D6.3 – Exploitation Plan (Public)

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CHANGE LOG

Version	Date	Description of change	Responsible
V0.1	10-11-2018	Initial Draft	Joaquín Luzón
V0.5	26-11-2018	Version for peer-review	Joaquín Luzón
V1.0	30-11-2018	Final version	Joaquín Luzón

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1   Executive Summary

This deliverable presents the progress made in the exploitation of the project outcomes, from the activity carried out in the first months (M1-M15), as well as the projection and exploitation and business plan that will guide the remaining months to M36.

FuturePulse will place increased priority on the exploitation of the project outcomes, which includes the FuturePulse platform and its components, the three music intelligence applications -which by the end of the project will have reached a close-to-market state following continuous pilot testing and evaluation in realistic settings-, the new technical capabilities of partners developed within the project and the low-cost generation of music intelligence reports with potentially great value to the music market. The two main goals of the FuturePulse exploitation strategy include the maximization of revenues from commercializing the aforementioned outcomes, and the sustainability of the developed platform and applications.

To achieve the exploitation goals of the project, the FuturePulse consortium will pursue both a joint exploitation venture with several of the partners participating with distinct roles, and individual exploitation paths that will enable the consortium members to realize the full exploitation potential of the project in a flexible manner, making sure that no conflicts are raised with respect to the joint exploitation plan. Exploitation planning and activities will be carried out within WP6 of the project work.

2   Introduction and Relation to other WPs/Tasks

This deliverable details the exploitation plan of the FuturePulse project. On one hand, it describes the exploitation plan and activities performed until the delivery of this document (November 2018, M15) and, on the other hand, it describes the activities planned until the end of the project with the goal of maximize the exploitation results and the sustainability of the developed platform and applications.

FuturePulse was born with the idea of offering its services to a music industry immersed in a transformation in line with the technological changes that promote the massive consumption of musical assets through the digital media. That is why our value proposition, which includes multisource multimodal extensive collection and indexing of music data, music mining and predictive analytics components and music audience mining and insights components, prioritizes the exploitation of these differentiating factors.

To achieve the exploitation goals of the project, the FuturePulse consortium aims to pursue both a joint exploitation venture with several of the partners participating with distinct roles, and individual exploitation paths that will enable the consortium members to realize the full exploitation potential of the project in a flexible manner, making sure that no conflicts are raised with respect to the joint exploitation plan.

It is important to remark that, given the high dynamism of the technologies surrounding the data management in the music sector, and in order to keep a valid competitive selling proposition, the consortium will likely have to pivot its exploitation strategy from now (M15) to the end of the project (M36).

Relation to other WPs/Tasks

The exploitation plan and activities of FuturePulse are closely related to several activities in the project:

WP1: The Use Case requirements and the Market Analysis performed are one of the most valuable inputs for the exploitation activities of the project. On one hand, the Use Case requirements will mostly shape the functionalities of FuturePulse platform. On the other hand, the analysis of the niche functionalities raised by means of the Market Analysis performed is a key aspect to shape the exploitation strategy of the project.

WP2, WP3 and WP4: These Work Packages address the technical requirements coming from the market-oriented use cases and develop the solution and components of the project. Thus, they play a key role to provide valuable outputs for the exploitation activities.

WP5: The feedback provided by all the pilots performed is crucial towards building the FuturePulse platform optimising its impact in the music industry market.

WP6: The overall exploitation plan is closely related to all the Communication, Dissemination and Liaisons activities of the project.

2.1 Exploitation phases

This section describes the different phases performed and planned towards the exploitation of the results of the project. The following figure depicts these phases, which are further detailed below.
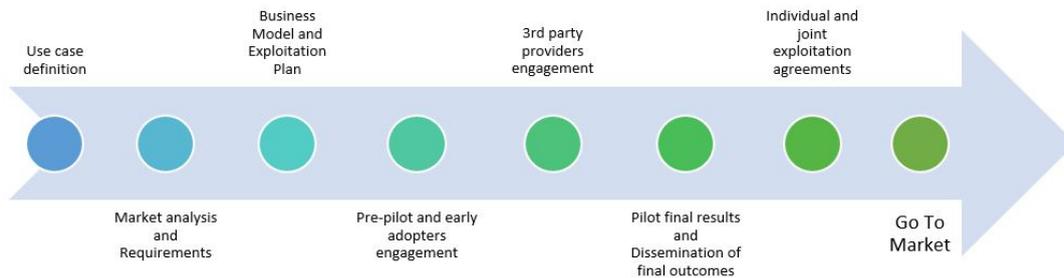
Figure 1 - FuturePulse exploitation phases

