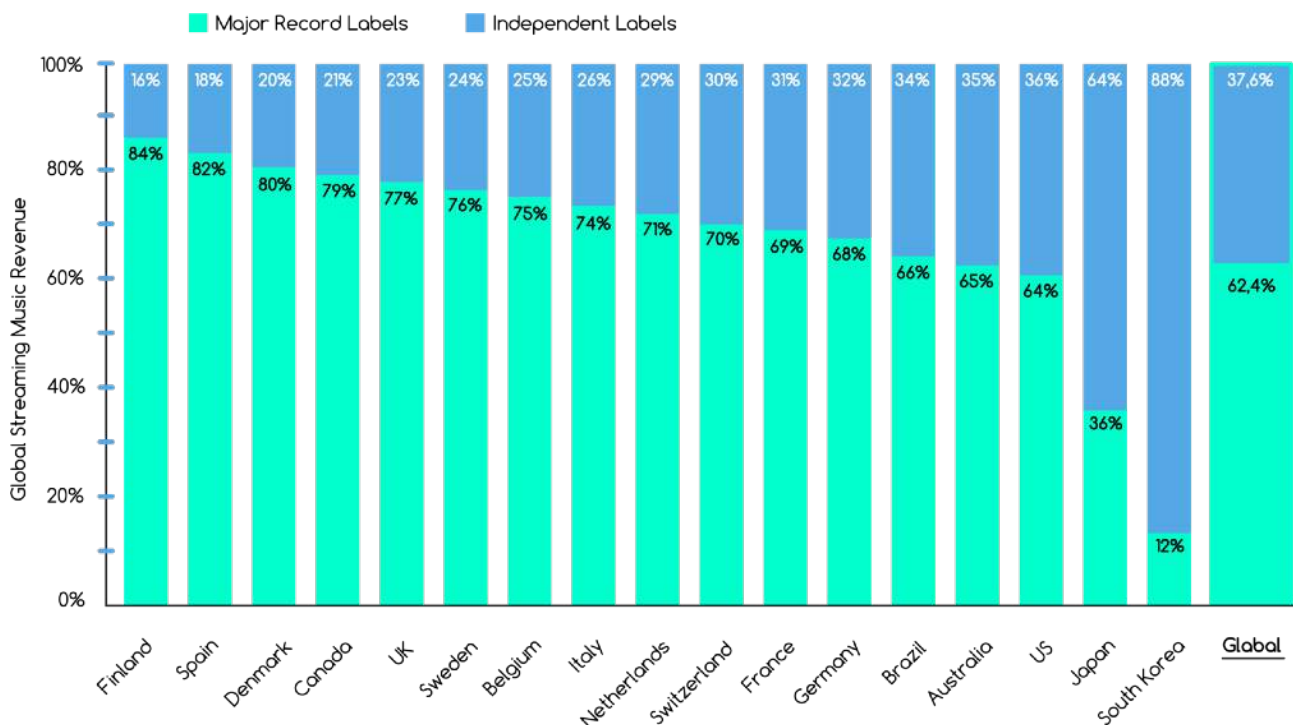
Global recorded music revenue share for major and independent labels by ownership

> I can upload my video to YouTube to be watched in 50 countries before breakfast. Why can't I just get paid by one person? 'YouTube, just pay me.' I don't need 50 people in 50 different countries to come and collect money from me... That's one of the advantages of an automated, digital, blockchain type of system.

Phil Barry,
Founder of Ujo Music - January 29th 2016
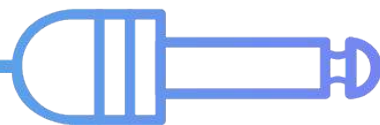
After the report of the previous pages and the results presented, we will now highlight the problems raised and explain the solutions that we want to develop with the support of the community. We will then present two roadmaps, our finished product, its functionalities and the ecosystem in which it will evolve.

Problems
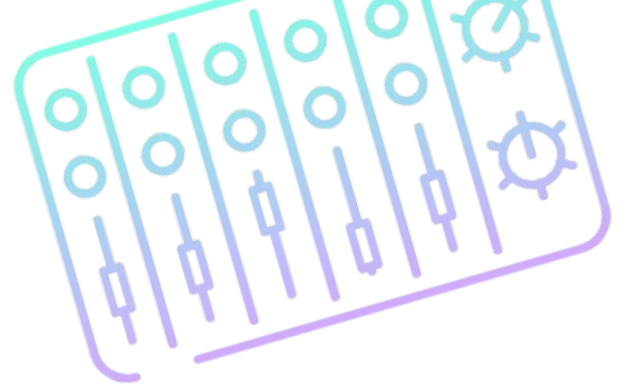
For music as a whole

Globally speaking we can see a general impoverishment of musical culture linked to the phenomenon of superstars and pushing us towards the average tastes that we are familiar with. In other words, the music industry is on the way to becoming a source of capital accumulation and losing its primary raison d'être; an artistic hobby that allows the population to leave the infernal Metro Boulot Dodo spiral for a while.

We can take as an example the development of LiveNation in France and Lollapalooza in Paris. In Belgium a company bought the shares of several Belgian turners (Sound & Visions, Make It Happen, Minerva, On The Rox). A number of Belgian festivals are also a good example of this phenomenon: Rock Werchter, TW Classic, I Love Techno and Pukkelpop. Changes are possible.

For the listeners

- No streaming platform is free without advertising.
- There is no streaming platform directly linked to a single piece of music production software, thus giving all users a semblance of equality, respect of own choice.
- There is no music streaming platform to bring listeners and composers together.
- These platforms do not offer a sufficiently attractive listening quality for music lovers.
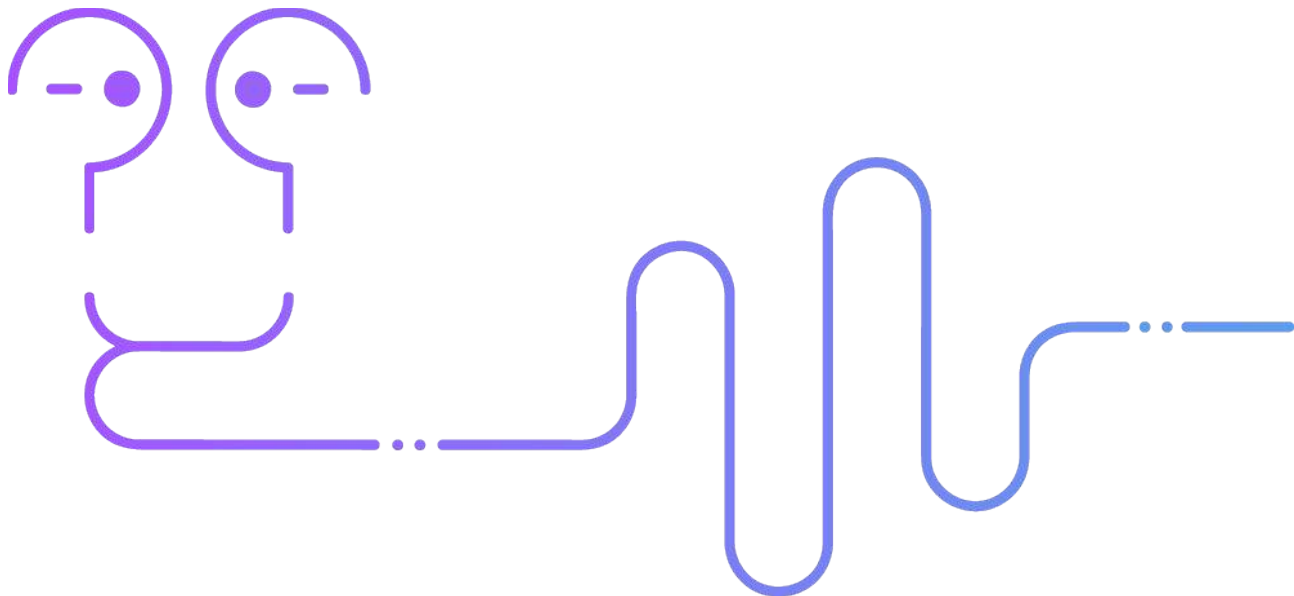
For the creators

- Small incomes
- Recognition
- Problems of access
- Difficulties of use
- Connections for B2B

- Professionalizing a difficult path
- Remote co-production
- Fear of the white score and strangers
- Remuneration sharing in a Band
- Hard Disc loss breakage theft

The problems especially for amateur and freelance creators today are many. After the fall in the physical sales of their albums, streaming is still not an alternative today, as the share of revenues allocated to creators is even lower.

