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## Deliverable D1.2 Quality and Risk Management Report

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Short Description	<p>This deliverable includes CULTURATI's Quality and Risk Management Plan as part of its Project Management. It includes project risk assessments and relevant quality-conforming processes; thus, it provides information on the plan, policies, and procedures for quality and risk management. Therefore, it is a reference document for all partners of the project. It is a living document and should be updated throughout the project as the Project Handbook.</p>
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Date	Version	Author	Remarks

8 April 2023	Draft 0.1	Eda Gürel	First version
30 April 2023	Final 1.0	Eda Gürel	Revised after review

## Executive Summary

The Quality and Risk Management Report of CULTURATI aims to guide all project partners and support them in finding relevant information about the project's quality and risk management plan, policies, and procedures. This report is an extension to our Project Handbook for effective project management and includes the project's quality and risk management plan.

Effective project management involves various processes and techniques, from defining project scope to allocating resources and monitoring progress. Two critical aspects of project management that require special attention are quality management and risk management. Quality management is the process of ensuring that the project meets the specified requirements and objectives, while risk management involves identifying potential threats and developing strategies to mitigate or avoid them.

Thus, this deliverable outlines the strategies and processes that will be used to manage quality and risks throughout the project lifecycle. This plan is essential to the project's success, as it helps ensure that the project is delivered on time, within budget, and to the required quality standards.

As the Project Handbook, this deliverable is based on the terms and conditions defined in the Grant Agreement and its Annexes and the specifications set in the Consortium Agreement. However, the quality and risk management plan is a living document and will be updated throughout the project lifecycle. This document is open access on the project's website as the other project deliverables and will be kept up to date.

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## 1. Introduction

Following the PM<sup>2</sup> Project Management Methodology developed by the European Commission, this report aims to provide a comprehensive overview of our project's quality and risk management plan. In this report, first we outline the roles and responsibilities of project stakeholders in implementing the plan and monitoring its effectiveness. Then, we outline the key objectives of the plan, followed by a description of the processes and techniques that will be used to manage quality and risks.

Thus, this report provides a comprehensive overview of our quality management objectives, including the specific deliverables, KPIs, and milestones that have been established for the project. We also discuss the strategies and processes that will be used to manage quality throughout the project lifecycle, and the roles and responsibilities of project stakeholders in achieving these objectives.

By implementing a robust quality and risk management plan, we aim to ensure that our project meets the specified requirements defined as deliverables, KPIs, and milestones, is delivered on time and within budget, and meets or exceeds the expectations of our stakeholders.

## 2. Quality Management Plan

This section will define the quality requirements, the quality management approach, process and responsibilities. We will also outline the quality assurance and control activities that will be undertaken throughout the project. This is a continuous review process to ensure quality in all aspects of the project. As part of our Quality Management Plan, following the PM<sup>2</sup> Project Management Methodology, in the following sections, we cover;

- **Roles and Responsibilities:** The Project Handbook and the Consortium Agreement define and outline the roles and responsibilities of the project organization. In this document, in particular, we define the roles and responsibilities concerning quality management.
- **Quality Management Objectives:** Quality management objectives refer to the effectiveness and efficiency of the goals and targets to achieve project goals. The process involves the development of clear and measurable objectives that align with the overall project defined in the Grant Agreement and with the needs and expectations of stakeholders.
- **Quality Assurance Activities:** Quality assurance activities are essential to ensuring that CULTURATI meets the desired level of quality and conform to established standards and requirements. These activities involve systematically monitoring and evaluating all aspects of processes.

- **Quality Control Activities:** Quality management also concerns with developing and implementing quality control procedures, such as inspection, testing, and verification, to identify and correct defects or non-conformities. While quality control is a reactive approach, quality assurance is a proactive approach for effective quality management.

## 2.1 Quality Management Roles and Responsibilities

This section outlines the specific roles and responsibilities of senior individuals involved in the project regarding the quality management processes. Accordingly, this section includes a description of the roles and responsibilities of the project manager, the quality assurance manager, the work package leaders, and task leaders in relation to quality assurance and the quality control.

This section aims to ensure that everyone involved in the project understands their specific roles and responsibilities regarding quality management processes. By clearly defining these roles and responsibilities, we can ensure that they are working together effectively and efficiently to achieve the project's quality objectives. This, in turn, helps to ensure that the project is completed successfully, within budget, and on time.

For the comprehensive list of all people involved in the CULTURATI project and their roles and responsibilities, see 4. Project Organization in the Project Handbook.

### 2.1.1 Project Manager and Coordinator

The Project Coordinator Bilkent University (BU) handles the Project Management and Coordination. Project Coordinator plans overall project management and execution according to the project's Description of Action and Consortium Agreement. Project quality management is among the roles and responsibilities of the Project Coordinator. In particular, regarding quality management, as defined in Annex 1 of the Grant Agreement, the project coordinator is responsible for ensuring the required quality throughout the project duration.

More specifically, the Project Manager and Coordinator has several responsibilities specific to quality management. These responsibilities include the following;

1. **Defining quality standards and processes:** The Project Manager and Coordinator is responsible for defining the quality standards and processes that will be used throughout the project. This includes establishing quality metrics (in terms of deliverables, KPIs and milestones), identifying quality control activities, and developing a quality assurance plan.

2. Ensuring quality requirements are met: The Project Manager and Coordinator is responsible for ensuring that all quality requirements are met throughout the project. This includes conducting regular quality audits, monitoring quality control activities, and reviewing project deliverables to ensure they meet the required quality standards.
3. Communicating quality expectations: The Project Manager and Coordinator will communicate quality expectations to all stakeholders, including the project team, Executive Committee, and pilot sites. This includes explaining quality metrics and standards, outlining the roles and responsibilities of the quality team, and providing feedback on quality performance.
4. Managing quality risks: The Project Manager and Coordinator will identify and manage quality risks throughout the project. This includes identifying potential quality issues, developing contingency plans, and taking corrective action when necessary.
5. Continuously improving quality processes: The Project Manager and Coordinator will ensure that the quality processes used throughout the project are continuously improved. This includes monitoring quality metrics, analyzing quality data, and implementing process improvements to enhance the project's overall quality.

The Project Coordinator and the Project Manager in CULTURATI is Dr. Eda Gurel.