2.1.1 Use Case Definition

In this phase, started at the time of the proposal and continued in the early months of the project, the use cases were defined, made up of three relevant stakeholders in three of the key links in the value chain of the current music industry: live music, record labels and background music providers.
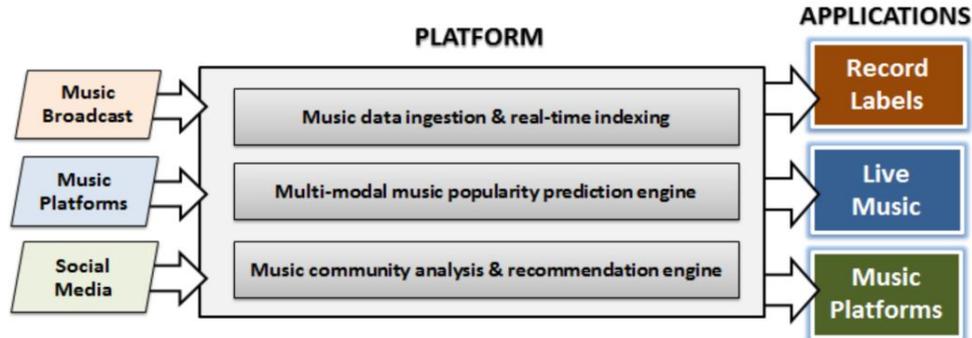
Figure 2 - Overview of FuturePulse outcomes

The project leaned on their extensive knowledge of the market and the technologies used in their field in order to shape the architecture and requirements of FuturePulse platform. At the same time, the consortium created the initial SWOT and the first observations regarding exploitation.

2.1.2 Market analysis and Requirements

Once the project started, the first thing to do was to generate the use case requirements (D1.2 - FuturePulse Requirements v1), which served as the main guide to evaluate the feasibility of the features and the development of the components by the technological partners. The project coordinator is in charge of harmonizing the inputs by the technical and business parts.

The market analysis comes from the pilot leaders, who carried out the first exhaustive search between the tools they currently use and those they identified as relevant for the project, either as competitors or possible partners (D1.1 and D1.3 - Music Industry Innovation Report v1&2).

2.1.3 Business Model and Exploitation Plan

As an initial milestone in the development of a business strategy, we need to define the business logic that derives from the use cases of the project.

This is the current stage of the project in which this Exploitation Plan is also defined. The aim here is to detail all the considerations to be taken into account and actions to be adopted in order to benefit from the results, experience and capacities acquired during and after the development of the project.

2.1.4 Pre-pilot and Early adopters engagement

This phase includes the development of the first prototypes per use case, ready for user testing.

As described in the Pilot Plan, the idea is to define a group of potential customers among the partners and clients of the pilot leaders. From the first pilot phase the commitment of these groups will be sought, through a development of quality pilots and continuous contact with clients.

