

Florida State University Libraries

2016

Collections Cubed Survey Instrument (2015)

Richard J Urban



Introduction/Consent

Welcome to the Collections Cubed 2015 Survey of 3D Technologies for Scientific and Cultural Heritage



Print Ready Model of the Lincoln life mask by Clark Mills
Courtesy SmithsonianX3D collection. <http://3d.si.edu>

Recent advances in the technologies needed to scan, publish, and physically render objects in three dimensions (3D) are now within reach of many scientific and cultural heritage organizations. The Collections Cubed project (#collections3D) seeks to understand how these new technologies are being adopted and used by libraries, archives, and museums in pursuit of their missions. The following survey will inquire about your organization's current and/or planned future use of 3D technologies (digitization, publication, and printing). It is intended to be answered by individuals who are knowledgeable about these technologies.

Informed Consent

I have been informed that Dr. Richard J. Urban from the School of Information at Florida State University is conducting a research project to understand the adoption and use of 3D technologies by libraries, archives, and museums in pursuit of their missions.

I understand that my participation is totally voluntary and that I may stop participation at anytime. I understand there are no risks or discomforts if I agree to participate in this study. I understand that participating in this research means completing a short, online survey that should take approximately 15-20 minutes of my time. Submitting personally identifying information is optional, and volunteered information will be kept confidential, to the extent allowed by law. Survey data will be kept in a secure location accessible only to the researchers, and will be destroyed by January 1, 2018.

If I have questions about my rights as a participant in this research, or if I feel I have been placed at risk, I can contact Dr. Richard J. Urban at (850) 778-3559, or the Chair of the Human Subjects Committee, Institutional Review Board, through the Office of the Vice President for Research at Florida State University at (850) 6448633 or by email at phaire@mailers.fsu.edu. Additional information on human subjects can be found at the Office of Research Human Subjects Committee home page located at <http://research.fsu.edu/humansubjects/>

By continuing to the next page, I am stating that I have read and understand this consent form, and I freely, voluntarily, and without element of force or coercion consent to participate in this study. I understand this consent may be withdrawn at any time without prejudice or penalty, and that I have the right to ask and have answered any inquiry concerning the study.

Organization Information

In this first section of the survey, please provide us with some background information on your organization.

Please provide some basic information about your organization:

Organization Name

Website URL

What type best describes your organization?

Archive

Museum

Library

Other. Please describe.

You selected archive in the previous question. What type of archive best describes your organization?

College and university archives

Museum archive

Corporate archives

Special collections

Government archives

Other. Please describe:

Historical society

You selected library in the previous question. What type of library best describes your organization?

- Academic library
- School library
- Art library, visual resources, or museum library
- Special library or collection
- Corporate library
- Other. Please describe:

You selected museum in the previous question. What type of museum best describes your organization?

- Anthropology/Ethnographic museum
- Historical society
- Aquarium/Botanic garden/Zoo
- Natural history/science museum
- Art museum
- National park
- Children's museum
- Science/technology center
- Historic house/site
- Other. Please describe.

How many full-time employees comprise your organization (FTE)?

- Less than 5
- 6-10
- 11-25
- 26-75
- 76-150
- 151 - 250
- 251 - 500
- 501 - 1,000
- 1,001 - 1,500
- More than 1,500

What is your annual budget?

- Less than \$250,000

- \$250,000 - 500,000
- \$500,001 - 750,000
- \$750,001 - 1,000,000
- \$1,000,000 - 5,000,000
- \$5,000,000 - 10,000,000
- \$10,000,001 - 25,000,000
- More than \$25,000,000

Please provide a brief description of the type and size of your collections.

3D Digitization Practices

In this section of the survey, please tell us a little bit about projects that your organization has undertaken to digitize your collections in order to create 3D representations of them.

