Music360

A 360 DEGREES PERSPECTIVE ON THE VALUE OF MUSIC

Deliverable 5.1

Sustainable Business Model of the Music360 Dashboard – Version 1

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[1] PU= Public, CO=Confidential, only for members of the consortium (including the Commission Services), CL=Classified, as referred to in Commission Decision 2001/844/EC

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1. Introduction

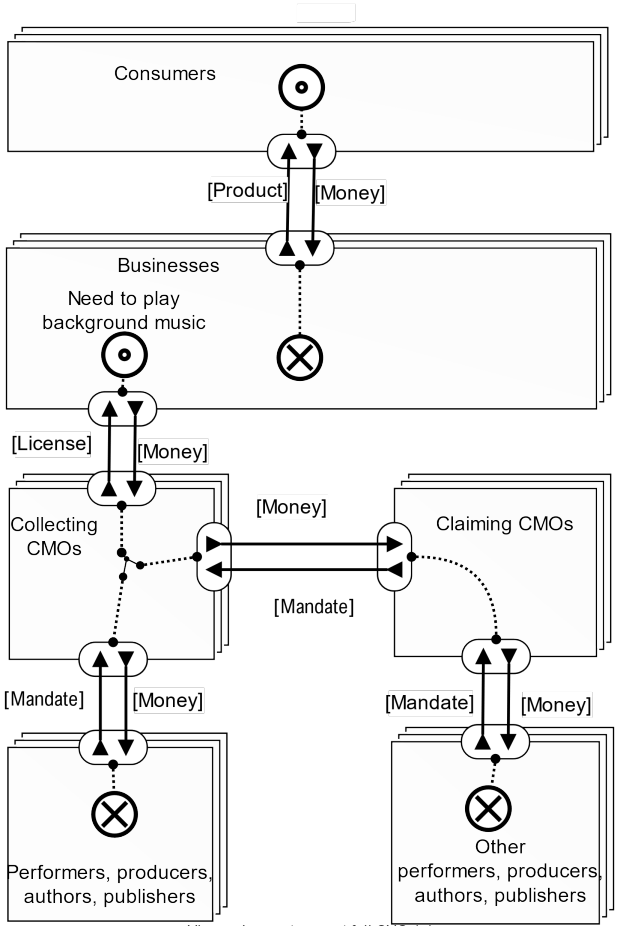
- The M360 platform will
  - increase transparency of the EU music sector by integrating and curating data about background music across CMOs
  - support venues in discovering the impact of background music on their business, e.g. on their revenue, customer experience, dwell time, or on other parts of their business goal (e.g. impact on recovery in health care institutions)

After the project is finished, the platform should be able to sustain itself

In this report we sketch possible business models and governance structures. This will be elaborated and tested in the coming year. The final proposal will be described in deliverable D5.2

2. The General CMO Revenue Model

The following *e³value* diagram shows the value flows as they happen in each country in Europe, described in Deliverable .6.3 (National Music Ecosystem Models). A brief introduction to *e³value* is given in the appendix. We supplement the diagram with a short summary of the value exchanges described by the diagram.



A business sells products to consumers. For this, they need a physical space, lighting, electricity, water, furniture and background music. To play background music, they pay for a licence.

Creators (performers, producers, authors, and publishers) register with a CMO in a country and give them a mandate to licence background music to businesses in that country. Each CMO monitors where in that country, their music is being played as background music. They distribute the collected licensing fees to their members. This is the **collecting** (and distributing) role of a CMO.

CMOs also mandate each other to collect revenues for their members from background music played in other countries. If the music of these creators has been played in another country, they receive the licence fees from the relevant CMO in that country and distribute it to their members. This is the **claiming** (and distributing) role of the CMO.

Figure 2-1 The general CMO revenue model: e³value diagram and narrative description

There are two kinds of CMOs. On one hand there are CMOs that licence author rights and collect and distribute for licence fees for authors, composers and publishers. On the other hand there are CMOs that licence neighbouring rights and collect licence fees for performers and producers.

