Music360

A 360 DEGREES PERSPECTIVE ON THE VALUE OF MUSIC

Deliverable 6.2
Stakeholder Needs for Understanding the Value of Music – Version 2

Disclaimer

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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

Deliverable D6.1 introduced the stakeholder needs for understanding the value of music. The content of this deliverable is still valid. However, after the first iteration of the project, the consortium evaluated the first round of living labs. That evaluation is the most important source of information for this deliverable. We report the most important findings. Additionally, we plan the next iteration of living labs.

2 Evaluation of the living labs

In a plenary project workshop in September 2024, we extensively reviewed the first round of living labs. Living labs can be quantitative (e.g. with statistics), qualitative, or both. The conclusions regarding the living labs themselves have been discussed extensively in D6.5. In this section, we focus on the lessons learned concerning the execution of the living labs, and not on the outcoming of these labs themselves.

We classify each living lab as quantitative, qualitative or mixed, since the setup of the experiment largely determines the execution of that particular experiment. Then we give a brief summary of the living lab; for more information, the reader is referred to Deliverable D6.5. Finally, we formulate a series of lessons learned per living lab. These lessons do not concern the outcomings of the experiments themselves but reflect on how the experiment was conducted.

2.1 Dutch living lab

2.1.1 Music in retail

Type of experiment: Quantitative

Description: The Dutch living lab was with a perfumery retail chain in The Netherlands. The lab studied the impact of the tempo of music on turnover and the result of selectable playlists on employees.

We established that slow tempo increased conversion and Member Sales Participation (MSP). At the same time, fast tempo increased how positive the employees perceived the music. Surprisingly, letting employees choose a playlist decreased their perceived job autonomy. The results provide a better understanding of the positive as well as the negative effects that music can have on customers and especially employees' work experience and offer some initial practical insights for retailers.

Lessons learned:

L1: Interview capacity is needed. The living lab considered the effect of varying the tempo of music on turnover at the store/outlet level. Because many outlets were involved, it was possible to do meaningful analysis on the store level rather than the individual customer level. Nevertheless, it would be interesting to know the effects on the customer level too. For that, it is needed that customers are interviewed while they are in the shop. Also, it might be useful to more directly relate played music to items sold. However, for the experiment, no interviewing was foreseen. For the follow-up of this experiment, we need to consider how to collect additional data in a cost-effective way.

L2: Standardized processing would be useful. Processing of collected data was set up manually. It would be useful to have processing facilities, such that collected data can be (semi)automatically analysed. This requires standardisation of the experiments.

L3: International experiment would be interesting. Although the experiment was with an international retail chain, the experiment was done at only Dutch outlets. It would be interesting to study the same retail chain at outlets outside The Netherlands.

2.2 Spanish living labs

2.2.1 Events in Torrent, Valencia

Type of experiment: Quantitative

Description: This living Lab involves two events celebrated in Torrent (Valencia) in the summer of 2023. Event 1 is a parade, the Entrance of Moors and Christians, and Event 2 is a street party. Both events are celebrated outdoors, event 1 is cultural-based and event 2 is social-based. Analysing two different events in the same location, allows us to find similarities and differences about the relationship between music and intention to repeat next year. Data from the two events are collected through an online survey, with questions about cultural, social and emotional values, distinguishing between values about the event and values about the music.

Correlations confirm the multidimensionality of experience in both events, consequently there is no unique factor which explains intention to repeat. In event 1, we find a higher positive relationship between intention to repeat and music emotional value ("enjoy listening to music and observing participants' clothes"), although the relationship is weaker for cultural and social values. In event 2, there is a higher positive relationship between intention to repeat and some cultural, social and emotional values (cultural: "music meets event"; social: "meet family and friends"; emotional: "music feelings of wellbeing" and "enjoy listening to music"). Emotional value of music appears with higher correlation in the two events, demonstrating the importance of this music non-economic value in the two events analysed.