Please indicate the number of 3D digitization projects you have in each of the following stages:

	0	1	3	4	5	7	8	9	11	12	13	15	16	17	19	20	
In planning																	<input type="text"/>
In progress																	<input type="text"/>
Completed in the past 5 years																	<input type="text"/>

What types of resources have been the focus of your digitization efforts? Please provide approximate numbers of items digitized.

- 0 3-dimensional artifacts (sculptures, historic artifacts, material culture, paintings, etc.)
- 0 3-dimensional naturefacts (natural science specimens, fossils, geologic specimens, etc.)
- 0 historic/archeological sites and structures (geographic features, buildings, monuments, etc.)
- 0 Plans, drawings, or other 2D resources (architectural drawings, engineering drawings, conceptual art, etc.)
- 0 Other

Which of the following digitization methods have you used? Please check all that apply.

- CAD/3D modeling
 - Contact scanning
 - Computed Tomography (CT) scanning
 - Photogrammetry (e.g. 123DCatch, etc.)
 - Structured-light scanning (e.g. Microsoft Kinect)
 - 3D models derived from digitized 2D resources
- Other. Please Describe.

- Laser surface scan - long range (e.g. pulse/phase scanners used for structures, vessels, archeological sites and monuments, etc.)

- Laser surface scan - short range (e.g. handheld or fixed laser scanners for smaller movable objects)

Which file formats are used to store digitized 3D collections at your organization? These choices represent a small portion of the many file formats available, please feel free to include others that are not included here).

- .3ds (Autodesk 3D studio)
- .ascii/text
- .obj (wavefront object)
- .ply (polygon file format)
- .iges (initial graphics exchange specification)
- .skp (sketchup)
- .step (standard for the exchange of product data)
- .vrm (virtual reality markup language)

Other. Please describe.

.pdf (3D PDF)

.stl (stereolithograph)

What kind of software does your organization use to create or manipulate 3D digital resources?

123D

MeshLab

AutoCAD

OpenSCAD

AutoDesk

Rhino

Other. Please describe.

Blender

FreeCAD

Provide a brief description of the rationale for your 3D digitization efforts. Why have these collections been the focus of your work?

How are 3D digitization projects funded at your organization? (e.g. internal operating expenses, soft-funded grants, etc.)

What does a 3D digitization project look like for your organization? Please provide a brief description of the digitization processes and methods used at your organization. (e.g. steps taken, best practices, quality standards/quality control, etc.)

Access to 3D Resources

In this section of the survey, please tell us how you provide access to the results of your 3D digitization projects to internal and external audiences.

How does your organization provide access to 3D digital resources?

- Limited access to select internal users Public access via the Internet

Other. Please describe.

- Limited access to select external audiences (i.e. researchers, other museums, consortia, etc.)

What technologies does your organization use to store and manage 3D resources for internal audiences or limited access to external audiences. (i.e. file systems, digital asset management, databases, collection management systems, etc.)

What technologies does your organization use to provide public access to 3D collections via the Internet or for public audiences. (i.e. content management systems, 3D viewers, etc.)

Please provide URL(s) for any collections of 3D resources published via the Internet

URL 1

URL 2

URL 3

URL 4

Click to write the question text

URL 5

URL 6

URL 7

URL 8

What metadata standards does your organization use to describe 3D resources?

- Darwin Core
- Dublin Core
- Europeana Data Model (EDM)
- Locally defined metadata

- MARC
- MODS
- VRACore
- Other

What kinds of intellectual property licenses govern the use of published 3D resources?

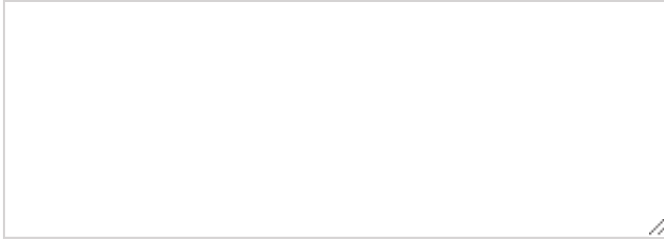
- All rights reserved
- Locally defined Terms of Use (provide a URL if possible)
- Creative Commons
- Other licensing framework (e.g. BSD, GPL, MIT, etc.)
- Public Domain

Which printers (manufacturers) does your organization use?