- Each CMO has a local authorisation to collect licence fees from recording, distributing, broadcasting and performing music offline in their country of residence. For streaming, collection of licence fees by author CMOs is not bound to the country of residence but is repertoire-based.
- Creators (performers, producers, authors) are roles and if one person plays all these roles, he or she has to register with the appropriate CMO in each role.
- The worldwide organisation of composers and lyricists CISAC (https://www.cisac.org/about/cisac-overview) maintains a database of interested party information (IPI) in which natural and legal persons are given a unique Base Number, and their names and pseudonyms are given a Name Number. The database can be used to find out for which country and which right an author or composer is registered at which CMO.
- The worldwide association of performers' CMOs, SCAPR (https://www.scapr.org/), maintains the International Performers database (IPD), that assigns a unique International Performer Number to each performer. CMO's use the IPD to find out which CMO(s) a performer has mandated for which territories.

Most CMOs use a small fraction of their revenues for social cultural funds that support the music sector in their country financially. For simplicity we do not show this in our models.

3. Mission of the Music360 platform

The mission of the platform is to increase insight in the value of background music for creators, venues and other stakeholders.

- For creators and CMOs, the platform will provide data about when and where their songs are played as background music, integrated across CMOs. This will allow creators in their career planning, and help CMOs to distribute rights based on more accurate knowledge of the music usage.
- For venues, the platform will provide support for experiments to test the impact of background music on employees and customers, their revenue (for commercial entities) or mission (for non-profit organisations).
- Other stakeholders include policy makers, production companies, marketing organisations, journalists and others interested in the music ecosystem. For these stakeholders, the platform will offer services to provide aggregate information about the ecosystem.

4. Services and users of the Music360 platform

Table 1 lists the services for the four main users:

- CMOs for authors (lyricists, composers, arrangers) and publishers, and CMOs for performers (featured musicians and session musicians) and producers.
- Creators, who are a member of a CMO.

- Venues where (background) music is played.
- Music branding companies interested in the value of music for a brand.

Table 2 lists services for the other possible users:

- Publishers, record companies, distributors
- Background music providers
- Audio recognition companies
- Data curation and aggregation companies
- Digital services providers (DSP), i.e. music streaming providers
- Consumers, journalists, broadcasters, independent production companies, advertising agencies
- Researchers
- Lobby organisations
- Policy makers

Services for these stakeholders provide aggregate information.

This list of users is consistent with the user personas in D3.1 (Reusable dashboard to present and analyse the value of music - version 1). The services described here are high-level and can be decomposed into user functions as defined in D3.1.

	CMOs use this for	Creators use this for	Venues use this for	Music branding companies use this for
Establish relation between works and recordings	Improve data quality of works & recordings databases			
Provide data about when and where a track is played	Validate the accuracy of distribution data	Career planning; Understanding payments		
Provide playlist data for a country/ segment/ artist/ rightsholder	Increase transparency of cross-CMO payments; improve accuracy of distribution data; Data about unsigned artists	Career planning; Understanding payments.		
Provide aggregate data about the flow of music		Flow of new music		Insight in the role of new music in branding
Provide data about the business value of playlists	Sales and marketing activities of background music to venues; improve granularity of info to venues; communication, pricing of licences, acquisition of venues.	career planning	Improve revenue, brand recognition, customer experience, and employee satisfaction	Insight in the role of music in branding
Tested experiment protocols (designs, variables, analysis routines etc.)			Support impact experiments	Support branding experiments
Data platform for music branding experiments: store and provide playlist data during experiment; provide example experiment designs with variables.	Get new insights about the business value of music		Get new insights about the business value of music	Get insights into the brand value of music

Table 1 Platform services for CMOs, creators, venues and branding companies.

	Publishers/ labels, distributors use this for	Background music providers use this for	Audio recognition companies use this for	Data curation and aggregation companies usde this for	DSPs use this for	Consumers/ journalists/ broadcasters / independent production companies/ advertising agencies use this for	Researchers use this for	Lobby organizations use this for	Policy makers use this for
Establish relation between works and recordings									
Provide data about when and where a track is played									
Provide playlist data for a country/ segment/ artist/ rightsholder									
Provide aggregate data about the flow of music	Data about unsigned artists	Planning of playlists	Market intelligence	Aggregate data collection	market intelligence	Early information about new music; information about brand value of music		Useful for lobbying	flow of music across borders
Provide data about the business value of playlists		Insight in the role of music in branding	sales channel					Useful for lobbying	
Tested experiment protocols (designs, variables, analysis routines etcv.)							support marketing experiments		
Data platform for music branding experiments: store and provide playlist data during experiment; provide example experiment designs with variables.			sales channel						

Table 2 Platform services for other possible users

5. Revenue model scenarios for the Music360 platform

We now extend the generic model of Figure 2-1 with the Music360 platform.