Lessons learned:

L1: Trade-off between sample size and questions in a survey. This trade-off was a challenge in the two quantitative experiments because experience is analysed. A questionnaire with many questions ensured obtaining complete information about the experience but reduced the sample size, making it difficult to generalise findings. Solutions to this issue might include conducting additional robust data analysis, including other small but similar events, repeat the study to find similarities and differences with the previous experiment, and repeat the study with fewer questions.

L2: Selecting questions for the questionnaire. Multidimensionality of experiences implied measuring multiple values, which resulted in many items in latent constructs. However, the survey could be simplified by reducing the number of items as the results obtained from events 1 and 2 says few items are related to the output. Also, alternative analytical methods which require fewer numbers of items can be explored to reduce complexity.

L3: Selecting events. Cultural events in the town analysed are important because they engage citizens and can aid to maintain residents there. However, as these events usually are repeated once a year, conducting a survey during the event or in another period might offer different results. Repeating the experiment at a different time might help to identify if results persist or are event specific. Other options are repeating the experiment in a different town or focus the experiment on another town but a comparable event.

L4: Comparing venues: This living lab is different to the rest of living labs and it makes the comparison difficult. However, the analysis might offer interesting conclusions about music values in different contexts.

2.2.2 Background music and cultural & social values in a Supermarket

Type of experiment: Qualitative

Description: This living lab was with a top national chain in Valencia, Spain. The lab explored the effect of cultural and social values of background music on the customers.

We interviewed (semi-structured interviews) the customers to have a deeper understanding on how background music (or other noises) affect their connection to the brand and how this connection could be improved through cultural and social values. The results showed that, in this case study, variables such as the language of the songs and the decade they belong to should be considered when selecting the playlist.

Lessons learned:

L1: Cultural and social values have been less studied in this kind of venue. After this exploratory study, we are more prepared to perform a quantitative study with more precise questions for a survey.

L2: We need to complete the employee point of view. It would be also interesting to know the employees perceptions regarding cultural and social values.

L3: Lack of international comparison. As the experiment was with a national retail chain, it would be interesting to study if the results are the same in other national retail chains outside Spain.

2.3 Finnish living labs

The Finnish living labs comprised experiments in shopping centres, books stores, and grocery stores.

Type of experiment: Quantitative

Description: The Finnish study explored how music affects customer experience, sales, and brand fit in retail settings. It was conducted over three months in ten locations (5 shopping centres, 4 bookstores, and 1 grocery store). The study compared the impact of customized playlists (matching the retailer's brand) at the shopping centres or copyrighted commercial music versus royalty-free music at the stores.

The study found that customer experience was higher when the background music matched the retailer's brand. Store sales showed an indirect improvement through better customer experience and increased impulse purchases when recognizable commercial copyrighted music was played than unrecognizable royalty-free music was played. Due to insufficient data, the study could not determine the effects of background music on employee satisfaction or interactions with customers.

In shopping centres, two playlists were designed to fit the brand and were changed monthly without informing customers or employees. In bookstores and grocery store, the study alternated between copyrighted commercial and royalty-free music every two weeks, again without informing customers or employees. Feedback was collected from customers using touchscreen modules placed inside the shopping centres and stores. Feedback from employees was collected via email surveys but unfortunately, there were insufficient responses to the employee survey to measure the effects.

Lessons learned:

L1: Employee feedback is needed. In the first Living Lab, we could not collect enough responses from the staff via email. We believe this was because the survey was conducted too frequently, it was too long, and shop staff did not react to email because their work is not computer work. In the second round, we aim to engage better and motivate the staff to increase the number of responses. We are going to ask the partner(s) how to reach and motivate the staff the best. We think a qualitative approach might work better if budget-wise possible and we are seeking opportunities to work with Kaarina Kilpiö as a

consultant or even a researcher interviewer. Kaarina Kilpiö, a University Lecturer from Sibelius Academy, has a lot of experience in background music studies. Also, we can hopefully obtain more responses by shortening the study period but increasing the number of study points.

