User Research Methodologies

for GLAM Digital Projects

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Table of **contents**

01

About GLAM Digital Projects

About GLAM Digital Projects
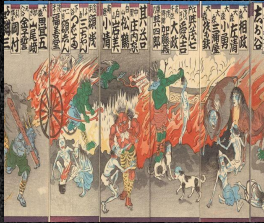
2016

University
of Oregon Libraries   **+**   Jordan Schnitzer
Museum of Art   **=**   UO GLAM Alliance

2018-2020

"Leveraging GLAM Assets in Research, Teaching, and Learning: Mellon
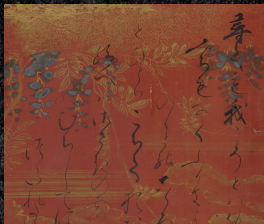Faculty Fellowships to Advance Library-Museum Collaboration"

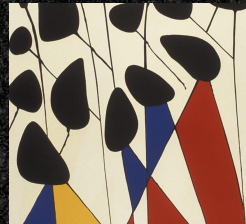# 6 digital projects

Omeka S and WordPress

Yōkai
Senjafuda

The Artful Fabric of
Collecting

Tekagami
and Kyōgire

Madness Outside In

United Collections

The March
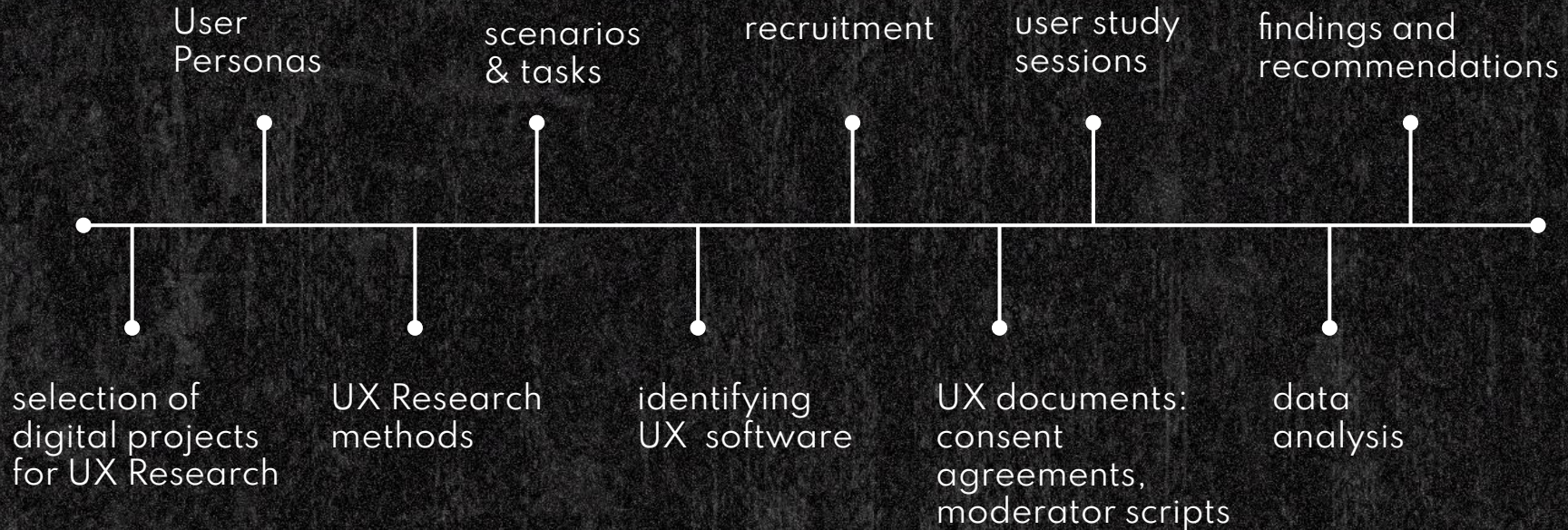
All projects can be found on glamalliance.uoregon.edu

02

UX Research Process

Research Questions

- How do users feel about digital projects?
- What are the areas of friction that users face while interacting with digital projects?
- What are the opportunities to improve the user experience of the digital projects?

The Process of UX Research

- User Personas
- scenarios & tasks
- recruitment
- user study sessions
- findings and recommendations

- selection of digital projects for UX Research
- UX Research methods
- identifying UX software
- UX documents: consent agreements, moderator scripts
- data analysis

User Personas

Curator Persona

The Artful Fabric of Collecting

TOMMY ITO

Asian Art Curator
Works at an art museum that specializes in Chinese Art collections

Tommy Ito is a Curator for Asian Art at the Smithfield University Museum of Art. They are tasked with showing off a digital exhibit to potential donors. It's important to them that they can show the website off without any technical issues accessing the digital exhibit. They favor searching for a specific item that everyone always wants to see. They want to show off the interactive viewer and talk about how it makes a connection between the physical artwork and access to millions of people for free in digital form.

Frequency of use: frequently to show off the digital exhibit to donors who connect with the art museum remotely through Zoom.