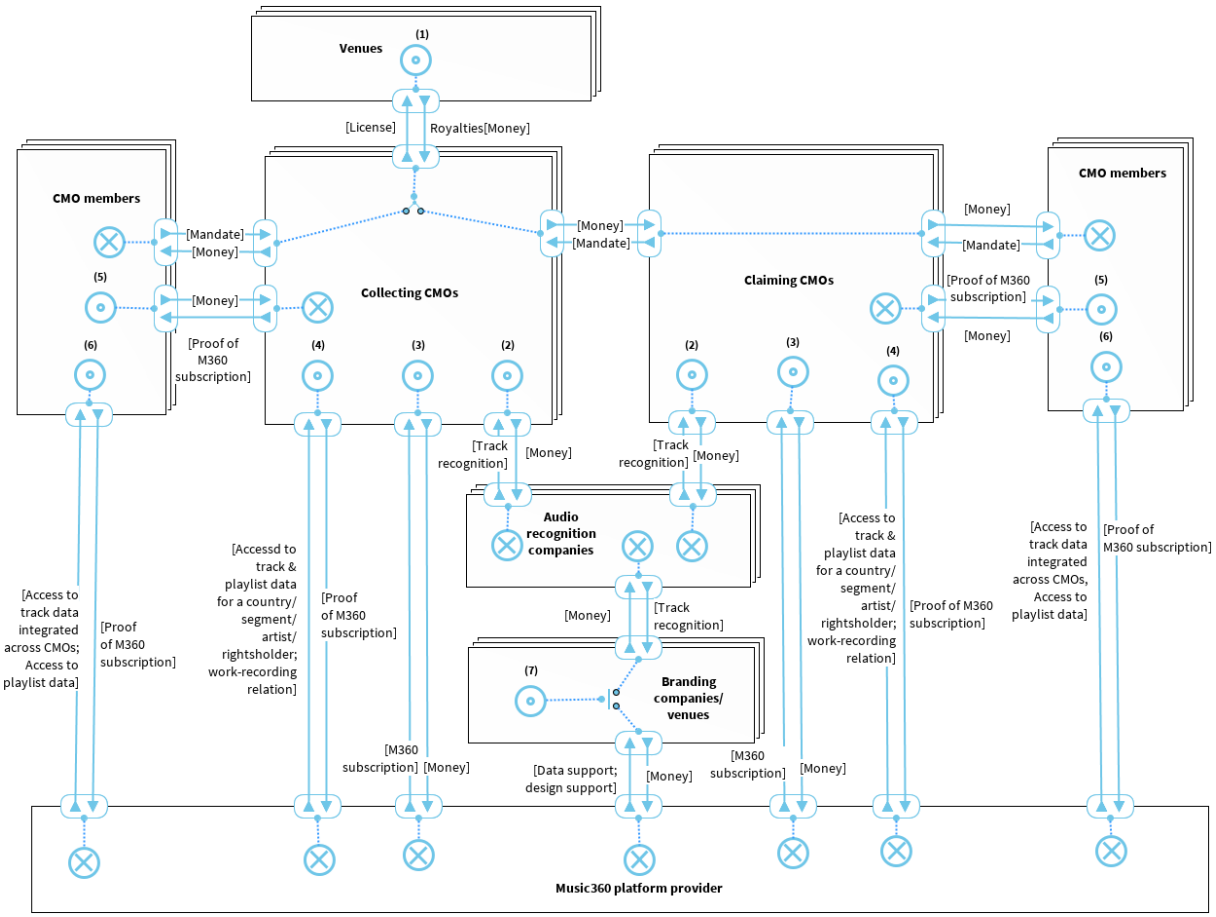


Figure 5-1 Revenue model for the services in Table 1. The numbers attached to the needs refer to transaction paths, which are discussed below.

