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Short Description	This deliverable aims to present the data and feedback collected from the initial user testing phase of the CULTURATI project. Due to delays in technology development, the report focuses on insights gathered from over 20 interviews conducted with content creators, which will guide the ongoing development and future user testing efforts.
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Executive Summary

This User Testing Report presents the preliminary findings from the initial phase of user (content creators) engagement for the CULTURATI project. Due to delays in WP2 System Development and Evaluation, WP3 System Testing and Verification was affected, causing the pilot testing in Türkiye to start in M15 instead of M13 as originally planned in our Gantt chart. Anticipating potential delays in technology development, we had been updated our critical risks in M8 on September 2023.

Due to the delays in WP2, since 20 September 2023, the Coordinator and Technical Team members have met online on Zoom every week. Occasionally, we held two or more meetings per week. Therefore, the total number of technical team meetings between 20 September 2023 and 20 May 2024 is 49. All meetings are recorded on Zoom, and the recordings and meeting minutes are available on Moodle. In addition, as part of our project coordination and management, we have held six Executive Committee Meetings since April 2023. Furthermore, the Coordinator of the Project visited the technical team members located in Spain in November 2023 to address critical issues and enhance collaboration.

As part of our user-centered design approach, in M13, during Trainings Across Europe, we also gathered feedback from the European pilot sites and integrated the Editor Role in the initial wiki for content creators. Consequently, we could not complete the collection of the planned 1600 surveys from the end-users and 80 interviews (including the content creators). However, we successfully conducted more than 20 in-depth interviews with content creators. These interviews provided valuable insights into user needs and expectations, highlighting key areas for improvement and adjustment in our technological solutions. The feedback obtained plays a crucial role in refining our development process and ensuring the successful implementation of future user testing phases, ultimately contributing to achieving our project objectives.

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1. Introduction

This document aims to present the initial findings from the user testing phase of the CULTURATI project. This report details the feedback and insights gathered from 20 in-depth interviews conducted with content creators from the two pilot sites in Türkiye: **Ankara Citadel and Istanbul Rahmi M. Koç Museum**. Initially, the project aimed to collect data from 1600 surveys and 80 interviews at these sites; however, due to delays in technology development, we focused on a smaller yet significant sample of interviews **with content creators**.

The CULTURATI project is dedicated to developing innovative technologies integrating cultural heritage with modern digital platforms. These technologies aim to enhance the accessibility and engagement of cultural content for diverse audiences. This report will discuss the methodology used for the initial user testing, the key findings from the interviews, and the implications for the continued development of the CULTURATI technologies. Additionally, it will outline the steps planned to achieve the project's goals despite the delays encountered.

2. Current Status

The CULTURATI project has encountered delays in the development phases, specifically within WP2 System Development and Evaluation, particularly in developing the wiki platform for content creators. These delays have impacted WP3 System Testing and Verification, causing a shift in the project's timeline. According to our original Gantt chart, pilot testing in Türkiye was scheduled to commence in M13; however, it began in M15 due to these delays.

In anticipation of potential setbacks, we proactively updated our critical risks in M8 (September 2023). To mitigate potential delays in the project and enhance communication, we increased the frequency of our meetings. Since 20 September 2023, the Coordinator and Technical Team members have met online on Zoom every week, sometimes holding two or more meetings per week. As a result, the total number of technical team meetings between 20 September 2023 and 20 May 2024 is 49. All meetings are recorded on Zoom, and the recordings and meeting minutes are available on Moodle.

Additionally, we have held six Executive Committee Meetings since April 2023 to support project coordination and management further. Furthermore, the Coordinator of the Project visited the technical team members located in Spain in November 2023 to address critical issues and enhance collaboration. We also informed our Project Officer about a delay in our Milestone 2:

Implementation of the Service Platform, which was due on 31 January 2024. We achieved this milestone with a delay on 27 February 2024.

Despite these challenges, we have conducted over 20 initial interviews with content creators, providing valuable early feedback. Furthermore, in M13, we gathered additional input from the European pilot sites and integrated the Editor Role in the initial wiki for content creators.

While the original plan included collecting 1600 surveys and 80 interviews (including content creators; see Grant Agreement section 1.2.4 Stage ONE: Development of CULTURATI), the current status reflects a strategic pivot to focus on in-depth qualitative feedback from content creators at the Ankara Citadel and Istanbul Rahmi M. Koç Museum. This approach has allowed us to gain deeper insights into user needs and expectations, crucial for refining our technological solutions and preparing for subsequent user testing phases.