L2: Terminology must be aligned and kept consistent. The terminology is not standardized, and terms can mean different things to different stakeholders or individuals. For example, music represented by CMOs can be referred to as copyrighted music, recognizable music, or commercial music. Similarly, a 'customer' can mean either a person who enters the store but leaves without purchasing or a paying customer. Since the research involves many different parties, it is important to make sure that terms mean the same thing to all stakeholders throughout the project.

L3: Set the research frame for partners. We want the study to be valuable for the retailers during the second round too but it is also important not to give too much influence to the partners so that the research and results can be more standardized and comparable with other nations' living labs. We believe this is possible if there is no time pressure and the setup is well-planned with the other partners onbeforehand.

L4: Fewer partners, more units, and a shorter research period. During the three-month study period, we collected a good amount of feedback from the customers but not enough feedback from the employees. We believe that by shortening the study period but increasing the units we get more reliable data from customers and employees. This would be easiest with one big retail chain. We are going to discuss with Pirkanmaan Osuuskauppa if they would be interested in Living Lab 2 in their other S-market stores like Pendoliino. Pirkanmaan Osuuskauppa is one of the biggest owners of not just grocery stores but also fashion, beauty, and home products in Finland. Also, Suomalainen Kirjakauppa has potential with over 50 stores from Living Lab 1. Conducting further studies in shopping centres is unlikely to provide new insights, and measuring the impact on sales is challenging, so we don't think it's valuable to do Living Lab 2 with shopping centres.

2.4 Irish living labs

2.4.1 Music and productivity

Type of experiment: Qualitative

Description: The Irish study aimed to investigate the impact of music on customer experience, revenue, and employee behaviour and engagement. We chose a hospitality setting due to the prominence of background music therein and also the variance of music used in the different bars, restaurants, hotels which is directly influenced by the location, time of day, clientele to name but a few. The research took place over a three-month period conducted in seven different bar and restaurant locations in Ireland. Music played a crucial role in creating the atmosphere in bars and venues, influencing both customer behaviour and staff morale. The living lab aimed to understand music's multifaceted role in bar and restaurant settings by collecting qualitative insights from managers and staff.

Our specific focus in the living lab was to understand the impact of music on productivity in the workplace, to understand the impact of music on the customers in a variety of different settings and at different times of the day and to understand the impact of music curation, how it is done and how this in turn impacts on sales and customer retention.

From our research we established that music plays a significant role in enhancing the atmosphere and overall experience in bars and restaurants. By tailoring the music to different audiences and times of the day, it not only keeps customers engaged and encourages them to stay longer, but also boosts sales of food and drinks. Additionally, giving staff the flexibility to adjust the music can improve their motivation and teamwork, leading to a happier, more motivated and more productive workforce and ultimately leading to a better customer experience.

Lessons learned:

L1: Flexibility: This first living lab threw up many challenges which had not been anticipated prior to the commencement of the research. The impact of Covid on workplaces between hybrid working arrangements, more people working from home and a depleted office environment meant that our first choice of an office-based workplace was not readily available. Added to that, the post Covid office environment means that many employees listen to their own music via headphones and so having spent many months trying to agree a living lab in an office environment we had to abandon our plans and go back to the drawing board.

L2: Availability: The hospitality industry is a very busy one which tends to have its key working hours outside of the normal working day. In addition, it is very difficult to gauge the activity levels of a hospitality venue on any given day and this caused many arranged interviews to be rescheduled, long wait times for managers or staff that were called away to tend to workplace issues and failed attempts to conduct interviews on many occasions. This added significant time to the work involved in the data collection.

L3: Passion: Hospitality workers are passionate about their industry and are hugely invested in the work that they do, in the impact of variables on the success of their venue and on creating the best atmosphere possible for their customers. Although it proved difficult to get to talk to them once they started talking about their sector, hospitality workers were very hard to stop and they were full of enthusiasm for new ideas, for ways to improve their customer offering and very proud of their individual establishments.

