



Unleash your creativity
in open spaces!

Good Practices and Recommendations

Actionable guidance for cultural and
creative professionals and policymakers



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INTRODUCTION

What is Artcast4D?

Combining art and immersive technology for people to interact with culture and unleash creativity? This is what Artcast4D, a European consortium of research, technology, culture, and media partners developed, working with artists, cultural organisations, creative businesses, museums, city, and local authorities to create new, immersive experiences in public spaces.

“The project’s innovation lies in its ability to create immersive environments in open spaces, with minimally intrusive projection technology, through the design of collective interactive applications for broad and varied audiences,” explained Daniel Schutze, founder of interactive installations partner MDLite.

The Artcast4D project is publishing an open-source program using, refining, and extending the proven AAASeed real-time 2D/3D software.

Artcast4D implemented four pilots with different cultural and creative topics and experiences: Citizens Engagement, Art in Public Spaces, Innovation in Art and Experience, Wisdom Tourism, bringing together creative actors and industrial partners with civil society.

Pilots included training workshops, and open training modules designed for developers and artists. They also helped to derive policy guidelines on how to strengthen competitiveness and innovation in Europe.

“Advances in immersive technologies represent an important driver for the experience economy, enhancing breadth, depth and intensity of artistic performances and visitors’ experiences in public areas and at arts and cultural institutions,” said Xavier Maître, leading the research study on the keys for immersion in open spaces by Université Paris-Saclay.

Artcast4D kicked off in Milan in September 2022. The consortium carried out research and development, pilots and living lab demonstrations, communication and dissemination of findings and recommendations over 36 months.

Benefits for Small and Medium Cultural & Creative Organisations (CCIs)

> AAASeed UI at Insectotropics installation.



Accessible & Affordable Innovation

Lowers adoption barriers for SMEs: no need for specialized coding skills, reduced setup costs, open-source access.

Inclusive Co-Creation

Enables direct citizen, artist, and community involvement in creative processes.

Professional Upskilling

Workshops, training modules, and community supports lifelong learning for both entry-level and advanced users.

Scalability and Flexibility

Works in both indoor and outdoor settings; adaptable to different content, venues, and sizes.

Cross-border and Cross-sector Collaboration

Facilitates cultural exchanges and joint events, even internationally.

Artcast4D Pilots: Living Labs of Good Practices

> Setting up Artcast4D in Valencia.



ISSY-LES-MOULINEAUX, FR

Citizens' Engagement

KEY ACTIVITIES
Interactive public artworks,
cross-border live installations

GOOD PRACTICES DEMONSTRATED
Co-creation with non-artists,
blending heritage and digital

HOUNSLOW, UK

Art in Public Spaces

KEY ACTIVITIES
Multidisciplinary commissions,
installations, student-led labs

GOOD PRACTICES DEMONSTRATED
Artistic freedom, effective use of
urban spaces

VALENCIA, ES

Innovation in Art & Experience

KEY ACTIVITIES
Dance-tech prototypes, open grant
for artist collectives, live workshops

GOOD PRACTICES DEMONSTRATED
Supporting new business models,
training, community building

ATHENS, GR

Wisdom Tourism

KEY ACTIVITIES
AI-driven museum exhibits, ethical
and philosophical engagement

GOOD PRACTICES DEMONSTRATED
Displaying intangible heritage,
emotional/cognitive engagement

Citizens' Engagement

Issy-les-Moulineaux, FR
Total Participants : 6,630

- > Fresco installation.
- > Cartomaton.
- > Issy Mix installation.



Fresco

4,000 participants

transformed the town centre into a public canvas through an interactive digital fresco made by six residents with diverse backgrounds. The artwork responded in real time to passers-by through motion detection, bringing art directly into public life.

Cartomaton

500 participants

invited citizens to blend their faces with digitally designed playing card figures, combining tradition and technology.

Mirror Cities Hello Hounslow, Ici Issy

2,000 participants

connected the Twin Cities of Issy and Hounslow via a mirror visual installation that captured gestures and movements in both cities and reflected them in real-time across the Channel.

Issy Mix

130 participants

was the pilot's final showcase: a live music and visual projection where young visitors' drawings were projected live onto a tower, creating an inclusive and performative closure to the pilot.

