Research & Innovation Information Technologies / ATHENA

UNICHE

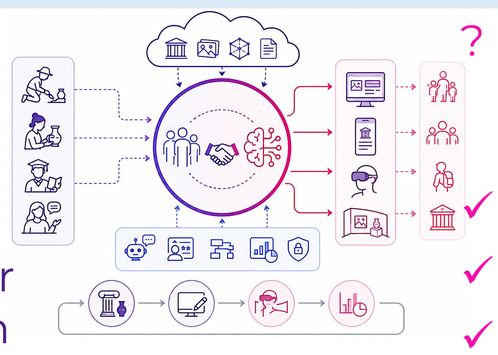
Michalis Zervas
michalis.zervas@athenarc.gr

UNICHE: A No-Code, Human-AI Platform for Cultural Heritage Experiences

Michalis Zervas, Ioannis Zikos, Vasileios Perifanis, Vasilis Zafeiropoulos, Akrivi Katifori, Maria Boile, Chairi Kiourt, Yannis Ioannidis
Athena Research Center

Motivations & Challenges

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



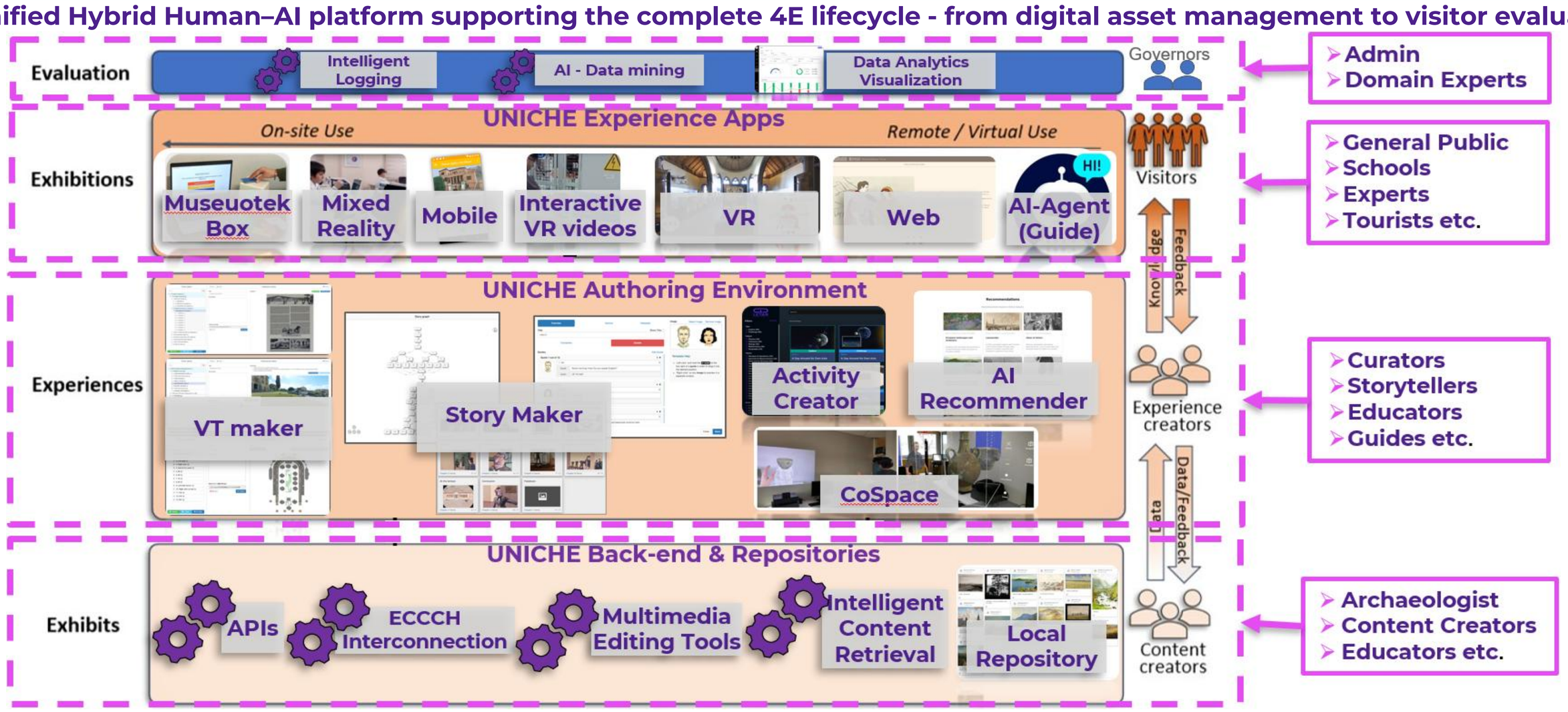
Research Question & Key Objectives

? **How can one no-code platform let non-technical CH professionals create AI-assisted experiences across onsite, hybrid, and remote settings?**

✓ **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



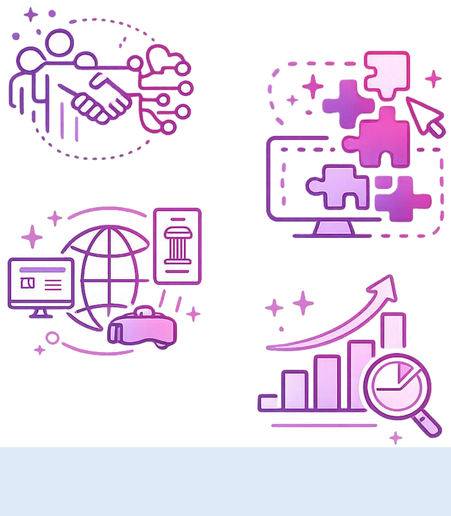
Museo Galileo, **Italy**

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:

Funded by the European Union

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.

ACM GreekCHI-CYCHI Symposium 2026
Dynamics of Hybrid Collaborative Networks
Thessaloniki, Greece – 6-7 November, 2026