### 2.1.2 Quality Assurance Manager

As identified in the Grant Agreement, Universidad Carlos III de Madrid; Prof. Juan Miguel Gomez Berbis is responsible for Quality Assurance in the CULTURATI project. In CULTURATI, the Quality Assurance Manager will ensure that the CULTURATI project meets specific quality standards and specifications considering the unique challenges and risks associated with AI development. This will involve developing and implementing project-specific quality control processes, creating and managing quality metrics that align with project goals, and conducting audits to identify areas for improvement. Additionally, the Quality Assurance Manager will collaborate with all project package leaders, stakeholders (research sites), and team members to ensure that quality is integrated into all aspects of the CULTURATI project. This includes defining quality requirements, ensuring the project adheres to industry best practices, and managing quality-related risks. Ultimately, the Quality Assurance Manager will ensure that the project meets or exceeds the quality expectations while remaining within scope, schedule, and budget constraints.

Specific to AI, the Quality Assurance Manager will ensure that the AI system is being developed following ethical principles and industry best practices and that the system produces accurate and

reliable results. Therefore, he will work closely with the development team to define and implement testing protocols that ensure the AI system meets performance and functionality requirements. Additionally, the Quality Assurance Manager will oversee the training and testing data used to develop and test the AI system, ensuring that the data is diverse, representative, and bias-free. He will also ensure that the AI system's decision-making processes are transparent, explainable, and auditable, as this is crucial for gaining user trust and regulatory compliance. Overall, the role of a Quality Assurance Manager of CULTURATI will ensure that the AI system is developed and tested to the highest possible standards and meets the pilot sites' needs and expectations while minimizing risks and potential harm.

### 2.1.3 Executive Committee

The Executive Committee is responsible for the operational activities of the project. Thus, it plays a valuable role in ensuring that a project is successful and meets the project's goals and objectives. By providing high-level guidance and direction to the Project Manager and Quality Assurance Manager, the Executive Committee will help ensure that the project is aligned with the project's strategic priorities and that any issues or conflicts are resolved promptly and effectively. Nevertheless, the Executive Committee of CULTURATI involves the Project Assurance Manager according to the decision of the General Assembly on 7 March 2023.

### 2.1.4 Work Package Leaders

There are seven Work Packages in the CULTURATI project including WP7 Ethics Requirements. Each Work Package has a Work Package Leader responsible for overseeing the activities of a specific work package, which is a subset of the project defined by a set of specific objectives and tasks. The Work Package Leaders are responsible for ensuring that the work package is completed on time, within budget, and to the required quality standards. As such, they have important responsibilities for quality management within their areas of responsibility.

In particular, regarding quality management, Work Package Leaders in CULTURATI are responsible for;

1. Ensuring compliance with quality standards: Work package leaders are responsible for ensuring that the work being performed defined as tasks within their work packages is in compliance with the established quality standards and requirements. This will involve monitoring and controlling the quality of the work being performed, and identifying and addressing any issues or deficiencies in the work.
2. Conducting quality checks: Work package leaders are responsible for conducting regular quality checks to ensure that the work being performed meets the established quality

standards and requirements. This will involve reviewing work products, conducting tests and inspections, and analyzing quality data to identify any issues or trends.

3. Managing quality issues: Work package leaders are responsible for managing quality issues that arise within their work packages, and ensuring that appropriate corrective and preventive actions are taken to address these issues.
4. Reporting on quality performance: Work package leaders are responsible for reporting on the quality performance of their work packages to the Project Manager and other stakeholders. This will involve collecting and analyzing quality data, and preparing reports that summarize the quality performance of the work package and any issues or trends that have been identified.

The CULTURATI project is organized into seven Work Packages with their Work Package Leaders as listed below;

- WP1 Project Management and Coordination, Work Package Leader: BU, Dr. Eda Gurel
- WP2 System Development and Evaluation, Work Package Leader: NIMBEO, Dr. Angel Lagares
- WP3 System Testing and Verification, Work Package Leader: RMK, Ms. Mine Sofuoğlu
- WP4 System Validation and Demonstration, Work Package Leader: BU, Prof. Altay Güvenir
- WP5 AI Integration, Work Package Leader: IOTIQ, Dr. Metin Tekkalmaz
- WP6 Communication, Dissemination and Exploitation, Work Package Leader: TTD, Dr. Julie Scott
- WP7 Ethics Requirements, Work Package Leader: BU, Dr. Eda Gurel

### 2.1.5 Task Group Leaders

The CULTURATI project has 34 Task Groups in six Work Packages (excluding WP7 Ethics Requirements). In project management, a work package is a set of related tasks that are grouped together to achieve a specific objective. A task group is a team responsible for executing a set of tasks within a work package. Quality management is an essential part of project management, and the task groups within work packages have a critical role in ensuring the quality of the project deliverables. Accordingly, the responsibilities of the task group leaders in work packages regarding quality management in CULTURATI involves;

1. Conducting quality assurance activities: The task group leaders must conduct quality assurance activities to ensure that the deliverables meet the quality requirements. This will involve checking that the work is being done according to the quality plan, and identifying any potential issues that could affect the quality of the deliverables.

2. Conducting quality control activities: The task group leaders must also conduct quality control activities to ensure that the deliverables meet the quality requirements. This will involve reviewing the work that has been done, identifying any defects or issues, and taking corrective action to address these issues.
3. Reporting on quality: The task group leaders must report on the quality of their work to the project manager and other stakeholders. This will involve providing regular updates on the quality of the deliverables, identifying any issues that have been identified, and outlining the actions that are being taken to address these issues.

## 2. 2 Quality Management Objectives

After defining the roles and responsibilities in quality management, this section outlines the project team's specific objectives regarding quality management.

Quality management is a critical aspect of any project, as it ensures that the specified requirements and objectives are met and that the project is delivered to the highest possible standard. In line with PM<sup>2</sup> Project Management Methodology, in our project, first of all, we have defined several key quality management objectives that we aim to achieve. These objectives are based on the Work Plan of the project (see 5. Project Planning in the Project Handbook) and its specified work packages and their deliverables, as well as key performance indicators (KPIs), and milestones defined for our project in our project proposal and Grant Agreement.

The primary objective of our quality management plan is to ensure that the project is delivered on time, within budget, and to the required quality standards. To achieve this objective, we have established a set of deliverables that must be met at each stage of our project (see 3.5 Project Timeline and Scope in the Project Handbook) under predefined Work Packages and their specific tasks (see 5.2 List of Work Packages in Project Handbook). These deliverables are designed to ensure that the project is progressing as planned, and that all stakeholders are aware of the project status.

