CULTURATI

Deliverable D1.7 – Impact Report 1

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1

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Short Description	Impact Report 1 highlights the initial outcomes of the CULTURATI project, focusing on cultural heritage engagement, stakeholder involvement, and technological implementation. It outlines key achievements, challenges, and the project's early impact on user experiences, collaborations, and policy discussions.

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20 January 2025	Draft 0.1	Eda Gürel	First version
12 February 2025	Final 1.0	Eda Gürel	Revised after review

Executive Summary

This document presents an overview of the progress made towards delivering impact within the CULTURATI project. It assesses the project's advancements and contributions across multiple dimensions, including scientific, economic, technological, and societal impact, as well as its broader influence on industry and sustainability.

The report is structured into key sections:

- **Scientific Impact**: Examining the project's contributions to research and knowledge generation, including advancements in cultural heritage engagement, innovative methodologies, and interdisciplinary collaborations.

- **Economic and Technological Impact**: Highlighting the role of CULTURATI in fostering innovation, supporting digital transformation, and creating economic value through new business models and technological solutions.

- **Societal Impact**: Assessing how the project enhances cultural participation, accessibility, and awareness, while strengthening community engagement and fostering inclusive heritage experiences.

- **Other Impacts (Industry, Society, and Sustainability)**: Evaluating the broader implications of the project, including its influence on policy, industry practices, and sustainable heritage management.

- **Monitoring and Evaluation Strategy**: Outlining the approach used to track project progress, measure impact, and ensure continuous improvement. This includes key performance indicators, data collection methods, and assessment frameworks that provide insights into the effectiveness of project activities.

This report serves as a foundation for measuring ongoing impact and guiding future actions to maximize the long-term benefits of the CULTURATI project.

Table of Contents

1. Introduction

The CULTURATI project aims to enhance cultural heritage engagement through innovative technologies and interdisciplinary collaboration. This **Impact Report 1** provides an overview of the project's progress in delivering measurable impact across scientific, economic, technological, and societal dimensions. By assessing key achievements, challenges, and contributions to industry and sustainability, the report highlights CULTURATI's role in shaping the future of cultural heritage experiences. Additionally, it outlines the **Monitoring and Evaluation Strategy**, ensuring that project outcomes are effectively tracked and continuously improved. This document serves as a foundation for understanding CULTURATI's impact and guiding its future direction.

2. Progress towards Delivering Impact

Before detailing the specific impacts of the CULTURATI project, this section provides an overview of the progress achieved in alignment with the project's objectives. It highlights key milestones and accomplishments across various work packages (WPs), including the development and validation of innovative technologies such as AI, stakeholder engagement initiatives, and dissemination efforts. This foundation sets the stage for analyzing CULTURATI's broader scientific, economic, societal, and industrial impacts.

Objectives

The CULTURATI project is driven by the following core objectives:

- Establish an inclusive cultural and educational ecosystem by actively engaging Cultural and Creative Industries (CCIs), stakeholders, and citizens.
- Design, test, and validate an innovative digital platform that leverages advanced technologies to create and disseminate content related to cultural heritage and the arts across Europe.
- Enhance visitor experiences through customized games and interactive routes, utilizing AI and sensor-based technologies to manage visitor flow and provide personalized content.

Addressing Specific Needs

The project addresses several critical challenges within the CCIs:

- **Resilience of Cultural Sectors**: Strengthening the capacity of CCIs to adapt and recover in the post-COVID-19 landscape.
- **Personalized Experiences**: Equipping CCIs with tools to deliver tailored cultural experiences to users.

- **Visitor Management**: Implementing carrying capacity strategies to safeguard cultural resources and optimize visitor numbers.

- **Accessible Knowledge Dissemination**: Providing cost-effective digital solutions for sharing cultural heritage, artistic content, and values.

- **Encouraging Repeat Engagement**: Developing strategies that foster return visits through distinctive and engaging experiences.

Target Groups

CULTURATI actively engages various stakeholders, including:

- **CCIs, Creative Professionals, and Citizens**: Facilitating knowledge-sharing and content dissemination.

- **Cultural Heritage and Arts Consumers**: Engaging end-users of the CULTURATI platform.

- **Local Authorities and Communities**: Collaborating with regional stakeholders to ensure widespread adoption.

- **Scientific and Academic Communities**: Fostering broader societal and research-driven engagement.

Expected Outcomes

The anticipated outcomes of CULTURATI's implementation include:

- **Increased Participation**: Expanding the network by incorporating five additional sites and onboarding 60 new CCIs, creative professionals, and citizens.

- **Enhanced Digital Engagement**: Achieving a 15% increase in social media traffic for each pilot site.

- **User Growth and Retention**: Expecting two out of five new users to join based on recommendations and one out of five to revisit within a year.

