How does open innovation support open research? Lessons from the eCHOing project

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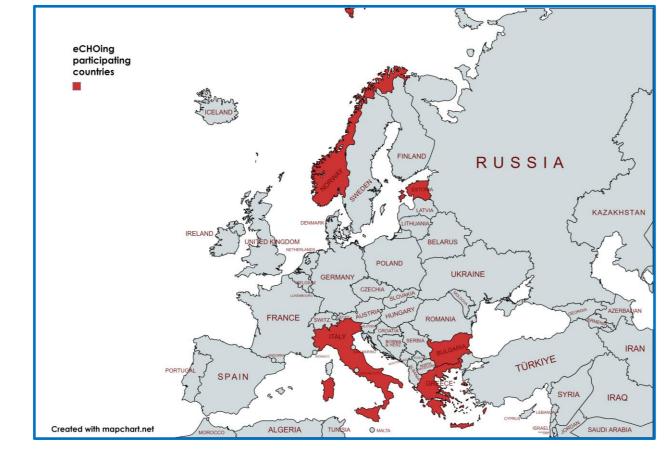
Background: eCHOing and its approach to open innovation

In two years (2022-2024), the Erasmus+ partnership "Recovery of cultural heritage through higher education-driven open innovation" (eCHOing) has fostered open innovation practices and digital skills of heritage professionals,

students and citizens in five countries targeting small cultural heritage organisations (CHOs).

Background

The coronavirus crisis was seen as an opportunity to revitalise the connection between Higher Education (HE) and society and enable them to assume even more



energetically, their role and responsibilities towards European citizens. The project aimed to realise the potential of universities to contribute to the recovery of a sector that has been most severely hit, the cultural and creative sector (CCS), specifically small and medium-sized CHOs.

Open innovation

The term 'open innovation' refers to a situation where an organisation doesn't just rely on internal knowledge, sources and resources (such as its own staff or R&D) but also uses external sources (such as customer feedback, published patents, competitors, external agencies, the public) to drive innovation.

In the cultural heritage sector, it mear co-create or co-develop project ideas institutions from other sectors or ir forms: for example, citizen scienc communities, innovation labs, hackti

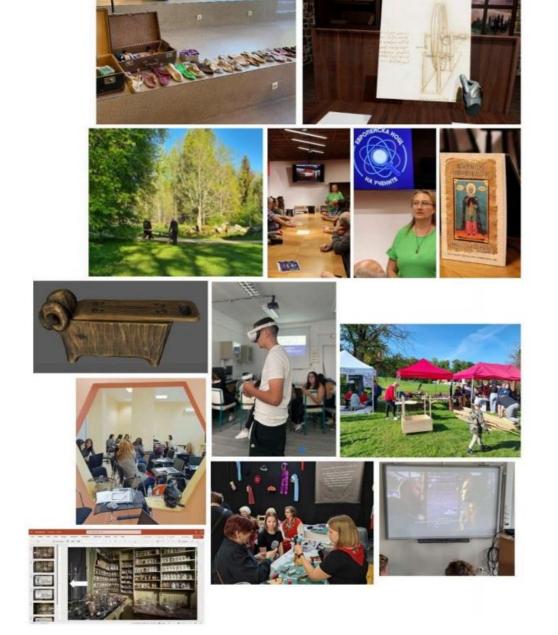
eCHOing pathway to experiential open innovation

eCHOing developed five online training modules and organised 25 open innovation projects, local events in all participating countries and an international final conference.

The 25 projects allowed CHOs to experiment with various forms of open innovation. They followed the same life cycle:

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Develop



Implement

Collage of photos from some of the 25 projects and events

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Evaluate

From open innovation to open research

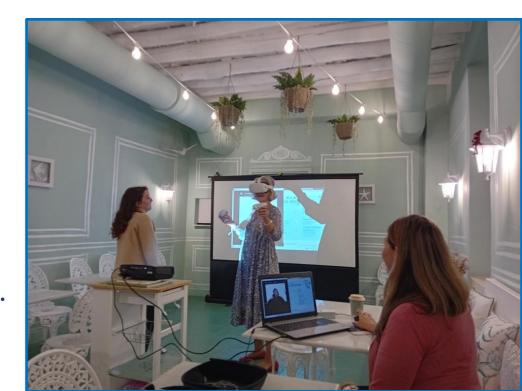
The 25 collaborative projects differed in the scope of participation and in the type of activities. Some led to the creation of digital objects and/or collections which can be used in research.

1. Open innovation supporting the development of new tools.

One example was a project where students developed a tool for searching in a historical collection of newspapers in Bulgarian.

This allows searching across two centuries and 6 orthographic reforms.

This tool can be used for research by historians, linguists, and media scholars and adds a valuable new instrument within the open science domain.



An Italian student introducing the use of virtual reality in museums for Greek CHOs

- **2. Expanding digital collections.** Examples from Norway, Italy, and Bulgaria contributed to the creation of 3D museum objects and virtual exhibition components. These are valuable additions to the digital services and content offered by small museums and expand collections with open content which will benefit researchers and educators.
- **3, Promoting citizen science.** We also had several examples of citizen science projects in Greece and Bulgaria. Involving citizens in activities that help answer research questions or help create new digital resources that will be openly available to scholars, educators, and members of the general public is another contribution to developing open research.

Conclusions



- Open innovation does not only support new activities but can be a valuable pathway into open research.
- Setting up collaboration takes time but is rewarding! **Planning** is a major key to success.
- It is a great engagement tool for CHOs while students benefit from experiential learning.

REFERENCES



For training modules and deliverables of eCHOing check

Angeletaki, A., Evangelista, C., Sasso, G., Giuliodori, G., & Rice, P. M. (2024). Lessons Learned: HE-driven open innovation to sustain CHOs in Europe.

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Initiate

• Language barriers in multinational setting: not all CHOs were happy with training in English.

Prepare

- Capacity of institutions (lack of staff time, equipment, technological infrastructures).
- Sustaining interest of external stakeholders and citizens after the projects finished.