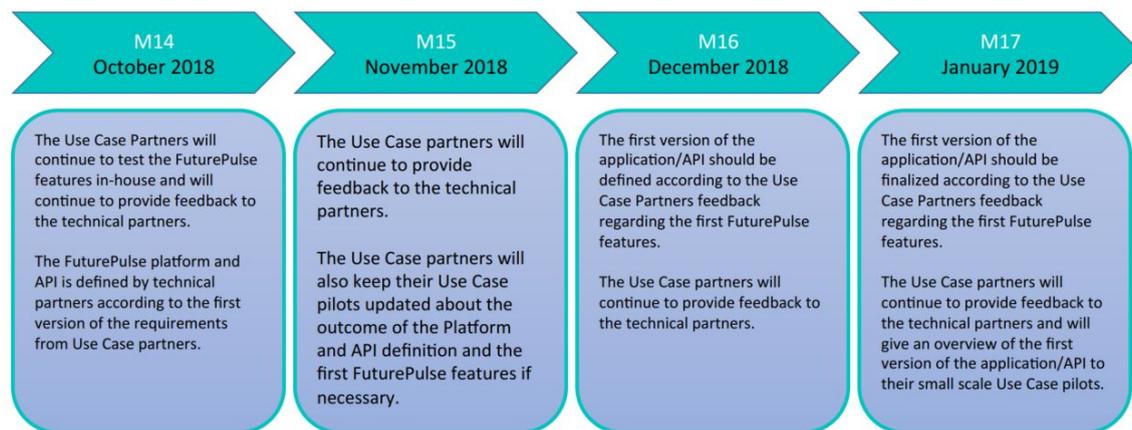| M14 October 2018	M15 November 2018	M16 December 2018	M17 January 2019
The Use Case Partners will continue to test the FuturePulse features in-house and will continue to provide feedback to the technical partners. The FuturePulse platform and API is defined by technical partners according to the first version of the requirements from Use Case partners.	The Use Case partners will continue to provide feedback to the technical partners. The Use Case partners will also keep their Use Case pilots updated about the outcome of the Platform and API definition and the first FuturePulse features if necessary.	The first version of the application/API should be defined according to the Use Case Partners feedback regarding the first FuturePulse features. The Use Case partners will continue to provide feedback to the technical partners.	The first version of the application/API should be finalized according to the Use Case Partners feedback regarding the first FuturePulse features. The Use Case partners will continue to provide feedback to the technical partners and will give an overview of the first version of the application/API to their small scale Use Case pilots.

Figure 3 -Pre-pilot phase

In this project phase, we will begin to explore the additions of new system and use case requirements based on pilot performance and operational considerations.
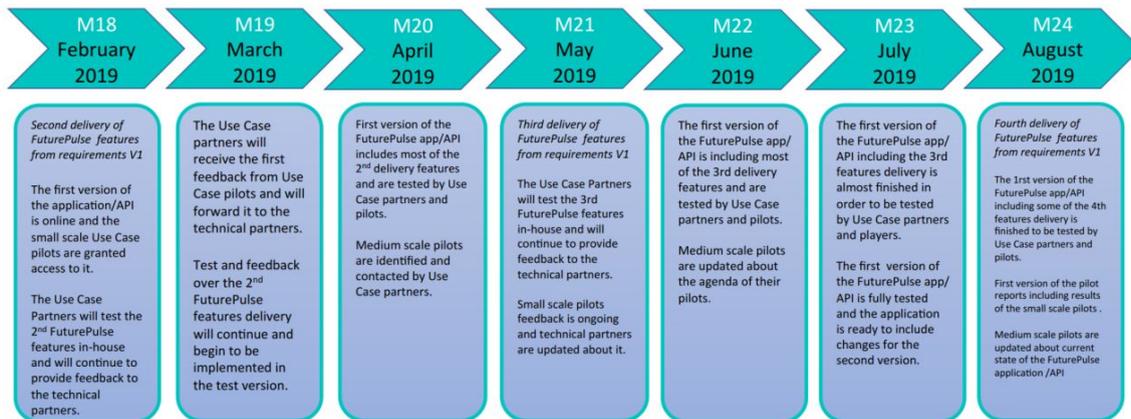
2.1.5 3rd party providers engagement

M18 February 2019	M19 March 2019	M20 April 2019	M21 May 2019	M22 June 2019	M23 July 2019	M24 August 2019
Second delivery of FuturePulse features from requirements V1 The first version of the application/API is online and the small scale Use Case pilots are granted access to it. The Use Case Partners will test the 2nd FuturePulse features in-house and will continue to provide feedback to the technical partners.	The Use Case partners will receive the first feedback from Use Case pilots and will forward it to the technical partners. Test and feedback over the 2nd FuturePulse features delivery will continue and begin to be implemented in the test version.	First version of the FuturePulse app/API includes most of the 2nd delivery features and are tested by Use Case partners and pilots. Medium scale pilots are identified and contacted by Use Case partners.	*Third delivery of FuturePulse features from requirements V1* The Use Case Partners will test the 3rd FuturePulse features in-house and will continue to provide feedback to the technical partners. Small scale pilots feedback is ongoing and technical partners are updated about it.	The first version of the FuturePulse app/API is including most of the 3rd delivery features and are tested by Use Case partners and pilots. Medium scale pilots are updated about the agenda of their pilots.	The first version of the FuturePulse app/API including the 3rd features delivery is almost finished in order to be tested by Use Case partners and players. The first version of the FuturePulse app/API is fully tested and the application is ready to include changes for the second version.	*Fourth delivery of FuturePulse features from requirements V1* The 1rst version of the FuturePulse app/API including some of the 4th features delivery is finished to be tested by Use Case partners and pilots. First version of the pilot reports including results of the small scale pilots. Medium scale pilots are updated about current state of the FuturePulse application /API

