Researching Researchers:
Avalon Media System's Ethnographic Study of Media Collection Usage

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What is Avalon?

**Avalon Media System** enables libraries and archives to easily curate, distribute and provide online access to their A/V collections for purposes of teaching, learning and research.

[www.avalonmediasystem.org](http://www.avalonmediasystem.org)
What is Avalon?

Open source software system currently directed by Indiana University & Northwestern University

Hydra Solution Bundle
Project Funding

• 2010-2011: IMLS Planning Grant
• 2011-2015: National Leadership Grant from the Institute of Museum and Library Services
• 2015-present: Andrew W. Mellon Foundation
Early Planning Decision

• Focus on:
  1. Infrastructure for media collections management and delivery *OR*
  2. End-user tools for teaching, learning, and research use?

• Chose to focus initially on option 1
Goals of current Mellon grant

1. Develop additional Avalon functionality

2. Conduct studies of use of audio and video collections by humanities researchers

3. Develop and implement a community-funded business and governance model

4. Deploy Avalon in a hosted SaaS model for testing/pilot
Learning Tools Interoperability
From Our Mellon Grant Proposal:

• The proposed user research will be multi-method, though primarily ethnographic in character:

• Identify at least two disciplines for focus, such as music theory, ethnomusicology, or film studies.

• Conversations with these researchers will enable us to select a set of researchers for focus who represent a wide range of media research use cases and are willing to work with us during the grant.
Why ethnographic research?

QUESTIONS ANSWERED BY RESEARCH METHODS ACROSS THE LANDSCAPE

BEHAVIORAL

WHAT PEOPLE DO

W HY & HOW TO FIX

HOW MANY & HOW MUCH

WHAT PEOPLE SAY

ATTITU DINAL

QUALITATIVE (DIRECT)

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QUANTITATIVE (INDIRECT)

https://www.nngroup.com/articles/which-ux-research-methods/
## Which ethnographic research?

### A LANDSCAPE OF USER RESEARCH METHODS

**BEHAVIORAL**
- Eyetracking
- Usability Benchmarking (in lab)
- Usability Lab Studies
- Moderated Remote Usability Studies
- Unmoderated Remote Usability Studies
- Ethnographic Field Studies

**ATTITUINAL**
- Participatory Design
- Focus Groups
- Interviews

### QUALITATIVE (DIRECT)
- Concept Testing
- Diary/Camera Studies
- Customer Feedback
- Desirability Studies
- Card Sorting

### QUANTITATIVE (INDIRECT)
- Clickstream Analysis
- A/B Testing
- Unmoderated UX Studies
- True Intent Studies
- Intercept Surveys
- Email Surveys

### KEY FOR CONTEXT OF PRODUCT USE DURING DATA COLLECTION
- Natural use of product
- De-contextualized / not using product
- Scripted (often lab-based) use of product
- Combination / hybrid

https://www.nngroup.com/articles/which-ux-research-methods/
discovering user needs

make it up—we’re smart!

ask marketing

read pubs

ask users’ mgmt

ask users what they like or want

ask users what they do

ask users what they did

study real artifacts & data

watch users work & discuss
Uncover issues users have trying to use streaming media within their research projects.

Look at the technology they employ, and how they use technology in ways that help and hinder their research processes.
WHAT IS CONTEXUAL INQUIRY

The key differentiator between contextual inquiry and other user research methods is that **contextual inquiry occurs in context**.

It’s not simply an interview, and it’s not simply an observation.