For many, it is difficult to create the conditions necessary to practice their art, whether this is due to a lack of financial resources or know how. In fact, the existing softwares are very complicated, especially for occasional or random use.

Although talented many creators, due to lack of trust, organization or time... miss opportunities to see their work adopted by a company or an individual.

For promising artists, the path to professionalization of their musical career is long and difficult; they are often alone or they use agents who do not represent the essence of their work, only the name.

Another problem is that a music group often ends when one of the members moves away from their home, for example.

Finally, the phenomenon known as « fear of the blank page » applies to musicians as well as to authors. Indeed, how many musicians can complain about lacking inspiration, going in circles or always co-producing with the same people?
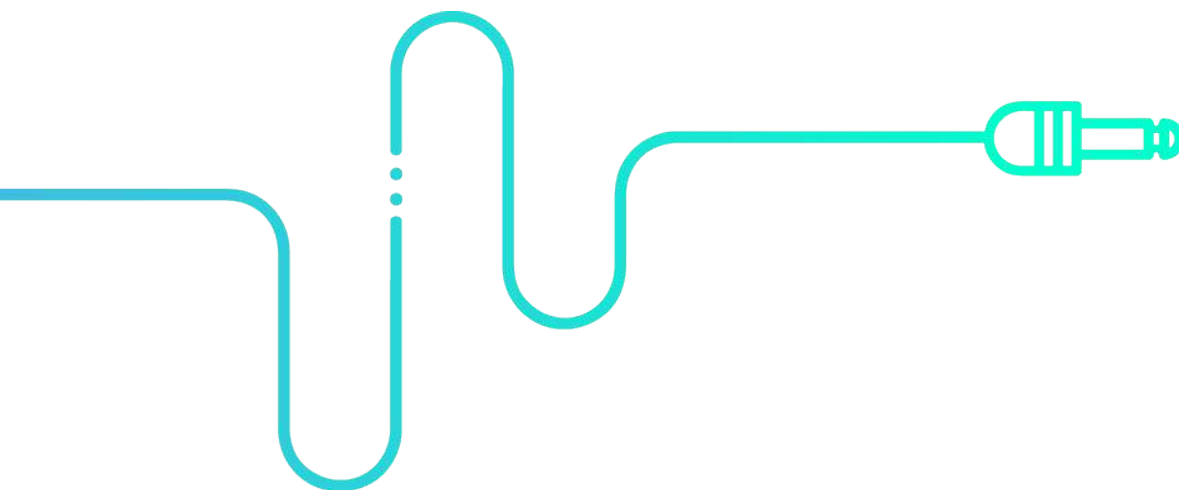
Solutions

For music as a whole

Creation of a web platform accessible to all, allowing free access to many original, amateur and/or independent works. These diverse and CC-licensed works encourage the creation of covers, remixes, international and intercultural collaborations.

For the listeners

Music fans love to share their latest favorites with others. Via this platform they will be able to share with others the must-haves of tomorrow, on an exclusive basis all while supporting the creators thanks to tipping.

No streaming platform is free without advertising and none will offer such a diverse international offering.

This is an uncompromising offer for true music lovers. An offer resulting from a new type of creation that crosses cultures. Thanks to blockchain technology an auditor can pay a creator without any intermediary. Thanks to OpenJam Studio a creator can compose without constraints linked to a lack of knowledge (solfèges, etc.), a lack of financial means (instruments, courses, etc.) or difficult conditions

(geographical, political, economic or social).

The recordings offered for listening will of course be available in .wav format and, for some, as downloads. It is important for us to offer the best possible listening experience, as desired by the creators.

For the creators

We will allow users to tip the artists they listen to. This short circuit compensation will be the largest in the music industry as it exists today. We will allow each creator to become anchored in an ecosystem attentive to the recognition of their work by their peers. We will promote a community vision of music.

Thanks to blockchain technology this platform will guarantee the traceability / anteriority of artists creations, improve their IPRs but also make their remuneration methods transparent.

This web platform will only require a computer and an Internet connection to access it. It will be ultra playful so that everyone can compose without the constraints of technical knowledge (solfeggio, arrangements...).In case of theft or loss everything will be store on the cloud. Also, it will make it easy to connect companies and music composers.

This platform will allow artists to professionalize themselves by having privileged access to many external services (mastering, graphics, merchandising, etc.). OpenJam will allow remote, live or deferred music co-production.

Finally, through its community vision, creators in need of inspiration will be able to call upon a friend, colleague or total stranger to make a cover song or rearrange their productions.
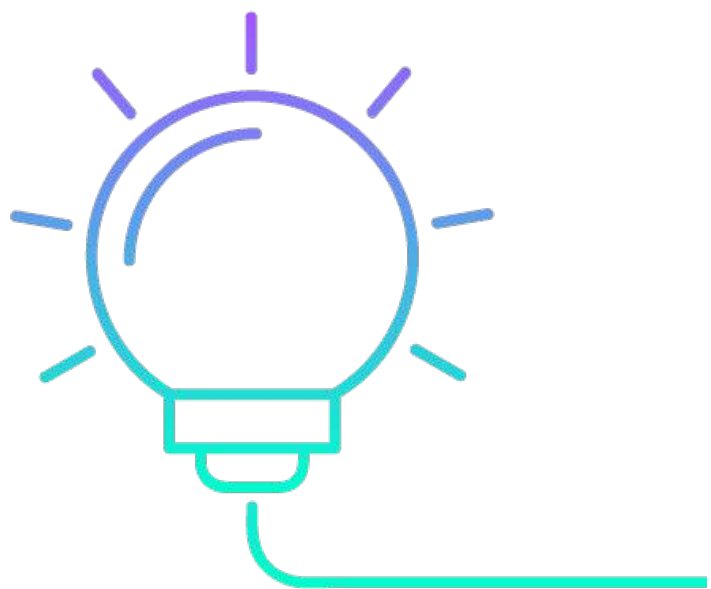
Roadmap

3.5 Years Roadmap

2017   ### Q2 to Q4/2017
- IDSprint
- Startup weekend
- Business model
- Team creation

2018   ### Q1 to Q2/2018
- Creation of the legal structure
- Release of OpenJam Tip
-

Q3 to Q4/2018
- Pré-ICO and ICO
- Listing JamCoin on exchanges
- OpenJam Loop Library
- Release of OpenJam Player beta

2019   ### Q1 to Q2/2019
- Release of OpenJam Player
- Trade Place integration
- Shops integration
- Release of OpenJam Studio beta

Q3 to Q4/2019
- Web radio
- WebVST standardization
- B2B partnerships

2020   ### Q1 to Q2/2020
- Release of OpenJam Studio
- Customization

Q3 to Q4/2020
- Fusion of Player & Studio
- Public API to our services
- Community leaded development

2021   ### 2021 to ...
- Global expansion
- Products improvement

Roadmap by product

Player   Studio

Pré ICO

OpenJam Tip (Minimal Viable Product)

ICO

OpenJam Player alpha

Communication between artists

OpenJam Loop Library

IoT instrument

Sending crowdfunding counterparts

OpenJam Player beta

OpenJam Studio alpha

Social network

Integration of music shop advertising

OpenJam Player v1

OpenJam Studio beta

Radio

Standardisation of WebVST

Customization

OpenJam Studio v1

Fusion of OpenJam Player and OpenJam Studio

B2B for product improvements

Global expansion

Products

Our development is based on the creation of an ecosystem in 3 phases. We will start by developing OpenJam Tip (phase 1), our MVP. We will then work on OpenJam Player (phase 2) and OpenJam Studio (phase 3) which are respectively for listeners and creators from all horizons.

