

Milestone Report



Share 3D

ACTIVITY 3

**M5 - GUIDES DEMONSTRATING THE USE OF TOOLS
FOR TARGET AUDIENCES**

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1. INTRODUCCION

This document provides a guide for end users from the education, tourism, research and cultural sectors demonstrating uses of the Share 3D storymaker and dashboard. This guide is designed to support these end-users in their use of the tools for their target audiences.

Each section of the document is dedicated to one of the targeted audiences and provides a short description of the audience's characteristics. It is followed by an example, an envisaged scenario for this particular audience and its use of both Share3D tools, the Storymaker and Dashboard. These examples give a context to the use of the tools and might inspire the users.

A set of step-by-step instructions and guidelines (M4) are also available online: <https://share3d.gitbook.io/share-3d-guidelines/>. These cover: User guide to the Share3D dashboard, User guide to the Share3D storytelling tool, and Guidelines on the 3D process: Capture, Post processing, Publishing in Sketchfab, Metadata and Licencing.

2. EDUCATION

2.1. Target audience

The education audience includes:

1. Professionals involved with learning at schools, colleges, universities and other educational institutions, with educational roles in cultural institutions, and in the private sector. With a special focus on those with an interest in the cultural heritage. Although educational curricula and national priorities differ, there is a common desire to make interesting and inspiring content, and experiences, available for students and lifelong learners.
2. Commercial members of this audience include educational publishers, learning software providers and content developers. Some integrate and showcase cultural heritage content on their digital learning platforms. Others create and publish learning resources with cultural heritage content (MOOCs, e-books) or develop educational applications and games.
3. Policy-makers including governmental bodies involved in designing and promoting educational policies on a European and national level. These partners can help grow awareness of Europeana as an education resource and make valuable introductions to national educational publishers.
4. Educational NGOs and associations, who can help raise awareness through their online portals and reaching educators across Europe.
5. Higher education students engaged in formal post-secondary education.
6. Users of Europeana collections, that provide multiple perspectives on historical, political, economic, cultural and human developments across Europe and beyond.

2.2. Dashboard

One scenario envisaged for this audience is use of the Dashboard by educational institutions as a learning tool for students in history, computer science, maths or geography classes. Creating and uploading 3D content to Sketchfab and then using the Share3D Dashboard to create metadata could be a class assignment for secondary and/or higher education students. 3D has been used in schools for project based learning for pupils to develop their digital skills¹.

Higher education providers can use the Dashboard as a learning tool for students to explain the metadata that is required to describe 3D content and make it discoverable on a platform such as Europeana. Students of higher education receive assignments such as scanning historical, cultural or archeological objects and learning how to work with various technologies and using the Dashboard to understand the metadata requirements, the use of Linked Open data and the creation of EDM records in XML format.

¹ <https://sketchfab.com/blogs/community/project-based-learning-at-fort-vancouver/>

2.3. Storymaker

Uses of the storymaker for this audience include:

Education institutions can use the Storymaker to create educational stories and teaching resources using various materials from Europeana and Sketchfab. The stories or in-class teaching materials then can be shared online or to be viewed on digital platforms – e.g. interactive school boards, tablets, projector screens or output as PDFs to provide handouts.

Educators can integrate the use of the Storymaker in their students' assignments. For third level courses the Storymaker might be used for making thematic presentations or defending coursework and class projects about history, architecture, art and other related fields. In secondary education, educators might use the Storymaker as part of assignments given before or after sightseeing excursions or visits to sites, museums etc.

Students can use the Storymaker to make various presentations, thesis defense and other coursework that require analysis of visual data of cultural heritage. The Storymaker allows re-use of content already available in Europeana and Sketchfab to create stories and share them on different platforms (i.e social networks, school/college papers online).

For learning software providers Storymaker can serve to integrate and showcase cultural heritage content on their new or existing digital learning platforms. For others it can help to create and publish learning resources with cultural heritage content (MOOCs, e-books) or to develop educational applications for kids, games.

Educators in cultural institutions can also make use of the Storymaker to supplement their websites with educational materials (e.g. online learning materials, worksheets, classroom tasks etc.) to support teachers and educational groups to make use of the museum's resources in attractive and contemporary ways.