- **Economic Impact**: Projecting a 25% increase in secondary spending through optimized and personalized experiences.

Achievements

1. **Project Management and Coordination (WP1):**
    - The CULTURATI project received positive feedback from the European Commission during the M15 Project Review, acknowledging the project's progress and successful implementation of planned activities. Additionally, all

deliverables for the stated term were accepted, reflecting the consortium's dedication and the project's strong alignment with its objectives.

2. **Development of Technologies (WP2)**

- Successfully completed the development and initial testing of the global content platform and its web applications.

- Delivered Prototype v1 in M15 and Prototype v2 in M23, which is under enhancement with AI-driven content management and personalized visitor experiences. For further details, please refer to **Deliverable D2.7 Implementation of the Service Platform and Delivery (Prototype v.1), Deliverable D2.8 Improved Version of the Service Platform (Prototype v.2), Deliverable D3.6 System Verification and Prototype v.1.**

3. **Testing and Validation (WP3)**

- Completed a stakeholder analysis, forming a National Consortium/Network at two pilot locations in Türkiye including Ankara Citadel and İstanbul Rahmi M. Koç Museum and identifying content creators based on this analysis. For further details, please refer to **Deliverable D3.1 National Consortium/Network Report – Türkiye.**

- Conducted user trainings and content creation at pilot sites, including Ankara Citadel and Istanbul Rahmi M. Koç Museum. For further details, please refer to **Deliverable D3.3 Training Report – Türkiye.**

- Each pilot site in Türkiye generated over 2,000 content pieces using the CULTURATI platform. For further details, please refer to **Delievarable D3.4 Content Report 1.**

- Conducted prototype v.1 testing at these sites and collected feedback from experts, visitors, and partners to refine the system. A total of over 35 interviews were conducted, and 900 surveys were collected using the System Usability Scale (SUS). For further details, please refer to **Deliverable D4.4 Research Report 1.**

- Developed Prototype v2 based on insights from testing. The new version of CULTURATI was released in M23 for further testing and optimization. For further details, please refer to **Deliverable D2.8 Improved Version of the Service Platform (Prototype v.2), Deliverable D4.10 System Verification and Prototyping v.2.**

4. **Conceptual Model Development and Stakeholder Engagement (WP4)**

- Completed a stakeholder analysis, establishing a National Consortium/Network across all pilot locations, including those in Europe—Ascoli Satriano (Italy), Porvoo (Finland), and Blenheim Palace (UK)—and identified content creators based on this analysis. For further details, please refer to **Deliverable D4.1 National Consortium/Network Report – Europe.**

- Finalized the conceptual model to measure visitor learning, engagement and satisfaction with CULTURATI, which was published on *As Predicted*. For further details, please refer to **Deliverable D4.4 Research Report 1**.

- Finalized the survey instrument after obtaining ethics approval from Bilkent University Ethics Committee. It can be accessed at https://culturati.eu/survey/

- Presented the conceptual framework at an international conference, highlighting the theoretical foundation and expected impact of CULTURATI. For further details, please refer to **Deliverable D4.4 Research Report 1.**

- Provided training sessions and materials, enabling initial content creation at pilot sites. For further details, please refer to **Deliverable D4.2 Training Report – Europe.**

- Generated over 8,500 content pieces for the CULTURATI platform by M24. For further details, please refer to **Deliverable D4.3 Content Report 2.**

- Conducted pilot tests in M23 at all pilot locations and collected over 500 surveys utilizing the survey instrument of CULTURATI. Data collection will continue until the end of the project. For further details, please refer to **Deliverable DD4.4 Research Report 1.**

5. **Integration of AI (WP5)**

- Completed data preparation for AI-driven tools.

- Integrated initial AI modules for content categorization and question generation.

- Developed the AI model repository and initiated work on transformative and recommendation AI toolboxes.

- Development of AI will continue until the end of the project.

6. **Dissemination, Exploitation, and Communication (DEC) (WP6)**

- Established and maintained effective communication channels for seamless internal collaboration.

- Shared project progress through national events, newsletters, explainer videos, and DEC videos, ensuring broad outreach via targeted social media, partner networks, and the project website.

- Published key outputs and deliverables, including training materials and operational guidelines, making them widely accessible on the project website and social media platforms. For further details, refer to **Deliverable 4.8 Midway Dissemination Report**.
- Organized workshops, public talks, and national events to engage users and stakeholders.
- Presented CULTURATI at two international conferences (one presented the conceptual model), contributing to open science and ensuring broad dissemination and impact.