Development will initially be based on a single musical style. But you are free to contact us to propose other developments.

Phase 1: OpenJam Tip

One of the remuneration solutions proposed by OpenJam is the tipping of artists directly by their listeners.

It is not an invention but a digitization of an ancestral method of payment that has been brought up to date; payment by the hat where payment is made after a performance and where the listener gives what he considers owed to the artist.

This voluntary remuneration will be made through the JamCoin, an utility token serving as a value exchange in a micro-economy for the benefit of amateur musicians, listeners, producers, music service providers and independent labels.

All transactions will be recorded in a blockchain to ensure full transparency of artists' remuneration and rights. The latter will have the opportunity to set up strategic locks. These locks will take, for example, the form of a maximum number of listenings without tipping or a minimum amount to tipper to have the possibility of recording their productions in playlists.

Some might think that it is a risky gamble to leave the consumer responsible for the remuneration of the artists he appreciates, however, this is done after certain concerts or the artist and his audience are close enough.

A new Public/Artist relationship could emerge from this direct remuneration.

The shared emotional connection between the artist and his listeners should encourage tipping and could make this mode of remuneration a new norm, as is the case in the remuneration of hotel staff in some countries.

OpenJam Tip is our Minimum Viable Product (MVP).

Its purpose is to give an overview of our ecosystem by implementing the basic functionalities to start spreading the word about our new business model?

The development of this first product will be initiated between the pre-ICO and the ICO and will evolve thereafter to become OpenJam Player.

Features

Allows musicians to create their own personal page, follow others, upload their compositions and be tipped by listeners who appreciate their work. They can choose the license adapted to their works in order to protect the authorship of their pieces and to ensure the precedence of their works...

• Allows labels to create their own page and manage groups of musicians. The tipping is then managed by the labels who then redistribute it to the artists according to their respective economic models. A dashboard will allow the labels to follow their business. OpenJam is a springboard for the development of these labels that are an integral part of our ecosystem.

• Allows listeners to create play-lists and be tipped by other jammers for their music selection.

- Allows all OpenJam users to post ads to:

  - Ensure their own promotion or that of another jammer, whether a musician, listener or label. This could include productions, playlists, products or services...)

  - Seek help from other Jammers and propose collaborations.

  - Obtain direct access to content creators (for audiovisual professionals)

Technologies used

We plan to work with the following technologies for the 3 main products.

- Web Assembly
- WebAudio API
- ReactJS
- Redux

- Electron
- RethinkDB
- .NET Core 2
- Microsoft Azure

Phase 2: OpenJam Player

OpenJam Player is a music streaming platform in the form of an open-source software, a website and a mobile application. This software allows you to listen to music files from a largely exclusive catalogue of labels and musicians from all horizons.
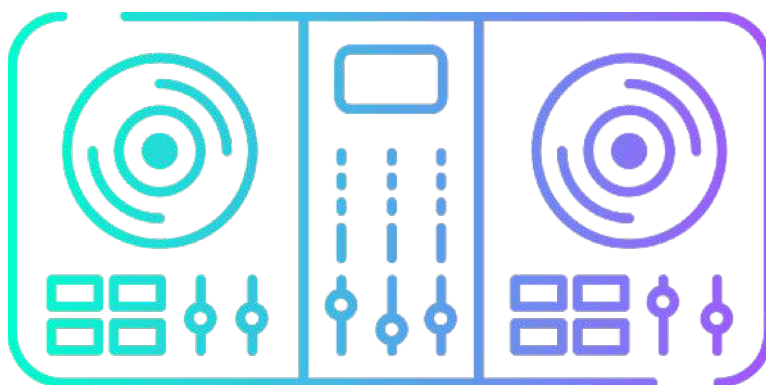
Some key features

- Pay the artists you love by tipping them. This process is the digital counterpart of the tip in the hat (payment method after a performance, where the customer gives what he feels he owes to the supplier) that amateur musicians practice for example in our streets, terraces, bars etc.

- Access a powerful search engine to filter results by geographic region, musical styles and sub-styles, instruments used in musical compositions, etc. For example, a listener can search for rockabilly songs within a 20-mile radius including contrabass. The artists of tomorrow are on OpenJam and they may be near you.

- Define smart playlists based on your search criteria. These lists will automatically grow with the songs published on OpenJam.

- Recommend the songs you love to your friends and other OpenJam users by becoming an artist's ambassador. This tokenization of an artist's popularity will allow you to obtain merchandising, concert tickets or access to a rehearsal session. In other words, if an artist's popularity explodes as a result of public promotion the artist's first ambassadors will be rewarded.

- Discover new songs and emerging styles with different radios that offer structured and easy-to-access information.

- Share your best playlists and win JamCoins from other listeners who appreciate your selection.

- View your listening statistics on a dedicated page and easily find a track you've listened to in the past. Easily track the progress of an entire personalized panel of artists on OpenJam.

- Follow the news of the artists you love and be notified of their upcoming concerts. You will also be able to discover some demo tracks, covers and exclusive rearrangements if you are an ambassador.

- Meet other Jammers who have the same tastes and follow their activity and musical favorites.

- The recordings offered for listening will of course be available in .wav format and, for some, as downloads. It is important for us to offer the best possible listening experience, as desired by the creators.

- Finally, audio-visual content creators can find the perfect piece under Creative Commons license to dress up their video creations.

For professionals in the sector

Discover OpenJam Trade Place: a set of tools integrated with OpenJam Player for audio-visual professionals looking for compositions or new talents.

With OpenJam Trade Place you will be able to:

- Find the perfect song under a Creative Commons license to dress your video creations for cinema or web.

- Discover the talents of tomorrow and propose them a management of their musical career.

But also for platform users

- Listeners can support their favorite artist by purchasing merchandise and they can use their JamCoins to access discounted services such as mastering, graphics, etc...

- The Jammers will also be able to launch calls for tenders to music producers for coproductions, covers, arrangements, etc...

Phase 3: OpenJam Studio

OpenJam Studio is a collaborative web sequencer for everyone allowing computer-assisted music creation without any restrictions of any kind that can be related to knowledge, financial or spatiotemporal factors.

Indeed OpenJam Studio is...

• ... accessible to everyone ! All you need is an internet connection and a computer, tablet or phone to start creating, meeting, learning...

• ... community-based! Imagine that you are a guitarist and that you are composing a guitar riff that you like. Once shared on OpenJam, other Jammers with their specialization (drums, synthesizer, bass...) will be able to collaborate with you to develop your piece until it becomes a masterpiece. It will also protect producers from the fear of the blank page since they will be able to co-produce, share and develop their creativity.

• ... economically interesting! It becomes possible to compose music without having to buy an instrument (often considered too expensive by the parents of future young musicians), or without having to resort to expensive lessons. Do you have a computer and an internet connection? Welcome to OpenJam.

- … so much fun to use that a person without theoretical knowledge of music can create. If you are new to music composition only the basic features will be displayed in a simplified interface. Unlock additional features as you progress, such as a library of loops from songs already published on OpenJam or powerful virtual instruments (WebVST) that will allow your imagination to run wild.

- … composed of a set of new technologies enabling collaborative and creative musical co-production at a distance. How many bands give up when one member leaves?

- … the source of original and diverse musical creations that break the current codes of the music industry with a customizable licensing system.

- … open source! If you are a developer you can create your own plugins or virtual instruments and make them available to the community.

OpenJam Studio will allow the emergence of new musicians, new bands and new musical styles. Whether you're a studio professional or a beginner musician you'll have access to the best tools to create tomorrow's music by yourself or with others.