Figure 4 -First pilot phase

2.1.6 Pilot final results and Dissemination final outcomes

After the final results of the pilots, we will have a wide and clear vision of the results of the project. The components and the platform will have a maturity close to production-level and the users (potential customers) will have a solid and formed opinion about the products.

M25 September 2019	M26 October 2019	M27 November 2019	M28 December 2019	M29 Juanary 2020	M30 February 2020
The second version of the application/API including the 4th tested FuturePulse features is online and the medium scale Use Case pilots are granted access to it. The Use Case Partners will continue to test it in-house and will continue to provide feedback to the technical partners.	Test of the second version of the application/API including the 4th tested FuturePulse features will continue in-house and by medium scale pilots as soon as the features are ready to go live. Feedback is sent to technical partners on a regular basis.	Test of the second version of the application/API including the 4th tested FuturePulse features will continue in-house and by medium scale players as soon as the features are ready to go live. Large scale pilots are identified and contacted by Use Case partners.	Test of the second version of the application/API including the 4th tested FuturePulse features will continue in-house and by medium scale players as soon as the features are ready to go live. Feedback is sent to technical partners on a regular basis. Large scale pilots are updated about the current state of the application.	Final test of the second version of the application/API including the 4th tested FuturePulse features will continue in-house and by medium scale pilots. Feedback is sent to technical partners on a regular basis. Large scale pilots are updated about the agenda of their pilots.	The second version of the FuturePulse app/API including the 4th tested features delivery is finished being tested by Use Case pilots. The third version of the application is ready to be online, large scale pilots are updated about the agenda of their pilot and are ready to test this version of the application/API. Feedback is sent to technical partners on a regular basis.

Figure 5 -Second pilot phase

It is a key phase, not only for the commitment of early adopters, but for a confirmation as a key platform for the digital music ecosystem. Dissemination of the final results will depend on the correct development of the communication and dissemination strategy defined at the beginning of the project and revised during the project years.
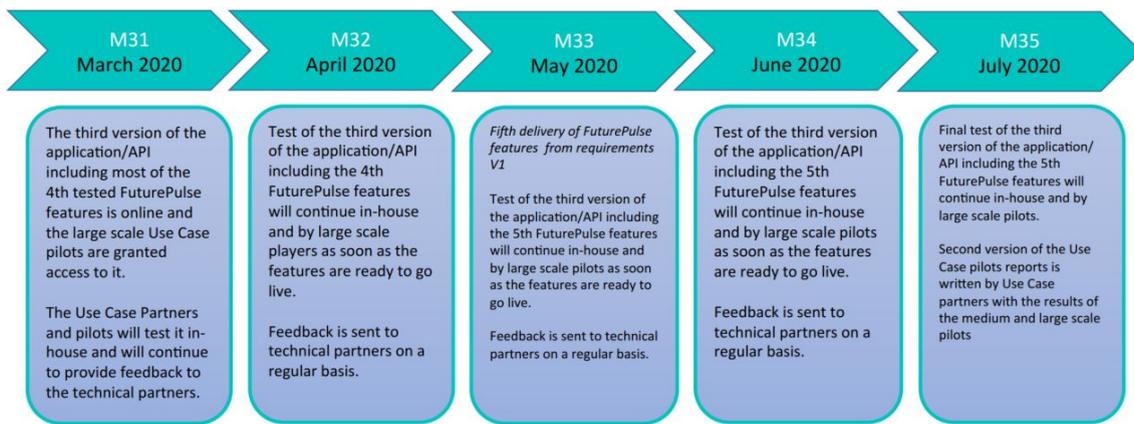
M31 March 2020	M32 April 2020	M33 May 2020	M34 June 2020	M35 July 2020
The third version of the application/API including most of the 4th tested FuturePulse features is online and the large scale Use Case pilots are granted access to it. The Use Case Partners and pilots will test it in-house and will continue to provide feedback to the technical partners.	Test of the third version of the application/API including the 4th FuturePulse features will continue in-house and by large scale players as soon as the features are ready to go live. Feedback is sent to technical partners on a regular basis.	*Fifth delivery of FuturePulse features from requirements V1* Test of the third version of the application/API including the 5th FuturePulse features will continue in-house and by large scale pilots as soon as the features are ready to go live. Feedback is sent to technical partners on a regular basis.	Test of the third version of the application/API including the 5th FuturePulse features will continue in-house and by large scale pilots as soon as the features are ready to go live. Feedback is sent to technical partners on a regular basis.	Final test of the third version of the application/API including the 5th FuturePulse features will continue in-house and by large scale pilots. Second version of the Use Case pilots reports is written by Use Case partners with the results of the medium and large scale pilots

