

# Living Labs Case Studies

## **Mart – museum of modern and contemporary art of Trento and Rovereto | Ways of Perception**

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## 1. An introduction to your organisation

Founded in 1987 as an operational agency of the Autonomous Province of Trento, the Mart is a public institution. The Museum of Modern and Contemporary Art of Trento and Rovereto, has three locations: the Museum's headquarters (a large architectural complex inaugurated in 2002 and designed by Mario Botta and Giulio Andreolli) and the Casa d'Arte Futurista Depero are in Rovereto; the Galleria Civica, which became part of the Mart in October 2013, is in Trento. The Mart's Collections include around 20.000 thousand works of art ranging from the nineteenth century to contemporary art, including Futurism, the Novecento Italiano, Abstractionism, Informal Art, Arte Povera, and Transavanguardia up to the most recent artistic research.

It employs a staff of curators, conservators, researchers, archivists and professionals in the fields of education, science and communication reaching to 49 staff and 21 volunteers in 2023.

Final version of Canvas:

[https://miro.com/app/board/uXjVI7n1yFc=?userEmail=leoni.emma95%40gmail.com&track=true&utm\\_source=notification&utm\\_medium=email&utm\\_campaign=add-to-board&utm\\_content=go-to-board&lid=o1rjpysg8ebo](https://miro.com/app/board/uXjVI7n1yFc=?userEmail=leoni.emma95%40gmail.com&track=true&utm_source=notification&utm_medium=email&utm_campaign=add-to-board&utm_content=go-to-board&lid=o1rjpysg8ebo)

## 2. Why become a RECHARGE NEXT Living Lab?

The Mart museum, through its Education Department, has always placed participation at the core of its laboratory design process. This includes activities such as consultation and co-design with individuals with disabilities, as well as with school teachers and students, in order to incorporate their feedback and expertise into the development of the workshops. The museum has also emphasized participatory approaches through its involvement in the EU Creative Europe project *The Floor is Yours*, which enhanced the museum's methodology by integrating co-design practices with local partners and initiating a deeper understanding of what it means to build long-term relationships for a public institution.

Within the RECHARGE NEXT project, we have been evaluating our understanding of participation in both financial and technical contexts. We believe that involving specific target groups in the development of tailored tools leads to final products that are more meaningful and useful for visitors. Moreover, using participatory practices can help reduce costs, foster a greater sense of ownership, and amplify the collective energy and commitment invested in the process. RECHARGE NEXT allowed us to explore an innovative field: altered states of consciousness.

| Objective                              | How you have achieved the objective  |
|--|--|
| Youth entrepreneurship (MaDe students) | Involve the students from the very beginning in the development of low-tech tools and give them the lead in the realization of four products—managing timing, design, and usability with the support of the professor. |

|  |  |
|--|--|
| Make the museum more accessible for young people           | Developed two high-tech tools (The medium sims really interesting for the younger) and four low-tech tools (directly co-design with a class of mostly under 18) to introduce interactive and inclusive experiences within the museum, encouraging engagement from younger audiences.                       |
| New ways of connecting public to the content of the museum | Co-designed two immersive tech-based prototypes with local partners that allow audiences to experience iconic works from the Mart collection from within. Additionally, co-designed four interactive low-tech tools with MaDe students to engage the senses and deepen visitor connection to the artworks. |
| Alternative and healthy ways to induce altered states      | Collaborated with Professor De Pisapia, local tech partners, and MaDe students to develop various prototypes that explore sensory stimulation and immersive experiences as alternative methods to induce altered states of consciousness.  |

### 3. Data collection

- Please add any outstanding data to your KPI documents ([Tailored KPIs](#) and [Shared KPIs](#))

### 4. Continuing your Living Lab activity

Continue the story of your lab since first reporting in October 2024 - with any further co-creation or co-ideation workshops, prototyping and testing workshops or sessions:

We carried out the co-ideation phase with the local tech partner in October 2024, followed by the co-creation and testing phases. In parallel, we held our first co-ideation workshop with MaDe in the following month.