Traction

The success of our product is directly linked to the number of users. The more listeners, creators and music tracks there are on the platform, the more valuable the JamCoin will be. To quickly attract users and build a community, we will work in the following way:

- Studio with 1000 possibilities: Loop library, samples, drum kit
- Possibility to play remotely and for free
- Ability to listen to music for free
- Derivatives for amateur musicians
- Uberisation of graphic designers, sound engineers, music teachers and video artists (through professionalization paths)
- Creation of a musical monetary ecosystem
- Contest with known artists

Imagine yourself as a musician: Do you have a logo for your band ? Then you have a shop. Your listeners are able to buy T-shirts, lighters, badges and other goodies directly in OpenJam. As an artist you receive a commission on every sale without having to manage your shop. We take care of the printing, shipping and after-sales service.

Some features

- 50 production lines on the sequencer, a collaborative Loop Library and Free voice-over...

- A track import/export module allowing you to compose from your favorite sequencer. A control panel will allow you to select the items you wish to export.

- The possibility to monetize unfinalized music by putting it on the platform. When other users reuse them, during the tipping, each author will be remunerated in proportion to their work or according to the terms of an agreement signed between them in the form of a smart-contract.

Architecture of musical projects

OpenJam Studio offers management of music projects based on the proven architecture of Git. Each song is a Git repository. This is a JSON file describing the structure of a piece. There are also MIDI files and references to audio clips used in the project. The audio clips are stored in a secure BLOB. The following table compares Git commands and their OpenJam Studio equivalents.

Git	OpenJam Studio
Create a new repository	Create a new song
Add & Commit	Save current work on local
Pushing changes	Save current work on OpenJam
Branching	Create a remix
Pull	Pull automatically when you open a song for modification
Merge	You can merge only if you are the creator of the song
Pull Request	Submit modifications to the creator ofthe song
Tagging	Tagging (demo, pre-mastering, post-mastering ...)
Log	Get the history of a song

Ecosystem

Relation between artists, listeners, and OpenJam

B2B

Services

Services development

Purchase of advertising space

Partnerships

Licences purchase

Subscription and purchase of services

Rewards if loyalty

Rewards if loyalty

Subscription and purchase of services

Mutual trust
Sharing on social networks

Listeners

Artists

Tipping
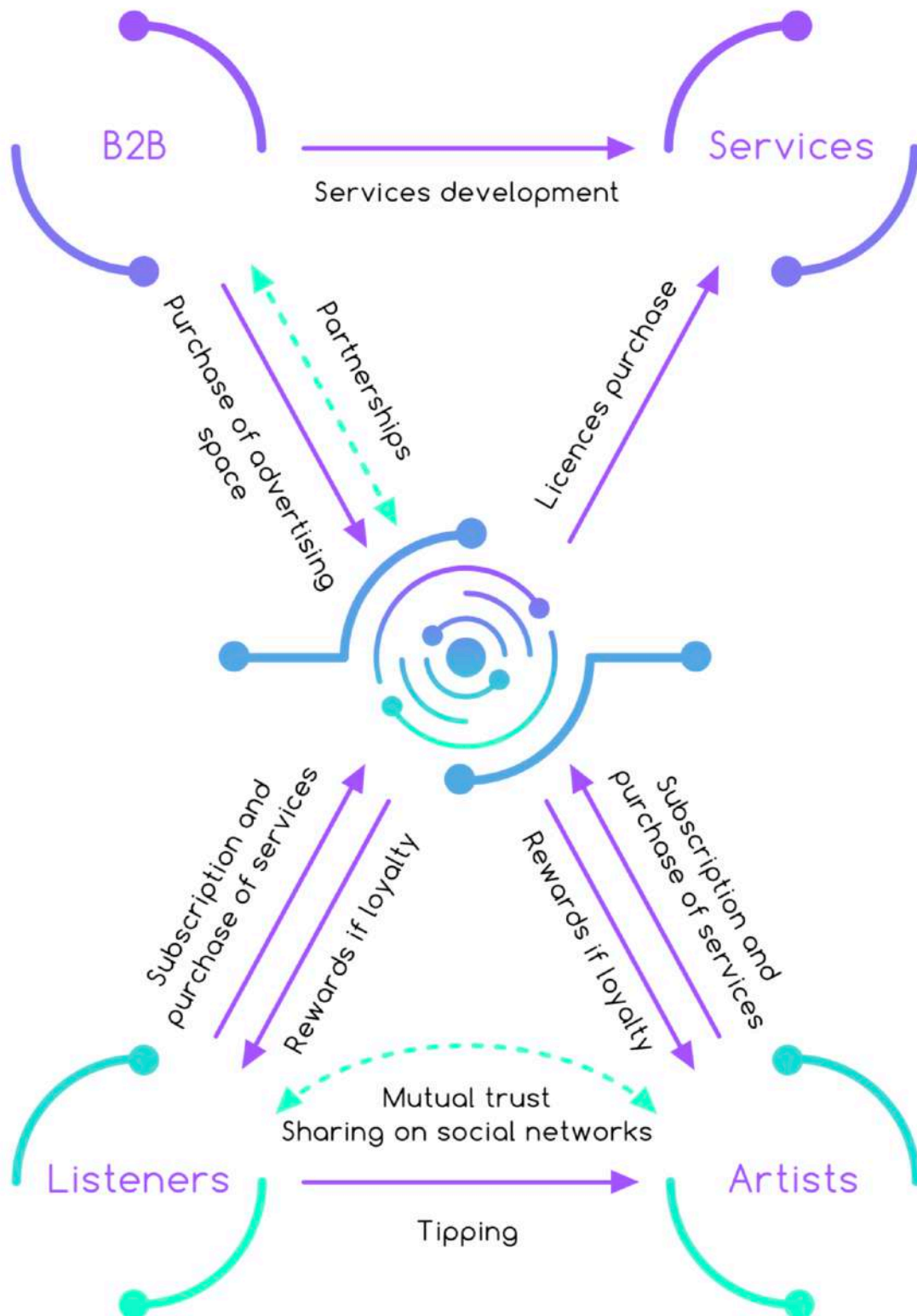
Source of income

We consider the following sources of income:

- The basic version will be accessible free to all but monetizing. Low cost enhancements will be available such as exclusive VST, general interface customization, studio customization, early access to sample loops packs etc.

- As any free OpenJam platform will have its advertising network exclusively promoting music, the latest instruments and will propose exclusive offers to JamCoins owners notably on the trade place.

- Integrated purchases will also be possible such as additional cloud space, more public playlists, etc...

- A commission to be discussed for the setting in relation, for the purchase and/or the sale of services such as merchandising, graphics, mastering, management, administrative secretariat, etc....

- A commission on certain transactions made in the ecosystem

- Rental of promotional space for the promotion of artists on the platform

Trade place

In order to offer a platform that meets the maximum needs of this ecosystem, a market will be accessible from the artist's profile where fans can find his **merchandising, tickets, vinyls, voices, acapellas, lyrics, sheet music...**

But it will also offer a specialized search function, for experienced users and artists needing to connect for services such as graphic design, mastering, promotion, setting up specific merchandising, music production tender, etc...

- Audiovisual professionals can find the perfect song.
- The musicians will have access to various services (merchandising, graphics, mastering...)
- Listeners can spend their jam corners there to support their artists.

The currency of this market will be the JamCoin, an utility token created to promote direct and international exchanges for the musical ecosystem.

Rely on OpenJam

User profiles are stored in Azure AD B2C on a European server and we adhere to a strict application of GDPR. Data security is essential in this open-source project.

We are also advised by a law firm specialized in issues related to the GDPR, intellectual property and the legal form to adopt.

Benefits of open-source vision

Over three-quarters of companies today use open source software somewhere in their business. According to a survey by the National Council of Free Software the pure players of open source are resolutely optimistic for 2017: +25% increase in the projected workforce and a turnover that would increase six times faster than in the entire digital sector. (cf CNLL Annual Survey Results).

