Research & Innovation Information Technologies / ATHENA

UNICHE

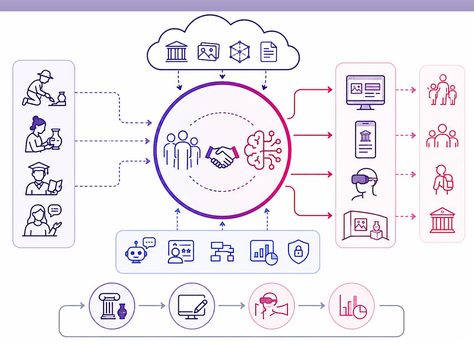
Anastasia Vasileiou

anastasia.vasileiou@athenarc.gr

Towards a Hybrid Human-AI Collaborative Platform for Cultural Heritage

Motivations & Challenges

- **Growing demand** for **interactive**, **immersive**, and **personalized** cultural heritage experiences.
- Adoption of **AI**, **XR**, **web**, and **mobile**.
- **Fragmented tools** hinder collaboration
- Need for **accessible, no-code** creation.

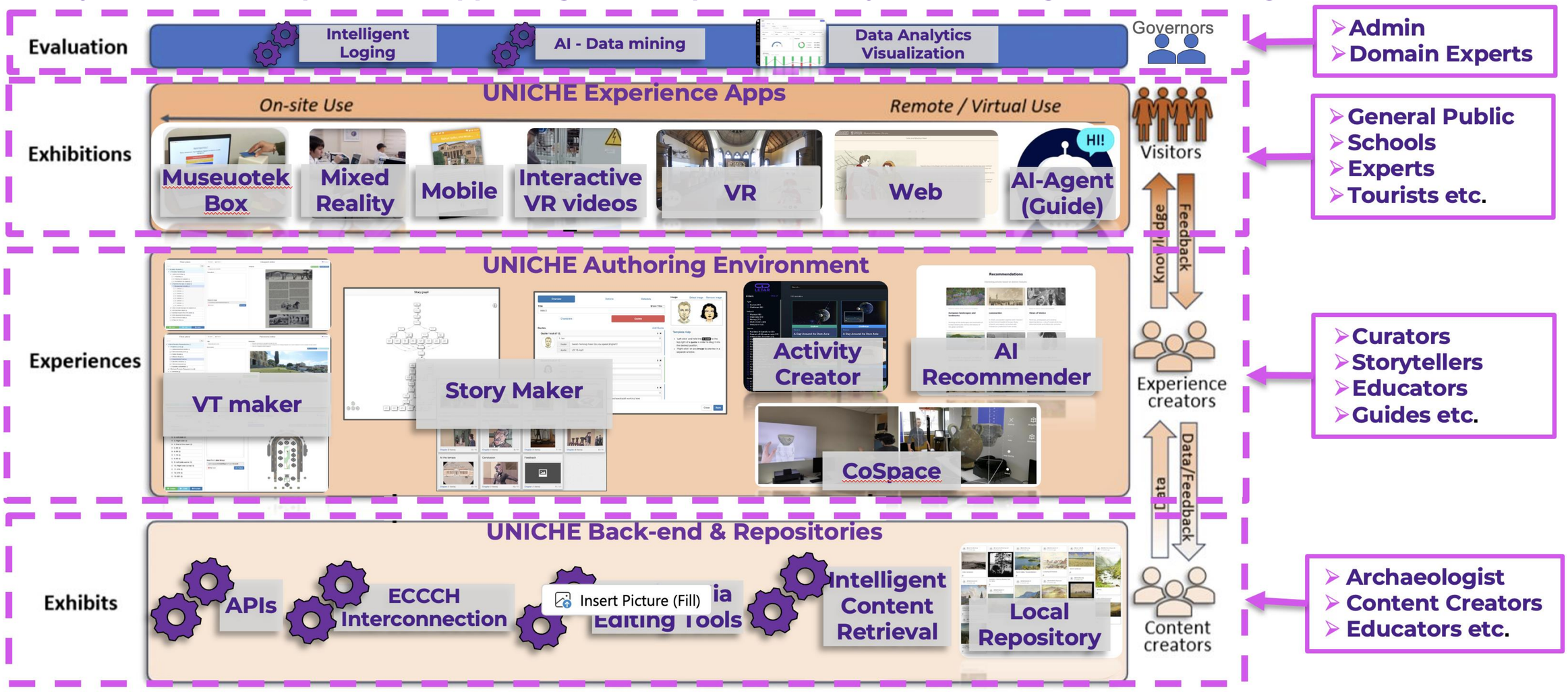


Key Objectives

- ✓ **Hybrid Human–AI collaboration**
- ✓ **Unified No-Code platform**
- ✓ **Technology-agnostic architecture**
- ✓ **AI-assisted experience authoring**
- ✓ **Interoperability with ECCCH**

UNICHE Hybrid Human-AI Architecture – 4E Approach

A unified Hybrid Human–AI platform supporting the complete 4E lifecycle - from digital asset management to visitor evaluation.



Validation Across Europe

Internal Pilot Environments

- Open-air Archaeological Sites
- Museum Exhibitions
- Portable Exhibitions

Open-air archeological sites



Archaeological site of Kalapodi, **Greece**



Messapian city walls in Ugento, **Italy**

Portable



Museum of Architecture in Wrocław, **Poland**

Museums



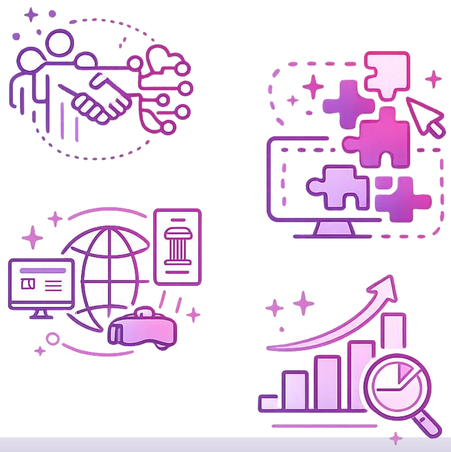
Museo Galileo, **Italy**

Pan-European Expansion With 10 Open Call Pilots

Extending the validation to additional cultural heritage institutions and diverse use cases across Europe.

Impact

- ✓ **Empowers** multidisciplinary Human–AI collaboration
- ✓ **Simplifies** cultural heritage authoring through **No-Code**
- ✓ **Enables** interoperable and multimodal experiences
- ✓ **Supports** data-driven visitor engagement and evaluation



Project

- **36 Months Project**
- **12 Partners**
- **7 Countries**
- **10 Open Calls**

uniche-eccch.eu

info@uniche-eccch.eu

Acknowledgments:

This work is based on research conducted within the UNICHE project, funded by the European Union under Grant Agreement No. 101233650. UNICHE is part of the European Collaborative Cloud for Cultural Heritage initiative established by ECHOES. The views expressed in this paper are those of the authors and do not necessarily reflect the views of the European Union.

Funded by the European Union

PRO-VE

27th IFIP/SOCOLNET Working Conference on Virtual Enterprises
Dynamics of Hybrid Collaborative Networks
Padova, Italy – 26-28 October, 2026