We numbered the transaction paths in the revenue model and explained the revenue scenarios for these paths below.

(1) Venues pay licence fees to play background music. This is the model shown in Figure 2-1.

(2) Some CMOs use fingerprinting devices, provided by audio recognition companies.

Revenue model: the audio recognition companies (ARC) use devices and other technologies to collect audio data and use their audio recognition technology to create a list of tracks played. It provides read access to this data to some stakeholders according to contract with the client (which may be the venue or a CMO).

(3) CMOs pay a fee to the M360 platform to get access to track and playlist data from different CMOs, integrated by the Platform.

Revenue model 1: A CMO pays a flat yearly subscription fee to get unlimited access. The fee could be proportional to the number of artists registered with the CMO.

Revenue model 2: Each CMO pays a base fee to get access and a small amount for each usage of the data, i.e. for every query.

Whatever the revenue model, it does not change ownership of data. Subscription just provides access to the data of other CMOs but does not change ownership. Access permissions, on the other hand, may depend on the type of subscription.

A CMO may have to renegotiate its contract with an ARC to allow it to share its data with other CMOs and their members.

(4) A CMO with a subscription can access track data, playlist data, and the work-recording relation established by M360 (after CMO members accessed the platform for the first time and connected their IPI and IPN).

(5) If a CMO subscribes, all of its members are subscribed. They pay for this in an implicit transaction: The subscription fee of the CMO is paid by members by deducting it from the licence fees they receive.

(6) A member of a CMO that has an M360 subscription can access data about their own tracks and playlists in which they occur, integrated across CMOs.

(7) Venues or branding companies who want to do an experiment to measure the impact of background music, can pay an audio subscription company to track data in the venue and can use the M360 platform to store it and get support for experiment design, store data, and value analysis.

During the experiment, measured track data is owned by the venue or branding company doing the experiment. After the experiment is finished, the audio recording device can be used by another venue or a CMO, if they acquire the service from the audio recognition company, to provide them the track and playlist data.

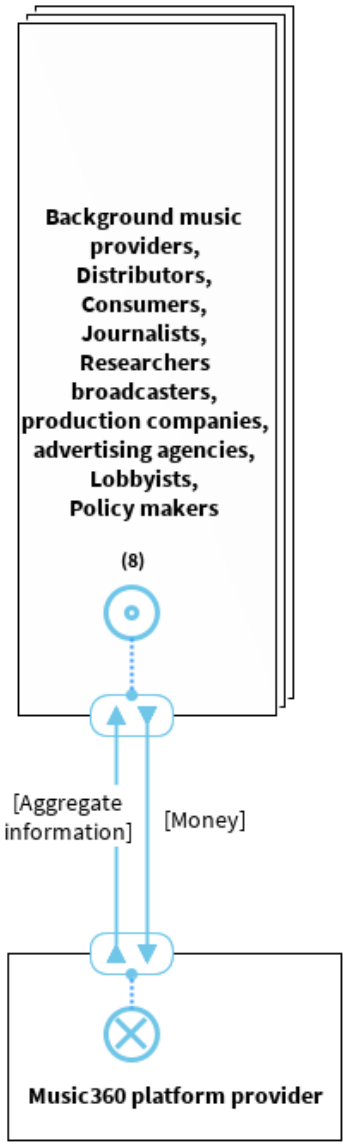


Figure 5-2 Service for other possible stakeholders. See Table 2.

(8) Other stakeholders can get aggregate information about background music.

Revenue model: this can be a freemium model.M360 publishes an abbreviated free report yearly. If a stakeholder wants more, it has to pay. CMOs who have a subscription get this data without additional cost. Academic researchers may get it at a lower price.

M360 expenses are not shown in the diagram. They include

- IT costs
    - Software licence costs
    - Hardware; Storage & Server space costs
- Resources
    - Software Development & maintenance
    - Business development and lobbying costs
    - Administrative costs
    - Operational costs

Depending on the governance model (decisions about participation, decision rights, ownership and access of data), we can attach numbers to these models: all money flows, market segment sizes, number of queries etc. to assess financial sustainability of the M360 business model.

6. Governance models of the Music360 platform

6.1. Entry requirements

Entry requirements describe the conditions that an entity must satisfy to join this value network.