The benefits of open source for community software are numerous:

- Free access speeds up dissemination.
- Transparency is reassuring.
- The egalitarian spirit of most projects means that end users have more direct access to developers than registered users generally have to proprietary developers.
- Open source projects can develop for minority languages whose potential users are too few for them ever to be a profitable market.
- A developer is someone who creates and takes pride in a job well done.
- Provide a technical community interacting with an artistic environment
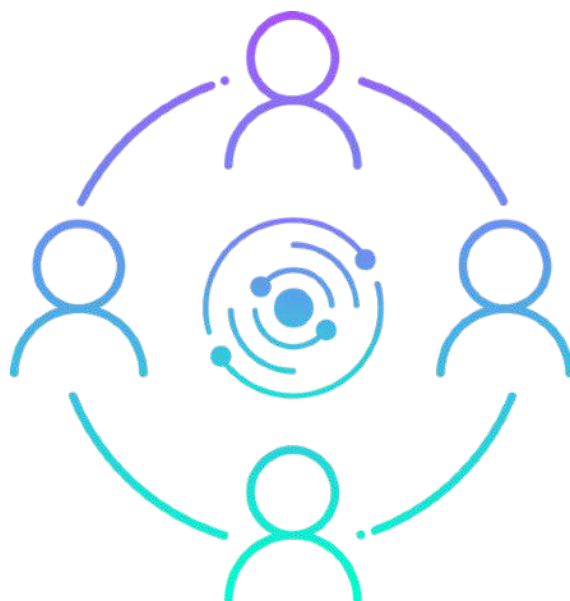
Legal entities and Main partners

TechMeDev

The OpenJam team will join TechMeDev Sàrl, a Luxembourg company created in November 2017. This structure has already developed, with brands active in the field of communication (FG, TRANSFER, ...), artists and various partners, a TRANSMEDIA 3.0 project (Future Generation) and can thus by this bief, facilitate and promote the development of the OpenJam project, open to all artists. In addition, synergies will be created in this joint structure between the OpenJam project team and another Blockchain development project led by the Ocean Lab team.

TechMeDev aims to incubate the OpenJam project, to put it into production while respecting the values that animate its designers, and this in order to house it, as soon as possible, in a clean structure in which members of the initial team will take part. However, this company will remain based in Luxembourg.

TechMeDev implements all necessary means to obtain financial support, assistance and recognition from Luxembourg institutions (LuxInnovation, Government, networks, Sacem...).

TechMeDev is also in charge of developing a win-win partnership with the French radio network and the international brand FG and other media animated by values similar to the project.

We hope to reach as quickly as possible a good level of visibility and a cruising pace that will allow us to value the community's effort and the artists' work.

OpenJam

OpenJam is a project built with the will to respect its users. We deeply believe that with the support of a community it is possible to realize big projects that change the world like Wikipedia, Firefox or the Apache HTTP Server that runs 46% of the world's web.

These different projects have a technological and social impact. Remember the world of Encarta's time and the tiny amount of information you could find in relation to Wikipedia.

In 20 years the world could be a very different place from what it is now. Will there be more music on our streets? Will musical collaborations cross borders and

cultures? Will musicians be able to live decently from their art? OpenJam provides solutions to these problems and believes in a culturally richer world.

OpenJam will set up **incentives** to accelerate the development of the features most expected by the community. UserVoice will be used to collect feedback. For OpenJam open source is a strategic foundation of our company and a lever for accelerating the development of our products. We will regularly participate in technical conferences abroad as speakers to share our experience of open source and promote our products.

Later, we will create a new standard: WebVST. A standardized VST format for the web based on WebAssembly and WebAudio APIs. It will be compatible with all web sequencers, OpenJam Studio being the first one

Oceanlab

Oceanlab is acting as the missing link between transactions and people. You are able to read the blockchain as if you were reading a newspaper, accessing information related to trading, new uses of the blockchain, new technologies and projects without browsing through an enormous amount of data.

We are surrounded by a team that brings us its technical skills, training and expertise on this project.

OceanLab, like OpenJam, is also a project developed within TechMeDev. This means that we share the same offices, which allows us to regularly discuss our respective progress.

We share the desire to work on blockchain projects and the passion for a job well done.

Radio FG

Radio FG (electronic music expert since 25 years) is an actor, unique in the French radio market. Radio FG offers an original format focused on electronic music, the discovery of new musical scenes and creations. The radio has a daily audience of 318,900 listeners according to the Médiamétrie institute (September 2016 - June 2017) and more than 500.000 all formats combined.

Radio FG broadcasts its programme through 34 cities on FM and DAB+ including Paris, Marseille, Strasbourg, Nice, Rennes, Dijon, Caen, Clermont-Ferrand, Perpignan, Antwerp and Monaco.

Radio FG also broadcasts FG Chic, 6 web radios offering original formats available on radioFG.com, smartphones and tablets. Requests for extension are in progress and on track on French territory.

Distinguishing points:

• A radio station making news, supporting events and the performing arts;
• The cultural exception and the promotion of local musical and artistic fields;
• FG has created and developed French touch with renowned artists and careers such as Daft Punk, Guetta, Sinclar, and more recently The Avener, Kungs, Møme, Synapson, Petit Biscuit...
• Programming focused on quality electronic music, house, deep, lounge and classics;
• Open-mindedness media partner.

Future Generation

Future Generation was born from the association of Antoine Baduel (CEO radio FG France) and David Schmitz (co-founder TechMeDev Sàrl), with the idea to develop Radio FG France in Belgium, Saarland and Luxembourg, to modernize and virtualize the radio media (VR, Decentraland.), to create a structure supporting artists, culture and local scenes. Today, Future Generation wants to invest and believe in the OpenJam project because the approaches, the spirit and the objectives are the same...

What's Openjam's futur ?

To ensure the best development with this partnership between OpenJam, Future Generation & radio FG France (with Antoine Baduel), the best way, for the team, to highlight the OpenJam's environment, is to develop a first micro-musical system focused on electronic music. We hoped so opening the way to other collaborations around different musical styles.Contacts are already ongoing... (We'll also be on Midem's exhibition in Cannes, Wallifornia MusicTech in Liège..)

Feel free to tell us about your projects...

We also want to integrate OpenJam into our daily lives, to accelerate its adoption by as many people as possible. We are thinking of wireless speakers, integrating AirPlay/Chromecast in the OpenJam app or broadcasting artists on a national radio.

Finally like some giants in their sector such as Mozilla or Wikipedia, we hope after having reached a certain stage of development to be able to rest on the community and focus on spreading the values that inspire us: working towards better remuneration for artists.

Token value

Earning and spending JamCoins

	Earning JAMs	Spending JAMs
Listeners	• Refer your friends • Promote OpenJam on social media • Be an artist or a label's ambassador • Get tipped for your music selection • Listen to commercials Reach levels • Buy JamCoins	• Tips to artist • Early access (demos, rearrangements,…) • Buy merchandizing • Promote an artist or a label • Buy services Create a public playlist
Musicians	• Get tipped for your musical activity • Sharing songs and loops • Get a bonus If you have a good reputation • Free gifts	• Buy services • Early access (songs, WebVSTs, loops…) • Buy exclusive instruments • Buy WebVSTs • Promote your music • Do FIAT transfer
Labels	• Get tipped for your musical activity • Be an OpenJam ambassador	• Buy professional services
Github user, pro press, others	• Bounty rewards	• Do FIAT transfer

How will the value of JamCoin grow?

Decreasing supply

- JamCoins will be always limited to 450 000 000 tokens.

- Musicians who have established a good reputation on OpenJam will receive an extra bonus each time they are tipped or when they win a contest. The higher your reputation, the higher the bonus offered will be.

- JamCoins will be used by music lovers and musicians to purchase a monthly premium subscription.