2.1. Scientific Impact

The CULTURATI project is advancing scientific understanding of how digitalization influences user satisfaction, learning, engagement, and other beneficial outcomes in cultural heritage and the arts. The key scientific contributions include:

- **Advancing Scientific Knowledge**: A core objective of CULTURATI is to examine the impact of digital tools on end-user experiences with cultural heritage. To achieve this, we have incorporated insights from multiple social science disciplines and finalized a conceptual model designed to collect user data. This model was presented at the International Conference MTCON 2024 and shared on *As Predicted*. Additionally, it serves as a standardized evaluation instrument to assess visitor experiences and outcomes at pilot sites, creating a foundation for future research. The model's adaptability allows it to be applied to other cultural heritage sites, expanding its relevance and utility beyond the project.

- **Integration of AI and Machine Learning**: The project leverages AI-driven technologies to enhance knowledge curation and educational engagement within cultural experiences. AI modules have been developed for content categorization, question generation, and visitor flow management, enabling a more personalized and interactive experience. This integration not only enhances visitor engagement but also establishes a benchmark for AI applications in cultural heritage, demonstrating its potential to transform the accessibility and appreciation of cultural knowledge.

- **Research Publications and Conferences**: The project aims to produce two peer-reviewed journal publications, two book chapters, and five conference presentations. To date, CULTURATI has been presented at two international conferences (M9 and M15), with one including the publication of a summary of our presentation in the conference proceedings.

Additionally, a conference presentation is scheduled for M30, and one peer-reviewed journal publication is currently under revision.

- **Training the Next Generation of Researchers**: CULTURATI has expanded its research team beyond initial expectations, now involving seven research students across multiple institutions (Bilkent Universitesi Vakif (BU), Oxford Brookes University(OBU), NIMBEO, Universidad Carlos III de Madrid (UC3M), and Universita Degli Studi di Foggia (UNIFG)), surpassing the original plan of three students. This expansion reflects the project's commitment to fostering interdisciplinary research and expertise in AI and social sciences.

  - **Artificial Intelligence Specialization**: One student at BU is focusing on AI, specifically working on algorithm development for question generation for the games of CULTURATI. This hands-on involvement equips them with expertise in AI and machine learning, preparing them for advanced research and professional opportunities in the field.

  - **Contributions from Computer and Social Sciences**: The remaining students are divided between computer sciences (UC3M, NIMBEO) and social sciences (UNIFG, OBU). Computer science students enhance the technological aspects of the project, while social science researchers contribute to conceptual model development and evaluation frameworks. They apply qualitative and quantitative research methods to assess the impact of digitalization on user engagement with cultural heritage.

By integrating students from diverse disciplines, CULTURATI ensures a comprehensive, interdisciplinary approach to research, fostering the next generation of scholars skilled in AI, digital heritage, and user experience analysis. This interdisciplinary training approach enhances the depth of research while promoting cross-sectoral collaboration and innovation in the cultural heritage domain.

2.2. Economic and Technological Impact

The CULTURATI project seeks to drive economic growth and technological innovation by opening new markets and advancing digital solutions in cultural heritage management. Key impacts include:

- **Expanding the Market for IoT and AI**: A major economic impact of the project is the creation of a new market for IoT and AI-driven optimization technologies. By integrating these technologies into cultural heritage sites, CULTURATI generates demand for IoT solutions that improve visitor flow management and user experience enhancement. These advancements not only benefit the cultural sector but also create opportunities for technology developers

and service providers. The deployment of AI-powered IoT systems enables real-time optimization of visitor distribution, preventing overcrowding, enhancing safety, and improving operational efficiency. As these technologies prove effective at pilot sites, the potential for their scalability and adoption in other cultural and commercial sectors increases, driving broader economic and technological progress.

- **Development of an AI Recommendation Engine**: One of the project's key technological advancements is the creation of an AI-powered recommendation engine designed to curate and personalize content for visitors. Unlike conventional systems, this advanced AI engine analyzes user preferences, behavior, and contextual data to deliver tailored cultural experiences. This level of personalization enhances visitor engagement, increasing the likelihood of repeat visits and positive word-of-mouth promotion. The real-time adaptability of the AI system sets a new benchmark for personalized cultural experiences, making it a valuable tool for cultural heritage sites. Furthermore, by demonstrating the effectiveness of this technology, the project can facilitate its adoption in other sectors, including education, tourism, and entertainment, expanding its overall economic and technological impact.

The CULTURATI project is positioned to generate substantial economic benefits for cultural sites, local communities, and regional economies by increasing visitor numbers and encouraging repeat visits. While the full extent of these benefits is still being assessed, initial observations from the two pilot sites in Türkiye—Ankara Citadel and Istanbul Rahmi M. Koç Museum—suggest promising potential. The project aims to:

- **Drive Economic Growth**: By attracting more visitors and encouraging return visits, cultural heritage sites stand to increase revenue through admission fees, guided tours, and related tourism services. Enhanced visitor experiences are expected to boost overall tourism appeal, benefiting the local economy and supporting site maintenance and regional development.