With the help of training sessions that started in M11 instead of M10, the content creators have created over 2000 pieces of content (KPI) by the end of M12 as planned. The detailed report for content creation can be found in Deliverable D3.4 Content Report 1. This content has been uploaded to the CULTURATI wiki, and the process is nearing completion.

3. Methodology

3.1. Sample

There are 25 content creators for the Ankara Citadel, and we interviewed **18** of them in M16. These interviews cover 18 of the 21 locations identified for the pilot site. Before the interview sessions, we provided information about the purpose of our semi-structured interviews and collected consent in hard copy. These consent forms are kept at Bilkent University. Additionally, we gathered feedback from the **four** content creators at the Istanbul Rahmi M. Koç Museum in M15. However, their formal semi-structured interviews are scheduled to take place in the first week of June in M17. In total, we collected feedback from 22 content creators. The following analysis reflects our findings based on this feedback.

3.2. Key Questions

In our interviews, we primarily asked content creators about their perceptions and expectations regarding the CULTURATI project after training them on how to create content for the platform. This content is designed to develop question-and-answer games and routes for visitors. The second key

question focused on their needs, explicitly inquiring whether they required additional infrastructure or assistance to carry out their tasks effectively.

4. Findings from the Ankara Citadel

4.1. Perceptions and Expectations

In response to the first key question about their perceptions and expectations of the CULTURATI project, the content creators provided valuable insights that are reflected in the analysis of Word Cloud 1. The prominent words from the word cloud analysis include "ankara," "people," "project," "information," "museum," "create," "application," "cultural," "want," and "kale (castle)."

Themes:

- **Cultural and Historical Focus:** The prominent words "ankara," "museum," "cultural," and "kale" indicate a strong focus on integrating cultural and historical elements within the project. Content creators see the project as an opportunity to showcase Ankara's cultural heritage and historical sites.
- **User Engagement and Information:** Words like "people," "information," "create," and "application" emphasize the importance of engaging users and providing valuable information. The content creators are enthusiastic about developing content that offers visitors interactive and informative experiences.
- **Project Goals and Needs:** Words such as "project," "want," and "generate" reflect the content creators' expectations and desires for the project. They need resources and support to generate and promote content effectively.

Key Insights:

- The word cloud reflects a project centered on the intersection of cultural heritage and technology, highlighting the necessity of developing platforms that support and promote cultural content.
- User feedback and the active involvement of content creators are pivotal to the project's development process, suggesting an iterative and user-centered design approach. Content creators value their role in shaping the platform and are eager to contribute to its success by providing feedback and creating engaging content.

Example:

"This project will help hidden cultural treasures come to light.", Male, Ankara Citadel, Content Creator

These findings underscore content creators' positive perceptions and high expectations for the CULTURATI project. They are keen to see how integrating cultural heritage with technological advancements will enhance visitor experiences and are committed to contributing towards the project's goals. Based on our user-centered methodology and with the decision taken in our Extraordinary Executive Committee Meeting on 13 May 2024, we integrated a ticketing system to help them report problems on the wiki platform of CULTURATI.



Figure 1. Word Cloud 1: Perceptions and Expectations from the Project

4.2. Needs and Infrastructure

In response to the second question about their needs, specifically, whether they required any additional infrastructure or assistance, the content creators provided valuable feedback reflected in the analysis of Word Cloud 2. The prominent words from the word cloud analysis include "use," "computer," "internet," "connection," "need," "phone," "social," "shops," "infrastructure," and "media."

Themes:

- **Technology and Connectivity:** The prominent words "computer," "internet," "connection," and "phone" suggest a strong emphasis on the necessity of robust technological

infrastructure and reliable connectivity. Content creators highlighted the importance of having access to these essential tools to create and share content effectively.

- **Usage and Necessity:** The central words "use" and "need" indicate a focus on the practical aspects of technology usage and the specific needs of content creators. This suggests that creators are keenly aware of the tools required for their tasks and the gaps that need to be filled.
- **Social and Commercial Aspects:** Words such as "social," "shops," and "media" reflect the content creators' understanding of the broader social and commercial context in which their content will be used. This includes considering how their content can engage users and be integrated into social media and commercial platforms.

Key Insights:

- The word cloud emphasizes the critical role of technological infrastructure and connectivity in the content creation process. Reliable access to computers, the internet, and phone connections are seen as fundamental needs.
- Content creators are aware of the practical requirements for using technology effectively. Their feedback underscores the importance of addressing these needs to ensure they can produce high-quality content.
- There is a recognition of the importance of integrating content with social and commercial aspects, indicating that content creators see value in making their work accessible and engaging through various platforms.

