

# Creating Online Infrastructures for Digital Scholarship and Research

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## **Abstract**

21st century academic content comes in all kinds of media and formats: Text, Data, Video, Audio, Image libraries and even software programs. Over the last five years, Texas State University Libraries has taken steps to create robust digital scholarship infrastructures. This presentation reviews how to build such infrastructures innovatively placing research online through digital libraries, archives and online data repositories. This presentation will overview how to set up such services using leading edge open source software solutions (Dspace, Omeka, Dataverse) and overviewing technological, administrative and human resource infrastructures. The session will outline project management principles, phased project development and setting the stage and incentives for working with stakeholders to create robust and diverse online digital scholarship programs. This presentation overviews building such infrastructures with progressive benchmarks for a university wide service. It forwards the application of project management, inclusivity and scaling for creating such a program for any university, college or learning oriented institution building foundations for a digital scholarship program.

## Creating Library Infrastructures for Digital Scholarship

### 1) From Zero to Hero or Utilizing Existing Infrastructures

- a) Digitization Lab: Equipment, Manager, Student Help
- b) Staffing: Digital Collections Librarian/Department Head, Programmer
- c) Options: Digital Repository Librarian/Data Services Librarian

### 2) Getting Started with Projects

- a) Principles, Diversity and Inclusion
- b) Project Management
- c) Agile Methodologies
- d) Stakeholders and Sponsors
- e) Timelines and the Long-Range Trajectories

### 3) Phased Project Building – Benchmarks

- a) Building a Team
- b) Technical Benchmarks/Proof of Concepts
- c) Phased Building: From Simple to Complex
- d) Working with Special Collections and Archives
- e) Working with Faculty

### 4) Example Digital Scholarship Humanities Infrastructure/Phasing

- a) Beginnings: Simple Wins  
Santiago Tafolla Online Exhibition and Digital Archive  
Images, text, translation, diversity  
<https://exhibits.library.txstate.edu/thewittliffcollections/exhibits/show/santiago-tafolla-collection/rev-tafolla>
- b) Increasing Capacity: Digitizing, Using Complex Technology/Student Help (100k+ pages)  
Digital Repositories, Zooming, Page Turning Modules/Workflows, Quality Assurance  
<http://exhibits.library.txstate.edu/univarchives/exhibits/show/pedagog>
- c) Complex Projects: Multimedia/Story Narrative/Interviews/Video  
And the Earth Did Not Swallow Them: Severo Perez Digital Film Archive  
<http://exhibits.library.txstate.edu/thewittliffcollections/exhibits/show/severo-perez/>  
Dick Reavis National Tour of Texas: GIS Innovation  
<https://exhibits.library.txstate.edu/thewittliffcollections/exhibits/show/the-national-tour-of-texas>

- d) Grant Projects and Innovation: Proposals and Outside Collaborators  
Sand Marcos Daily Record Negatives, Flickr  
<https://www.flickr.com/photos/txstate-smdr/>
- e) Putting it all Together: New Technologies  
Cabeza De Vaca: IIf/Mirador Viewer, Interviews and Marketing  
<https://exhibits.library.txstate.edu/cabeza/>

## 5) Working with Faculty: Digital Fellowship Programs

- a) Structuring, Competitions, Prototypes for Further Grants.  
[Texas State University Libraries Digital Fellows Program](#)

## Conclusion

Tips/Admonitions

## Presentation Background Websites and Resources

[Texas State University Libraries Wittliff Collections Online Exhibitions](#)

[Texas State Libraries University Digital Archives](#)

[Texas State University Libraries Faculty Digitization Services](#)

[Texas State University Libraries Digital and Web Services](#)

## Learning Outcomes

- 1) Attendants will learn how to create and/or strengthen digital scholarship infrastructures
- 2) Attendants will learn project management and agile programming principals for digital scholarship projects
- 3) Attendants will learn how to build digital scholarship teams and technology infrastructures
- 4) Attendants will learn about key open source software to enable digital scholarship projects (DSpace, Dataverse, Omeka, IIf)

**Keywords:** Digital Scholarship, Digital Humanities, Digital Teams, Online Exhibitions, Digital Libraries, Digital Archives, Multimedia Libraries, Agile Programming, Project Management, Digital Infrastructure Development