



Deliverable 4.6 – Lessons Learned

Version 1

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Objective of the deliverable

This deliverable, with the renewed number D4.6 after the Amendment 2 numbering update processed in 2024 (originally D4.4 with 2 iterations), reports on the lessons learned from the Humanizing Technology Experiments (HTEs) on the peer-to-peer learning activities which were conducted during the experimentation periods between artists, experts, partners, studios and end-users at various occasions.

A series of interactive, informative, inspiring and sometimes influential sessions have been organised by the studios and other project partners to support and improve the quality of the experiments as part of the studios fellowship program (WP4).

This deliverables reports of these sessions, their value and how we plan to run a similar program for the Path to Progress Experiments (PPEs) based on the feedback received and improvements identified.

History of changes

Date	Version	Author	Comment
12.06.24	0.1	Klara Kaluzikova	Setup of deliverable
18.06.24	0.8	Rodolfo Groenewoud – van Vliet	Draft
21.06	0.9	CRA/ MNDL/ In4Art	Review round
28.06	1	Rodolfo Groenewoud – van Vliet	Rodolfo Groenewoud – van Vliet

Table of content

History of changes.....	2
Table of content	3
1. Abstract.....	4
2 – Peer-to-Peer program HTEs	5
3 – Lessons Learned.....	9
4 – Peer-to-Peer program PPEs	10

1. Abstract

This deliverable describes what we did as part of the peer-to-peer program for the first round of Hungry EcoCities art-driven innovation experiments: the Humanizing Technology Experiments. To reach the three main goals (cross-pollination between those involved in the experiments, joint inspiration sessions on relevant topics and enforcing individual experiments through access to external experts), we organised both digital and physical events, as well as various meetings. Chapter 2 elaborates on what was included in this part of the residency program. In Chapter 3, we zoom in on the lessons learned from all of these activities and in Chapter 4 we describe what we intent to keep and what we intent to change for the upcoming round of Hungry EcoCities art-driven innovation experiments: the Paths to Progress Experiments.

2 – Peer-to-Peer program HTEs

In the Hungry EcoCities Humanizing Technology Experiments we had no less than 11 artists (7 individuals and 2 duo's) and 21 structurally involved experts from 8 project partners involved. This makes 32 people all together. Then, and not unimportantly, most artists involved subcontracted experts for parts of the experiment, in total 5 out of 9. These individual experts were also regularly involved in project progress and planning meetings. This makes the total amount of structurally involved individuals to realize the 9 HTE projects at least 37. In addition to these structurally involved people, we involved numerous experts in the experiments through visits, masterclasses, encounters, meetings and workshops. We did this with three main goals in mind:

The HTE peer-to-peer program goals:

- 1) to allow for cross-pollination between core individuals involved in the projects.
- 2) to support the projects as a group through joint inspiration and information sessions with cross-program relevance
- 3) to enforce the individual projects through access to external experts

To reach the goals, we very actively planned for, and organized a wide range of sessions and gatherings, both physically and digitally, across the locations of the partners of Hungry EcoCities.

Goal 1: to allow for cross-pollination between core individuals involved in the projects

What we did: collaboration gatherings and working sessions

1.1 Joint kick-off virtual session in September 2023

1.2 Split [physical kick-off workshops](#) in Turin (CRA) and Rotterdam (EatThis/In4Art)

1.3 Joint collaborative workshop with all artists and consortium members to close the research period and start the building period in Turin in November 2023

1.4 Prototype park physical demonstration and interaction events in Turin (CRA), Rotterdam (EatThis/In4Art) and Berlin (SOS) in May 2024

1.5 Join wrap-up virtual session End of May and End of June 2024 to reflect on the HTE outcomes and program



Artists Helena Nikonole (Acoustic Agriculture), Nonhuman Nonsense (Council of Foods) and Bernat Cuni (WTFood) in the joint collaborative workshop in Turin in November 2023, discussing their findings, questions, plans and doubts to develop their experiments within Hungry EcoCities

Goal 2: to support the projects as a group through joint inspiration and information sessions with cross-program relevance

What we did: Experiment masterclasses and inspiration sessions

- 2.1 Visit I: Westland (NL)
- 2.2 Visit II: CRA Make (IT)
- 2.3 Masterclass I: Carolyn Steel
- 2.4 [Masterclass](#) II: Ethics of AI
- 2.5 [Masterclass](#) III: Just Transition in Food and Agriculture
- 2.6 Visit III: Mendel Labs and Makerspace (CZ)



Visit to the CRA – Carlo Ratti Associati prototyping factory in Turin in September 2023, with artists Ivan Henriques (Ecoshroom), Helena Nikonole (Acoustic Agriculture) and Frederik de Wilde (Symbiosis.AI). Also Pavel Chaloupsky from Mendel University Brno attended as main scientific expert in all three related experiments.



Visit to the Westland area of the Netherlands, also known as the 'silicon valley of horticulture', organised by EatThis. With IM-A Studio (Future Protein), Genomic Gastronomy (MVPxFFF), Jeroen van der Most (Vegetable Vendetta) and Bernat Cuni (WTFood).