3. RESEARCH

3.1. Target audience

The research audience includes:

1. Researchers, scholars, lecturers from various scientific fields of the humanities and the science. .
2. Students within the fields of the humanities and the sciences.
3. Personnel cultural NGOs and Cultural Heritage Institutions

3.2. Dashboard

Envisaged scenario for this audience

Recent technological advancements have made a tremendous impact in both the humanities and the sciences. For example, 3D laser scanning offers a sophisticated method of documenting and studying archaeological sites and biological specimens. Researchers are scanning and documenting archaeological sites and objects in museum collections around the world.

Researchers who are uploading 3D content to Sketchfab, can use the Share3D Dashboard tool to capture metadata to describe their content in detail. The Dashboard provides a tool which integrates Linked Open Data and encourages best practices such as the licencing of content. The resulting metadata is compatible with modern open science approaches by enabling the dissemination and re-use of scholarly content.

The Dashboard provides a tool which produces well formatted XML records that are compatible with EDM (the Europeana Data Model). This can be used by Research Supervisors to demonstrate to their research students the process of creating the documentation needed to support access to digital cultural heritage objects and which is needed for deposit in a digital archive.

3.3. Storymaker

Use of the storymaker for this audience:

Lecturers and research supervisors can use the Storymaker to integrate 3D content in class presentations and discussions with their students.

Students of higher education institutions can use the Storymaker to integrate 3D content and other digital materials in scientific reports, for seminars or other presentations including defence of their theses. Having access to the huge variety of resources available via Europeana

and Sketchfab opens the possibilities for students to explore ideas, topics and materials from cultural heritage institutions with no physical presence.

4. CREATIVE INDUSTRIES

4.1. Target audience

Description of target audience

The Creative industries audience includes:

1. SMEs (Small and medium-sized enterprises or small and medium-sized businesses), creative studios and agencies who use digital technologies and cultural heritage assets, e.g. 3D models for business products or services
2. Professionals (publishers, journalists, content creators) involved in creating various types of content for cultural and heritage clients
3. Multimedia journalists and digital media outlets that have a focus on cultural, educational and documentary content.
4. Individuals who create, use and reuse 3D content

4.2. Dashboard

Envisaged scenarios for this audience include:

One of the envisaged scenarios for the creative industries target audience is sharing 3D assets on Europeana by using Share3D Dashboard to generate the metadata needed to reach wider audiences. In this way, 3D models that would otherwise not be seen outside of a project environment can be shared. For example, an SME that creates a set of 3D assets for a client who commissioned a Virtual Reality experience. Such product is complex and VR is not easy to share widely with the public. However, its elements, the 3D models are in more accessible format and could be uploaded on Sketchfab and shared with Europeana. In this scenario, the assets that ultimately build the virtual environment are treated as digital heritage objects in their own right and could be disseminated accordingly. In this case the Share3D Dashboard can give such assets their second life.

Another scenario could involve a professional who builds a 3D model of a building that is a well known tourist attraction. The model is uploaded to Sketchfab so that it can be embedded in an online application, as Sketchfab offers a state-of-the-art viewing platform for 3D models. As the model is highly relevant to Europeana and its audiences, he/she decides to use the Share3D Dashboard to share the 3D model and enable its re-use.

For educational publishers who have enabled the inclusion of Sketchfab models in publications (such as e-books or MOOCs), the Dashboard can be used by authors to add metadata for 3D content.

Media journalists who are able to include Sketchfab models in stories, blog posts and reports on cultural heritage related topics could make use of the Dashboard. In this way metadata can be added to the 3D content as part of the process of sharing it via websites and other platforms.

4.3. Storymaker

Use of the storymaker for this audience

Share3D's Storymaker allows people working in the creative industries not only create stories, but also visualise ideas and concepts in an easy and user friendly way. One of envisaged scenarios for such use could be a creative studio that needs to create a moodboard for a client. It aims to visually explain a certain style in design in a digital format that can be easily updated and shared as a link. The gathering of the content itself could be done collaboratively by the team using the Share3D Storymaker tool, where team members add objects to a story over time. Furthermore, the tool allows visual content from Sketchfab and Europeana to be combined with their own assets, which means that the client can see archival, historical and contemporary visual references. The moodboard can easily be shared with the clients and updated on the go.

The Storymaker can be used to add value to social media content. In this scenario, a cultural heritage institution approaches a digital marketing consultant to create a social media campaign. For example, the institution is planning to celebrate an International Day and wants to appeal to enthusiasts and interested members of the public, and social media audiences who share videos, pictures and memes. In order to make it visually attractive and informative at the same time, the consultant came up with a catchy title, with ideas for a small online exhibition, links on the institution's Twitter, Facebook and Instagram. The Storymaker tool could be used to help with that - for example presenting a selection of available resources from Europeana and Sketchfab.