These findings highlight the practical needs and infrastructure requirements identified by content creators. Addressing these needs will be crucial in supporting their work and ensuring the success of the CULTURATI project. Due to Wi-Fi and GSM operator problems at the pilot site, we plan to consult a member of our Advisory Board from Vodafone to help resolve these issues.

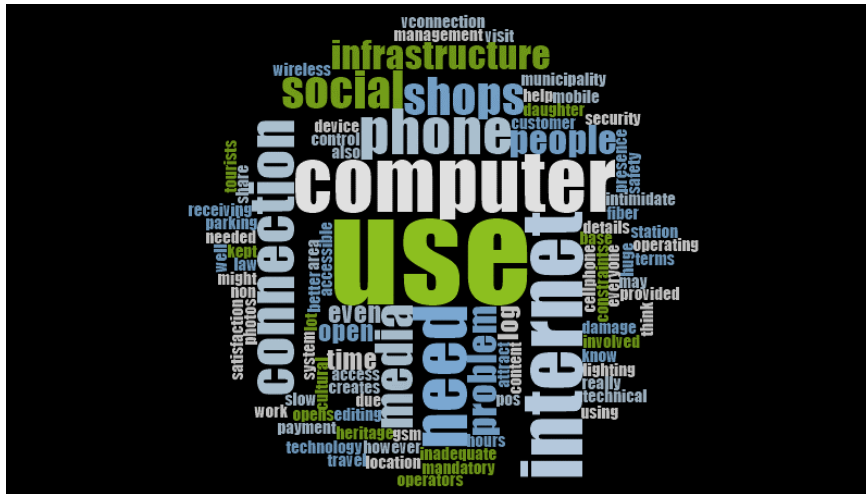


Figure 2. Word Cloud 2: Needs and Infrastructure

5. Findings from the Istanbul Rahmi M. Koç Museum

During the training sessions with the museum staff, we gathered important insights. The following section details the feedback gathered from the four content creators at the museum.

5.1. Rediscovery Through Content Creation

Themes:

- **Personalized and Immersive Experience:** Administrators curated themes and levels within the CULTURATI platform, targeting specific audiences and breaking away from traditional approaches. The aim is to ensure a personalized and immersive user experience.
- **Creative Content Development:** Content creators were tasked with developing tailored questions, answer options, hints, and additional information. This departure from conventional modes of interpretation allowed for more creative and engaging content.
- **Rediscovery and Innovation:** Museum staff experienced a journey of rediscovery as they created content around specific themes and levels. This process offered fresh perspectives on the museum's collections, deepening their appreciation for the artifacts and inspiring innovative interpretation, exhibition, and engagement strategies.

Key Insights:

- The CULTURATI project helps the Istanbul Rahmi M. Koç Museum to transcend traditional boundaries, embracing a dynamic and inclusive model that celebrates diversity and innovation.

- By encouraging creative thinking among content creators to provide personalized experiences for users, CULTURATI has the potential to introduce a new era of cultural preservation and education at the museum.
- This innovative approach will enrich each individual's journey through the museum's collections, enhancing visitor engagement and learning.

Example:

"While creating questions and answers under defined categories and levels, we rediscovered our collections and gained fresh perspectives and a deeper appreciation for the artifacts.", Female, Istanbul Rahmi M. Koç Museum, Content Creator.

5.2.Overcoming Challenges in Content Delivery

Themes:

- **Information Utilization:** Content creators at the Istanbul Rahmi M. Koç Museum possess extensive knowledge about their collections. However, this information often remains untapped, stored in computers, and not utilized to enrich the visitor experience. The challenge lies in effectively delivering this knowledge to diverse audiences.
- **Labor-Intensive Content Creation:** Developing tailored questions, answers, hints, and additional information is a labor-intensive process. The feedback from museum staff highlighted the significant effort and time required to produce engaging and informative content, which can be a barrier to large-scale content creation.

Key Insights:

- **AI Integration as a Solution:** CULTURATI and its AI component integration is seen as a promising solution to these challenges. AI capabilities within CULTURATI will harness the expertise and knowledge of museum staff in unprecedented ways. By employing machine learning algorithms, the AI will gradually assimilate the information stored within museum databases, unlocking hidden treasures of knowledge and insights.
- **Enhanced Content Creation:** As AI technologies evolve, they are expected to become invaluable tools for content creators. AI will assist in curating and delivering content across defined categories and levels, generate questions and answers for engaging question-and-answer games, and enhance interactive experiences for visitors. Through intelligent analysis and pattern recognition, AI algorithms can suggest relevant information, craft engaging narratives, and improve the overall quality of content creation.

