

Milestone Report



Share 3D

ACTIVITY 6

M10 - USER EVALUATION REPORT

Indicative completion Date:

31/05/2019

Publication date: 28/02/2020



CONNECTING EUROPE FACILITY (CEF) – TELECOMMUNICATIONS SECTOR

Grant Agreement INEA/CEF/ICT/A2017/1568597

Table of Contents

Introduction	4
METHODOLOGY	4
2.1 User groups	4
2.2 Methodology	4
2.3 Phases	4
2.4 Action plan	5
EVALUATION: DASHBOARD	6
3.1 Evaluation against the user requirements specification	6
3.2 User feedback	8
3.1 Evaluation of questionnaire responses	10
User evaluations - Storymaker tool	11
4.1 Evaluation against the user requirements specification	11
4.2 User feedback	13
4.3 Evaluation of questionnaire responses	16
Evaluation: Guidelines	16
Conclusion	17
Annex 1: Questionnaire	19

Table of Figures

<i>Figure 1: this is the first image</i>	4
--	----------

List of Tables

<i>Table 1: This it a caption</i>	5
-----------------------------------	----------

Disclaimer

This document contains description of the Share3D project findings, work and products. Certain parts of it might be under partner Intellectual Property Right (IPR) rules so, prior to using its content please contact the consortium head for approval.

In case you believe that this document harms in any way IPR held by you as a person or as a representative of an entity, please do notify us immediately.

The authors of this document have taken any available measure in order for its content to be accurate, consistent and lawful. However, neither the project consortium as a whole nor the individual partners that implicitly or explicitly participated in the creation and publication of this document hold any sort of responsibility that might occur as a result of using its content.

This publication has been produced with the assistance of the European Union. The content of this publication is the sole responsibility of the Share3D consortium and can in no way be taken to reflect the views of the European Union.

Share3D is a project funded by the European Union
(Grant Agreement INEA/CEF/ICT/A2017/1568597).



Acronyms

GLAM	Galleries, libraries, archives, and museums
UI	User Interface
UX	User experience

1. INTRODUCTION

This document focuses on the evaluation of user feedback of the tools developed in the Sharing New Perspectives: Your 3D view on Europeana project (Share3D dashboard and storytelling tool).

The evaluation forms part of Activity 6 and was designed to inform the development of the dashboard and storytelling tools, by evaluating user experience of the tools to refine the development of the prototypes and improve the usability of the tools.

Evaluation was carried out at two stages - in the early stage of development of the tools and again when the tools reached a mature stage. This document provides a description of the evaluation methodology and collects and presents the results of the user evaluation.

2. METHODOLOGY

This section describes the methodology and means of user evaluation in the project.

2.1 User groups

The project defined target audiences for the tools (see Milestone 9 user requirements specification). The audiences include:

- Cultural heritage institutions: curators, researchers and communicators
- Education: educators and students
- Tourism: guides, site managers
- Creative industries: creatives
- Research: researchers and university educators

2.2 Methodology

The methodology for gathering user feedback and evaluating user experience of the Share3 tools includes:

- Interviews: face-to-face, phone/Skype
- Online questionnaire
- Email responses

2.3 Phases

The evaluation of the tools was conducted in two phases:

Phase 1 - During this stage project partners (VUFC, NoHo and VisDim) evaluated user needs and requirements from the tools under development in Share3D by:

- one to one open discussion (directly or via Skype, phone call, or by email)
- open questions based on storyboards and scenarios around a use case
- open questions based on the user requirements

Phase 2 - During this stage project partners (VUFC, NoHo, VisDim and CARARE) evaluated user feedback on their experience of using the Share3D Dashboard and Storymaker. Users were invited to take part in the evaluation through:

- personal invitations by project partners to their contacts in GLAM institutions
- invitations to cultural heritage institutions on Sketchfab
- messages posted on Twitter to invite users to explore Share3D tools
- during events where Share3D was presented

The evaluation was carried out

- one to one interviews (directly or via Skype)
- through an online questionnaire¹ available at Share3D.eu and distributed through social media and newsletters
- by gathering feedback via emails
- evaluation against the user requirements specification

2.4 Action plan

Project partners developed an action plan for carrying out the evaluation. This involved the following steps:

1. Interviews

- a. Identifying contacts amongst the target audiences
- b. Inviting contacts to participate in the evaluation by direct email
- c. Scheduling Interviews
- d. Participation in dissemination activities and presentation of the Share3D tools and gathering direct feedback from participants

2. Online questionnaire

- a. Designing the questionnaire and publishing it online
- b. Inviting feedback from target users via direct email
- c. Messaging target users via mailing lists and social media

3. Evaluation against user requirements specification

The developed tools were evaluated against the user requirements specification.