5. TOURISM

5.1. Target audience

The tourism audience includes:

1. SMEs (Small and medium-sized enterprises or small and medium-sized businesses) operating in tourism and entertainment industries distributed across five main groups: food and beverage services, recreation and entertainment, transportation, accommodation and travel services.
2. Professionals and freelancers operating in tourism and entertainment industries (i.e., tourist guides, tour operators, etc.).
3. National policy-makers, governmental bodies and associations that are operating within tourism and entertainment industries.
4. Museum curators or other culture based staff involved in the tourism sector.
5. Tourist information desks and centres.
6. Service providers for tourism and entertainment industries players.
7. Mobile tourism and navigation app developers.

5.2. Dashboard

Envisaged scenario for this audience

A potential scenario in which the tourism industry could make use of the Share3D dashboard is one in which there is a collaboration between a national or regional tourist board and cultural institutions to promote an area. Under this scenario, the organisations involved commission the creation of 3D models of sites, buildings or objects that are uploaded to Sketchfab and shared with Europeana via the Dashboard. This would enable tourism enterprises and others to share their content with the broad public and enable its re-use .

Tourism is closely related to the design and planning of urban environments. The creation of 3D models of historic buildings, urban areas and archaeological monuments may be requested by the governmental institutions as part of the planning process. In some cases three-dimensional city models are created, components of which (e.g. individual buildings) can be uploaded on Sketchfab and shared with Europeana via the share3D dashboard.

Another potential scenario is by individual tour guides who are expert in the cultural heritage and interested in creating 3D models for upload to Sketchfab and to be shared with Europeana via the Dashboard.

5.3. Storymaker

Use of the storymaker for this audience

One anticipated scenario is the use of the Storymaker by tour guides Storymaker tool to create virtual tours through the main landmarks of the city/country for regular visitors and also to offer tours for people with limited mobility or who are unable to visit in person.

Another scenario is the use of the Storymaker by exhibition organisers to offer tourists/potential visitors an online preview of the exhibition and a way of interacting with the objects on display.

Business enterprises could make use of the Storymaker in their marketing strategies to develop materials for their websites – for example showing local cultural heritage landmarks in 3D format with historical information from the archives.

Another scenario is the use of the Storymaker by regional and national tourist boards as a way of creating interactive presentations for web dissemination, exhibitions and fairs to promote visits. Local tourist information offices could use the Storymaker to create digital content – e.g. guides, routes and presentations highlighting cultural heritage sites, landmarks, museums, etc. The tool allows tourism officers to add text and hotspots to 3D models to describe the sites and customise the offer.

Another application for tourism is the use of the Storymaker to create timelines for historical areas. Such timelines could be created by tourist boards, businesses or venues.

There is potential to create mobile applications based on stories prepared in the Share3D storymaker.

In the context of town planning, the Storymaker could be used as a way of visualising proposed modifications and as a way of collecting feedback from citizens as part of the urban design and planning process.

6. CULTURAL HERITAGE INSTITUTIONS

6.1. Target audience

Description of target audience

The Cultural Heritage Institutions audience includes:

1. GLAM sector (Galleries, Libraries, Archives and Museums) of all sizes (national, regional, local, independent, site museums and special collections) who are commissioning, creating and using 3D models and sharing their content on / using Europeana
2. Professionals involved in working with cultural and heritage sites who create content, promote culture, curate exhibitions, manage collections and develop educational programmes
3. Policy-makers including governmental bodies involved in designing and promoting cultural policies on a European and national level. These partners can help grow awareness of Europeana among cultural heritage institutions and encourage sharing their collections on Europeana portal
4. Cultural and heritage NGOs and associations, who can help raise awareness through their online portals and reaching educators across Europe

6.2. Dashboard

Envisaged scenario for this audience

The Dashboard is designed with cultural institutions in mind who are uploading 3D models of objects from their collections, monuments and buildings to Sketchfab. 3D digitisation is supporting documentation, conservation, exhibition and education strategies.

The Dashboard allows cultural heritage institutions to create the metadata needed to share their 3D models uploaded on Sketchfab with Europeana. The envisaged scenario is that the institution imports its 3D models to Sketchfab and then uses the Dashboard to add all the metadata required by Europeana. This process is facilitated by the tool which, once connected with a user's Sketchfab account, copies the metadata for a model available on Sketchfab to the Dashboard where users can then add to and enrich the metadata for Europeana. After adding the required metadata, the 3D models can then be submitted by the users for provision to Europeana. The Dashboard makes it much easier for cultural institutions to share details of models they are uploading on Sketchfab with Europeana.