- **Foster New Business Opportunities**: The project has the potential to stimulate entrepreneurship and support local economies by driving increased foot traffic to cultural heritage sites. This surge in visitors can create new business opportunities for local artisans, craft producers, and small businesses, strengthening the CCIs. Additionally, increased engagement in cultural tourism can contribute to the preservation of local heritage and artistic traditions, ensuring long-term sustainability.

Preliminary observations from the pilot sites in Türkiye suggest that the CULTURATI project has the potential to support economic growth. As the initiative progresses and technologies are further

developed and implemented, these economic impacts are expected to become more pronounced. Through scalable and sustainable solutions, the project demonstrates its long-term value for the cultural heritage sector, local economies, and technological advancement.

2.3. Societal Impact

The CULTURATI project is committed to generating meaningful societal impact by promoting inclusivity, education, and engagement with cultural heritage and the arts. The platform is designed to enhance accessibility and awareness, particularly among diverse and underrepresented groups. While the full extent of the societal impact is still unfolding, early activities and findings suggest promising outcomes in the following areas:

- **Enhancing Accessibility and Awareness**: The CULTURATI platform leverages digital tools and technologies to improve access to cultural heritage and the arts, enabling a broader audience to engage with and appreciate historically significant sites. This increased accessibility is particularly important for individuals who may otherwise have limited opportunities to experience cultural heritage, thereby widening participation and cultural appreciation.

- **Engaging Diverse Communities**: One of CULTURATI's key objectives is to involve diverse groups, including young people, minorities, and disadvantaged communities, in content creation and dissemination. By providing these groups with opportunities to contribute, CULTURATI fosters a democratized approach to cultural heritage, ensuring that multiple perspectives and voices are represented. This inclusive engagement not only enriches platform content but also empowers communities to take an active role in preserving and promoting their cultural heritage.

- **Enhancing Educational Experiences**: CULTURATI incorporates customized games and interactive routes to make learning about cultural heritage engaging and immersive, particularly for younger audiences. By using personalized, interactive experiences, the platform increases engagement and interest, fostering a lifelong appreciation for history and culture. Additionally, data collected from users based on our conceptual model will help measure learning perceptions and outcomes, providing insights into how effectively the platform enhances education.

- **Promoting Socio-Cultural Development**: By engaging local communities in the preservation and promotion of their cultural heritage, CULTURATI contributes to socio-cultural development. The involvement of local stakeholders in content creation fosters a sense of

pride, ownership, and responsibility for cultural preservation. This community-driven approach ensures that cultural heritage remains relevant and valued for future generations.

As the project progresses, these societal benefits are expected to become more pronounced, further demonstrating the platform's impact in enriching cultural heritage, fostering engagement, and ensuring accessibility for all.

2.4. Broader Impacts: Industry, Society, and Sustainability

The CULTURATI project aims to drive significant advancements in the cultural sector by integrating innovative technologies and improving operational efficiencies. This approach not only enhances the management of cultural heritage sites but also equips local stakeholders with valuable skills and knowledge, fostering a sustainable and impactful cultural ecosystem. Key impacts include:

- **Enhancing Content Dissemination**: CULTURATI's training sessions have been instrumental in developing content creation skills among local stakeholders, including entrepreneurs. These sessions have not only improved their ability to contribute to the CULTURATI system but have also deepened their appreciation of cultural heritage. By facilitating the creation and global dissemination of high-quality digital content, the project is increasing accessibility and enriching the representation of sites such as Ankara Citadel, Provoo and Ascoli Satriano in the digital space.

- **Promoting Cultural Tourism**: The content generated through CULTURATI serves both as an educational resource and a promotional tool for cultural heritage sites. By enhancing their digital visibility, the project aims to increase tourist interest and encourages visits. This not only drives economic benefits for local communities but also supports cultural preservation through sustainable tourism practices.

- **Leveraging Social Media for Outreach**: CULTURATI has effectively used social media to extend its reach to a diverse audience, raising awareness of pilot sites, cultural heritage, and the project's objectives. By involving all partners and their networks, the project has ensured that its messages are widely and effectively disseminated, engaging both local and international audiences.

- **Building Collaborative Networks**: One of the key achievements of CULTURATI has been the formation of collaborative networks involving local citizens, academics, students, and entrepreneurs. These networks foster a sense of community and cooperation, serving as sustainable support structures for ongoing and future activities. This approach promotes

long-term engagement and ensures shared responsibility in the preservation and promotion of cultural heritage.