2.4.2 Music and productivity

Type of experiment: Qualitative

Four key themes were identified in the living lab, in the area of how music helps maintain staff focus and energy. Music was considered by all staff to be a vital asset to their working day. Firstly, music set the pace of work from the moment they walked into the venue. Secondly, music helped to lift the mood of the employees especially during long shifts. Thirdly, music helped keep engaged throughout the shift, with specific mention being made of tempo and atmosphere. Lastly, music helped employees work faster and most importantly it enhanced team cohesion.

Lessons learned:

L1: Variety: Repetition was a key concern raised by many of the interviewees. The same song heard over and over again could turn the motivating element of the music into one of frustration and annoyance.

*L2: Music is for the Staff and the Custome*r: Music sets the pace by adjusting its tempo and volume to match the energy level, helps staff and customers stay in sync with the venue's activity. This is as important for the staff as it is for the customer. A happy staff member results in a happier customer so the music chosen has to satisfy on both fronts. The wrong tone, mood or tempo of the music can have as detrimental an effect on the staff as it can on the customer.

2.4.3 Music Curation and Planning

Type of experiment: Qualitative

In every interview with every employee the need to adapt music in a venue to the time of day, crowd size, and noise levels to maintain the right atmosphere, boost staff energy, and enhance the customer experience was mentioned.

The living lab highlighted the repetitiveness and predictability of the current playlists, which can be boring and monotonous. Staff members suggest varying the music volume and playlist based on the venue's activity, such as lowering the volume when it's quiet, changing the playlist to more lively tracks as the venue gets busier, and playing upbeat nightclub music on Friday and Saturday nights. For lunch and brunch, they prefer chilled music with fewer lyrics to facilitate conversation, while dinner time sees an increase in volume with more pop or electro jazz music to create a lively ambiance.

Staff in hospitality settings know their customers, know their location and importantly know what works, including the music played. They are on the ground able to react quickly to every event and eventuality. They feel strongly that this should be reflected in having a greater say in the music choice.

Lessons learned:

L1: Control: Control of the playlist is essential and in this living lab we saw both sides in two contrasting situations - those who had control over the curation of the music played in the venue and those who had no control over the music. For the management or staff who chose the music, the attention that they gave to the customers, to the mood of the venue, to the noise levels and the time of day and thus chose the music best suited to this was extremely professional and well thought out. For management and staff that did not have access to the music playlists in their venue, the levels of frustration they expressed at the negative impact of the wrong music played at the wrong time was very evident.

L2: Control Check: We need to establish the difference between a playlist chosen by headquarters and that chosen by the staff who are on the floor at any given time. This would allow for more directed and targeted research into the impact of the music chosen by those who gauge the customer needs and those who choose music based on what they think the customer will need.

L3: Choice and Employee Satisfaction: Would the choosing of the music playlist give more employee satisfaction, more employee empowerment and thus create a happier and more productive work environment? In our next living lab we would like to divide our venues into 2 distinct groups, one where the employees are given carte blanche vis-a-vis music choice and one where headquarters chooses the music for the venue without any employee involvement. The knock on effect of both on the levels of employee satisfaction, productivity and ultimately customer satisfaction and revenue would be interesting.

2.4.4 Impact on the Customer including Customer Retention and Sales

Type of experiment: Qualitative

Description: Music shapes the atmosphere of a venue, it sets the tone, matches the energy level and creates a vibe that enhances customer experiences, from relaxed dinners to lively, energetic nights. There are however different customer groups who respond to different music choices, based on their preferences and mood to match the venue’s atmosphere at the time of day. Volume Control is crucial and adjusting music volume to match crowd size, time of day, and customer preferences is essential for maintaining the perfect atmosphere and enhancing the overall experience. It is important too to reflect what’s happening at a given time. This is not just about playing Christmas tunes at Christmas but its about seeing what’s important in the customers lives and bringing that into the music choice in the venue. Examples of this from the living lab included music themed events linked to artists performing in the city e.g. Coldplay/Taylor Swift or certain events such as Pride, St. Patricks Day. These events increased customer numbers and also drove customer revenue.