Good Practices

Co-creation with non-artists through accessible tools

Blending heritage with digital play

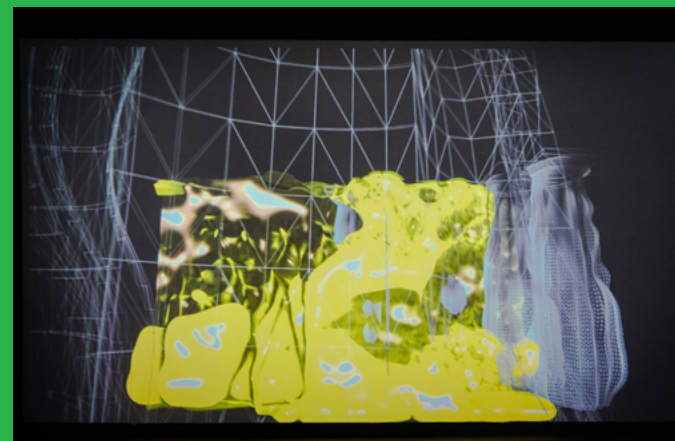
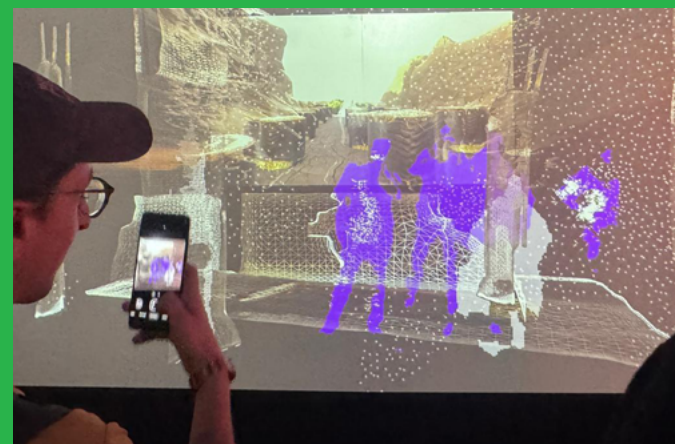
Cross-border collaboration and visual dialogue

Art in Public Spaces

Hounslow, UK

Total Participants : 3,313

- > Insectotropics installation.
- > The Pillars of Our Latex House.
- > Participants play the AAAMaze game.
- > Mirror Cities, Hounslow.



The Watermans-led pilot

Artistic freedom across multiple disciplines Effective use of public urban settings Student-led interaction and learning-by-doing

The Pillars of Our Latex House

560 participants

used movement-triggered visuals to explore the history of gutta-percha in an interactive gallery installation.

AAAMaze

100+ participants

an algorithmic labyrinth that responded to user interaction via joystick, voice, and light. The installation was showcased at the Universities of Richmond and Greenwich, sparking curiosity among students and staff alike.

Insectotropics

593 participants

merged performance, digital art, and Persian poetry in Bell Square, transforming a classic text into an immersive, participatory journey.

More Than Human

60 participants

presented a soft-cinema dance experience using Kinect, choreography, and real-time generative visuals.

Mirror Cities Into the Earth

2000 participants

extended the Issy pilot, reinforcing international artistic networks through shared presence and interactivity.

Good Practices

Artistic freedom across multiple disciplines

Effective use of public urban settings

Student-led interaction and learning-by-doing

Innovation in Art and Experience

Valencia, Spain

Total Participants : 90

- > TEK-NET performance, Valencia.
- > Experimenting in Valencia.
- > Contra Centro, Valencia.



Set in Espai LaGranja

this pilot invited choreographers and dancers to blend movement with generative media in experimental performances.

TEK-NET

47 participants

explored identity and surveillance through dance, blending physical performance with screen-based visual response.

Contra Centro

40 participants

critically examined digital self-curation in a data-saturated society. It concluded with a participatory workshop on body-technology interaction.

Good Practices

Immersive choreography integrating open-source software

Professional training embedded in artistic creation

Sensory-rich, live audience experiences

Wisdom Tourism

Athens, Greece
Total Participants : 1,480
(Pilot: 339; Pre-pilot: 1,141)

> Wisdom Tourism, Athens.



Wisdom Tourism

This pilot created a museum-style installation, Artificial Superintelligence: Human Well-being and the Decision-Making Dilemma, merging philosophy, AI, and cultural heritage. Visitors explored ethical challenges of emerging technologies through a multisensory and participatory digital exhibition.

Good Practices

- Fusion of intangible heritage with digital tools
- Emotional and cognitive audience engagement
- Framing complex policy debates in accessible ways

How Pilots Serve as Good Practices

These pilots collectively serve as replicable models for integrating immersive technologies into cultural and civic life, supporting wider adoption of digital tools in the arts, and providing evidence-backed policy recommendations for the EU's creative sector.