Figure 6 -Third pilot phase

2.1.7   Individual and joint exploitation agreements

To achieve the exploitation goals of the project, the FuturePulse consortium will pursue both a joint exploitation venture with several of the partners participating with distinct roles, and individual exploitation paths that will enable the consortium members to realize the full exploitation potential of the project in a flexible manner, making sure that no conflicts are raised with respect to the joint exploitation plan.

In this phase the exploitation of the results of the project will be carried out, both by each partner and by the consortium as a whole. All the background and foreground conditions included in the Consortium Agreement will have been consulted beforehand, and the necessary agreements between partners will be generated in order to maximize the fulfillment of most of the technical and business interests of each partner.

2.1.8   Go to Market

Depending on the results obtained after the development of the remaining phases of this exploitation plan, the partners will set out a 'go to market' strategy, which will include tasks that are included beyond the duration of the project.

3 Market Analysis

In order to address the identification of FuturePulse unique selling proposition, the differences/advantages with respect to existing solutions and the definition of effective messages to be used in the appropriate dissemination channels, the consortium is continuously working on the analysis of the current market. This research focuses both on solutions that are already a reality and on new propositions that foresee major changes to the business model and the state of the art.

One of the latest milestones in this continuous market analysis is the second version of the Music Innovation Report (D1.3). It presents the functionalities addressed by each of the solutions that somehow share FuturePulse's objectives and that we consider more relevant in today's market.

The music analytics and recommendation market shows relevant changes daily or weekly, so we have defined how to keep the entire consortium updated on new features presented by industry agents: online data collection tools, specific slots in regular meetings,etc.

We believe it is necessary to emphasize and keep in mind that we are approaching three distinct market segments within the music industry, and whose needs in terms of analytics and business decisions may be considerably different from each other. For example, we see in the field of background music providers an opportunity, since few platforms cover their needs in terms of statistical tools with which to enrich their tools for playlist editing.

From the aforementioned document, we must cite "Existing solutions currently offer analytics solely on a per artist basis. Hence, location-focused search and comparison of music popularity is not possible at this time. Yet, this is an essential feature for anyone interested in an overview of music popularity, specifically for their area of interest.", since the gaps in the market in which FuturePulse can acquire greater reputation are later cited. These include a variety of datasets from which to present at the same time streaming platform statistics, social network data and historical sales data; extract a popularity value through the analysis of social network interactions - including a prediction of future sales; or the impact of certain events on the consumption of certain musical assets.

Once identified, we focus on achieving a differentiation of these products on the market based on our own achievements based on exhaustive analysis from the technical and expert points of view of each of the fields of the music industry. After that, the communication strategy focuses on maximizing the impact of the message that defines FuturePulse as the proposal that best adapts to the needs of stakeholders.

4   FuturePulse products

In this chapter we want to describe the considerations we have in terms of product definition once we have clear needs of each of the cases of uses involved in the project.

Nevertheless, we continue to believe that each case maintains its entity with a view to the production of a cutting-edge product that is sustainable in terms of exploitation. Detailed below, we can understand how this realization of tools that aim to become indispensable in the daily life of multiple professionals in the industry of digital and live music can be approached.

4.1   FuturePulse for Record Labels

FuturePulse for Record Labels is a B2B solution that consists of a single dashboard that Marketing and A&R teams from record labels could use to compare multi source analytics and predictions. These sources range from broadcast data to streaming platforms and social media. They will use the product to make business decisions based on data-driven insights with respect to the time, genre, geography, and demographics of popular music. The user must be able to evaluate the effects of events and promotional activities on revenue.