¹ <https://share3d.eu/support/>

4. Analysis

The feedback collected from users during the evaluation activities was analysed and reported back to the Share3D team during the project's regular Skype conference calls.

3. EVALUATION: DASHBOARD

This section describes the results of evaluating the Dashboard against the user requirements specification, the feedback from users and the feedback gathered in the online questionnaire.

3.1 Evaluation against the user requirements specification

#	Category	Description	Priority	Evaluation
1	Access	Users need to be able to access the Dashboard on desktop (online)	Must have	Yes, the Dashboard is available online
2	Access	Users need to be able to access the Dashboard on tablet and mobile (online)	Should have	The Dashboard is available on mobile devices
3	Access	Users need to be able to register/create an account in Dashboard that will A) link to their Sketchfab account and B) be authorised by Europeana	Must have	Yes, users can register and link to their account on Sketchfab. Users need to sign the Data agreement, and have their accounts approved by the Share3D administrator before submitting data to Europeana.
4	Profile	Users need to be able to access and edit their profile information and settings (including closing the account)	Must have	Users can edit their profile information. The process for closing the account has not been embedded.
5	Info	Users need to be able to find more information about the Dashboard and Share 3D	Should have	Yes, there is a link to the Share3D project website.
6	Contact	Users need to be able to contact Share 3D if they have any questions about the Dashboard	Should have	Yes, users can contact Share3D via the website.
7	Objects	Users need to be able to view their Sketchfab objects and their status in terms of the metadata submission to the Europeana	Must have	Yes, users can view the metadata for their sketchfab objects and its status - not published, awaiting validation, published (submitted to Europeana)

		(none, uploaded, submitted, validated)		
8	Objects	Users need to be able to organise their objects into collections (not reflected in Sketchfab)	Could have	Not implemented
9	Objects	Users need to be able to edit their objects directly in Sketchfab (link > opening in a new window)	Should have	Yes, a new window opens to allow users to edit their model on Sketchfab if they click on the preview of the object in the dashboard
10	Objects	Users need to be able to add tags to their objects	Could have	The metadata capture form allows users to add 'tags' for subject, period, place name and creation method.
11	Objects	Users need to be able to search their object by keyword / tag	Should have	Not implemented.
12	Metadata	Users need to be able to add metadata (EDM) to their Sketchfab objects	Must have	Yes, the metadata capture form allows users to add metadata to their Sketchfab objects that conforms to EDM.
13	Metadata	Users need to be able to edit/delete metadata (EDM) of their Sketchfab objects (before submitting to Europeana)	Must have	Yes, users can edit their metadata before submission. Users can 'delete' the metadata for a model from the Dashboard.
14	Metadata	Users need to be able to edit metadata (EDM) of their Sketchfab objects (before submitting to Europeana)	Must have	Yes, users can edit their metadata before submission.
15	Metadata	Users need to be able to submit their Sketchfab objects with completed metadata (EDM) to Europeana for validation	Must have	Yes, the dashboard allows users to capture metadata from Sketchfab (including the links to the object and to previews) and add metadata for Europeana before submission. Metadata records are submitted to Europeana via the CARARE aggregator..
16	Metadata	Users need to be able to submit a bulk of Sketchfab objects with completed metadata (EDM) to Europeana for validation	Should have	Not implemented
17	Metadata	Users need to be able to get notifications when their objects and metadata are validated by Europeana	Must have	Notifications currently depend on a manual process.