- Musicians will have to exchange JamCoins for promotion, exclusive IoT musical instruments, WebVST and services. Music lovers will be able to tip the artists they enjoy with JamCoins.

- With the growing scale of our company it will also increase the value of our currency.

Increasing demand

- OpenJam will charge music stores and advertisers in fiat currencies in order to acquire JamCoins from the market. Thereafter, music lovers and musicians who do not have a premium subscription will be paid with these JamCoins for each advertisement seen. This will fuel the steady demand for JamCoins.

- Purchase price of JamCoins through OpenJam will always be based on market value and also, according to the market value will be transferred to the musicians for their work. Therefore, regardless of the exchange rate, JamCoins will be purchased and transferred according to market value.

- The growing number of music lovers and musicians will drive the value of JamCoin as the primary settlement measure of our success.

- OpenJam users will not only be music lovers or musicians. There will also be music teachers, graphic designers, sound engineers, videographers, music stores and advertisers... All these entities that provide services to musicians will increase the demand for JamCoins, which should see its price increase over time.

Why Ethereum?

Ethereum is one of the most complete blockchain!

A decentralized platform that manages smart contracts: applications that work exactly as scheduled without any possibility of downtime, censorship, fraud or third-party interference. This guarantees transparency for our users.

These applications run on a custom built blockchain, a shared global infrastructure that can move value and represent property ownership.

This allows developers to create markets, store records of debts or promises, move funds according to long-standing instructions (such as a will or a futures contract) and many other things that have not yet been invented, all without the risk of an intermediary or counterpart.

Using Ethereum, we can create a contract that will hold a contributor's money until a given date or goal is met. Depending on the results, the funds will either be returned to the project owners or safely returned to the contributors. All this is possible without the need for a centralized arbitrator, a clearing house or having to trust anyone.

The advantage that OpenJam can derive from the use of smart contract Ethereum is that they are customizable for the distribution of artist remunerations according to their participation in a song. This meets our objective of fairer remuneration for artists!

Choosing Ethereum is only one consequence of the essential choice of a platform adapted to the need.

Our Team

Core Team

David SCHMITZ

Business & Network Manager

Passionate about media and new technologies.
I created TechMeDev Sàrl and Future Génération with the objective of bringing radio media into its 3.0 version. I'm graduated in management and law.

https://www.linkedin.com/in/davschmitz/

Philippe MATRAY

Founder - Blockchain Project Manager

7 years of experience in .NET/JS cross-platform software development, project management and teaching; guitarist and music composer. OpenJam is my Ikigai.

https://www.linkedin.com/in/phmatray/

Stanislas POINDRELLE

Founder - Marketing & Artists Manager

Graduated master in innovation management.
6 years experienced as artist's manager/programmer and party promoter in music industry.

https://www.linkedin.com/in/stanislas-poindrelle-474748a3/

TechMeDev Team

In addition to the core team, we are also supported by the TechMeDev team.

Amélie JONET

Operational &
Financial Manager

Fabrice DISTEFANO

Blockchain
Project Architect

Olivier SAINTELET

Marketing &
Communication Manager

Consultants & Freelancers

We are also supported by some consultants and freelancers for specific short assignments.

David LEPAUX

Web Development

Laura LARUELLE

Marketing &
Project Coordination

Ilse THEUNISSEN

Graphic Design

Yves MALANDRI

E-Business

FG Media Partner Team

Antoine BADUEL

Head of company
at RADIO FG

Jean-Etienne BADUEL

Managing Director
at RADIO FG

Radio FG - Feel Good

House, Dance, Hip Hop US,
RnB and Electro

Partners

House of Startups

Powered by the Luxembourg
Chamber of Commerce

Nyuko

Services for startups, corporate
and community

Green Revolver Music

Booking - Promotion -
Management

OUTRANCE

Association for the promotion
of culture and psytrance music.

Nashton Records

Electronic Music Label based in
Lyon (FR) and Kraków (PL)

Oceanlab

Human ideas | Blockchain
realities

Advisory Board

Samuel CARDILLO
Serial entrepreneur
Blockchain enthousiast

Loïc BAR
Serial entrepreneur
CEO at Opinum

Renaud HOYOUX
CTO / lead dev. at Cytomine
Opensource developer

Alban AMOUROUX
Author of the Multiroom blog
Expert in #SmartAudio

Token Sale

In brief

Token details

Role of token	Community rewarding, platform payments
Token supply	450 million
Distributed in the crowdsale	337,5 million (75%)
Token symbol/Ticker	JAM
Number of decimals	18
Blockchain	Ethereum
Emission rate	No new coins will ever be created
Origin	Luxembourg

Crowdsale details

Minimum viable product	OpenJam Tip
Minimum goal	$2 000 000
Accepted currencies	All cryptocurrencies available via the Ethereum platform
Minimum transaction about	0.1 Ethereum
Pre-ICO distribution period	From: XXX TBA To: XXX TBA
Main ICO distribution period	From: XXX TBA To: XXX TBA
Token distribution	Tokens will be distributed in proportion to the investment after the ICO.
How funds are held	Multi-sig wallet held by team council

Pre-ICO launch

Pre-ICO start and end dates will be announced soon.

Our pre-ICO will begin on the XXX TBA and will run for 10 days until the XXX TBA. 75% of all JamCoins will be available during the pre-ICO and ICO. Only registered users will be able to participate in pre-ICO.

You'll be able to invest in OpenJam with any verified token on the Ethereum platform having a market valuation; you'll be able to invest in Dollar, Euro, BitCoin, Ethereum for example. You will do this by sending them to an ERC20 wallet address which will be revealed when the ICO starts.

Bonus schedule

The base price of the JamCoin will be determined at the end of the ICO. The following bonuses are available depending on when you invest.
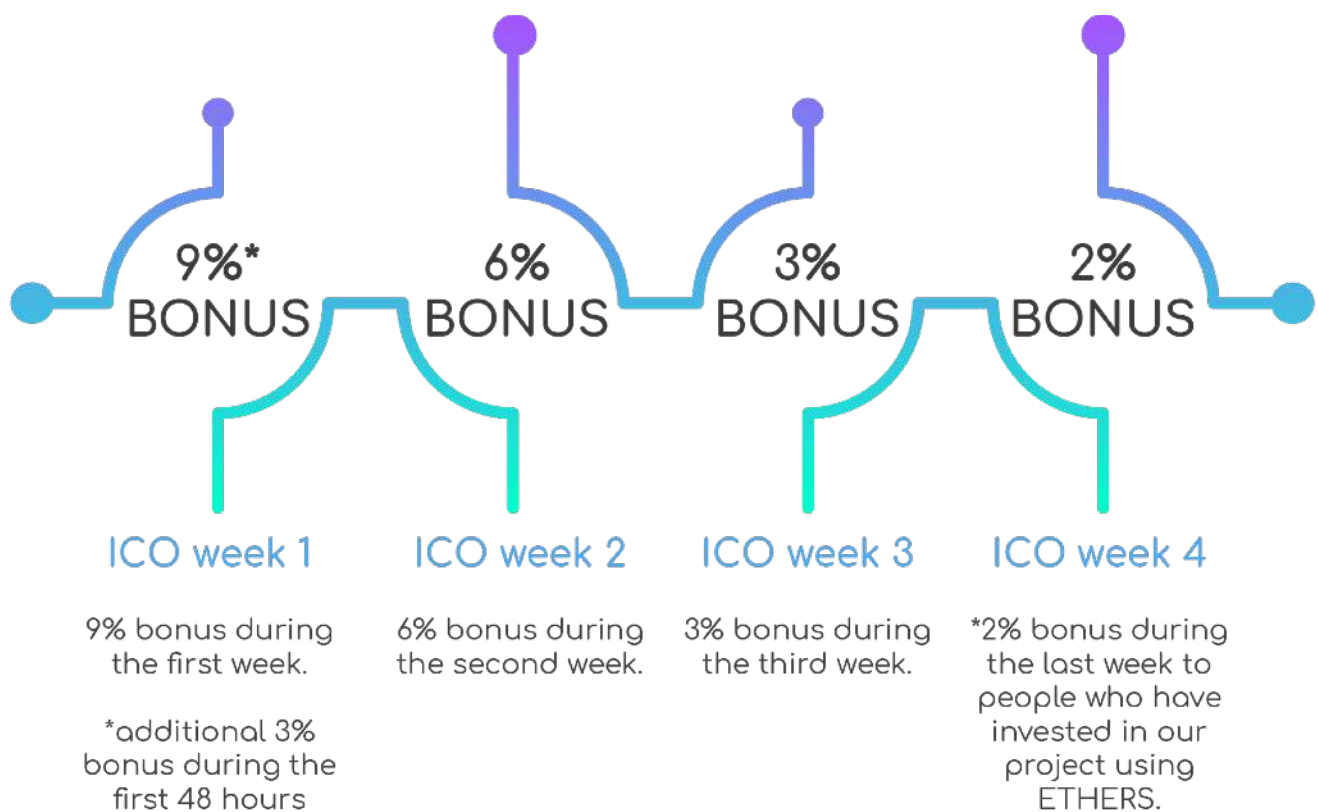
15%
BONUS