Lessons learned:

L1: Events: This was an interesting addition to the results which was not expected and most interestingly was not replicated across all venues. It would be interesting to gauge the impact of such an event night with another venue on the same night that was not running a themed event to see if the resulting customer spend, and retention was impacted.

2.5 Overall lessons learned

2.5.1 General

L1: Collecting subjects. It turned out that it is not easy to find parties who are interested in participating in an experiment. It takes time to be involved in an experiment, and it takes also time to setup the experiment in collaboration with parties.

Implications:

- Start as early as possible with attracting parties for an experiment.
- Make it attractive to participate. The best motivation is if the participant is interested in the result. Essentially, he gets the result for free, which can be used to optimize the sales process. Additionally, other incentives can be applied, such as a temporally reduction of the fees for the intellectual property rights.

L2: Limit the research design. The research design should be realistic and well scoped.

Implications:

- A well-scoped research design needs to be taken into account during the planning of the experiment.

2.5.2 Quantitative experiments

L1: Comparison of experiments. The quantitative studies performed each have their own research questions and research design. This is valuable because it provides a quantitative understanding of the value of music. However, it makes the experiments not comparable. In an international context, it would be interesting to know if the same experiment has different outcomes in different European countries.

Implications:

- There is value in comparable experiments, meaning that these experiments should have a similar setup (see also L2)
- An international experiment would be interesting, e.g. with an international retail chain, to understand if there are national differences.

L2: Standardization of experiment. The quantitative experiments each have a slightly different setup and protocol. Also basic definitions such as ‘music’ and ‘customer’ differ per experiment. To allow for reuse by others, and generalization, it would be a contribution if the experiments are standardized as much as possible so that they can easily be replicated by us and others.

Implications:

- There should be a library of standardized research designs. Obviously, these designs depend largely on what they want to measure. We foresee many different experiments, but for the project, we will focus on only a few designs. Building an extensive library is for the entity that brings the Music360 platform to the market.
- A glossary with definitions of the most important concepts is needed.
- To allow for reuse, the questionnaire should be available in multiple languages.

L3: Software support. Calculations as done right now are one-of-a-kind. To be able to scale up the experiments, and to allow for analysis by novices on statics, it would be useful if (most of) the computation can be done automatically. Obviously, this requires standardization of the experiments (see L2).

Implications:

- We need to develop software support for processing the data, which is reusable for the same experiment design.
- The software support should be developed such that it is easy to adapt to a different experiment, with different variables.

L4: Shorten the experiment period and increase the number of units under study. A study that takes too long results in a lower response. Often the study takes longer because than more units of study can be taken into account.

Implications:

- The duration of the experiment is an important parameter that should be taken into account during study design.
- While designing the experiment, a strategy should be developed how to attract as many test subjects as possible.

L5: Optimize number of questions and the quantity of collected data: There is a trade-off between the number of questions asked and the quantity of collected data.

Implications:

- Carefully balance the number of questions, such that the maximum number of data is collected

L6: Focus on the unit of analysis. In order to compare the experiments, we should have results from customers and from employees.

L7: Selecting questions for the questionnaires: The item included in a question to measure non-economic values might impact the answers in different experiments, with contradictory results.

2.5.3 Qualitative experiments

L1: Time consuming. It is difficult to interview many people and not all the customers are willing to participate. The saturation concept can be applied after around 50 people. If possible, focus groups could be an alternative.

L2: Focus. Everyone has a different area of concern, of interest and of importance and trying to keep people focused on similar areas or themes can be difficult. This leads to a lack of common broad themes and thus a difficulty when making comparisons.