#### Co-ideation

**22/11/2024 – Workshop MaDe Manufacturing Design Institute**

Where: Mart museum

With whom: MaDe students, teachers, professor De Pisapia and Mart staff

Main goals:

- Introduce the *Way of Perception* project

- Present the concept of altered states of consciousness
- Introduce the Mart collection

Activities:

- Round table and discussion about the altered state of consciousness
- Workshop *mindfulness and slow looking*

Tools (including digital): Laboratory

Outputs: Brainstorming about altered state of consciousness which led to a subsequent in-depth knowledge of the topic in the class group

### **Co-creation**

#### **18/10/2024 – Initial meeting with tech companies**

Where: Online and Mart museum

With whom: Bookelot, B2labtech, Mart staff and professor De Pisapia

Main goals:

- Understand each company's expertise and technologies
- Define potential development paths and contributions base on

Activities: Presentation and open discussion

Tools (including digital): Videocall, notes

Outputs: Identification of possible contributions from each company. B2labtech decide to withdraw from the project.

### **Co-creation**

#### **06/11/2024 – Meeting with Bookelot**

Where: Online on Bookelot platform

With whom: Bookelot and Mart staff

Main goals:

- Test Bookelot's software
- Familiarize the company with the Mart collection

Activities: Speaking, confrontation, software demonstration

Tools (including digital): Bookelot platform

Outputs: Potential prototype concepts based on their platform

### **Co-creation**

#### **12/11/2024 – Meeting with Level Up**

Where: Mart museum

With whom: Mart staff and Level Up

Main goals:

- Learn about Level Up's technologies and explore possible collaboration opportunities
- Testing of Level Up's software

Activities: Speaking and confrontation

Tools (including digital): VR

Outputs: Early-stage prototypes and development ideas

## Prototype

Following the initial in-person co-creation meeting, we continued to discuss and communicate several times with the two technology companies via email and phone to develop the expected prototypes.

## Prototype

### **08/01/2025 –Workshop with MaDe Manufacturing Design Institute**

Where: MaDe Manufactory Design Institute

With whom: MaDe class, teacher, Mart staff

Main goals:

- Select four artworks from the Mart collection
- Brainstorm prototype development ideas
- Discuss the first version of the prototypes

Activities: Laboratory and presentation

Tools (including digital): Printed artworks, post-it notes

Outputs: Selection of four artworks, each paired with a specific sense:

- “I Re Magi” A. Savinio -View
- “Ritratto della Singorina Panizzutti” Guido Pajetta - Tact
- “La medusa tramonto” Eugenè Bergman – Hearing
- “Vegetazione” Ennio Morlotti – Sense of smell

## Prototype

### **07/04/2025 – Follow-up prototyping workshop with MaDe**

Where: MaDe Manufactory Design Institute

With whom: MaDe class, teacher, Mart staff

Main goals:

- Discuss and review the first prototypes version

Activities: Presentation and group feedback

Tools (including digital): Printed artworks, presentation

Outputs: Four prototypes to be test

## Testing

### **16/02/2025 Public prototype testing during “W la Domenica!”**

Where: Mart museum, permanent collection

With whom: Bookelot staff, Level Up staff, Mart staff, professor De Pisapia and museum visitors

Main goals:

- Test the developed prototypes to understand how museum visitors interact with the VR medium and how they evaluate and perceive the proposed experiences

Activities: Two VR experiences by Bookelot and one AR experience by Level Up

Tools (including digital): A calming, dedicated experience corner in the museum

Outputs:

- Evaluation of the experiences and collection of feedback from the audiences - <https://drive.google.com/drive/folders/1Hyubk8XdSeNy-rK1LD8G2TfKTTRdFk5Y>

## Testing

### 28/04/2025– Testing prototypes MaDe

Where: Mart museum, permanent collection

With whom: MaDe class, teachers, Mart staff, professor De Pisapia

Main goals:

- Test if the prototypes successfully evoke the intended sensory experiences

Activities: On-site testing with a polarity map to assess strengths and weaknesses and guided tour of the exhibition "*Li Yongzheng. Nel profondo di questo deserto*"

Tools (including digital): Four senses prototype and notes map

Outputs:

- Evaluation of the development stage of each prototype
- Feedback session with Professor De Pisapia to refine and prepare for final implementation
- How did you identify your stakeholders? Do you think the living Lab methodology assisted you in developing meaningful relationships with stakeholders? Describe how you maintain these relationships.