18	Metadata	Users need to be able to sync / refresh the Dashboard so the metadata gets updated in Sketchfab	Should have	Not yet implemented.
19	Metadata	Users need to be able to fill in the EDM metadata with a support of vocabularies (e.g. AAT, Geonames)	Should have	Yes, the metadata capture forms integrate Linked Open Data vocabularies.
20	Metadata	Users need to be able to download the EDM metadata of an object	Should have	Users can preview the EDM metadata for an object, but download has not yet been provided.
21	Metadata	Users need to be able to download the EDM metadata of multiple objects (batch)	Could have	Not yet implemented.

3.2 User feedback

Feedback was gathered from users at various stages in the development. In early summer 2019, CARARE and ARC demonstrated an alpha prototype of the Dashboard to colleagues at the Discovery Programme. The processes of registering, linking the account to Sketchfab, importing metadata for a published model on Sketchfab and adding metadata using the Dashboard was worked through. Valuable feedback was gathered from the Discovery Programme on the ease-of-use, the metadata profile and the functionality of the forms which helped to inform the next stage of development of the forms.

During the autumn and winter of 2019, the Dashboard was demonstrated to a number of potential users and feedback was gathered. ARC demonstrated the Dashboard at a meeting of the Europeana Archaeology project which, amongst other feedback, helped to inform the development of the vocabulary resources that are incorporated into the Dashboard. The Dashboard was also demonstrated at meetings of the Europeana Aggregator forum which led to testing of the services by partners in the Common Culture project and the V4Design project.

Information about the Dashboard and invitations to potential users to test the service were posted on the EuropeanaTech mailing list and on Twitter. This led to a number of individuals registering on the service to test its functionality.

In general user feedback on the Dashboard has been good. Testing of the services by users during the beta stage (autumn-winter 2019) gave useful feedback on the functionality and the usability of some aspects of the service.

Some of the feedback and actions are described below

Feedback	Action
<i>Difficulties with the login process - The log-in form does not seem to redirect to the right page</i>	The login process was reviewed and stabilised. A password reset function was added.
<i>Users requested the ability to include more information about the process of creating 3D models in their metadata record.</i>	The metadata profile was reviewed, new elements were added to cover the model creation process, and the mapping to EDM was revised to include these new elements. A vocabulary list was developed to provide a pull-down list for model creation processes. The forms were adapted.
<i>Users requested the ability to be able to include links to online resources, bibliographic references and references to collections.</i>	The metadata profile was reviewed and new elements were added and the forms adapted.
<i>'Can the descriptive text include hyperlinks and media included when writing the description.'</i>	The possibility of implementing a more advanced editor was evaluated, but no solution has yet been found.
<i>Difficulties were reported in choosing a date from a calendar to add the date of the creation of the model. The day-month-year format was considered to be overly precise, as models are created over a period of time.</i>	The calendar was replaced with a simple pull-down list to allow users to select the year of creation (of the 3D model).
<i>Difficulties were reported in using Mapbox to select a location relevant for the model. Names for small villages/hamlets were not found, or came up in the wrong country,</i>	The form was changed to allow use of Mapbox to search for locations and to enable users to drag-and-drop the pin to capture the exact coordinates of the place to the record. A separate 'place name' element allows users to record the name of the location manually.
<i>I was not sure what 'copyright statement' meant, perhaps it would be clearer to say 'copyright holder'?</i>	Review element labelling and guidelines.

"I've been looking at theShare3D dashboard for a while, I really like the easy mapping from sketchfab metadata to EDM², that's some great stuff!" Europeana staff member

"First of all I want to say that I think that Share 3D is amazing. Not only do we have an easy way to get Sketchfab models into Europeana but what has essentially been created is a tool for cataloguing natively in EDM including LOD." Europeana content ingestion

"We think that the tool for metadata collection is a great idea and we are interested in knowing more about it." University lecturer

"I have been working yesterday with a Share3D tool to prepare the metadata. I must say, it's very easy to use." Project manager

"I would love to see your very impressive tools additionally tailored to more sustainable solutions, which would also promote those at the same time." University repository manager

"I had a demo of this project : <https://share3d.eu/> at the beMuseum conference last year in Brussels and re-use of the developed techniques within the project look very promising." Natural history curator