L3: Semi-structured questions are hard to design. It is not easy to define semi-structured questions upfront, and also the balance the number of questions. To many questions are not useful, since there is only a limited amount of time for the interview; to few questions may lead to the situation that the time available is not completely used.

Implications:

- Trial interviews, to see if the questions are producing the desired results, and if there are sufficient questions to keep the discussion going on.

3 The second iteration of experiments.

Similar to the first iteration of experiments, we will have quantitative and qualitative living labs.

3.1 Quantitative living labs

For the quantitative living labs, we will develop an Experimentation Toolkit (ETK). This ETK standardizes the quantitative experiments, so that they become repeatable, and also can be shared with others outside the consortium.

Development of the ETK takes time and therefore needs to be restricted in scope. We have decided to develop an ETK that:

- Can be used for experiments in retail.
- Can be used for experiments, which consider the effect of music on employee.
- Considers the outlet/shop, customer, or employee as unit of analysis.
- Has standardized research designs.
- Has standardized, scriptable, procedures, so that the experiments can easily be done and be replicated.
- Has standardized questionnaires and related materials, which will be translated in the national languages where the experiments are performed.
- Has software tools for processing the raw data to draw conclusions.

We plan to execute the following experiments:

- International: One experiment that spans two or more EU countries. This will be a quantitative experiment to understand the impact of local produced music.
- A series of quantitative experiments where we measure the following:
    - For individuals: The impact on emotion, music fit (with the brand).
    - For employees: Impact on interaction of music with employees.
    - For venues: Impact on (indexed) revenue.
    - In these studies, we will vary the following parameters (A/B factors):
        - Variation in tempo.
        - Variation in playlists (for employees).
    - Impact of a better understanding of music played on the repartition process of CMOs.

Country-wise, this results in the following experiments:

- Netherlands: Continuation of the living lab with the perfumery retail chain.
- Finland: Still under consideration
- Ireland: Extension of the current experiments in the hospitality sector with quantitative aspects.
- Portugal: Quantitative assessment of the impact of have more play-data on repartition of royalties to rightholders.
- Spain: Still under consideration

3.2 Qualitative living labs

We foresee the following qualitative living labs:

- Ireland: The next living lab will aim to build on the first living lab but with a little more focus on specific differences to attempt to achieve more specific music focused results. We will once again use hospitality as our lab base. This time we will split the venues in 2 with half as a control group. The control group's playlist will be chosen by the management/headquarters. the other group will be given control over their playlists. They will be able to choose what to play when, the timing that they can change the playlist, the volume of the music etc.
  The aim is to be able to gauge the impact of employee knowledge of the customer, of reading the mood of both employees and customers and tailoring the music accordingly. Ultimately, we will compare the productivity. job satisfaction and overall mood of the employees who had control over the music they listened to and those who had no control over the music they listened to.
- Spain: Still under consideration.
- Portugal: In the qualitative part of the Portuguese living lab, we want to examine how rightsholders in Portugal's attitudes towards the three dimensions of value (economic, social, and cultural) are affected by the context in which their music is used. The study also seeks to understand how the perception of value should influence the distribution of royalties. The Portuguese living lab will involve questioning rightsholders in Portugal. The interviews will explore the following topics:

    - The rightsholder's view on the economic, social, and cultural value created by the use of their music.
    - The impact of context and user type on the perception of value.
    - The implications of the perception of value for the distribution of royalties.

The findings of the Portuguese Living Lab will help us better understand how rightsholders perceive the value of their music and how this perception should be incorporated into the royalties distribution process.

3.3 Other opportunities

We have received interest from organizations outside the Music360 consortium to do experiments, specifically:

- GEMA (Germany)
- CMOs in South America
- Other CMOs, as a result of a demonstration of the Music360 platform during a SCAPR meeting (SCAPR is an international organisation of (nearly) all neighbouring societies in the world)

If possible, we will offer these entities our ETK under and NDA agreement.