Customization should be fully addressed by UX design -custom comparison and analysis- and backend -adaptability of the platform to catalogue and data sources.

4.2   FuturePulse for Background Music Platforms

FuturePulse for Background Music Providers aims to respond to the demands of a market where stakeholders are a platform in their own right.

The aim is no longer only to reduce manual processes when selecting and curating the appropriate playlists that will sound in their clients' establishments, but also to enrich these lists by fulfilling the requirements in regards to consumption prediction in terms of popularity and trendiness.

In this case, the product gives importance to an approach closer to SaaS, where customers can 'plug' the system to their platform.

4.3   FuturePulse for Live Music

FuturePulse for Live Music is a B2B solution that should guide the organizers of live music events in their acquisition and normalization of use of online platforms for business decision making.

The user must have a user-friendly platform that provides information in an accurate, concise and easy to analyze manner, so that the value of this product is obtained from a balanced trade-off between a light user experience and a solid and reliable combination of audience metrics and predictions, music attributes and metadata.

Genre taxonomy customization has to be supported by the product, offering the necessary flexibility to handle major changes in genre taxonomy by different clients.

4.4   Open Source considerations

The consortium partners will investigate the option of offering at least part of the solution as open source, while closed source tools will be eventually wrapped in professional editions of the FuturePulse product. This could mean a freemium/premium approach for the platforms, or opening some development tools for third parties to work with.

5   IPR activities

FuturePulse consortium is fully aware on the efforts needed to deploy a sustainable exploitation strategy. The scope of Intellectual Property Rights include:

- Copyrights and related rights
- Trademarks (including geographical indications)
- Patents
- Industrial designs, integrated circuit designs and plant varieties
- Trade secrets

During the period M16-M36, the consortium will explore the following set of activities regarding Intellectual Property Rights:

- Assessment of the Terms of Service of external third parties providing data to the FuturePulse platform: this task will ensure that the exploitation strategy does not infringe any ToS and will seek for backup providers to prevent data absence risks.
- Joint ownership agreements or collaborative agreements, for which professional advice may be needed, given the complexity and technicality of the subject matters.
- Freedom-To-Operate analysis: legal assessment as to whether any exploitable FuturePulse result may be considered to infringe any patent owned by others.
- Foreground declarations to identify the Intellectual Property Rights generated by each partner in FuturePulse.
- Licensing analysis, as licensing affects the exploitation paths to be adopted.

FuturePulse consortium is aware of the obligation to exploit the results of the project. All IPR activities are covered by contractual requirements included in:

- Grant Agreement (GA): Article 28 (Exploitation of Results) of the GA number 761634.
- Consortium Agreement (CA): it covers Access Rights for Exploitation in article 9.4.
- Description Of Action: in Section 2.2.1 Dissemination and exploitation of results, Exploitation Strategy, Knowledge management and Protection, IPR management and revenue sharing aspects are covered.

The final IPR activity report will be included in the deliverable D6.6 Exploitation Report on M36.

6 FuturePulse preliminary individual exploitation efforts and plans

Despite the individual exploitation, the commercialisation opportunities for bringing the FuturePulse platform in the market are based on the potential source of revenue for the consortium partners. Such exploitation intentions and the potential revenue sharing for each individual partner are summarised in the table below. According to it, the industrial partners are collaborating to position the FuturePulse platform in the front of competition and commercialise it among the primary, secondary and tertiary markets. The commercialisation will be based on both Intellectual Property Rights (IPR) and revenue sharing models, which, although to be finalised in the course of the project, will take the form of partners' shares to the FuturePulse ownership and sales. The IPR sharing will be calculated on the basis of the partner contribution to the project, while revenue sharing will consider selling and service provision (e.g., further development, customization, etc.) efforts in addition to ownership.

The technological advances of the project are also being exploited by the technology providers of the consortium (BMAT, ATC, Musimap, IRCAM) to promote their position in the fields of music data and social media analytics, recommendation systems, intelligent content management systems and data-driven visualizations, while music industry partners (Playground, Bass Nation, Soundtrack Your Brand) will gain considerable competitive advantage and will be able to reinforce their position in the market. The initial individual exploitation plans are described below in more detail.

7 Project Liaisons

Included in the dissemination strategy, FuturePulse has established active collaboration with other relevant H2020 projects.