It involves observing people performing their tasks and having them talk about what they are doing while they are doing it.
# User Research Methodology

## Contextual Inquiry-Observation

<table>
<thead>
<tr>
<th>Project</th>
<th>Media</th>
<th>Applications</th>
<th>Equipment</th>
<th>Step by Step Procedure</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Media Used (Formats)</td>
<td>App Used</td>
<td>Equipment Used</td>
<td>Experience</td>
<td>Experience</td>
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</tbody>
</table>
# User Research Methodology

## Avalon User Research Study Observation Sheet

<table>
<thead>
<tr>
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<th>Avalon User Research Study Observation Sheet</th>
<th>Avalon User Research Study Observation Sheet</th>
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</thead>
<tbody>
<tr>
<td>1. Name, Date, Location:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Project Description:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2a. Research planned for today/goals of work session:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Media Used: (include format)</td>
<td>4. Media Tools/Applications Used:</td>
<td>5. Computer Equipment Used:</td>
</tr>
<tr>
<td>3a. Experience with media:</td>
<td>4a. Experience with apps:</td>
<td>5a. Experience with equipment:</td>
</tr>
<tr>
<td>3b. Issues with media:</td>
<td>4b. Issues with apps:</td>
<td>5b. Issues with equipment:</td>
</tr>
<tr>
<td>6. Step-by-step processes:</td>
<td></td>
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</tr>
<tr>
<td>7. Observation notes</td>
<td></td>
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</tr>
</tbody>
</table>
User Research Methodology

CONTEXUAL INQUIRY: Follow up interview
User Research Methodology

DIARY STUDY

Diary Study Week #5

Please describe a moment in your research this week where you worked with time-based media on a computer. Be specific as to what material you were working with - the title of the video as well as the platform you accessed it with. What did you plan to do with this media? What did you accomplish? What kept you from getting things done? You can talk about environment here as well as technology. What helped you in getting things done? What were the frustrations?

Please submit your response by attaching a Word document or PDF.

<table>
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<th>Submitting</th>
<th>Turnitin</th>
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<tbody>
<tr>
<td>Jun 5</td>
<td>Everyone</td>
<td>Apr 16 at 12am</td>
<td>-</td>
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</table>
Study Results

For scholars of all levels: More importance is put on content and accessing it, less on interface.

They will use whatever player/tool is available to access the film/music/footage they need for their project.
Study Results

No one uses just one tool while accessing and researching media.

**Ripping**
HandBrake
MakeMKV

**Viewers**
Adobe Suite
iMovie
Preview
QuickTime Player
YouTube

**Note Taking**
Handwritten notes
(legal pad/scrap of paper)
TextEdit

**Writing**
Google Docs
KeyNote
Microsoft Word
Pages
Scrivener

**Collecting/Citing**
External Hard Drive
DropBox
EndNote
Zotero

“My computer is particularly slow, I should restart it, but I have too many documents open.”
Study Results

COMMON FRUSTRATIONS USING MEDIA for SCHOLARSHIP:
Difficulty locating files on own machine.
Study Results

COMMON FRUSTRATIONS USING MEDIA for SCHOLARSHIP:
Lack of training in technology for research needs.

“I should really learn how to use iMovie properly but I don’t have the time and my research budget doesn’t allow for taking a class.” (Tenure Track Study Participant, Northwestern)

“I was looking for something else for my research and I found this program to use.” (Graduate Student Participant, Northwestern)

“I rely on my techie-friends and students to help me when I get stuck.” (Visiting Professor Participant, Northwestern)
Study Results

COMMON FRUSTRATIONS USING MEDIA for SCHOLARSHIP:
Difficulty getting hi-res screen shots for presentations/publications/use as evidence.

https://www.youtube.com/watch?v=37XhluqsWVk
Study Results

COMMON FRUSTRATIONS USING MEDIA for SCHOLARSHIP:
Lack of authoritative sources

http://7thhouseontheleft.com/2011/10/love-lucy/
Study Results

Sand dunes in the Rub' al Khali ("Empty quarter") of Saudi Arabia, COURTESY WIKIPEDIA
Lessons Learned Thus Far

• Recruitment
Lessons Learned Thus Far

• Working from 2 separate institutions

  Consistent training and use of materials

  Crucial projects based on immediate institutional needs

  Changes in staffing across both project teams (including loss of initial leadership on study)

  Policy differences across institutions
We’re listening...

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