In addition to the deliverables, we have also identified a set of KPIs that will be used to measure the success of the project. These KPIs are based on factors such as project performance, stakeholder satisfaction, and risk management. By tracking these KPIs, we can ensure that the project is meeting its objectives and identify areas that require improvement.

Finally, we have established a set of milestones that must be achieved throughout the project lifecycle. These milestones are designed to ensure that the project is progressing as planned, and that any issues or risks are identified and addressed in a timely manner. By achieving these milestones, we can ensure that the project is on track to meet its objectives and deliverables.

In the subsections below, we will provide a comprehensive overview of our quality management objectives, including the specific deliverables, KPIs, and milestones that have been established for the project.

### 2.2.1 Deliverables

Deliverables are an essential aspect of quality management objectives. In any project, a deliverable is a tangible result or output that is produced and delivered to the client or stakeholders to achieve the overall objectives of the project (see 3. Project Scope and 3.5 Project Timeline and Scope in the Project Handbook). Deliverables can include reports, software applications, design documents, or any other tangible product or service that is produced during the project.

By focusing on deliverables as part of quality management objectives, we will ensure that we will be delivering high-quality products or services that meet the expectations of our stakeholders.

Table 1 List of Deliverables

Deliverable (number)	Deliverable name	Work package number	Short name of the lead participant	Type	Dissemination level	Delivery date (in months)
D1.1	Project Handbook	WP1	BU	R	PU	M2
D1.2	Quality and Risk Management Report	WP1	BU	R	PU	M3
D1.3	Ethics Assessment Report	WP1	BU	R	PU	M3
D1.4	Data Management Plan 1	WP1	BU	DMP	PU	M3
D1.5	Data Management Plan 2	WP1	BU	DMP	PU	M25
D1.6	Training Handbook and Audio- Visuals	WP1	BU	R	PU	M13
D1.7	Impact Report 1	WP1	BU	R	PU	M24
D1.8	Impact Report 2	WP1	BU	R	PU	M36
D2.1	System Design and Specification	WP2	IOTIQ	R	PU	M4
D2.2	System Architecture Design and Specification	W32	IOTIQ	R	PU	M7
D2.3	System Components Design and Specification	WP2	NIMBEO	R	PU	M7
D2.4	Data Source Identification, Data Requirements and Data Lake Design and Specification	WP2	IOTIQ	R	PU	M13



D2.5	Third Party Systems Specification	WP2	UC3M	R	PU	M16
D2.6	UX, Real User Tests, and User Guidelines Specification Report	WP2	NIMBEO	R	PU	M16
D2.7	Implementation of the Service Platform and Delivery (Prototype v.1)	WP2	NIMBEO	OTHER	PU	M16
D2.8	Improved Version of the Service Platform (Prototype v.2)	WP2	NIMBEO	OTHER	PU	M24
D2.9	Final Implementation of the Service Platform (Final Prototype)	WP2	IOTIQ	OTHER	PU	M36
D3.1	National Consortium/Network Report – Turkey	WP3	BU	R	PU	M7
D3.2	Installation Report	WP3	IOTIQ	R	PU	M13
D3.3	Training Report – Turkey	WP3	BU	R	PU	M15
D3.4	Content Report 1	WP3	AG	R	PU	M15
D3.5	User Testing Report	WP3	BU	R	PU	M15
D3.6	System Verification and Prototype v.1	WP3	IOTIQ	OTHER	PU	M15
D4.1	National Consortium/Network Report – Europe	WP4	BU	R	PU	M17
D4.2	Training Report – Turkey	WP4	BU	R	PU	M18
D4.3	Content Report 2	WP4	BU	R	PU	M24
D4.4	Research Report 1	WP4	OBU	R	PU	M24
D4.5	Research Report 2	WP4	OBU	R	PU	M36
D4.6	Activity Report 1	WP4	BU	R	PU	M24
D4.7	Activity Report 2	WP4	BU	R	PU	M36
D4.8	Midway Dissemination Report	WP4	TTD	R	PU	M24
D4.9	Dissemination Report	WP4	TTD	R	PU	M36
D4.10	System Verification & Prototyping v.2	WP4	UC3M	R	PU	M24
D5.1	Model Repository UI	WP5	IOTIQ	OTHER	PU	M25
D5.2	Transformative AI Toolbox	WP5	BU	OTHER	PU	M36
D5.3	Recommendation AI Toolbox	WP5	BU	OTHER	PU	M36
D5.4	Evaluation of AI Algorithms	WP5	IOTIQ	R	PU	M36
D5.5	Final Prototype	WP5	IOTIQ	OTHER	PU	M36
D6.1	Dissemination, Exploitation, Communication Plan and Strategy	WP6	TTD	R	PU	M8
D6.2	Project Website	WP6	TTD	DEC	PU	M2
D6.3	National Events Report 1	WP6	TTD	R	PU	M12
D6.4	National Events Report 2	WP6	TTD	R	PU	M24
D6.5	National Events Report 3	WP6	TTD	R	PU	M36
D6.6	International Conference Report	WP6	TTD	R	PU	M36
D6.7	Summary Dissemination Report	WP6	TTD	R	PU	M36
D6.8	Policy Brief 1	WP6	BU	R	PU	M15
D6.9	Policy Brief 2	WP6	BU	R	PU	M23
D6.10	Policy Brief 3	WP6	BU	R	PU	M36
D7.1	OEI – Requirement No. 1	WP7	BU	ETHICS	SEN	M1
D7.2	OEI – Requirement No. 2	WP7	BU	ETHICS	SEN	M6
D7.3	OEI – Requirement No. 3	WP7	BU	ETHICS	SEN	M12
D7.4	OEI – Requirement No. 4	WP7	BU	ETHICS	SEN	M24
D7.5	OEI – Requirement No. 5	WP7	BU	ETHICS	SEN	M36

## 2.2.2 Key Performance Indicators (KPIs)

In all projects, it's important to have a clear understanding of what success looks like. That's where Key Performance Indicators (KPIs) come in. KPIs are defined as the measurable indicators that help to track the progress and success of a project. They are the management objectives that define the critical success factors and allow project managers to make data-driven decisions.