- **Uncovering Hidden Cultural Narratives**: The CULTURATI platform has provided local content creators with a medium to share their heritage, uncovering and documenting unique cultural stories that might otherwise have been lost. By involving local voices, the platform has captured and preserved rich cultural narratives, ensuring that future generations can access and appreciate these insights. The personal contributions of local creators have added authenticity and depth to the content, making it a genuine reflection of community heritage while also empowering local participants to take an active role in cultural preservation.

- **Rediscovery and Enhanced Appreciation of Cultural Collections**: Content creation within the CULTURATI platform has involved detailed artifact classification, question-and-answer generation, and engagement level structuring for visitors. This process has prompted a thorough re-examination of collections at sites such as the Istanbul Rahmi M. Koç Museum and Blenheim Palace, leading to new discoveries and deeper contextual understanding of historical artifacts. Curators at these institutions have gained fresh perspectives on their collections, framing them within new themes and narratives. This approach has enriched the visitor experience, offering more engaging and comprehensive interpretations, while also fostering a renewed sense of pride and purpose among museum staff.

As CULTURATI progresses, these broader impacts on industry, society, and sustainability are expected to grow, further demonstrating the project's value in cultural preservation, education, and economic development.

3. Monitoring and Evaluation Strategy

To ensure effective monitoring and evaluation of the CULTURATI project, we have established clear baseline conditions and measurable targets aligned with the project's objectives. These benchmarks focus on technological development, user engagement, and content creation, providing a structured approach to tracking progress.

To assess success, we have defined Key Performance Indicators (KPIs) and milestones, which serve as systematic tracking mechanisms to ensure alignment with CULTURATI's overall goals. These indicators offer a comprehensive framework for measuring impact across various domains, allowing us to evaluate progress and make necessary adjustments to stay on course toward achieving the

project's intended outcomes. The following tables present the KPIs and milestones relevant to this reporting period, along with their achievement levels.

Table 1. List of KPIs

KPI number	KPI name	Related work package(s)	Due date (in month)	Description	Status
KPI 1	Up-take by CCIs, creative professionals, and citizens	All WPs	M1-M36	Dissemination activities will be designed in a way to increase acceptance by the stakeholders. We aim to have five sites and 60 more CCIs, creative professionals, and citizens join CULTURATI other than the ones initially involved in the project.	We have already started engaging stakeholders, with five interested sites and a growing number of content creators expressing their commitment to the initiative.
Part of KPI2	Data Collection 1	WP2	M13, M15	At Stage ONE, collecting 1600 questionnaires and 80 interviews at two pilot sites in two waves in M13 and M15 from the end-users in Turkey	Due to delays in technology development, data collection for Stage ONE began in M16 instead of the originally planned M13. As part of Stage ONE, 39 interviews have been conducted, and more than 900 surveys have been collected. Data collection will continue until the end of the project.
Part of KPI2	Content Creation 1	WP3	M10-M12	At Stage ONE, each pilot site is responsible for initially creating 1000 content on the system between M10-M12. They will continue to create another 1000 (KPI) during the project. In total, 2000 will be created between 10M and 12M by RMK and AG. While RMK will be responsible for creating content for the museum, AG will be responsible for communication and coordinating CCIs, creative professionals, SMEs, and citizens to create content for Ankara Citadel. To this end, AG will identify and select 20 individuals.	Achieved.
Part of KPI2	Content Creation 2	WP4	M1-M36	Each site is responsible to create 1000 content on the system initially between M13-M15. During the project, they will continue to create another 1000 with the ultimate goal of reaching 10,000 content pieces.	As of M24, a total of 8,500 content pieces have been successfully created on the platform.
KPI 7	Scientific Publications 1	All WPs	M1-M36	During the project, team members of CULTURATI will attend five academic conferences and publish two articles in SSCI	We have already attended two international

				journals and two book chapters.	conferences, and in one of these, the summary of our presentation will be published in the conference proceedings. Additionally, one SSCI journal article is currently under revision.
KPI 9	Social Media Posts	WP6	M1-M36	All partners will make a social media post two times a month. The number of social media posts will be minimum 720 during the project.	427 posts on the dedicated social media platforms of CULTURATI in M24, excluding partner posts on their own channels.
KPI 10	Publication of Deliverables	WP6	M1-M36	All deliverables will be published within two weeks.	Achieved. All deliverables are shared on the website and APERTA so far.
KPI 11	Mass and Digital Media Visibility	WP6	M1-M36	We target to achieve a minimum of six mentions in each country, thus total mentions of 30 during the project.	Achieved for Türkiye; total mentions is 19 excluding BU's channels in M17.
KPI 12	National Events Participant Numbers	WP6	M1-M36	While the target population for the national events is 120, the final demonstration is 200. These national events will be held hybrid to reach a broader international audience.	Partially achieved for the first two events. The first event shad over 100 attendees. The target was fully achieved in the third event in Italy.
KPI 13	Public Lectures	WP6	M1-M36	Public lectures will be given by the consortium partners. The minimum number of these public lectures is 14.	Achieved. The number of public speeches is 26 in M17. We continue to give public lectures across all pilot locations of CULTURATI.
KPI 14	National Events, Workshops and Final Demonstration	WP6	M1-M36	The five lead events (national workshops and final demonstration) of the action research process (see WP6 for details) will be held in months 1 (Ankara, Turkey), 15 (Istanbul, Turkey), 22 (Italy), 29 (Finland), and 36 (the UK).	The first three national events have been held in M2, M15 and M21.
KPI 15	International Fairs	WP6	M1-M36	We will attend at least two international fairs. One of which is going to be ITB Berlin.	Arrangements are currently being made to participate in ITB Berlin 2025.