Demonstrate Accessible, Affordable Immersion: Showcasing open-source and low-overhead solutions for cultural institutions, making advanced immersive experiences possible outside elite venues and labs.

Foster Cross-Sector Collaboration: Pilots unite artists, technologists, local governments, educators, and citizens, acting as living labs for interdisciplinary innovation.

Upskilling and Empowerment: Each pilot integrates professional training, technical workshops, and open calls—building digital confidence for creatives at all levels.

Inclusive Engagement: By designing events for broad participation (youth, non-artists, local communities), the pilots set benchmarks for accessible digital creativity and civic engagement.

Scalable Impact: Use of real-time networking and open frameworks allows results to be replicated and adapted in different contexts across Europe.

From Creative Realities to Policy Realities: Lessons from the Pilots

Drawing from these four pilots and cross-cutting research insights, we propose six key policy pathways aligned with the EU's Culture Compass and Competitiveness Compass:

Institutionalise Open-Source Immersive Platforms – The Artcast4D model shows how modular, scalable and community-driven tools empower artists and citizens alike. The EU should establish shared standards for open-source immersive frameworks to enhance access and interoperability across Europe.

Mainstream Immersive Skills in Cultural Education – Support integration of immersive technologies into arts, heritage, and museum education through Erasmus+, Creative Europe, and the European Skills Agenda. Upskilling cultural professionals ensures both inclusion and innovation.

Establish Regional Immersive Labs and Mobile Units – Deploy mobile digital labs and cross-border creative residencies, particularly for underserved regions, SMEs and emerging artists. These hubs could mirror the success of Watermans and Issy's digital co-creation spaces.

Promote Cultural Co-creation and Digital Participation – Fund participatory digital programmes that turn audiences into co-authors. This encourages civic dialogue and democratic engagement—values central to the Culture Compass and EU cohesion strategies.

Enable Long-Term Affordability through Structural Investment – Reduce financial barriers by including immersive infrastructure and tools in the next Multiannual Financial Framework. Public procurement and state aid rules should prioritise small cultural actors and shared-use digital systems.

Embed Culture in AI and Digital Policy Debates – Support cultural institutions in using immersive media to communicate the ethical dimensions of AI, climate change, and democratic resilience, as demonstrated in Athens. Such work should inform EU debates on responsible technology and digital rights.

Artcast4D showcases that immersive culture, when open, participatory and purpose-driven, can strengthen Europe's digital transition, artistic diversity, and social resilience. By scaling these good practices and embedding them into policy, the EU can unlock the full creative potential of its different cultural and creative ecosystems.

Artcast4D's Lessons Learned & Key Policy Recommendations

Artcast4D is more than a research and innovation project, it's a glimpse into the future of cultural participation in Europe. By bringing immersive, interactive technologies into public spaces, the project reimagines how citizens engage with culture, while empowering small and medium-sized creative actors. Pilots across France, the UK, Spain, and Greece served as vibrant testbeds and good practices, revealing practical insights and offering a rich foundation for EU policy development.

Lessons Learned

Technology vs. Interaction Quality – Immersive experiences benefit less from the sheer complexity of technology and more from intuitive and natural interaction modes. Installations employing motion detection, pose recognition, and touch interfaces proved most effective in enhancing user engagement. Structured onboarding processes, preparing users and managing their expectations, significantly increased interaction quality, demonstrating that user experience design is paramount to immersive technology's success.

Interdisciplinary Collaboration – Effective immersive projects thrive when integrating creatives, technologists, curators, and user experience experts early in the design process. This interdisciplinary and iterative approach ensures richer, more engaging cultural experiences.

Open-source and Modularity – Artcast4D's open-source, modular framework proved essential in fostering innovation and sustainability. Allowing third-party adaptation

and extension facilitated broader adoption and scalability, particularly beneficial for small and medium-sized cultural actors lacking extensive resources.

Overcoming Structural Barriers – Despite growing demand, immersive technologies face structural challenges including digital skills gaps, perceived complexity, and financial constraints. These barriers disproportionately affect smaller actors and independent artists. Addressing these through targeted investment in skills and affordable, scalable technology is critical for inclusive sector growth.

Social and Economic Inclusion – Artcast4D successfully demonstrated immersive technologies' potential in promoting cultural inclusion, citizen engagement, and socioeconomic sustainability. Immersive experiences in public spaces effectively attracted diverse audiences, encouraged active participation, and fostered a sense of community and social cohesion.