Finding the right match is both the most complex and the most meaningful challenge—choosing with who to collaborate shapes the direction of the project and defines its potential impact. We identified our stakeholders by mapping the key groups who could contribute meaningfully to the project. These included young adults, local technology partners, museum educators, and science experts such as Professor De Pisapia.

To begin, we formalized our participation with Professor De Pisapia, whose work we knew and deeply estimate. His involvement in the RECHARGE NEXT project provided an opportunity to explore the field of altered states of consciousness, opening a first pathway between this area of scientific research and the Mart's collection. This collaboration was foundational in defining a new interdisciplinary direction. The Mart museum also had a partnership with the MaDe Manufactory Design Institute, a local high school focused on design education and the hands-on development of technological objects. Understanding the school's mission, we saw real value in involving one of their classes in the co-ideation, co-creation and testing processes. To expand our reach into the tech innovation sector, we partnered with Trentino Sviluppo to identify 12 local tech companies and startups. With their support and in consultation with Professor De Pisapia, we selected two companies to collaborate with during the second, co-creation phase. Their involvement led to a significant shift in the project, particularly through the integration of VR visors as a medium for immersive experience design.

The Living Lab methodology was helpful throughout this journey. It supported us build a collaborative relationship with all stakeholders. Instead of viewing the project as a commission, everyone involved saw it as a shared, evolving process. The co-design approach allowed for open dialogue, iterative development, and a collective commitment to the project's goals. Each stakeholder brought different motivations to the table—whether scientific, educational, cultural, or entrepreneurial. This mutual investment has laid the foundation for long-term partnership, kept through ongoing communication and shared decision-making.

- Describe any unforeseen challenges that have occurred in your living Lab activities. How did you solve these?

None.

## 5. Output(s) and impact

- Describe your Living Labs' output(s) here. E.g. Services, products, visitor experiences, exhibitions etc. Please upload photographs and videos [here](#) naming them like this: "HUNT\_Cocreation\_17.06.23"

|                                     |  |
|-------------------------------------|--|
| MaDe – Manufactory Design Institute | 4 low tech prototypes to amply the senses in relation with 4 artworks of the museum collection |
| Bookelot                            | 2 VR immersive experiences   |
| Level Up                            | 1 AR interactive experience  |

- Please write a brief description of the value that your Living Lab created for your organisation and community.

The Living Lab created value for both our organization and the wider community by fostering new relationships and developing innovative tools.

For the MaDe students, the project provided their first meaningful encounter with the museum—many of them had never visited before. Through their active involvement in co-design and prototyping, they not only developed practical skills but also hopefully transforming their view of cultural institutions as places for creativity and collaboration. For the museum, the Living Lab introduced new high-tech and low-tech tools that made the visitor experience more interactive and engaging. These technologies expanded the ways audiences could connect with the artworks, opening opportunities for multisensory and immersive experiences.

Importantly, the project began to shift perceptions around altered states of consciousness. By exploring this theme through scientific and artistic approaches—and connecting it with the museum's collection—we opened a space for dialogue and greater understanding, encouraging a more open and inclusive perspective.

- Living Lab self-assessment and level of satisfaction on its achievements.

| Objectives | Result description | Achievement level (scale of 1-5) | Sustainability level (1-5) | Internal Impact level (organization) (1-5) | External Impact level (community) (1-5) |
|------------|--------------------|----------------------------------|----------------------------|--|---|
| 4          | 5                  | 3                                | 4                          | 4  | 3                                       |

**Achievement Level:** Where 1 is Poor: The objective was not met. The outcomes fell significantly short of expectations, with minimal or no progress made.

And 5 is Excellent: The objective was fully met or exceeded. All expected outcomes were achieved with high quality and effectiveness.

**Sustainability:** where 1 is Low: The result has minimal potential to continue. It is unlikely to be sustained or evolved beyond the first iteration without substantial changes or support.