Table 2. List of Milestones

Milestone number	Milestone name	Related WPs	Due date (in month)	Means of verification	Status
MS1	Data Management and Protection	WP1	3	Data Management Plan will be submitted in M3 and will be handled	Achieved

				by a dedicated member during and beyond the project to protect the data.	
MS2	Implementation of the Service Platform	WP2	12	Pilot testing and system updates will be conducted to successfully implement the platform.	Achieved
MS3	Content on the platform – Turkey	WP3	15	For the system to run and execute its main functions and to deliver Prototype v.1., training and updates will be provided to create content.	Achieved
MS4	Prototype v.1	WP3	15	Pilot tests will be conducted to deliver a successful prototype v.1	Achieved
MS5	Content on the platform – All pilot locations	WP4	24	Training and updates will be provided to have content on the system.	As of M24, a total of 8,500 content pieces have been successfully created.
MS6	Prototype v.2	WP4	24	Tests in operational environments will be conducted to deliver a successful Prototype v.2	Achieved
MS8	DEC Plan	WP6	8	To communicate, disseminate and exploit project's results during the project and beyond to meet the project's objectives.	Achieved

3.1. Monitoring Progress

To ensure effective progress monitoring, CULTURATI has implemented a comprehensive Quality Management Plan, detailed in **Deliverable D1.2 Quality and Risk Management Report**. This plan establishes key processes, roles, and control mechanisms to ensure the project is delivered on time, within budget, and to the highest quality standards.

The key elements of our Quality Management Plan and their role in monitoring progress are outlined below:

1. Quality Management Roles and Responsibilities

- **Project Manager and Coordinator**: Oversees overall project management and coordination, ensuring all activities align with project objectives. In line with this role, **a Technical Guide for Developers** was prepared in M1.

- **Quality Assurance Manager**: Ensures that all deliverables meet the required quality standards as defined **in Deliverable D1.2 Quality and Risk Management Report**, including the Deliverables Acceptance Plan.

- **Executive Committee**: The Executive Committee meets every three months unless a General Assembly is scheduled, in which case the regular meetings are adjusted accordingly. Between M1 and M24, six Executive Committee Meetings have been held (April 2023, July

2023, December 2023, April 2024, May 2024, and November 2024), including an Extraordinary Meeting on 13 May 2024, specifically convened to address delays in technology development. As a result of decisions made during this meeting, a ticketing system was introduced, and the use of GitHub was expanded across all technical teams. Additionally, three hybrid General Assembly meetings have been held, along with an online Extraordinary Assembly meeting.

- **Work Package Leaders**: Responsible for managing specific work packages, ensuring timely task completion and adherence to quality standards. Weekly technical team meetings were held, involving Task Group Leaders.

- **Task Group Leaders**: Lead smaller teams within work packages, overseeing specific tasks and ensuring attention to detail and quality control.

2. Quality Management Objectives

- **Deliverables**: The project is structured around specific deliverables at each stage to ensure progress remains on track and stakeholders are informed.

- **Key Performance Indicators (KPIs)**: A set of KPIs is used to assess project performance, stakeholder satisfaction, and risk management. Regular tracking helps identify areas requiring improvement.

- **Milestones**: Defined milestones guide project development and ensure that potential issues or risks are identified and addressed proactively.

3. Quality Assurance Activities

- **Internal Reports**: Partners submit internal reports every six months, detailing progress, challenges, and necessary adjustments. Between M1 and M24, three internal reports were submitted in addition to the consolidated report for the European Commission Review in M15.

- **Internal Meetings**:
  - Weekly work package meetings led by Work Package Leaders.
  - Due to delays in technology development, the Coordinator introduced additional weekly meetings with technical teams to align efforts and address technical challenges in real-time.
  - All Coordinator-led meetings are recorded, and meeting minutes and Zoom recordings are shared on Moodle, the internal communications hub in the project, for reference.