- Any CMO can become a user of M360 by paying a subscription fee. By implication, all members of these CMOs can use M360 as well.
- Any company can use M360 to do impact experiments, if it pays the service fee. In the revenue model these companies are called Branding companies/venues but M360 will not check this.

CMOs and economic entities that start using M360 must satisfy some obligations (compliance to APIs etc.) that we describe below in section 6.2.

Exclusivity requires special attention. If an economic entity starts using M360, would it be prohibited to use a similar platform at the same time? This question is meaningful if there are competing platforms that provide the same service. For example, a podcast creator who signs a contract with Spotify is not allowed to sign a contract with a competing streaming provider.

There is no way M360 can prevent the emergence of a competing platform. But it would defeat the integration value of the platform service. This in turn implies that M360 should be the only platform with a world-wide service.

6.2. Participant obligations

A CMO that is a member of M360 must provide APIs to a database that conforms to the data model of deliverable D2.1 (Music230 ontology for the value of music). See also the relational model in D2.2 (A distributed architecture for music data collection, representation, and distribution – Version 1).

The data provided by the CMOs to the platform remain property of the providing CMO but other CMOs can read it, and members of those CMOs can read data about their own tracks.

The quality of the provided data is very diverse. After we tested a prototype of the platform, we will identify quality requirements on the data in our first test of the platform.

6.3. Decision rights

The M360 platform can best be viewed as a cooperative of CMOs to improve their service to creators and venues. This should prevent any future danger of the platform being acquired by powerful stakeholders that do not support our goal of transparency and fair remuneration.

A possibility would be to position the M360 platform as a non-profit governed by SCAPR (worldwide association of performer's CMOs) and CISAC (the worldwide organisation of composers and lyricists). SCAPR is a non-profit that represents 61 performer CMOs from 45 countries. CISAC is a non-profit that represents 227 author societies from 116 countries. Since these organisations manage the databases of performers and author identifiers, this would be a natural home for the platform.

Another option would be to position the platform similar to the Digital Exchange Guidelines, DDEX. The members of this entity consist of a wide variety of industry participants. The type of membership depends on licence fees; i.e. board members who determine the strategic goals pay a higher fee than ordinary members who determine the operational and technical evolution of the platform and associate members who are allowed to use the services but do not participate in discussions on the further strategic or operational evaluation. This governance model would potentially reduce the authority of CMO's, but could increase adoption by the wider music industry and relevant stakeholders.

6.4. Property rights

To define a sustainable governance model we also need to clarify property and access rights. In particular, we need to resolve at least the following two questions:

- Who owns which data?
- Who has which data access?

6.5. Legal embedding

More generally, the provider offering the M360 platform must be established in some jurisdiction. We also need to define procedures and structures for conflict resolution.

7. Discussion

In the coming year, we will analyse the results of the living labs and of the test with the M360 prototype to clarify the services that the platform will deliver, and to clarify entry requirements and obligations of participating CMOs.

Once the decision-making structure and ownership of the M360 provider has been decided on, we can answer the remaining question about the business model and governance structure.

Appendix: The *E³value* notation and tool support for simulation

The e3value modelling language

The purpose of the *e³value* graphical language is to represent business models for value networks of digital business ecosystems. A business ecosystem is a set of economic entities that depend on each other for their economic survival and wellbeing [1]. A value network is a set of economic entities that exchange valuable objects with each other. The focus is on economic value: What is requested by some party, and what is offered of value in return as a reciprocal object. The language itself is the result of more than 20 years of academic research, and is used by several companies, and taught at universities world-wide.

The e3value notation is defined in detail by the E3value User Guide [2], which is available from our web site[2]. Here we give a summary.