In our project, we defined KPIs to help us identify potential issues early on, make adjustments where necessary, and ensure that the project stays on track toward meeting its goals. By monitoring our KPIs, we will determine the overall health of our project, identify areas that need improvement, and take corrective action to ensure that the project stays on course. Accordingly, the following table lists the KPIs in our project as defined in our project proposal and Grant Agreement.

Table 2 List of KPIs

KPI number	KPI name	Related work package(s)	Due date (in month)	Description
<b>KPI 1</b>	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.
<b>KPI 2</b>	Data Collection	WP2, WP4	M13-M36	We aim to collect 15600 questionnaires and conduct 780 interviews with the users to improve and validate it.
KPI	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
KPI	Pilot Testing for the Final Research Instrument	WP4	M16	Pilot tests (for research instruments) will be conducted by collecting 500 questionnaires and 50 interviews at all pilot sites in M16.
KPI	Data Collection 2	WP4	M16-M24	At Stage TWO, during the formative evaluation, we target to collect 400 face-to-face questionnaires at each pilot site and conduct 20 semi-structured interviews every three months in Stage TWO. Therefore, we aim to collect 6000 questionnaires and 300 interviews at five pilot sites in three waves between 16-24 months. Data collection will be conducted in three waves in M18, M21, and M24.
KPI	Data Collection 3	WP4	M25-M36	At Stage TWO, 400 face-to-face questionnaires and 20 semi-structured interviews with the end-users will be conducted every three months between M25-M36 in all pilot sites in the third year.

				Thus, we aim to collect 8000 questionnaires and 400 interviews at five pilot sites in four waves between M25-M36. Data collection will be conducted in three waves in M26, M29, M32 and M35.
KPI	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.
KPI	Content Creation 2	WP4	M13-M15	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. While BP will be responsible for creating content for the palace, HHU-PK and MSCA will be responsible for communication and coordinating CCIs, creative professionals, SMEs, and citizens to create content for their regions. To this end, they will identify and select 20 individuals.
<b>KPI 3</b>	Increasing Online Social Media Traffic	All WPs	M1-M36	Although there is not much research on the digital technologies and their impacts on the performance of CCIs, through our dissemination and communication efforts, we aim to increase online social media traffic of each site in this project by 15%.
<b>KPI 4</b>	New Users	All WPs	M13-M36	We aim to get two in every five new users (content creator or end-user/visitor) through recommendations of current users of CULTURATI.
<b>KPI 5</b>	Revisits	All WPs	M13-M36	Since there is not much research on the digital technologies and their impacts on the performance of CCIs, we expect to have one in every five users to make a revisit at each site in the following 12 months of their initial visit.
<b>KPI 6</b>	Increasing Income	All WPs	M13-M36	We expect to increase secondary spend per head by 25%.
<b>KPI 7</b>	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 journals and two book chapters.
<b>KPI 8</b>	Scientific Publications 2	All WPs	M1-M36	After the project, team members will attend five more academic conferences and publish two more academic articles listed in SSCI and two more book chapters.
<b>KPI 9</b>	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.
<b>KPI 10</b>	Publication of Deliverables	WP6	M1-M36	All deliverables will be published within two weeks.
<b>KPI 11</b>	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.
<b>KPI 12</b>	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.
<b>KPI 13</b>	Public Lectures	WP6	M1-M36	Public lectures will be given by the consortium partners. The minimum number of these public lectures is 14.
<b>KPI 14</b>	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).
<b>KPI 15</b>	International Fairs	WP6	M1-M36	We will attend at least two international fairs. One of which is going to be ITB Berlin.

### 2.1.3 Milestones

Milestones are essential components that serve as progress markers and aid in tracking project success. As such, milestones are typically defined as management objectives that must be met at specific points in time, and they play a crucial role in ensuring that a project stays on track and is completed within its given timeframe.

Accordingly, we defined a number of milestones in our project as critical points to allow us to assess their progress and make any necessary adjustments to ensure that they are on track to meet our overall project goals. In addition, we defined these milestones to communicate progress to stakeholders (both internal and external) throughout the project's lifecycle. The table below lists the milestones in our project.

Table 3 List of Milestones

Milestone number	Milestone name	Related work package(s)	Due date (in month)	Means of verification
MS1	Data Management and Protection	WP1	3	Data Management Plan will be submitted in M3 and will be handled by a dedicated member during and beyond the project to protect the data.
MS2	Implementation of the Service	WP2	12	Pilot testing and system updates will be

	Platform			conducted to successfully implement the platform.
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.
MS4	Prototype v.1	WP3	15	Pilot tests will be conducted to deliver a successful prototype v.1
MS5	Content on the platform – All pilot locations	WP4	24	Training and updates will be provided to have content on the system.
MS6	Prototype v.2	WP4	24	Tests in operational environments will be conducted to deliver a successful Prototype v.2
MS7	Final Prototype	WP5	36	The final prototype will be validated in operational environments to meet the project's objectives.
MS8	DEC Plan	WP6	8	To communicate, disseminate and exploit project's results during the project and beyond to meet the project's objectives.

### 2.1.4 Gantt Chart

A Gantt chart is a useful tool for quality management in project management. In the following Gantt Chart, we illustrate our project's schedule, showing the start and end dates of individual tasks, as well as their dependencies and duration.

Thus, we use the Gantt chart below to plan and schedule quality control activities throughout the project lifecycle. This includes identifying the quality control tasks that need to be performed, estimating their duration, and scheduling them within the project timeline. In addition, we will use the Gantt chart below to track the progress of quality control activities over time. This will allow us to monitor the status of quality control tasks, identify any issues or delays, and take corrective action as needed. Moreover, we utilize the chart below to identify potential risks and issues that could impact quality control activities. By visualizing the dependencies and interrelationships between tasks, we will identify areas where quality control activities may be impacted by other project tasks, and take steps to mitigate these risks. Using the chart effectively will ensure that quality control activities are integrated into the project plan and carried out effectively throughout the project lifecycle.