Technical Proficiency: low

MOTIVATION	SCENARIO	SPECIFIC GOAL
1. Show off a specific item to a potential donor	Tommy has a donor interested in looking at a specific artwork over Zoom. The artwork title, date, and material are important information to talk about with the donor. Tommy also wants to show off how the digital object is interactive through the digital exhibit website.	**1.1** Find a known item in the digital exhibit **1.2** Locate artwork title, date, and material for the artwork **1.3** Interact with the image viewer on a show item page, its utility, and functionality
2. Talk about a specific digital exhibit theme - Producing of silk - with a donor	Tommy has a donor who is interested in Chinese silk textiles. Tommy wants to show the donor the part of the digital exhibit about the production of silk. They plan to read from the web page and show the steps of producing the silk as depicted in Gertrude Bass Warner's photographs. Tommy also wants to show the sites of imperial silk workshops by taking the donor through the storymap dedicated to this topic.	**2.1** Find the Producing of silk page **2.2** Locate specific information on the page **2.3** Interact with the image viewer **2.4** Find a page about imperial silk workshops **2.5** Interact with the Storymap embed.

UX Research **Methods**

- Usability Testing
- Card Sorting
- Tree Testing

Usability Testing

- Observing people as they complete the typical tasks on the website
- Think out loud method
- The goal is to test functionality, understand how people navigate and perceive the website
- Scenario and tasks are drafted based on Personas
- Tasks tackle specific functional areas of the website, e.g. navigation, search and advanced search functions, interactive viewer

Usability Testing

Scenario 1

For this first scenario, you will familiarize yourself with the look and feel of The Artful Fabric of Collecting digital exhibit. You are not looking for anything specific, simply observing what stands out to you.

1) Please go to the direct link provided for accessing The Artful Fabric of Collecting digital exhibit. Take a moment to explore the website. While doing so, please let us know what draws your attention.

Usability Testing

Scenario 2

You are writing a blogpost about Ceremonial and Decorative Hangings. You want to include some images of the hangings in your blogpost.

1) Find the image of Hanging with Filial Piety Performance Scene.
2) Find and copy the embed code.
3) Find information about the measurements and material of the hanging.
4) Find the rights holder of this item.

Card Sorting

- The goal is to evaluate information architecture and uncover users' mental models
- Participants organize cards with content topics into categories that make sense to them.
- Hybrid Card Sort - sorting into predefined categories as well as creating new categories.

Card Sorting

Tree Testing

- The goal is to evaluate the navigation menu
- Helps to understand if menu labels make sense and if people can find the information they need easily.
- Participants complete tasks of finding information in the tree structure of the navigation.

Tree Testing

You want to find information about the characters in *The March* movie.

Where would you search for this information?

Please select

Home

🖑 Themes

James Blue

The Civil Rights Movement

Lyndon B. Johnson

Chapters

Recruitment

- Based on user Personas
- Representatives of the GLAM community that would use digital projects in their research and teaching
- The area of studies, research, or expertise of the participant should include Art History, Asian Studies, or History.

UX Documents

- Consent Agreements
- Participant Handout with scenarios and tasks for Usability Testing
- Moderator Scripts
- Template for Observer's Notes

Testing Setup and Moderation

Usability Testing Session

- Remote via Zoom
- Participant + moderator + observer
- 1, 5 h session, 4-5 scenarios, 11-14 tasks.
- Done directly on the website
- Port-study System Usability Scale

Tree Testing and Card Sorting Session

- Remote via Zoom
- Participant + moderator + observer
- 1 h session
- Done in UX software
- Post-study questions

Data Collection

Usability Testing Session

- Participants' comments and impressions (via think out loud method)
- Screen recordings of participants' interactions with the website
- Metrics on the number of errors and time to complete
- Answers to the SUS Survey

Tree Testing and Card Sorting Session

- Screen recordings of participants performing tasks
- Participants' comments
- Observer's notes
- Participants' answers to the post-study questions

Data Analysis

Usability Testing Analysis

- Average Score of Participants' Performance (errors and time to complete scenarios) for each scenario
- Identifying patterns from participants' comments, impressions, and observer notes
- System Usability Scale Analysis

Card Sorting Analysis

- The listing of all cards into categories
- How many times a specific card was sorted into each category - low-agreement and high-agreement cards

Tree Testing Analysis

- Tasks Success and directness
- Destinations - where participants ended up for each task

03 Main Takeaways

Main Takeaways

- Appreciation of format of digital projects among the GLAM community
- Value digital projects bring to increasing access to unique collections and in promoting research, teaching, and learning.

Main challenges:

- Navigating complex and content-rich digital exhibits
- Findability and discoverability of content

Main recommendations:

- UX needs to be integral part of the digital project development from the start
- Information Architecture - planning organizational structure, content categories and labels with experts, and testing with users
- Adapt scholarly content for the web - using best practices of writing for the web

04 Tools for UX Design and Research

UX Software

Building new digital projects

- UXtweak - Card Sorting (open, closed, hybrid), Tree Testing, Analysis Automatization, Wide range of dashboards
- Figma - wireframing and prototyping
- Marvel - wireframing, prototyping, and user flow, usability testing on prototypes
- Maze - tree test, card sorting, usability testing of prototype

Enhancing existing projects

- UXtweak - unmoderated usability testing
- Crazyegg - snapshots and heatmaps

Thank you