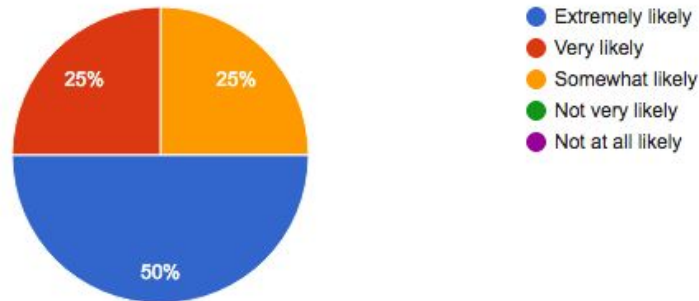
3.1 Evaluation of questionnaire responses

A small number of responses (11) were received via the online questionnaire. Of these only 4 completed the questionnaire in full. These respondents indicated that they were likely to use the Dashboard in future and characterised the process of using the Dashboard as moderate to easy

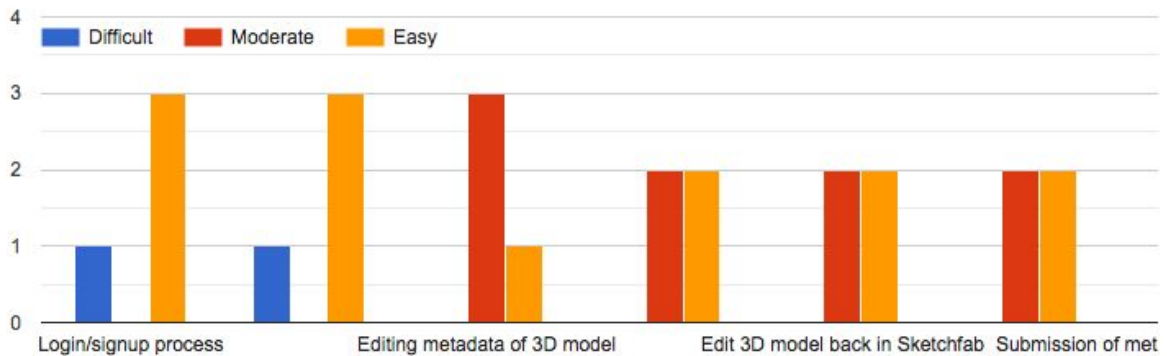
² EDM (Europeana Data Model) is the metadata format used by Europeana.

How likely is it for you to use Share3D Dashboard in the future?

4 responses



How would you characterize the following processes in Dashboard (Website: <https://dashboard.share3d.eu/login.php>)?



4. USER EVALUATIONS - STORYMAKER TOOL

This section describes the results of evaluating the Storymaker against the user requirements specification, the feedback from users and the feedback gathered in the online questionnaire.

4.1 Evaluation against the user requirements specification

#	Category	Description	Priority	Evaluation
1	Access	Users need to be able to access the Storytelling Tool on desktop (online)	Must have	Yes, the Storytelling tool (the Storymaker) is available online

2	Access	Users need to be able to access the Storytelling Tool on tablet and mobile (online)	Should have	
3	Access	Users need to be able to register/create an account or sign in to the Storytelling Tool if already registered	Must have	Yes, users can register and sign in to their accounts.
4	Profile	Users need to be able to access and edit their profile information and settings (including closing the account)	Must have	Yes, users can update their profile The process for closing the account has not been embedded in the forms.
5	Info	Users need to be able to find more information about the Storytelling Tool and Share 3D	Should have	Yes, links are provided to more information about the project and the Storymaker from the website.
6	Contact	Users need to be able to contact Share 3D if they have any questions about the Storytelling Tool	Should have	Yes, users can contact Share3D from the project website.
7	Tutorial	Users need to be able to read/watch a tutorial, e.g. 'Get started', 'I want to create...'	Could have	Guidelines have been provided for users to read about how to create a story.
8	Story	Users need to be able to create/edit/save/preview/publish/delete a story	Must have	Yes, users can create/edit/save/preview/publish and delete their stories
9	Story	Users need to be able to download a story	Could have	The facility to download a story in PDF format is under development.
10	Story	Users need to be able to share a story	Should have	Yes, users can share stories via social media and emails.
11	Story	Users need to be able to embed a story	Could have	Not yet implemented.
12	Story	Users need to be able to view a list of their stories and their statuses (e.g. draft, published)	Must have	Yes, users can view their stories and see their status (published, private).
13	Story	Users need to be able to search for, view and 'add to collection' stories created and published by others	Should have	Yes, registered and unregistered users can browse through stories, search for stories, and view the stories published by others.
14	Story	Users need to be able to rate stories created by others	Could have	Not implemented
15	Story	Users need to be able to comment on stories created by others	Could have	Not implemented