GANTT CHART												
Year	2023				2024				2025			
Quarters	1	2	3	4	1	2	3	4	1	2	3	4
<b>WP1 Project Management &amp; Coordination</b>												
Task 1.1 Project Management & Coordination												

Task 1.2. Risk Management	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Task 1.3. Ethics	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Task 1.4. Data Management	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Task 1.5. Prepare and Conduct Trainings			■													
Task 1.6. Scientific Coordination				■	■	■	■	■	■	■	■	■	■	■	■	■
Task 1.7. Dissemination & Impact Maximization				■	■	■	■	■	■	■	■	■	■	■	■	■
<b>WP2 System Development &amp; Evaluation</b>	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Task 2.1. Requirements Specification and Technologies Selection	■															
Task 2.2. System Architecture	■	■														
Task 2.3. Development of Server-side Components			■	■	■	■	■	■	■	■	■	■	■	■	■	■
Task 2.4. Data Lake Design and Creation			■	■	■	■	■	■	■	■	■	■	■	■	■	■
Task 2.5. Integration to Third Party Systems					■	■	■	■	■	■	■	■	■	■	■	■
Task 2.6. UX Implementation, User Tests & User Guidelines Preparation			■	■	■	■	■	■	■	■	■	■	■	■	■	■
<b>WP3 System Testing &amp; Verification</b>		■	■	■	■											
Task 3.1. Forming and Coordinating National Consortium/Network (Turkey)		■														
Task 3.2. System Setup and Installation				■												
Task 3.3. Preliminary User Trainings				■												
Task 3.4. Content Creation				■												
Task 3.5. Pilot Testing				■	■											
Task 3.6. System Updates and Tuning				■	■											
<b>WP 4 System Validation &amp; Demonstration</b>					■	■	■	■	■	■	■	■	■	■	■	■
Task 4.1. Forming and Coordinating National Consortium/Network (Europe)					■											
Task 4.2. Conducting Trainings					■											
Task 4.3. Content Creation					■	■										
Task 4.4. Finalizing the Conceptual Model and the Survey Instrument					■											
Task 4.5. Collecting Data							■	■	■	■	■	■	■	■	■	■
Task 4.6. Data Analysis and Writing Up							■	■	■	■	■	■	■	■	■	■
Task 4.7. System Installation, Updates, and Tuning						■	■	■	■	■	■	■	■	■	■	■
<b>WP 5 AI Integration</b>				■					■	■	■	■	■	■	■	■
Task 5.1. Data Preparation				■						■	■	■	■	■	■	■
Task 5.2. Model Repository UI										■						
Task 5.3. Transformative AI Toolbox											■	■	■			
Task 5.4. Recommendation AI Toolbox												■	■	■		
Task 5.5. Integration of the AI													■	■	■	■

Toolboxes													
<b>WP 6 Communication, Dissemination &amp; Exploitation</b>													
Task 6.1. DEC Plan & Shareholder Analysis													
Task 6.2. Implementation of DC													
Task 6.3. Implementation of Engagement Strategies													
<b>WP 7 Ethics Requirements</b>													
Task 7.1. Ethics Requirements													

Figure 1 Gantt Chart

### 2.3 Quality Assurance Activities

Quality assurance is the process of ensuring that quality requirements and standards are established and adhered to throughout the entire product or service development lifecycle. This involves developing processes and procedures to prevent defects and errors from occurring in the first place, and to ensure that the final product or service meets the desired level of quality. Quality Assurance is a proactive approach that focuses on preventing quality problems before they occur. Accordingly, in CULTURATI a number of audit reports are defined to manage the project and track progress in line with the defined objectives, deliverables, KPIs, and milestones.

During the project lifecycle of CULTURATI, two types of reports are scheduled for quality assurance. These are EC Periodic Reports and CULTURATI Internal Reports (see their details in 7.3 reporting in the Project Handbook).

#### 2.3.1 Internal Reports

Internal reports play an important role in quality assurance in project management in CULTURATI. These reports are generated by the project team and are used to monitor and improve the quality of the project deliverables. Here are some key reasons why we use these reports;

1. Monitoring project progress: Internal reports will be used to monitor the progress of the project against the project plan. By tracking the completion of tasks and milestones, the project team will identify any delays or issues that may impact the quality of the deliverables.
2. Identifying quality issues: Internal reports will help to identify quality issues and defects in the project deliverables.
3. Ensuring compliance: Internal reports will help us ensure that the project deliverables will be delivered on time and comply with quality standards (see 2.4 Quality Control). By reporting, the project team can identify areas where the project deliverables may not meet the required standards and take corrective action to ensure compliance.

4. Facilitating communication: Internal reports will facilitate communication among project team members and stakeholders. By providing regular updates on the status of the project and the quality of the deliverables, internal reports will help to ensure that all stakeholders are informed and aligned on the project goals and objectives.
5. Driving continuous improvement: Internal reports will be used to drive continuous improvement in the quality of the project deliverables.

In addition to EC Period Reports (see 7.3 Reporting in Project Handbook), the CULTURATI project will have four internal reports for quality management.

Table 4 Reporting Due Dates

Report	Month from	Month to	Due Date to send to the Coordinator	Completed and Submitted to EC
<b>Internal Report 1</b>	1	6	31.07.2023	30.06.2024
<b>Internal Report 2</b>	7	12	31.01.2024	30.06.2024
<b>Interim Report 3</b>	19	24	31.01.2025	31.03.2026
<b>Interim Report 4</b>	25	30	31.07.2025	31.03.2026
<b>Periodic Report 1</b>	1	15	30.04.2024	30.06.2024
<b>Periodic Report 2</b>	16	36	31.01.2026	31.03.2026

Each partner will prepare internal project reports with the following information for quality assurance;

- **Project Status:** This section will provide an update on the project's progress, including milestones achieved, tasks completed, and upcoming activities.
- **Key Performance Indicators (KPIs):** This section will include metrics that measure the project's performance against its objectives, such as budget, schedule, and quality (see Table 2 List of KPIs with their metrics).
- **Risks and Issues:** This section will highlight any potential risks and issues that may impact the project's success and any actions taken to mitigate them.
- **Resource Allocation:** This section will include information about the project's resource allocation, including budget, staff, and other resources.
- **Changes and Variations:** This section will highlight any changes or variations to the project plan, including scope changes, budget variations, and schedule delays.
- **Next Steps:** This section will outline the next steps for the project, including upcoming activities, milestones, and deliverables.



As seen above, the Key Performance Indicators are an essential part of these internal project reports. The template for internal project reports is available in the Annexes of the Project Handbook and on the Moodle document-sharing platform of the project. The internal reports will be prepared for internal purposes. However, the information in them will feed into deliverables and the EC Periodic Reports. Peer reviewers for these reports will be assigned by each partner internally, depending on the tasks and expertise required.