PRE ICO

15% bonus during
the pré ICO

ICO launch

ICO start and end dates will be announced soon.

OpenJam plans to attract investments via the Initial Coin Offering (ICO) method, by issuing its own tokens (JAM) with a limited emission. After the ICO no coins will be issued, so any inflation is ruled out.

Total supply is 450 000 000 JAM tokens, 337 500 000 JAM are being offered for sale. Early buyers will receive special bonuses connected to the timing and amount of purchase. The JAM distributed and remaining can be tracked at https://openjam.be.

9%* BONUS	**6% BONUS**	**3% BONUS**	**2% BONUS**
ICO week 1	**ICO week 2**	**ICO week 3**	**ICO week 4**
9% bonus during the first week.	6% bonus during the second week.	3% bonus during the third week.	*2% bonus during the last week to people who have invested in our project using ETHERS.
*additional 3% bonus during the first 48 hours			

Fund releasing

Fund releasing will happen gradually to enable the development of our business:

ICO M+1	10 %	After the release of OpenJam Tip
ICO M+4	15 %	After the release OpenJam Loop Library
ICO M+8	15 %	After the release of OpenJam Player
ICO M+12	10 %	After the beta release of OpenJam Studio
ICO M+15	20 %	After the release of Web radio
ICO M+18	10 %	After the WebVST standardization
ICO M+21	10 %	After the general release of OpenJam Studio
ICO M+24	10 %	After the release of the customization sprint

The contributions will be used for product and technical development, management, operations, marketing, sales, PR and international expansion. If we do not reach the envisioned amount, we'll rely on operating profits and scale down our operations to remain fully functional for the next two years.
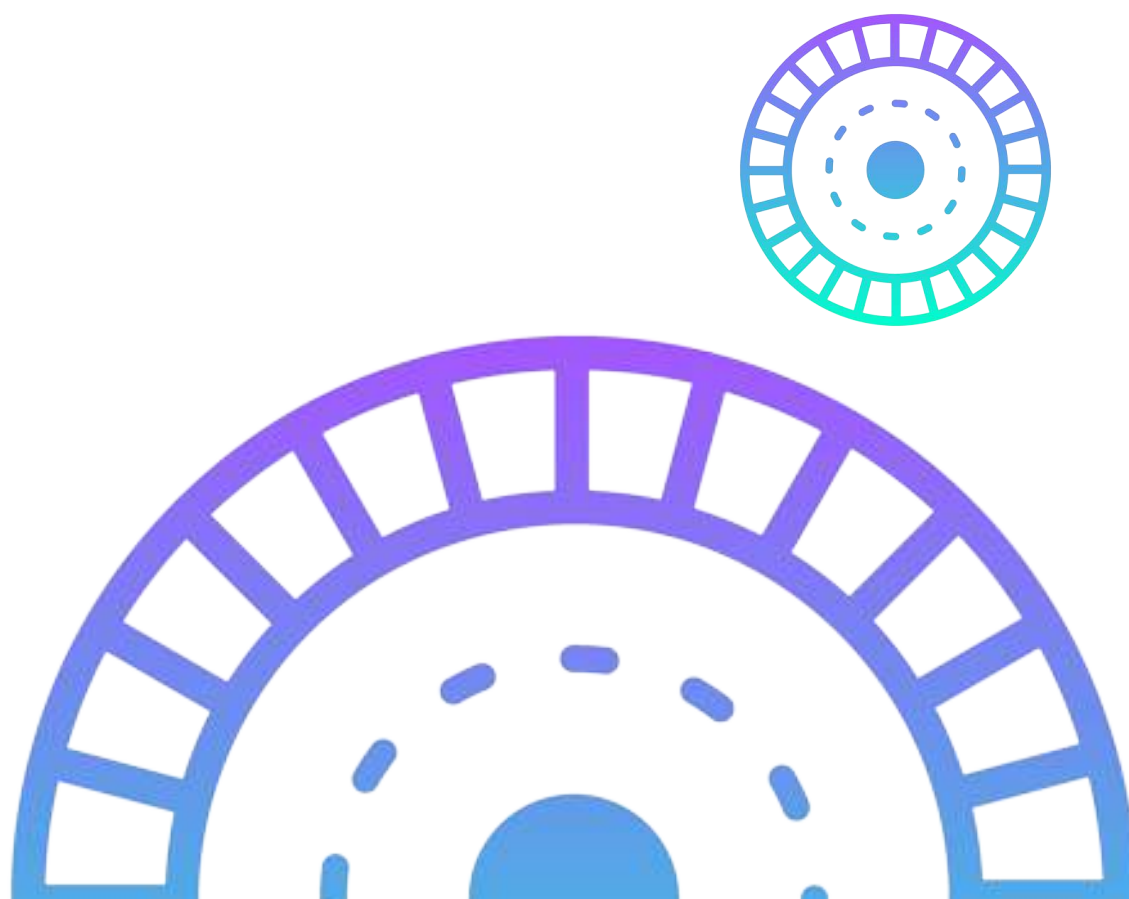
# Token release

Contributing rules

There are strict rules and precautions to follow while participating within the OpenJam ICO:

- Send Ethers from your personal Ethereum wallet.
- Do not send Ethers from exchanges like Bittrex, Kraken, Coinbase, etc...
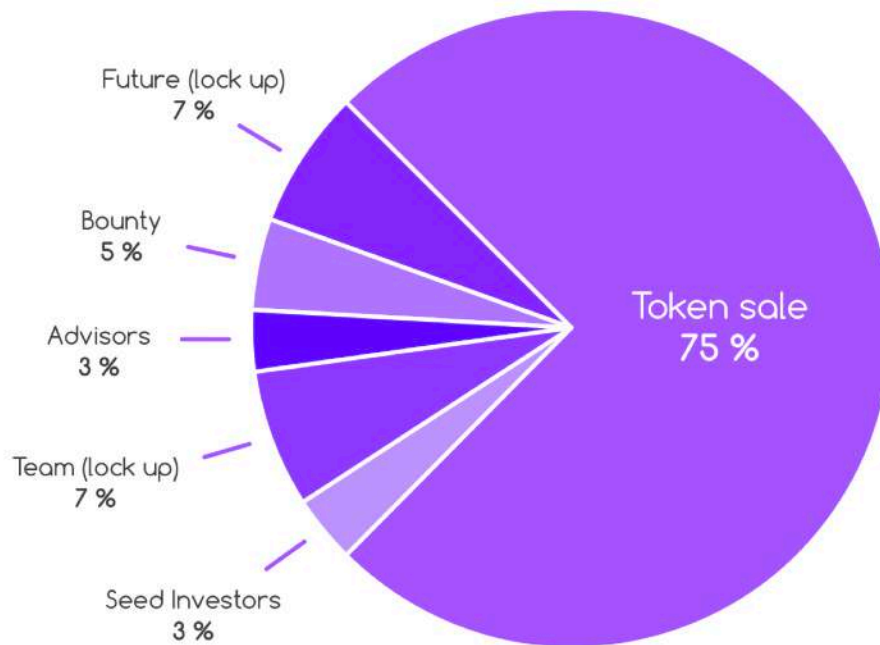- Do not send Ethers before the Pre-ICO/ICO has begun.