Following the Concertation Meeting held in Brussels in October 17th 2017, the H2020 projects of the Audio Cluster set up by the European Commission (FuturePulse, MARCONI[1] and HRadio[2]) have maintained regular communications in order to share information and check opportunities for collaboration. Two online meetings among the three projects have been held on May 14th and July 19th, where all have exchanged public documents about use cases, requirements and architecture. Besides, we have checked opportunities to join communication and dissemination events. As a result, potential interactions have been detected and a face-to-face meeting is planned in Vienna next December 4th to check first prototypes and come up with an action plan for collaboration.

FuturePulse will pursue liaisons with other projects and initiatives. Some candidates are projects VERTIGO-STARTS[3] and ABD-DJ[4].

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[1] https://www.projectmarconi.eu
[2] https://www.hradio.eu
[3] https://www.starts.eu/projects
[4] https://abcdj.eu

8   Technical aspects for the Exploitation

8.1   Data sourcing

One of the risks that we believe may affect the entire project, and therefore the exploitation of its outcomes, is the possibility of not being able to incorporate important data sources in the final, close to market, product due to possible limitations for commercial use from the data providers. Data from these data sources are being analysed and processed in order to allow   to characterize the mainstream market, and analyze transversally the consumption and use of music - i.e. Facebook, YouTube - or provides to us insights from dedicated niche markets or more specialized listeners - such as LastFM or Bandcamp.

That's why since the early stages of the project, our analysis focused on the availability of data sources under **WP2 - Music Data Collection, Analysis and Indexing**. The configuration of a risk management and prevention plan for data sources is one of the tasks on which the consortium will pay special attention during the coming months of the project, in order to have a necessary backup until the end of the project, and from day one of the exploitation of the results of the project after its completion. Adding to the above, one to one discussions with critical data providers will take place in order to reach business agreements, if possible, for ensuring that sources will be used and utilised by the FuturePulse platform in a fully commercial product.

8.2   Customization of the platform

From the beginning, FuturePulse is seen as a B2B solution, for all the use cases. For this reason, it is very important that the solutions offered by FuturePulse are as flexible as possible to the complete customization of the platform according to the needs and resources of customers.

Customization is an aspect that affects the exploitation of the project in a positive way, since it allows us not to pigeonhole easily and creates the common challenge of developing a platform according to the state of the art of the technologies and the constant changes in the market. It should also be pointed out that the customization of the platform implies a strong commitment on our part, ie, the customer must have the support of a team from day one to start adapting the platform to their systems.

Specifically, the following situations lead us to have to define a setup plan for each of FuturePulse solutions:

8.2.1   FuturePulse for record labels

The current solution for record labels requires the ingestion of the complete audio database and metadata for audio analysis and analytics. In addition, access to social network and DSP data is required, which in many cases cannot be obtained without prior authorization from the artists/record labels involved.

8.2.2   FuturePulse for background music providers

The background music providers solution requires the definition of a dataset that adapts to the specific needs of each market in which it works. The ingestion of data and

social network data needed to characterize the popularity and recognition of tracks and artists varies greatly depending on the geography and catalog of potential customers.

8.2.3   FuturePulse for live music

The current solution includes the mapping of musical genres defined by BN. Although it is a comprehensive definition that aims to cover a wide variety of electronic music genres, another potential customer might be interested in obtaining analytics from a different genre mapping. An example would be an organizer of live music focused on styles that move away from electronic music, or a venue that does not need so much granularity in terms of defining musical styles.

9 Conclusions

Over the last 15 months, the FuturePulse consortium has worked - in close and joint collaboration - to define an exploitation plan that ensures that the results of the project will be fully exploited, as well as the sustainability of these results. After the relevant market analysis and a self-analysis process ranging from the definition of requirements and architecture to this exploitation plan, it is clear that FuturePulse remains a strong and competitive solution in a dynamic, fluid and aggressive context.

Therefore, it is clear that we must continue in good shape with the market analysis and continue to define the tentative business models, as well as finish by defining the FuturePulse unique selling proposition (USP). The product development marked by the prototypes developed for each case of use begins to have projection and entity, and soon we can evaluate its strength in the market from the first pilot tests.

In addition, each of the partners has assumed its own exploitation of the results obtained in the course of the project, both during the 36 months of the project and from day one after the project. This exploitation is focused both from a business and research point of view.