### 2.3.2 Internal Meetings

All bodies of the consortium meet regularly to coordinate, discuss and assess the progress of the project and exchange information. The major meetings and their schedules are defined under 4.4.1 Meetings Management in the Project Handbook. The project's Kick-off Meeting was held in M2 on 7 March 2023 in Ankara, Türkiye, because of the earthquake in M1 of the project in the country.

As seen in the Gantt chart of the project, WP1 Project Management and Coordination and WP2 System Development and Evaluation are currently in progress. For these work packages, the Work Package Leaders' assignment of tasks and other roles for individual members took place in M1 through online weekly meetings. Task groups hold **weekly** meetings to manage and coordinate their work. Work Package Leaders hold **monthly** meetings with the involved stakeholders for coordination and quality management. During the project, the same procedure will be followed for the rest of the work packages.

After each meeting, meeting minutes are prepared and shared with the interested members within 10 calendar days. Meeting minutes are also stored on Moodle. Rules about decision making and keeping meeting minute records are covered under 4.4.2 Meeting Minutes in the Project Handbook. The meeting minutes template is available on Moodle.

## 2.4 Quality Controls

Quality control is the process of verifying that a product or service meets the desired level of quality. This involves inspecting and testing products or services to identify any defects or errors that may have occurred during production. Quality control may be considered a reactive approach that focuses on detecting and correcting quality problems after they occur.

### 2.4.1 Deliverables Acceptance Plan

A deliverable acceptance plan is a critical component of a quality management plan, as it outlines the criteria for determining whether a project deliverable meets the required standards and is acceptable for delivery. A total of 53 deliverables and eight milestones will be submitted to the European Commission over the project lifecycle of CULTURATI. To ensure efficient, timely, high-quality delivery of all deliverables and milestones, the following key elements are included as part of the Deliverables Acceptance Plan;

1. Acceptance criteria clearly defines the acceptance criteria that will be used to determine whether the deliverable meets the project requirements.
2. Acceptance procedures describes the procedures for reviewing, testing, and verifying the deliverable against the acceptance criteria.
3. Roles and responsibilities defines the roles and responsibilities of the team members involved in the acceptance process.
4. Acceptance schedule establishes the timeline for acceptance, including the dates by which each deliverable must be reviewed, tested, and approved.

#### 2.4.1.1 Acceptance Criteria

The quality criteria for project deliverables are the specific measurable standards that must be met for the deliverable to be considered acceptable. The following criteria must be followed when preparing the deliverables and milestones (excluding the deliverables in other types such as a prototype);

A template for all deliverables and milestones has been produced and is available on Moodle. The template provides the general structure to be followed;

- Cover page (including logo, deliverable name and number, type, dissemination level, due date in months, delivery submission date, work package number, lead beneficiary and EX visibility information)
- Document information (including project information, document details, short description and history of changes)
- Executive summary
- Table of contents
- List of tables
- List of figures
- Introduction

- Core part
- Conclusion
- References
- Annexes

While preparing the deliverables, the following quality criteria should be respected;

- **Accuracy:** The content of the deliverable should be consistent with the project Description of Action as briefly described in the Grant Agreement. It should also be free from errors and mistakes, and all the information should be factually correct.
- **Completeness:** The deliverable should meet all the requirements outlined under the related task or tasks defined in detail in the Grant Agreement and 5.3 Work Package Descriptions and Their Deliverables in the Project Handbook. It should also provide the appropriate references and citations.
- **Clarity:** The deliverable should be easy to understand and communicate its intended message effectively. It should also be free from grammar and spelling mistakes.
- **Timeliness:** The deliverable should be delivered on or before its deadline. The due date of deliverables and milestones are specified based on project months. For instance, M1 represents, the first month of the project. According to the Grant Agreement, they should be completed on time and submitted to the European Commission via the Participant Portal at the latest on the last day of the month they are due.
- **Appearance:** The deliverable should follow the formatting on the deliverable template.
- **Resubmission:** The deliverable should respond to comments received after delivery of inspection of the draft final version.

#### *2.4.1.2 Acceptance Procedures*

The acceptance procedures are the activities and processes used to review, test, and approve our project deliverables against the established acceptance criteria listed above. These procedures are a critical component of the quality management plan, as they ensure that the project deliverables meet the required standards and are acceptable for delivery.

The quality check of deliverables starts early, approximately in the middle of the preparation phase, to get timely feedback from the reviewers. In this way, the Reviewers support the preparation process by providing comments for improvement on time.

Once the Reviewers approve, the deliverables are sent for review to the Work Package Leaders, the Project Manager, and the Coordinator. After their approval, the Coordinator uploads them on the EC platform.

All documents must be reviewed by using Microsoft Word's Track Changes feature. By using this tool, reviewers can easily identify and approve or reject changes made by other reviewers, which can help to ensure that the final document is accurate, coherent, and well-written. All changes in the documents must be recorded under the "History of Changes" section on the document information page of the deliverable. Previous copies of the documents should also be kept. The files must be saved by following the configuration explained in 7.2.2 Labeling of Documents in the Project Handbook to ensure that files are saved in a consistent and organized manner, making it easier to find and access them in the future.

#### *2.4.1.3 Roles and Responsibilities*

Roles and responsibilities are a critical component of any project's quality management plan, as they define who is responsible for each aspect of the acceptance process.

In CULTURATI, each task in a Work Package has an assigned Task Group Leader as defined in the Grant Agreement. All tasks have assigned deliverables and milestones. Therefore, the Task Group Leaders are responsible for preparing their deliverables. The Work Package leaders are responsible for assigning a Reviewer with the right expertise and knowledge within their team. Once the Work Package Leaders approve, the deliverable is sent for approval by the Quality Manager, the Project Manager, and the Coordinator. The Coordinator submits the final version on the EC platform.

#### *2.4.1.4 Acceptance Schedule*

The acceptance schedule of the deliverables is an important aspect of the project's quality management plan, as it establishes the timeline for reviewing, testing, and approving the project deliverables.

First of all, progress on deliverables is monitored monthly by the Project Coordinator with the help of the Deliverables and Milestones Monitoring Checklist file on Moodle. The file includes the name of the deliverable or milestone, short description, work package number, type, dissemination level, due month, lead beneficiary as defined in the Grant Agreement.