Are you new to the Ethereum Platform?

With the great surge of token sales of Ethereum and other cryptocurrency projects there's also a great deal of misunderstanding and greed, both on the side of the companies as well as investors. How do you draw the line between good and bad projects? Follow the checklists below and you'll have to worry a lot less about how sound your investment is.

https://steemit.com/cryptocurrencies/@tradingbuddy/checklist-for-ico-investing-ethereum
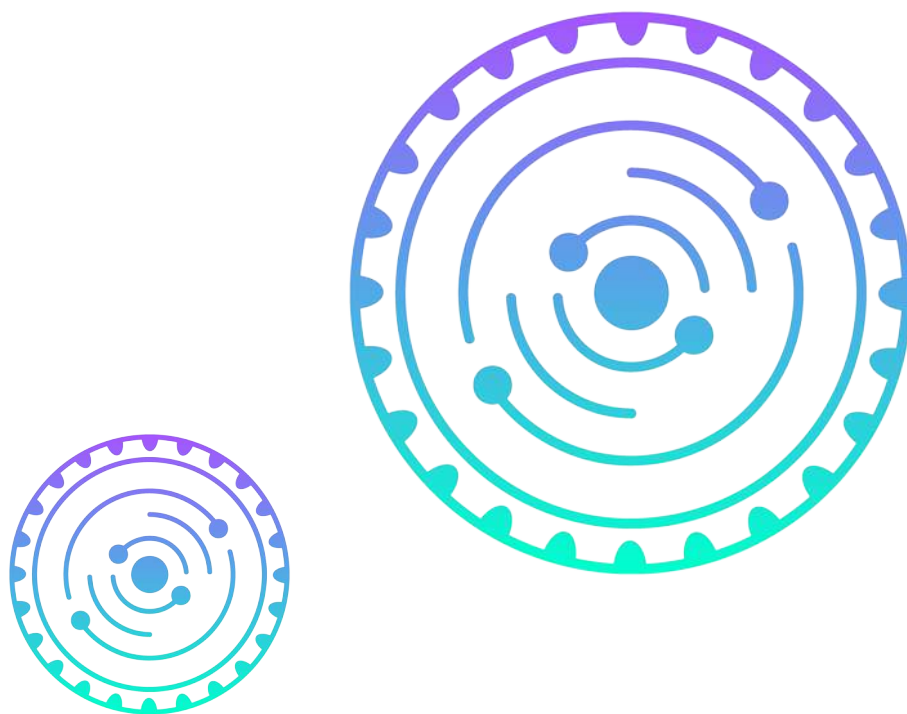
# Token sale and use of proceeds repartition

Future (lock up)
7 %

Bounty
5 %

Advisors
3 %

Team (lock up)
7 %

Seed Investors
3 %

Token sale
75 %

Token Sale

75% of the tokens will be sold to ICO participants. 12% of the tokens will be used to establish f u t u r e partnerships and a bounty program on our GitHub. The remaining 13% will be distributed to our seed investors, advisors and team.

Use of Proceeds

The money raised during the ICO will be distributed as follows. Funds will be released as we progress through the project.

Integration
15 %

Music market
10 %

Development
50 %

Expansion
25 %
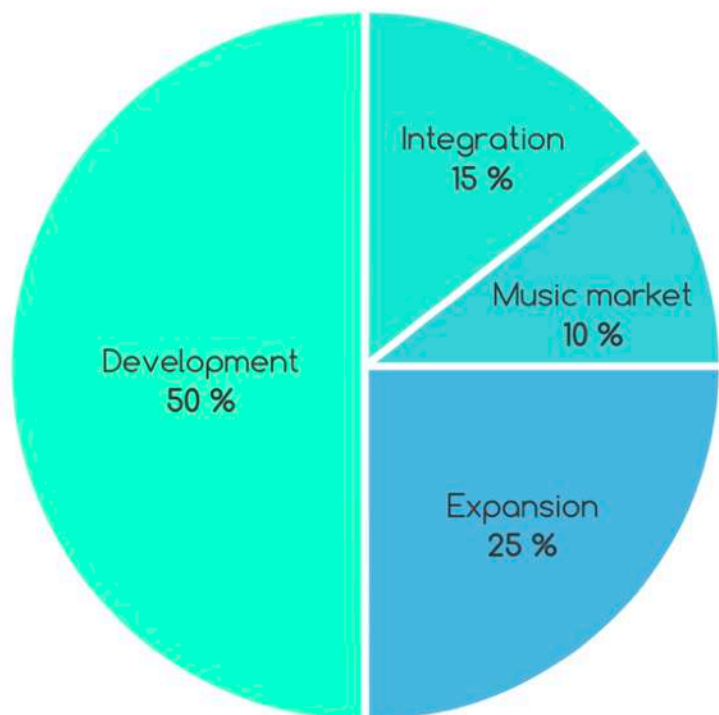
FAQ's

We have a frequently asked questions section on the GitBook of our whitepaper. This answers the following questions:

OpenJam

- What is OpenJam?
- How does it work?
- Do I have any obligations towards OpenJam?
- What is OpenJam's business model?
- What form of control do you have over the JamCoin?

Free music and copyright

- What is free music?
- Can I use free music in a non-commercial setting?
- What is copyright?
- What is the status of works hosted on OpenJam?
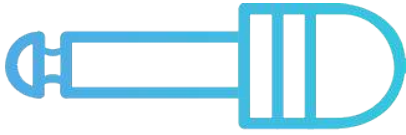- What are Creative Commons?

Artists

- What is an artist?
- How do artists get paid on OpenJam?
- Why tip an artist?

Products
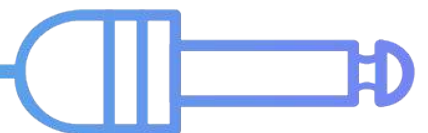
- What features for advanced users?

More informations on whitepaper.openjam.be

" One of the advantages of a blockchain ledger is that it can establish a more direct relationship between creators and consumers. Composers and artists can get directly compensated every time their songs are played. This can be a boon. "

Techcrunch

Webography

19 Oct. 2017	La blockchain, une séduisante promesse pour la musique en ligne
20 Oct. 2017	La blockchain sauvera-t-elle l'industrie musicale ?
20 Oct. 2017	Git - the simple guide
20 Oct. 2017	Streaming de musique : tricher plus pour gagner plus ?
20 Oct. 2017	Combien gagne un musicien avec le streaming ?
20 Oct. 2017	Comment vendre sa musique en 2017 ?
04 Nov. 2017	ICO Guides
16 Nov. 2017	Deploy a RethinkDB server on Azure in 15 minutes, or less
16 Nov. 2017	7 reasons why open source code is better than proprietary
17 Nov. 2017	L'open source, une stratégie payante ?
17 Nov. 2017	Petit guide sur les logiciels libres à l'intention des professionnels et des juristes
21 Nov. 2017	Economics of Initial Coin Offerings
21 Nov. 2017	How to: Judge if the token will rise in value after ICO
21 Nov. 2017	How to run an ICO
13 Jan. 2018	The new open-source economics (TED Talk)
14 Jan. 2018	Quelle est la rémunération des artistes par les services de streaming en 2017 ?
16 Jan. 2018	Wikipédia: Apache HTTP Server

OpenJam

" With the community,
for the community "

www.openjam.eu