Artists Ivan Henriques (Ecoshroom), Helena Nikonole (Acoustic Agriculture) and Frederik de Wilde (Symbiosis.AI) attended 3–4 days intensive workshops at Mendel University in Brno focusing on physical advancement of their prototypes. The workshops were carried out in collaboration with local makerspaces – Base48 and FabLab Brno. The workshops were positively evaluated by the artists as significant progress was achieved during their stays in Brno.



Goal 3: to enforce the individual projects through access to external experts

What we did: Experiment meetings with external experts on a needs basis.

For every experiment, we utilized our partner networks and actively extended these networks to involve external experts to comment, advice, direct, inform, inspire or otherwise enforce the individual projects. In all three main stages of the experiments, we had different purposes for this.

In the first stage of the experiments, the research and exploration stage, encounters with external experts were mainly useful to either broaden the knowledge base or narrow down the scope of the experiment. A good example of an encounter which enforced an experiment was the encounter from Future Protein with Deltares, the Dutch knowledge institute on delta technology. To narrow down the scope of the project in terms of what mussel characteristics to focus on in the project, the artists and several project partners met with research experts to discuss this topic.

In the second stage of the experiments, the early prototyping and building stage, encounters with subject matter experts proved very useful to determine the focus of

the experiments and identify the main elements of the digital prototype. A good example of an encounter which enforced an experiment here is the encounter from Ecoshroom with a research group at VU University in Amsterdam. The artist met several times with the research group, specialized in mycorrhizal fungi, to test ideas and intermediate results against their expert opinion. The Ecoshroom also benefited from collaboration the with Institute of Experimental Botany of the Czech Academy of Science. This led to improvements in the experiment design and, later, the achieved results.

In the third stage of the experiments, the demonstration stage, encounters with external experts proved very useful to receive feedback on the qualities and power of the prototypes which were created. An example of this is the encounter from Vegetable Vendetta with a marketing professor which responded to the prototype which intends to break the marketing advantage of large industrial food chains over small growers.

In line with the examples given above, all experiments have made use of one or more tailored meetings and encounters with experts from the partners networks.

3 – Lessons Learned

The participants in the HTE experiments have given feedback on each meeting organized in the peer-to-peer context after every meeting. Moreover, we have asked them to reflect on their experiences, including the peer-to-peer program experiences, as part of their final deliverables. This feedback was, in general, quite positive. Artists, as well as partners and other experts involved, are positive about the meetings and gatherings organized. Finding them insightful, fruitful and, not unimportantly, fun. For external experts it was sometimes difficult to contribute to ongoing projects because they are not involved throughout, and, as a result of this, only have a limited picture of the total project scope. For artists, they indicated that they would have liked to interact with each other, and between experiment teams, more regularly. Apart from that, they experienced the peer-to-peer efforts are positive and useful.

Lesson 1: organize more regular opportunities for cross-experiment pollination

Lesson 2: the responses to the masterclasses were very positive, we could consider offering more of these in the next round.

Lesson 3: the physical meetings and gatherings are time and resource consuming, yet considered crucial to develop the projects.

4 – Peer-to-Peer program PPEs

Looking ahead, we are preparing for the Path to Progress Experiments, which will run from September 2024 until October 2025. In these experiments, we will be involving even more people than in the HTEs: 10 artists from January-October 2025 and 10 SMEs for the whole duration. We expect that from the pool of artists, again, several will not be working alone. Also, from the pool of SMEs, we expect that the majority will be involved with more than 1 person. Together with the structurally involved consortium partners, this will mean we will be working with a total group of approximately 50 people.

We intent to maintain the same three main goals for the PPE peer-to-peer program as we did for the HTE peer-to-peer program:

- 1) to allow for cross-pollination between core individuals involved in the projects.
- 2) to support the projects as a group through joint inspiration and information sessions with cross-program relevance
- 3) to enforce the individual projects through access to external experts

To reach goal 1, we will keep the structure as we had in the first round, consisting of a virtual kick-off meeting (or two, one when the SMEs start and a second when the artists join), and a virtual wrap-up session in October 2025. Moreover, we plan to host individual and small group physical meetings throughout Europe as well as 1 joint collaborative workshop in May 2025 where we aim to bring everyone together.

In addition to what we did in the first round, we will introduce the PPE café moments: regular, online moments where all +/- 50 structurally involved individuals are invited to log in and discuss, present, ask or simply interact with peers across the 10 projects. By doing this, we reply to 'lesson 1', offering more regular opportunities for cross-experiment pollination.

To reach goal 2, we intend to organise another set of masterclasses, responding to some of the overarching needs and interests of the projects. With two of the first three masterclasses recorded and made available¹, the participants in the PPE program will get access to approximately double the amount of masterclasses compared to the participants in the Humanizing Technology Experiments.

To reach goal 3, we will do the same as before: map per project the possible need for external expertise to test, validate, inform, inspire or influence certain topics in the experiment. The regular, bi-weekly meetings we will be having with all 10 experiments throughout the duration of the PPEs are the main platform to discuss these needs and exchange contacts or offer introductions where opportune.

¹ Made available through [Hungry Ecocities – S+T+ARTS](#)



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Hungry EcoCities aims to explore one of the most pressing challenges of our times: the need for a more healthy, sustainable, responsible, and affordable agri-food system for all enabled by AI. More info: starts.eu/hungryecocities