The Work Package Leaders should monitor the status of upcoming (pending) deliverables and milestones in the monthly meetings. Any problems and delays should be flagged immediately with and (1) explanation, (2) planned mitigation action, and (3) expected delivery date. In addition, the Project Coordinator should be informed immediately.

The Project Manager and Coordinator will inform the concerned partners who have upcoming deliverables with a due date three months in advance. The following table provides the timeline details for the deliverables' preparation, approval and submission.

Table 5 Timeline for the Preparation, Approval and Submission of Deliverables

Time	Action	Actor
<b>3 months before the due date</b>	Reminder 1	Project Manager and Coordinator
<b>1 month before the due date</b>	Reminder 2	Project Manager and Coordinator
<b>2 weeks before the due date</b>	Reviewer checks	Task Group Leader
<b>1 week before the due date</b>	Revisions and final editing	Task Group Leader, Work Package Leader
<b>Due date</b>	Final approval and submission to the EC	Coordinator

## 2.4.2 Quality Management Forms and Templates

### 2.4.2.1 Quality Review Checklists

In this project, as part of our Quality Controls, we will use Quality Review Checklists developed by PM<sup>2</sup> Alliance (PM<sup>2</sup> Alliance, 2023) available at <https://www.pm2alliance.eu/the-pm2-artefacts/>. A quality checklist is a tool used to ensure that a project meets certain quality standards. It is a comprehensive list of items that must be checked and verified to ensure that the project meets specific requirements.

Accordingly, we will conduct quality checks on the following key areas;

- Scope
- Schedule
- Cost
- Quality
- Risk
- Issues and decisions
- Communication
- Project Organisation

- Client Satisfaction

They will be initiated by the Project Manager and conducted by the Work Package Leaders for each work package. These checks will be conducted in **M12, M24 and M36**.

As part of Quality Management, in this project, we will also use the logs. Logs are an essential quality management tool used to track and document various activities and events throughout a project's lifecycle. Logs provide a historical record of the project's progress, which can be used to track changes, identify trends, and analyze performance. Accordingly, we will use Risk Log, Issue Log, Decision Log, Change Log designed by PM<sup>2</sup> Alliance available at the same link above.

#### *2.4.2.2 Questionnaires*

In this project, we employ User-centered Design Methodology (UCD). User-centered design (UCD) is an approach to designing products, services, and systems that puts the needs, wants, and limitations of the end-users at the forefront of the design process. The main goal of UCD is to create designs that are usable, efficient, and satisfying for the users, rather than focusing solely on the technical or business requirements of the project. This approach involves understanding the users' context, needs, and goals through research, prototyping and testing designs with them, and iterating on the design based on their feedback.

Accordingly, we utilize a number of questionnaires to get feedback from the users as we develop CULTURATI. In Stage ONE of the project (see 3.5 Project Timeline and Scope in the Project Handbook), we will utilize the System Usability Scale to collect feedback from the users of CULTURATI to improve the system and the initial prototype. In Stage TWO, as part of our formative and summative evaluations, we will develop a new instrument based on our conceptual model to measure user satisfaction.

##### *2.4.2.2.1 System Usability Scale*

In Stage ONE, we will utilize The System Usability Scale (SUS) which is accepted as a reliable tool to collect feedback on the users' positive and negative experiences as described in the project proposal and the Grant Agreement. The SUS is a standardized questionnaire that is widely used to evaluate the usability of a system, product, or service. The SUS consists of ten statements that users rate on a five-point Likert scale ranging from "strongly agree" to "strongly disagree." The statements are designed

to assess users' perceptions of various aspects of usability, such as ease of use, learnability, efficiency, and satisfaction. Some examples of the statements include:

- I found the system unnecessarily complex.
- I thought the system was easy to use.
- I felt very confident using the system.

Once users have completed the questionnaire, the scores for each statement are converted to a standardized score ranging from 0 to 100. A higher score indicates better usability, with a score of 68 considered the average for most systems.

The SUS is a quick and easy way to obtain feedback on the usability of a system, and its standardized format allows for easy comparison between different systems. It can be administered to a wide range of users, from experts to novices, and has been used in a variety of contexts, including websites, mobile apps, medical devices, and software applications (usability.gov, 2023).

#### 2.4.2.2.2 Formative and Summative Evaluations

For Stage TWO in our project, we will develop a custom questionnaire based on our proposed conceptual model as defined in the project proposal and the Grant Agreement to monitor users' experiences as part of our quality management to improve CULTURATI during the project.

### 3. Quality in Software and AI Development

In the development of CULTURATI, we will follow the recommendations of ISO 13407 which is a standard that outlines the principles and guidelines for user-centered design (UCD) of interactive systems. The standard provides a framework for ensuring that interactive systems are designed in a way that takes into account the needs, goals, and limitations of the people who will use them. Accordingly, the project will be carried out in the following phases; (1) requirements specifications to better define the context of use and the users' needs, (2) technologies selection, (3) system architecture development, (4) user interface (UI) design, and (5) system evaluation (user testing) (ISO, 2022).

The Quality Assurance activities outlined in 2.3 Quality Assurance Activities will also encompass software and AI related issues. In particular, specific to AI, we will ensure that the AI system is being developed following ethical principles and industry best practices and that the system produces accurate and reliable results. We will focus on the "Ethics by design and ethics of use approaches for

Artificial Intelligence” material, released by the European Commission (European Commission, 2021). This document fosters the application of ethics design and proposes a proactive waterfall methodology. Accordingly, it starts with ethical principles, then ethical requirements, followed by ethics design guidelines and AI methodologies. In addition, a six phases generic model is outlined to ensure AI ethics. Firstly, the specification of objectives is tackled, establishing what the system can do and is capable of. Secondly, requirements elicitation and specification will trigger high-level design and architecture. Since AI is very related to data and what can be achieved through it, data collection and preparation are critical as we covered above. Finally, the detailed design and development will follow the previously mentioned principles and guidelines, being adequately tested and evaluated.