16	Story	Users need to be able to get a notification when someone rates their story	Could have	Not implemented
17	Story	Users need to be able to get a notification when someone comments on their story	Could have	Not implemented
18	Story	Users need to be able to create a title for the story	Must have	Yes, users can provide a title and description for their stories.
19	Story	Users need to be able to create additional metadata for the story	Should have	Yes, descriptive metadata is generated for all stories. This metadata includes the metadata added by the users (title, description, annotations), plus details of all the assets included in the story.
20	Story	Users need to be able to use a template	Should have	Yes, three templates are provided for users to use.
21	Story	Users need to be able to assign a Creative Commons licence to the story	Could have	Not yet implemented.
22	Objects	Users need to be able to search Europeana and Sketchfab for objects to use in a story	Must have	Yes, searches are available for content from both Europeana and Sketchfab. The Europeana search is filtered to include content openly licenced for re-use.
23	Objects	Users need to be able to save their searches for Europeana and Sketchfab objects	Could have	Not implemented.
24	Objects	Users need to be able to save/delete objects found on Europeana and Sketchfab	Must have	Users can select objects found in Sketchfab and Europeana for inclusion in their stories. Users can edit their stories choosing to replace objects with other materials, and can delete chapters from their stories.
25	Objects	Users need to be able to edit the objects (if applicable, e.g. crop an image, resize 3D object)	Should have	Not implemented.
26	Objects	Users need to be able to add their own content: text, images, video	Could have	Yes, a facility has been implemented to enable users to upload images and text documents for inclusion in their stories.
27	Objects	System managers need to be able to take down uploaded content (for breaches of	Could have	It is possible for the system manager to unpublish a story if

		privacy, copyright, other legislation, local policies etc.)		required (in case of any reported breach).
28	Teamwork	Users need to be able to create a shared workspace and invite / remove users	Should have	Not implemented. Users have an individual workspace.
29	Teamwork	Users need to be able to assign roles to team members (e.g. admin, editor, contributor, viewer)	Could have	Not implemented
30	Teamwork	Users need to be able to identify who created/added an item to the story	Should have	Not implemented.

The Storymaker tool offers three templates to choose from to fit best with the needs and story elements to communicate: a story based on hotspots of an object, a story based on a timeline and a story based on a slideshow.

The first template is most suited for a story about one unique object, where its different features can be highlighted and added as hotspots. The timeline template is best suited for a story based on dates and events. The third template, similar to a slideshow, is best suited for a story that has a number of highlights - it can showcase the objects in desired order and with equal importance for example.

4.2 User feedback

Feedback was gathered from users at various stages in the development.

In autumn 2019 users were invited to give feedback on the name of the tool. This was described as a “Storytelling tool” in the project workplan. Following a review and consultation with users, the service was named the “Storymaker”. The new name was agreed to be more representative of the service. The URL <https://storymaker.share3d.eu/> was registered and all references to the Storytelling tool on the project website were changed to the “Storymaker”.

In general, users have responded positively to the Storymaker service. Its look and feel are considered attractive by users. User feedback suggests that the process from signup to publishing a story is clear and straightforward, and the guidance made available on how to create stories out using content from Europeana and Sketchfab are considered helpful.