- 3D Systems
- LulzBot
- MakerBot
- RepRap
- Stratasys
- Zcorp
- None
- Other. Please describe.

If your organization uses 3D printers, which audiences have access to them?

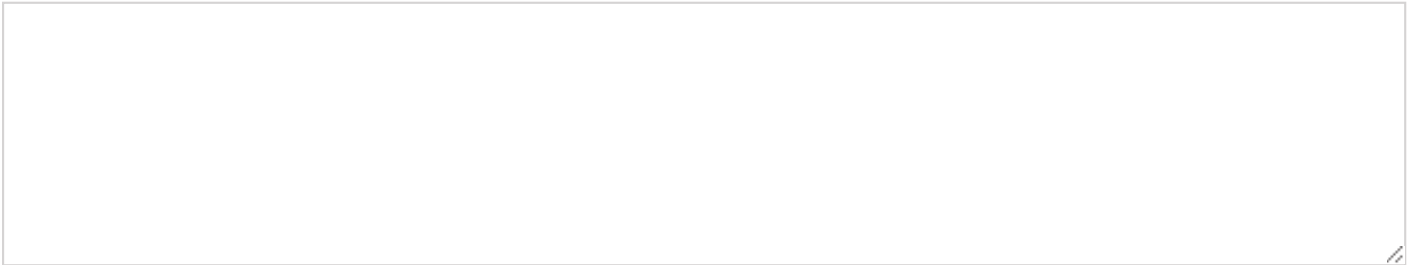
- Internal audiences
- Patrons and visitors
- None
- Other audiences. Please describe.



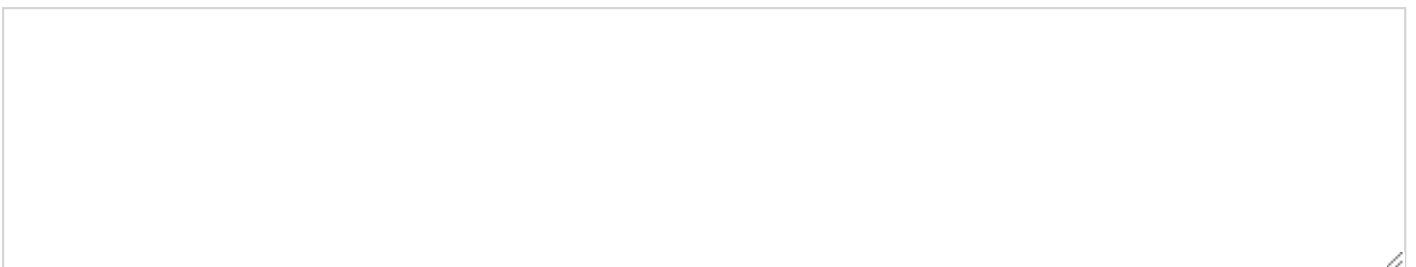
Use of 3D Digitization Resources

In this section of the survey, please tell us about how 3D resources are used to support your organization's mission.

Describe how 3D resources are used to support your mission (e.g. curatorial, education, research, etc.)



How is your organization evaluating the use of 3D resources by internal and external audiences?



Conclusion

What barriers or challenges has your organization encountered while creating, publishing, or using 3D resources?

What resources do you rely on to inform your creation, publication, and use of 3D resources? (e.g. publications, blogs, listservs, social media, leading individuals or organizations, etc.)

Are there other library, archive, or museum 3D technology projects that you use as aspirational examples? (please provide a name and/or URL if possible)

I am willing to receive emails about future surveys and/or participate in interviews about my organization's 3D activities. (this information will be kept confidential and participation is optional).

First Name

Last name

email