To ensure that the quality standard is also met for AI-specific deliverables, the following aspects will be focused on:

- **Safety:** Safety refers to ensuring that the AI system operates in a way that does not harm humans, the environment, or other systems. This involves testing for potential hazards and ensuring that the system's behavior is predictable and transparent.
- **Security:** Security involves protecting the AI system and its data from unauthorized access, modification, or theft. This includes implementing secure communication protocols, encrypting sensitive data, and monitoring the system for potential breaches or attacks.
- **Legal:** Legal considerations involve ensuring that the AI system and its use comply with relevant laws, regulations, and standards. This includes data protection, intellectual property, liability, and discrimination.
- **Ethics:** Ethical considerations involve ensuring that the AI system is designed and used in a morally and socially responsible way. This applies principles such as transparency, fairness, accountability, and avoiding bias.
- **Performance:** Performance refers to ensuring that the AI system meets its intended goals effectively and efficiently. This includes tuning parameters and monitoring and evaluating the system's output.
- **Privacy:** Privacy considerations involve protecting the personal data and privacy of individuals interacting with the AI system. This includes measures such as data minimization, informed consent, and anonymization or pseudonymization of data.

The AI deliverables should fulfill safety requirements that are measured based on effectiveness, integrity, robustness, traceability and openness within the AI construct, and security requirements based on confidentiality, integrity, availability, authenticity and non-repudiation. Due to the changing



landscape regarding AI and legal matters, the deliverable needs to be non-discriminatory, compliant with regulations, and transparent. Especially with AI development, there is some worry when it comes to ethics, therefore, the following aspects will be focused on: non-discrimination, unbiased, human oversight, data sparsity, and the protection of vulnerable groups. The deliverables will report the AI module's performance, i.e., accuracy, precision, recall, and efficiency. Finally, there are privacy concerns with the use of AI, and because of that, the deliverable needs to abide by confidentiality and anonymity norms.

#### 4. Risk Management

Risk management is the process of identifying, assessing, and mitigating risks that could potentially impact a project's success. Risks can arise from a variety of sources, such as changes in scope, technology failures, budget constraints, and external factors like economic or political instability. Effective risk management involves identifying potential risks, analyzing the likelihood and impact of each risk, and developing strategies to mitigate or respond to those risks.

Thus, as part of our risk management, we first identified potential risks. This is done by conducting a thorough analysis of the project's objectives, scope, budget, and timeline, as well as any external factors that could affect the project's success, including a potential pandemic. Once we identified the risks, we evaluated them in terms of their likelihood of occurring and the potential impact they could have on our project's objectives.

After risks have been evaluated, we developed strategies to mitigate or respond to those risks. Mitigation strategies aim to reduce the likelihood or impact of a risk, while response strategies focus on how to address the risk if it does occur. Accordingly, as part of risk management, we utilize the following two risk management strategies:

- Risk avoidance: avoiding activities that could potentially lead to a risk
- Risk reduction: taking steps to reduce the likelihood or impact of a risk
- Risk acceptance: accepting the risk and developing a contingency plan to address it if it occurs

Accordingly, the following table summarizes the main elements of our risk management for CULTURATI.

Table 6 List of Critical Risks, Related WPS, Potential Impact, and Proposed Mitigation Measures

Risk number	Description	Related work package(s)	Probability	Proposed Mitigation Measures
R1	Pandemic and related restrictions can affect project management and communication between project partners	WP1-WP7	Medium	Maintaining as much communication as possible through collaboration platforms including Moodle and Trello.
R2	A pandemic can restrict visits to sites	WP3, WP4	Medium	The online platform of CULTURATI will help to create and deliver content, as well as collect data.
R3	User acceptance - Visitors may not volunteer to take surveys on-site	WP3, WP4	Low	Online questionnaires and interviews will be conducted to meet the expectations of the users. Budget for some token of appreciation added in the budgets.
R4	Challenging operational environments may pose problems in optimizing the number of people in each location	WP3, WP4	Low	Optimization can be done by reviewing the previous visitor behavior and sensor data and fine-tuning the threshold carrying capacities for better utilization.
R5	Bidirectional sensors technology is currently operating with some errors	WP3, WP4	Medium	To overcome problems because of precision of the sensors' data, the algorithm of the system can be reviewed, and carrying capacities can be determined involving some contingency.
R6	Language may pose problems for AI in content creation and curation	WP5	High	Currently, NLP techniques are quite successful when the language is English. Therefore, for content creation and curation, the main pilot site is the one in the UK. However, experiments will be conducted in Turkish, Italian and Finish.
R7	Stakeholders may not be interested to participate in the events of CULTURATI	WP3, WP4	High	We aim to overcome this problem by ensuring proper and timely visible project activities. Involve partners and utilize their network and social media to engage stakeholders from the beginning of the project.
R8	Changes in personnel, delaying required work	WP1-WP7	Medium	We included several members from a range of backgrounds in the project.
R9	Data privacy and security	WP1-WP7	Medium	Collecting visitor data through sensors and AI systems may pose a risk to their personal information. Therefore, we will ensure that all data collected is secure, encrypted, and stored in compliance with applicable regulations with our Data Management Plan.
R10	Budget overruns	WP1-WP7	Medium	The project may exceed the allocated budget due to unforeseen expenses, delays, or changes in requirements. We will monitor project costs closely with our Internal Reports.

## Conclusion

In conclusion, in this deliverable, we outlined the quality and risk management plan of our project. The quality and risk management is a critical component of any project's success. Therefore, the plan first defines the project's quality objectives and the processes that will be used to achieve them. By setting clear quality standards and implementing quality control procedures, we aim to ensure that the project's deliverables meet the stakeholders' expectations.

This deliverable also included the risk management plan. Thus, the potential risks are identified, assessed, and mitigated. The risk management plan also outlined strategies for mitigating or responding to those risks. By taking a proactive approach to risk management, we aim to reduce the likelihood and impact of risks, ensuring that the project stays on track.

In short, by implementing a robust quality and risk management plan, we aim to minimize the likelihood of unexpected delays, budget overruns, and other issues that could impact the project's success. By incorporating quality and risk management into CULTURATI's overall framework, we intend to build a strong foundation for success and minimize the likelihood of unexpected issues.

## References

European Commission (2021). Ethics by Design and Ethics of Use Approaches for Artificial Intelligence. [https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ethics-by-design-and-ethics-of-use-approaches-for-artificial-intelligence\\_he\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ethics-by-design-and-ethics-of-use-approaches-for-artificial-intelligence_he_en.pdf)

PM<sup>2</sup> Alliance (2023, April 15). <https://www.pm2alliance.eu/the-pm2-artefacts/>

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