Key EU Policy Recommendations from Artcast4D

To build on Artcast4D's insights, the following strategic EU policy actions are recommended:

Institutionalise Open-Source Immersive Frameworks – Establish EU-wide standards for open-source immersive technologies to enhance interoperability, accessibility, and collaboration across cultural sectors. These standards should integrate clearly defined modules enabling rapid adoption and extension by cultural and creative SMEs.

Strengthen Immersive Skills in Cultural Education – Embed immersive technology training into cultural education initiatives through Erasmus+, Creative Europe, and the European Skills Agenda. Targeting digital literacy and technological skills in cultural education can close the existing digital skills gap and foster innovation.

Create Regional Immersive Innovation Hubs – Support the establishment of regional immersive innovation labs and mobile digital units, especially in underserved regions. These hubs can act as centres for cross-border collaboration, experimentation, and skills development, mirroring successful practices seen in the Artcast4D pilots.

Through strategic implementation of these recommendations, the EU can leverage immersive technologies to revitalise cultural experiences, empower creative SMEs, and enhance Europe's digital and cultural sovereignty. Artcast4D provides an innovative framework on how culture, technology, and policy can collectively shape a vibrant, inclusive, and resilient future across Europe.

Promote Participatory Digital Culture – Fund and encourage digital co-creation initiatives transforming audiences from passive consumers to active participants and co-creators. Such initiatives strengthen democratic engagement, community cohesion, and cultural participation, aligning with broader EU cohesion and democracy-enhancing strategies.

Structural Financial Investment – Include immersive technologies within structural funding programmes, prioritising financial support for cultural SMEs and ensuring affordable access to immersive infrastructures. Public procurement and state aid guidelines should facilitate easy acquisition of shared-use immersive technology.

Integrate Culture into AI and Digital Policy Debates – Position cultural institutions and immersive experiences centrally within EU digital and AI policy frameworks. Encourage cultural institutions to utilise immersive media to communicate complex policy challenges around AI ethics, digital rights, and environmental sustainability, thereby enriching public understanding and democratic dialogue.

Encourage Inclusive Leadership and Diversity – Adopt policies addressing gender imbalances and fostering inclusive leadership within immersive technology projects. Inclusive representation ensures cultural relevance and broad-based societal impact.

How to Become an Early Adopter

Who is this for?

SMEs, museums, regional authorities, CCIs, artist collectives, cultural event organizers.

Step-by-Step Guide

Visit www.artcast4d.eu/participate and register for updates or join the Discord/Google group.

Download and experiment with AAASeed open-source platform

Sign up for Artcast4D training modules and workshops.

Participate in the pilot demonstrators and the expanding affiliates network.