For example, a cultural heritage institution wants to share its 3D models on Europeana. A version of the 3D models is hosted on Sketchfab. Without the Dashboard, the cultural

institutions would need to manually create a metadata record duplicating the details entered on Sketchfab plus the links needed to embed the model and other information needed for Europeana, and then export this record for submission to an aggregator for provision to Europeana. With the Dashboard, the institution is offered a much more efficient process as they are able to capture any information uploaded to Sketchfab automatically and are provided with a user-friendly tool to capture the additional metadata needed for Europeana. The Share3D Dashboard is integrated with the [CARARE aggregator](#), which means that the metadata record can be submitted directly to Europeana without any additional work on the side of the cultural institution. Another benefit for cultural institutions is that the Dashboard has been built with metadata quality in mind. It enables cultural institutions to exploit Linked Open Data resources easily, and secures the quality of the metadata for Europeana.

Overall, the Dashboard is particularly beneficial to the cultural sector which is increasingly present on Sketchfab. Allowing for more efficient submission of 3D models to Europeana while preserving the metadata quality is of great benefit and can help the sector to share the collections more widely.

6.3. Storymaker

Use of the storymaker for this audience

Cultural heritage institutions can use the Storymaker to create stories using their collections as well as linking to the others across Europeana and Sketchfab. The stories then can be shared online in order to tell the stories of the artefacts, people, places and events; promote collections; and grow awareness of the cultural heritage.

Examples of the use of the Storymaker by Cultural heritage institutions include:

- An online exhibition designed to accompany a physical one and/or to provide an alternative to physical access to the exhibition. This scenario allows the content creators, curators and exhibition designers to easily compile the material and exhibit it in an interactive and attractive way that can be deployed on digital devices (e.g. desktop, mobile, and potentially touchscreen).
- An online timeline can provide another way of showcasing the history of a monument, building or area, or even of an individual institution. This scenario allows the content creators to select archives available in Europeana or Sketchfab to illustrate the timeline.
- A digital story to accompany a catalogue entry for an artefact. This scenario could help to build a narrative around an object and tell its history, that can be easily shared online

An example of this scenario is the online exhibition of High Crosses. They are the most iconic and artistically significant stone monuments of medieval Ireland, which survived in situ on monastic sites (a few are held in museum collections). For a cultural heritage institution, they can be a challenging subject to exhibit due to the fact that they are not possible to remove from

their sites. In 2010 the Irish High Crosses Exhibition at the National Museum of Ireland brought together casts of 6 plaster High Crosses along with a selection of Irish early Christian treasures. It was a temporary exhibition and ended in 2011. Despite its great success, there has not been any other major exhibition of the Irish High Crosses since. At the same time, the advance in 3D technologies in the past decade made it possible to create digital 3D models of many of the Irish High Crosses (for example through the 3D-ICONS EU project <http://www.3dicons.ie/>) and digitisation of collections has made hundreds of relevant Irish High Crosses materials to become accessible online through Europeana. With the Share3D Storymaker it is possible to re-use these abundant digital resources to exhibit the Irish High Crosses online in an easy and visually attractive way, for example by exploring each cross and its decorative motifs in detail.

Another scenario could involve a museum organising an online exhibition to put their objects in context. One of the objects in its collection is a 17th century pass glass, an unfamiliar object which is difficult to engage the visitors with. The glass is enclosed in a display with numerous examples of European glass objects and is accompanied with a short label with description, origin, etc. The curators would like to put it in the spotlight to help visitors understand the object in the context of 17th century society and material culture. The Storymaker tool could be used to help with that - the story could appear on the museum's website as an addition to the exhibition, and in situ - on a touchscreen / tablet provided next to the object.

In general we envisage that museum curators and exhibition organisers will use the Storymaker to improve museum experiences for visitors. While 3D models allow visitors hands-on interaction with realistic 3D copies of artefacts, the Storymaker allows curators to add context and to depict objects in their historical context.

7. SUMMARY

This document illustrates the various scenarios that the potential users of Share3D tools might follow and use either the Share3D Dashboard, Share3D Storymaker, or both. The information is also deducted after discussions on various stakeholders during users requirements and user evaluations performed on Share3D presentations and communication events.