These insights reveal that while content creation is currently labor-intensive, integrating AI into the CULTURATI platform will streamline content development. This will ensure visitors receive curated, informative, and captivating experiences, addressing content creators' challenges.

5.3. Enhancing Accessibility Through Customized Data Files

Themes:

- **Accessibility and Inclusivity:** A standout feature of the CULTURATI platform is its ability to deliver various data formats to users, significantly advancing accessibility and inclusivity. This feature is particularly beneficial for disadvantaged individuals, allowing them to engage with cultural content in ways that are most accessible and meaningful to them.
- **Catering to Diverse Needs:** Providing different data formats significantly benefits individuals with disabilities or special needs. For example, users with visual impairments can benefit from audio descriptions or text-to-speech functionality, while individuals with hearing impairments may require transcripts or subtitles for audiovisual materials. This ensures equitable access to information and cultural experiences.

Key Insights:

- **Support for Disabilities:** The CULTURATI platform's diverse data offerings are crucial for users with disabilities. Audio descriptions enable visually impaired users to access and interpret cultural content independently. Similarly, transcripts and subtitles can ensure that users with hearing impairments can fully engage with audiovisual materials.
- **Adaptation for Digital Literacy and Language Proficiency:** CULTURATI also supports individuals with varying digital literacy or language proficiency levels. Simplified text versions or visual aids can be provided for users with limited literacy skills or non-native language speakers, facilitating comprehension and engagement.
- **Customization for Learning Styles:** Customizable data formats under various levels accommodate different learning styles and preferences, allowing users to explore cultural heritage in alignment with their unique abilities and interests. This flexibility enhances the overall user experience and ensures cultural content is accessible to a broader audience.
- **Community and Educational Benefits:** The availability of diverse data formats can extend benefits beyond individual users to community organizations, educators, and researchers working with marginalized or underserved populations. CULTURATI can enable these stakeholders to integrate cultural content into educational curricula, community outreach programs, and research projects, promoting broader engagement with cultural heritage.

These insights highlight the importance of offering customizable data formats to enhance accessibility and inclusivity. By addressing the diverse needs of users, the CULTURATI platform will ensure that cultural content is accessible to all, thereby fostering a more inclusive and engaged community.

6. Implications for Technology Development in CULTURATI

The iterative and user-centered design approach is crucial for the platform's success. Content creators have provided invaluable feedback on their perceptions and expectations, which will be continuously incorporated into the development process. By actively involving users in the design and refinement of the platform, CULTURATI can ensure that the final product meets their needs and expectations.

To this end, we have integrated a ticketing system into the CULTURATI wiki platform, based on the decision taken in our Extraordinary Executive Committee Meeting on 13 May 2024. This system allows content creators to report problems and provide real-time feedback, ensuring that any issues can be promptly addressed and resolved. This not only enhances the development process but also fosters a collaborative environment where content creators feel their contributions are valued and impactful.

The labor-intensive nature of content creation, as noted by content creators at the Istanbul Rahmi M. Koç Museum, highlights the need for CULTURATI to streamline this process. The integration of AI technologies within CULTURATI is a promising solution. AI can assist in curating and delivering content, generating questions and answers, and enhancing interactive experiences for visitors. This will reduce the workload on content creators and allow for producing high-quality content at scale.

7. Future Steps

With the development and improvement of the technologies underway, we are determined to complete the remaining user testing phases. Starting in M17, we will begin collecting data from visitors at the two pilot sites of the project in Türkiye. This will involve gathering feedback from a broad range of users to ensure comprehensive testing and validation of our technologies as planned.

Testing in Türkiye constitutes Stage ONE of our user testing phases. Stage TWO involves testing at the European pilot sites. We intend not to delay the tasks in Stage TWO and plan to collect data from visitors at the European pilot sites starting in M18 as planned. By adhering to this timeline, we

aim to maintain the project's momentum and ensure that all user testing phases are completed efficiently.

Conclusion

The CULTURATI project has made significant progress despite initial technological development challenges. Our user testing at the Ankara Citadel and the Istanbul Rahmi M. Koç Museum provided insights into content creators' needs and expectations, highlighting the importance of a user-centered and technologically advanced platform.

The feedback underscored the labor-intensive nature of content creation and the need for streamlined processes. Integrating AI within CULTURATI will address these challenges, enhancing content curation and delivery.

Our commitment to accessibility and inclusivity ensures that CULTURATI serves a diverse audience, including individuals with disabilities and varying digital literacy levels. We will complete the remaining user testing and adhere to our KPIs.