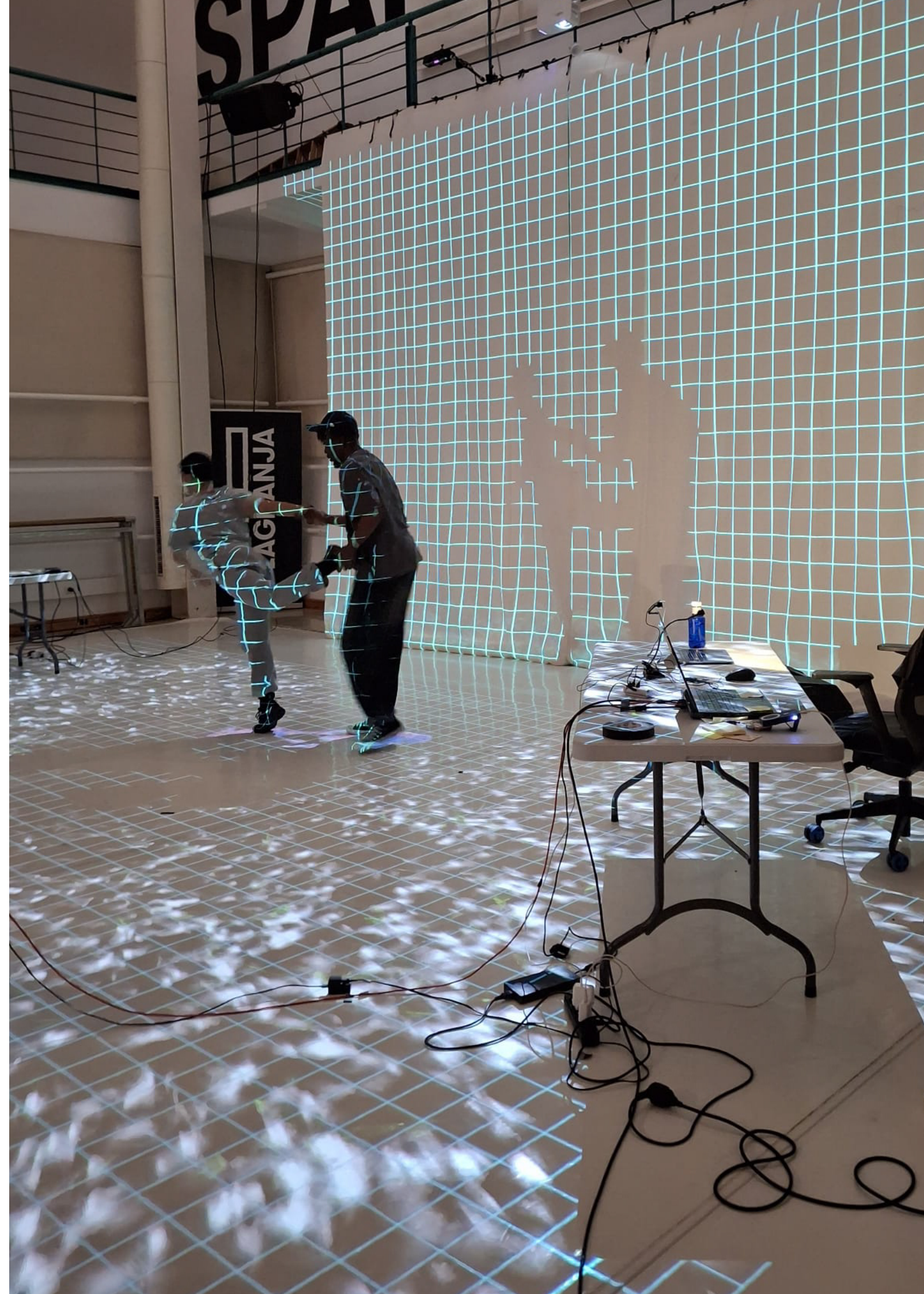
Share feedback, help co-develop modules, and present your use case as a model for others.

Benefits for Early Adopters

Shape the platform's future.

Access to exclusive training, events, and network opportunities.

Direct support from the Artcast4D team.



Looking Forward

Lessons Learned

Artcast4D has demonstrated that immersive technologies are not a luxury, but a necessity for the future vitality of Europe's Cultural and Creative Industries (CCIs). As Europe faces the intertwined challenges of digital transformation, green transition, and social cohesion, immersive technologies offer a powerful, accessible, and human-centred solution, especially when rooted in open-source principles and tailored to the needs of small and medium-sized cultural and creative actors.

By integrating digital and immersive creativity into public life and empowering creators and citizens alike, Artcast4D has laid the groundwork for a new European approach to cultural participation: one that is inclusive, collaborative, and future ready.

Over the course of four dynamic pilots across France, the UK, Spain, and Greece, Artcast4D provided living labs to test the potential of immersive technologies in diverse urban, educational, artistic, and community contexts. These pilots not only showcased the versatility of Artcast4D's open-source software, AAASeed, but also underscored how modular, low-cost immersive tools can empower smaller cultural and creative actors to innovate, co-create, and engage audiences in new ways.

In Issy-les-Moulineaux (France), the Citizens' Engagement pilot illustrated how immersive experiences can become tools for civic dia-

logue and public expression. "Fresco" turned a central square into a collective artwork responsive to movement, involving over 4,000 participants. "Cartomaton" merged personal identity and heritage through playful face-mapping, while "Mirror Cities" enabled

“*the Citizens' Engagement pilot illustrated how immersive experiences can become tools for civic dialogue*”

real-time visual dialogue between Issy and its UK twin, Hounslow. "Issy Mix" projected young visitors' artwork in real time, blending education, creativity, and celebration through an engaging immersive installation. These immersive installations proved that immersive experiences could foster urban inclusivity, cross-border connection, and wide-scale cultural participation when supported by intuitive interfaces and accessible tools.