Some of the feedback received and actions taken are described below:

Feedback	Action
<i>When I try to change the email address, it also changes the password with a line of dots and you should prob have a confirm password in case it was typed wrong the first time</i>	The login procedure was reviewed and stabilised.
<i>If no results are found searching for assets, there is no information that this is the case.</i>	A message added: "No results found, please try a new inquiry".
<i>Users requested the option of uploading their assets for inclusion in a story.</i>	The implications for offering this service were reviewed by the project team. It was agreed that offering users with the ability to upload materials could be considered as a value-added service for subscribers. The repository was subsequently adapted and forms developed to enable users to upload images from their local drive and store these on the Share3D repository to include in a story.
<i>Users reported difficulties when creating a story based on a timeline. The dates on the timeline did not appear in chronological order.</i>	The process of creating a timeline based story was reviewed, and the timeline was set to order chapters by date.
<i>I can't add hotspots on my 3D model.</i>	The underlying service, a prototype under development by Sketchfab, which enables users to add hotspots to other people's models was reviewed. Most issues have been resolved. Some issues persist for users who are attempting to add hotspots to their own models.
<i>Placing the annotation on a 3D model doesn't always place it where you click. A few of the annotations I added are stuck in the air. The annotations also aren't consistently saving the intended view of the object.</i>	Under review. This issue relates to the issue reported above and relates to the process of creating hotspots.
<i>When trying to edit the position of one annotation it moved other annotations unpredictably.</i>	Under review

<i>I would like to see a Save button across the screens as I wasn't sure if my edits were saved.</i>	A Save button was added to each page within the story being created by users.
<i>The initial creation pipeline has no way to publish the story. The user has to go to the "My Stories" tab and hit publish. There's nothing that prompts you to do that.</i>	Under review
<i>I noticed annotations that already exist on the model in sketchfab popping on to the model a couple of times as i was editing the story.</i>	
<i>The title of the story is not possible to change once added.</i>	The forms were adapted to allow users to edit the title and description of the story at any point.
<i>When viewing the story, I can click on the 3D models and open them directly on Sketchfab, but I can't do the same with Europeana assets. It would be good to be able to view where they come from.</i>	Under review

"I would prefer to start creating the story and then add the assets as I go along, rather than the other way around. It feels like you need to have the story well structured beforehand, which might not always be the case. I like the look and feel of the Storymaker tool. The interface is easy to use." Video producer

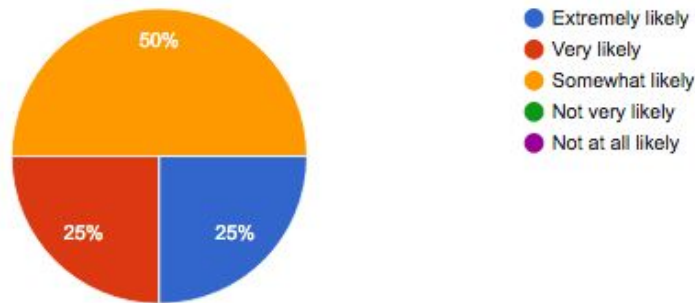
4.3 Evaluation of questionnaire responses

A small number of responses (11) were received via the online questionnaire. Of these only 4 completed the questionnaire in full. These respondents indicated that they were somewhat likely to use the Storymaker in future and characterised the process of using the tool as moderate to easy.

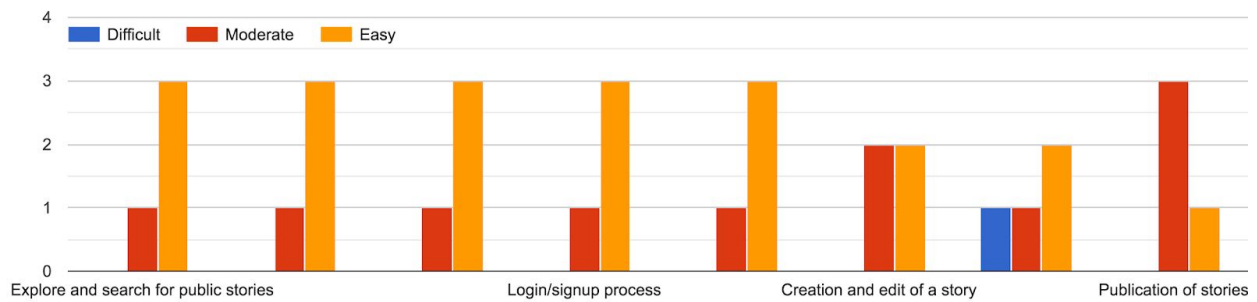
How likely is it for you to use Share3D Storymaker in the future?