An educational e³value model

[2] See www.thevalueengineers.nl

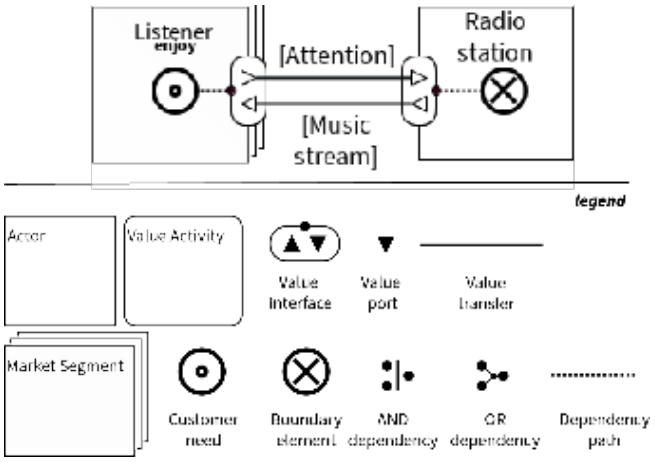


Figure 1 An educational *e³value* model

Figure 1 presents an *e³value* model. Realistic models are more complicated; this one is just to explain the constructs in the model.

A box represents an **economic actor**, for example a radio station. A stack of boxes represents a **market segment,** a set of actors that can perform the same commercial transactions, e.g. a set of listeners.

Boxes and market segments can be connected by **value transfers**, annotated by the transferred value object between square brackets (attention and music stream). A **value object** is something that is perceived as economic value by at least one actor or market segment. An optional label before the value object indicates the role of the transfer.

Value transfers connect oval interfaces of actors or market segments.

The oval **value interfaces** indicate that the transfers in these ovals together form a single commercial **transaction.** This means that the transfers in one transaction are triggered as a whole. If one of the transfers in a transaction is triggered in a market scenario, then all of them are triggered in the same scenario. An *e³value* diagram makes no statement about *when* these transfers occur, except that they happen in the contract period of the market scenario. A **contract period** is the period of the time the model comprises. Often, this is one year, but it is up to the modeller to decide upon this; we have also developed models with a contract period of 15 minutes.

A bull's eye in an actor or market segment represents a **need** that the actor or all members of the market segment can have. The bull's eye is connected by a dashed line to an interface. This means that when the need occurs, this interface is triggered. We can then trace the value transfers that occur in the diagram until we reach a cross. A cross represents a **boundary element,** meaning that we do not trace economic transactions any further. A boundary element is always part of a boundary actor or market segment.

The path, represented by the dashed lines, from the need to a boundary element is called a **transaction path**. It connects all transactions in the value network that must be executed to satisfy the need. We

use transaction paths to do cash flow computations. A revenue model summary describes a transaction path in words.

A transaction path can contain **and-splits and or-splits**. If an and-split is triggered (see Figure 2), all its branches are triggered. At most one branch may have a hollow connection point, meaning that triggering this path is optional. In a market scenario, the probability of triggering must be specified. If an and-split is triggered, all its branches are triggered. At most one branch may have a hollow connection point, meaning that triggering this path is optional.

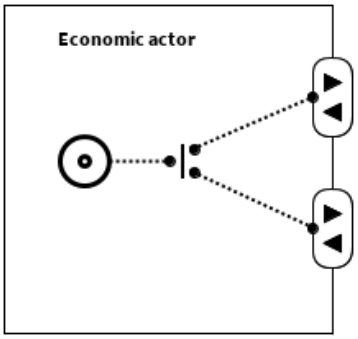


Figure 2 AND split

If an Or-split is triggered (see Figure 3), then one of its branches is triggered. In a quantification we must specify the distribution of choices over the Or-split.

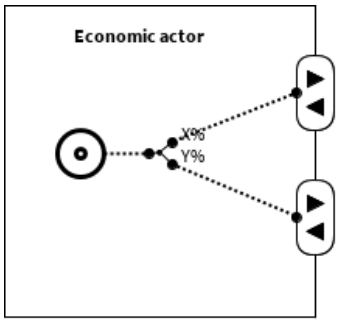


Figure 3 OR split

○ Analysis

The graphical *e³value* model can be quantified . Examples of quantifications are the number of consumer needs, the number of actors in a market segment, the price to be paid for value objects, and more. If quantified properly, an *e³value* model allows for a number of analyses:

- Various financial analyses, such as earn-back period, net value flow calculations, and discounted cash flow analysis.
- Fraud analysis: Actors that behave in a fraudulent way, and the financial effects of that behaviour .

This analysis happens in an automated way. For example, the financial effects for all actors can be calculated automatically (provided that the quantification is correct). Also, the method can derive possible fraud scenarios automatically, e.g. it contains heuristics about how people commit a fraud.

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