4. Quality Controls

- **Deliverables Acceptance Plan**: This plan establishes criteria and procedures for the acceptance of project deliverables, detailing review processes, roles, and responsibilities. All deliverables are submitted in accordance with these predefined quality standards. Further details are available in **Deliverable D1.2 Quality and Risk Management Report**.

- **Quality Management Forms and Templates**: Various standardized forms and templates are used to maintain consistency in quality (these templates are available on Moodle, the platform we use for internal communication), including:

  - Quality review checklists
  - Questionnaires (e.g., System Usability Scale at Stage ONE, and the CULTURATI survey instrument in Stages Two and Three)
  - A scheduled quality check in M12 and M24 was later deemed redundant, as weekly technical meetings with the Coordinator and Technical Team Members provided a more effective continuous quality control mechanism.

5. Risk Management

Details on Risk Management are provided in **Deliverable D1.2 Quality and Risk Management Report**. To mitigate delays in technology development, the following actions were taken:

- Risk updates were informed by the Internal Report from IOTIQ in M8.

- The Coordinator traveled to Madrid, Spain (M10) to meet with NIMBEO and UC3M, leading to the implementation of a contingency plan.

- Training for content creation began in M11, with initial content prepared in Excel files in M12. Once the system became operational, this content was quickly integrated into the platform.

- On 29 September 2024, we updated our critical risks once again on Sygma. Some consortium partners expressed concerns regarding the level of effort and contributions from certain other partners. Previously, delays in technology development had resulted in the project being six months behind schedule due to technical challenges. However, with the support of the pilot sites, we successfully recovered three months of the delay.

- The EU Review Report also raised concerns about the chosen technology (Wiki), highlighting potential customization limitations. These concerns were addressed during the General Assembly Meeting in M21, where the performance of all partners was reviewed. During this meeting, Blenheim Palace stated that the current content management platform (Wiki) was not suitable for their needs and requested the development of an alternative platform.

- As a mitigation measure, the technical team decided that a team member should visit Bilkent University Vakıf (BU) from 12-20 October 2024 to work on resolving these issues. Following the decision made during the General Assembly on 3 October 2024, a NIMBEO team member traveled to Bilkent University Vakıf (BU) to resolve technical issues related to the CULTURATI content management platform. For further details, refer to **Deliverable 2.8 Improved Version of the Service Platform (Prototype v.2) and Deliverable D4.10 System Verification and Prototyping v.2.** However, following the visit, some limitations of Wiki persisted, preventing the platform from meeting all requirements.

- As a result, the Innovation Manager of Blenheim Palace took the initiative to develop an alternative content management platform for CULTURATI, completing it within two weeks. The new platform was integrated in close collaboration with IOTIQ, ensuring a seamless transition. By the end of M21, Blenheim's content had been successfully created and integrated into the new system. Additionally, the project coordinator team from Bilkent University visited Blenheim Palace on 28-29 October 2024 and 27 January 2025 to review the developments.

- Stakeholder Engagement and Technical Issues in Porvoo: Workshops have been conducted to increase engagement with the project; however, stakeholder participation challenges have persisted, affecting content creation progress. Despite efforts to involve local professionals, academics, and community members, engagement levels remained lower than anticipated, contributing to delays in achieving content targets. Additionally, technical issues with the Wiki platform further impacted progress. The platform failed to consistently save content as reported by HHU on 22 January 2025, an issue that was later resolved by NIMBEO on 4 February 2025. As a result, the project did not meet its KPI target of 10,000 content pieces by M24. To compensate for these delays, HHU is actively continuing to enter data into the platform while exploring additional strategies to enhance stakeholder engagement and ensure sustained content contributions from the local community.

By implementing these structured monitoring and evaluation measures, CULTURATI ensures efficient project execution, proactive risk mitigation, and high-quality outcomes while remaining aligned with its strategic objectives and long-term impact goals. At critical moments, when challenges arise, the project team prioritizes **face-to-face meetings** to facilitate direct communication, problem-solving, and decision-making. These in-person interactions have proven essential for resolving technical issues, addressing partner concerns, and ensuring alignment among

stakeholders, reinforcing CULTURATI's commitment to collaborative and solution-oriented project management.

3.2. Quantifying Impacts

To ensure the effectiveness and success of the CULTURATI project, we have employed various strategies to quantify its impact. By systematically collecting and analyzing data from multiple sources, we can measure the project's reach, engagement, and overall influence on stakeholders.

1. Interviews with Content Creators

Interviews were conducted at pilot sites to gather insights from content creators regarding their expectations and experiences with the CULTURATI project and platform. These interviews provided valuable feedback and allowed us to:

- **Identify User Needs**: Understand the specific requirements and expectations of content creators.