In Hounslow (UK), the Art in Public Spaces pilot offered a broad canvas for experimentation across disciplines and settings. From motion-triggered exhibitions like "The Pillars of Our Latex House", to student-driven installations such as "AAAMaze", and immersive installations like "Insectotropics", and "More Than Human", the pilot demonstrated how immersive experiences can amplify artistic free-



dom and transform the relationship between art, space, and audience. With over 3,300 participants, including young people and university communities, Hounslow became a good practice for regional cultural empowerment, highlighting how mobile and adaptable immersive units can bridge gaps between institutions, artists, and the public.

The Innovation in Art and Experience pilot in Valencia (Spain) focused on the intersection of dance, digital media, and critical reflection. Within the Espai LaGranja cultural centre, choreographers explored identity, surveillance, and embodiment through immersive performance. “TEK-NET” and “Contra Centro” exemplified how immersive technologies can act as tools of both creative training and social critique. Although smaller in scale (90 participants), this pilot revealed that professional artists can harness open-source tools to craft high-quality, sensory-rich works, encouraging experimentation without dependency on high-end proprietary systems.

Athens (Greece) brought a policy and philosophical dimension to immersive culture through its Wisdom Tourism pilot. “Artificial Superintelligence: Human Well-being and the Decision-Making Dilemma” invited over 1,400 visitors to handle ethical questions around AI and society in a multisensory immersive experience. By merging intangible heritage with future-facing debates, the Athens pilot demonstrated how immersive culture can elevate public understanding of complex po-

licy issues. It also affirmed the role of cultural institutions in using immersive tools to foster critical reflection and participatory learning.

Through its innovative pilots, Artcast4D provided a tangible proof of concept: immersive installations can be modular, affordable, inclusive, and impactful. Whether revitalising public spaces, fostering co-creation between artists and citizens, or framing complex policy debates in emotionally engaging formats, Artcast4D has shown that immersive culture can transcend technical novelty and deliver meaningful, participatory experiences.

Moreover, Artcast4D’s commitment to open-source development was pivotal. By releasing AAASeed as a modular, scalable software, the

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It also affirmed the role of cultural institutions in using immersive tools to foster critical reflection and participatory learning.

”

project created a digital common that smaller CCIs, artists, educators, and cultural organisations across Europe can adopt and adapt. This supports the EU’s broader goal of reducing strategic dependency on proprietary tech, while encouraging a decentralised innovation ecosystem rooted in cultural sovereignty.

“

The EU can unlock the creativity, competitiveness, and cohesion its societies need.

”

Notably, Artcast4D responded to structural barriers, such as skills gaps, limited infrastructure, and financial constraints, faced by many cultural and creative SMEs. By developing an all-in-one solution suitable for both indoor and outdoor use, and by ensuring low energy consumption and minimal installation requirements, the project presented a sustainable model that aligns with Europe’s environmental and digital transition agendas.

The policy implications at EU level are clear. If immersive technologies are to fulfil their potential as a driver of innovation and growth, EU frameworks must embed them across funding, education, and regulation. This includes:

Investing in immersive infrastructure through structural funds and public procurement favouring shared-use and scalable digital systems.

Embedding immersive literacy and skills in cultural education via Erasmus+, Creative Europe, and the European Skills Agenda.

Supporting regional immersive living labs and mobile units, particularly in underserved regions, to stimulate local innovation and cross-border collaboration.

Promoting participatory digital culture, empowering citizens to co-create and interpret content, enhancing democratic and cultural resilience.

Integrating cultural and creative voices in AI and digital policy debates, using immersive tools to translate abstract ethical dilemmas into public experiences.

Ensuring inclusivity, by fostering gender-balanced leadership and diverse representation within the immersive tech landscape.

In essence, Artcast4D has not only developed open-source tools for cultural and creative actors alike, but it has also redefined the terms of engagement between culture, technology, and society. It has empowered creators and communities, challenged outdated models of cultural production, and offered a replicable, policy-aligned ecosystem for immersive innovation for the Cultural and Creative industries. In conclusion, Artcast4D has demonstrated that immersive technologies are not a niche experiment, but a strategic asset for Europe’s cultural and economic future. By scaling good practices and embedding them in EU policy, the EU can unlock the creativity, competitiveness, and cohesion its societies need. Europe’s creative future lies not only in the next app or algorithm, but in the power of immersive technologies to reconnect people with place, heritage with innovation, and creators with communities. Artcast4D demonstrates that with the right support, small and medium-sized CCIs can lead this transformation.

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Deliverables D1.2 Original comparative study; D1.3 Interdisciplinary analysis on immersive technologies; D1.4 Opportunities and challenges of immersive technologies.

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