4 responses



How would you characterize the following processes in Storymaker (Website: <https://storymaker.share3d.eu/home>)?



5. EVALUATION: GUIDELINES

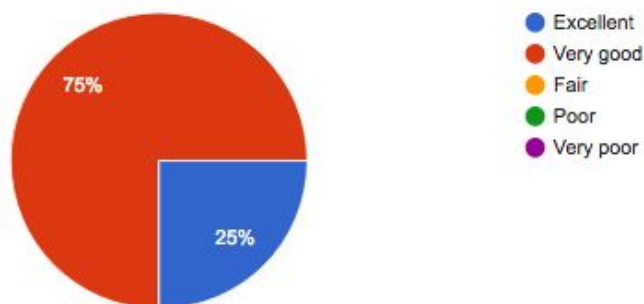
This section describes feedback from users on the Share3D guidelines. These provide user guides to the Dashboard and Storymaker as well as guidance and training materials on the process of creating 3D for cultural heritage.

In general the feedback on the Guidelines has been positive.

“Thanks for the resources. I am giving a lecture next month on the possible applications of 3D technologies in the context of cultural heritage. Is it ok for to use some of the concepts found in the guidelines from the last link. I will, of course, cite the source and your project.” University lecturer

How would you characterise the guidelines of Share3D? Website: <https://share3d.gitbook.io/share-3d-guidelines/>

4 responses



6. CONCLUSION

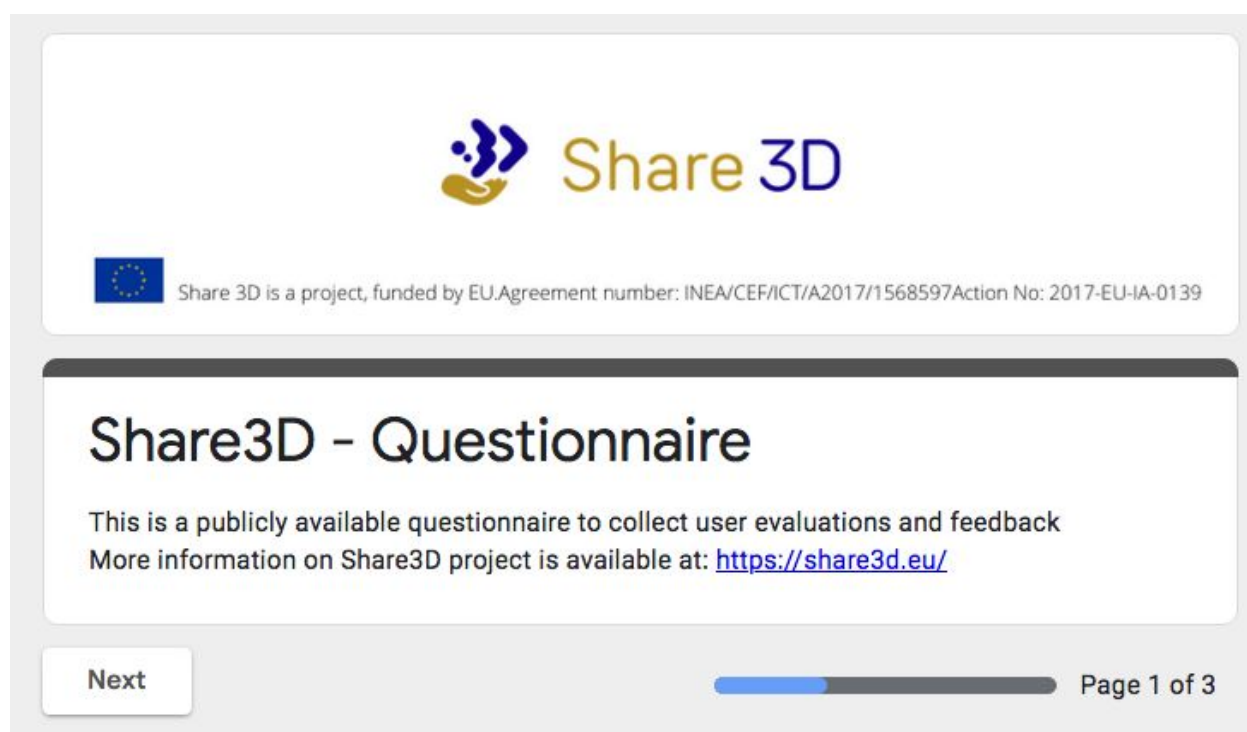
This document provides an overview of the evaluation and feedback received on the Share3D Dashboard, Storymaker and Guidelines during the lifetime of the project.