- **Assess Satisfaction**: Evaluate user satisfaction with the training and tools provided.

- **Gather Constructive Feedback**: Use insights to inform system improvements and further development.

- **Monitor Engagement**: Measure the commitment and participation of content creators in utilizing the CULTURATI platform.

2. Social Media Engagement Analysis

To assess the project's outreach and public engagement, we conducted an analysis of social media interactions, tracking key metrics such as:

- **Likes, Shares, and Comments**: Monitoring social media interactions to gauge audience interest and engagement.

- **Follower Growth**: Measuring the increase in social media followers over time to track the project's expanding reach.

- **Content Reach**: Evaluating how many people are viewing and engaging with CULTURATI content.

3. Newsletter Performance Metrics

To measure the effectiveness of CULTURATI's newsletters in reaching and engaging the target audience, we tracked:

- **Subscription Growth**: Monitoring the increase in newsletter subscribers, reflecting growing interest in the project.

3.3. Synergies with National, Regional, and EU-Level Research & Innovation Initiatives

To maximize CULTURATI's impact and integration, we have actively sought synergies with national, regional, and EU-level initiatives. Our approach includes:

- **Collaboration with Pilot Sites**: Strong partnerships with pilot sites in Türkiye, Italy, Finland, and the UK ensure that the project benefits from regional expertise and resources. These collaborations are essential for the effective deployment and validation of the CULTURATI platform across diverse cultural contexts.

- **Engagement with Local Stakeholders**: We actively engage cultural institutions, policymakers, and community groups to enhance project impact. This engagement, demonstrated through attendance at national events and participation in content creation, ensures that CULTURATI aligns with national initiatives and supports cultural heritage management and digital transformation efforts.

- **Interaction with EU-Level Research & Innovation (R&I) Initiatives**: As CULTURATI progresses, we plan to strengthen engagement with EU-level research frameworks, including participation in EU networks, policy discussions, and strategic collaborations. Aligning CULTURATI's outcomes with broader EU objectives positions the project as a leading example of how digital technologies can transform cultural heritage management across Europe.

3.4. Supervision of Researchers

As planned and led by Oxford Brookes University (OBU), the conceptual model of CULTURATI was finalized with significant contributions from researchers across various social science disciplines. To ensure consistent progress, regular research meetings have been held since M11, facilitating collaborative development and addressing emerging challenges. These meetings also served as documented milestones, tracking both research progress and researcher development.

On May 2, 2024, we presented our conceptual model at the MTCON (Managing Tourism Across Continents) 2024 Conference in Istanbul, highlighting the interdisciplinary collaboration and research efforts behind the project. The conference also featured an Editors Panel, attended by

editors from leading academic journals, including Tourism Management and Annals of Tourism Research.

Furthermore, CULTURATI has actively involved seven research students in different aspects of the project:

- One student at Bilkent University (BU) specializing in AI development.
- Two students at UNIFG and one student at OBU, focusing on various social science aspects of the project.
- Two students at UC3M and one student at NIMBEO, working in computer science.

Their participation has been instrumental in advancing research objectives, ensuring a comprehensive and multidisciplinary approach to the project's goals. To support their development, structured supervision and mentorship are provided, ensuring that their research contributions align with CULTURATI's objectives. This guidance framework guarantees that the research conducted is of high quality and has a meaningful impact on the project. Additionally, both research students from UNIFG participated in the national events at the Istanbul Rahmi M. Koç Museum and Ascoli Satriano in Italy, further enhancing their practical experience and direct involvement in the project.

Conclusion

This report outlines the progress and impact of the CULTURATI project, highlighting achievements in technological development, stakeholder engagement, dissemination, and content creation. Through structured monitoring and evaluation, we have ensured efficient project execution, proactive risk mitigation, and high-quality outcomes, while staying aligned with our strategic objectives.

Significant milestones have been reached, including the development of Prototype v2, integration of AI-driven tools, and the engagement of diverse stakeholders across multiple pilot sites. Our dissemination efforts have successfully extended the project's reach, with increasing interest from new sites and content creators, further reinforcing CULTURATI's potential for long-term impact.

Despite challenges in technology development and platform limitations, proactive measures, including face-to-face meetings at critical moments, have been instrumental in overcoming obstacles. Continued efforts in risk management, stakeholder engagement, and dissemination will further strengthen the project's outcomes.

Moving forward, CULTURATI remains committed to expanding its impact, refining technological solutions, and fostering collaboration across cultural heritage sectors. With ongoing engagement and knowledge-sharing, the project will continue to contribute to the digital transformation of cultural heritage experiences, ensuring accessibility, sustainability, and innovation.