And 5 is Very High: The result has very high potential to continue. It is likely to be sustained and adapted for future iterations with little to no additional support required.

**Internal Impact :** where 1 is Low: The result had minimal or no impact. It did not significantly affect the system of the organization, its procedures, activities and approaches.

And 5 is Very High: The result had a transformative impact on the organization. It profoundly affected the system of the organization, its procedures, activities and approaches.

**External Impact :** where 1 is Low: The result had minimal or no impact. It did not significantly affect the intended community..

And 5 is Very High: The result had a transformative impact. It profoundly affected the intended community, creating significant positive change.

## 6. Reflection and conclusions

Please describe the added value of participatory practices according to your Living Lab experience

The Living Lab methodology was helpful throughout this journey. It supported us build a collaborative relationship with all stakeholders, instead of viewing the project as a commission, everyone involved saw it as a shared, evolving process. The co-design approach allowed for open dialogue, iterative development, and a collective commitment to the project's goals. Each stakeholder brought different motivations to the table—whether scientific, educational, cultural, or entrepreneurial. This mutual investment has laid the foundation for long-term partnership, kept through ongoing communication and shared decision-making.



## Please summarise your Key Findings

- Active listening and time value

Take time to listen to one another from the beginning. Understanding and discussing each partner's motivations and needs early on is essential to building a strong foundation. Developing a meaningful project requires time and ongoing communication. Trust and long-term relationships are built through consistent sharing and active listening throughout the process.

- The value of collaborating with Cultural Institutions

Working with cultural heritage institutions (CHIs) offers significant benefits for partners, including increased visibility and access to rich historical and cultural resources.

## Inputs for future directions and new cycles (what will you do differently? What was the main lesson learned that you will not do again!)

The Key Findings also summarise some inputs for future directions.

## Describe how you see the Long-term sustainability of your project and possibilities for scaling Up

Long-term sustainability is achievable. We are planning to integrate the software developed by Bookelot into the permanent exhibition, along with the prototypes created by MaDe. This would allow the project's ideas to remain accessible to the public over time, extending its impact beyond the testing phase.

We are also exploring the possibility of introducing a dedicated workshop series for school groups. These workshops would use the developed objects to help young people engage with the concept of altered states of consciousness in an educational way. If implemented, this could contribute to greater awareness and understanding among younger audiences, while also supporting the museum's educational mission.

We are in early discussions about a potential collaboration with the university's DiPSCO. The idea would be to conduct research on altered states of consciousness and explore how this knowledge could be incorporated into museum spaces and cultural heritage settings. In this model, the university could provide academic expertise and funding for research, while the museum offers space and historical context. Both institutions would benefit from shared results and public engagement.

While this plan is still under development, we are open to experimenting with the VR experience created by Bookelot starting at the end of next month. Hopefully, the sensory object developed by MaDe will also be accessible from the beginning of the next school year.

## What recommendations would you give another similar organisation for potential replication of the Living Lab methodology?

We learned that it's essential to structure the core of the process to keep everyone aligned and to use key performance indicators (KPIs) to regularly evaluate the project's impact and progress.

## 7. Appendices

- Please upload the signed Informed Consent Forms [here](#), labeling them as follow: "HUNT\_ICF\_Cocreation\_17.06.23"
- Please upload the Participant Lists [here](#), labeling them as follow: "HUNT\_PL\_Cocreation\_17.06.23"
- Supplementary data sources

| Name of the document        | Content                      | Link  |
|-----------------------------|------------------------------|---|
| MaDe_Presentation_WoP       | Prototypes presentation      | <a href="https://drive.google.com/drive/folders/1Hyubk8XdSeNy-rK1LD8G2TfKTTRdFk5Y">https://drive.google.com/drive/folders/1Hyubk8XdSeNy-rK1LD8G2TfKTTRdFk5Y</a> |
| Ways of Perception_Data_ENG | Feedback test tech companies | <a href="https://drive.google.com/drive/folders/1Hyubk8XdSeNy-rK1LD8G2TfKTTRdFk5Y">https://drive.google.com/drive/folders/1Hyubk8XdSeNy-rK1LD8G2TfKTTRdFk5Y</a> |

- Supplementary Materials