In general, the services developed by Share3D have been well received by users. The Dashboard is well regarded as a simple and easy-to-use tool for cataloguing 3D content and delivering the metadata to Europeana. While the Storymaker is considered to be an attractive and enjoyable tool for reusing the content available through Europeana and Sketchfab.

The services were made publicly available in autumn/winter 2019. By the end of February 2020, 50 individuals/institutions had registered as users of the Dashboard and 70 individuals/institutions had registered as users of the Storymaker. We expect to continue receiving user feedback on these tools, particularly now the tools are matured and their use is increasing due to the visibility of the project results among target audiences. The Share3D team has agreed to keep the evaluation process open and implement the changes if possible over 2 years after the project ends in order to optimise the tools and their use.

7. ANNEX 1: QUESTIONNAIRE

The questionnaire was made publicly available via the Share3D website to capture feedback from users on their experience of using the Share3D dashboard and Storymaker.



Share3D questionnaire entry screen

The questionnaire asked users to share some information about themselves, their skills and interests in the project.

About you:

- Individual
- A researcher / academic
- An educator / teacher
- A Cultural Heritage organisation
- An SME
- A non-profit organisation
- A public administrator

Which of the following describes the sector that you are working for?

- Cultural Heritage Institute (gallery, library, archive and museum)
- Education (school, college, university, educators)
- Tourism (tourist attractions and experience providers, guides and site managers)
- Creative Industries (studios, creators of digital content focused on culture)
- Research (individual academic researchers and university educators)
- Other

Are you already using 3D cultural heritage models in your work?

- Yes
- No

How would you characterize the following processes in Dashboard (Website:

<https://dashboard.share3d.eu/login.php>)? *

Login/signup process	Difficult / Moderate / Easy
Importing a 3D model from Sketchfab	Difficult / Moderate / Easy
Editing metadata of 3D model	Difficult / Moderate / Easy
Save metadata of 3D model	Difficult / Moderate / Easy
Edit 3D model back in Sketchfab	Difficult / Moderate / Easy
Preview of 3D model metadata record	Difficult / Moderate / Easy
Submission of metadata records to Europeana	Difficult / Moderate / Easy
Access the storymaker with your 3D model as a main story object	Difficult / Moderate / Easy

How likely is it for you to use Share3D Dashboard in the future?

- Extremely likely
- Very likely
- Somewhat likely
- Not very likely
- Not at all likely

How would you characterize the following processes in Storymaker (Website: <https://storymaker.share3d.eu/home>)? *

Explore and search for public stories	Difficult / Moderate / Easy
View public stories	Difficult / Moderate / Easy
Structure of stories via templates (hotspot, slideshow, timeline)	Difficult / Moderate / Easy
Login/signup process	Difficult / Moderate / Easy
Access to useful support material (FAQs, Guidelines, Tutorials)	Difficult / Moderate / Easy
Creation and edit of a story	Difficult / Moderate / Easy
Search of assets	Difficult / Moderate / Easy
Publication of stories	Difficult / Moderate / Easy

How likely is it for you to use Share3D Storymaker in the future? *

- Extremely likely
- Very likely
- Somewhat likely
- Not very likely
- Not at all likely

How would you characterise the case studies of Share3D? Website: <https://share3d.eu/case-studies/> *

- Excellent
- Very good
- Fair
- Poor
- Very poor

How would you characterise the guidelines of Share3D? Website: <https://share3d.gitbook.io/share-3d-guidelines/> *

- Excellent
- Very good
- Fair
- Poor
- Very poor