Analyzing UXR Data with MAXQDA: A Remote Moderated Usability Test Example
Today’s agenda

- A Quick and Dirty Overview of MAXQDA for UX Researchers
- Analyzing Remote Moderated Usability Test Videos
- Code System of UX issues
- Creative Coding to Organize UX issues
- QTT Feature to Generate UXR Deliverables
- A Short Live Demonstration for Practice
UX Research WITHOUT MAXQDA
UX Research WITH MAXQDA
A QaD Overview of MAXQDA for UX Researchers: Affordances and Benefits

**Organize**
- Data Flexibility and Variety (transcripts of user and stakeholder interviews and focus groups; images of field visits/contextual inquiries; audios & videos of usability tests)
- UX Research teamwork through Team Cloud (project exchange, collaborative coding and analysis)

**Analyze**
- Code, categorize, thematize UXR data
- Summarize & annotate
- Retrieve & filter
- Visualize
- Discover combinations & relationships to identify users’ pain points, expectations, experiences etc.

**Present**
- Data Visualizations (e.g., Creative Coding)
- UX Deliverables (e.g., QTT Worksheets)
- Transparency of UXR findings and user insights (e.g., Exporting usability video segments to convince your stakeholders)
A QaD Overview of MAXQDA for UX Researchers:

MAXQDA 2022 Workspace

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MAXQDA 2022 Workspace: Four Main Windows

Document System

- Documents
  - jasmine
    - jasmine-transcript
    - jasmine-usabilityaudio
    - jasmine-usabilityvideo
  - Jessica
    - Jessica-transcript
    - Jessica-usabilityaudio
    - Jessica-usabilityvideo
  - Mary
    - Mary-transcript
    - Mary-usabilityaudio

Code System

- Need for quick services from academic websites
- Previous bad UX of websites
- Frustration about not finding something easily on a web...
Analyzing Remote Moderated Usability Test Videos with MAXQDA

- Overview of Multimedia Browser
- Coding a usability test video with clip selection
- Adding memos to usability test video segments
- Exporting the coded video clips to share with stakeholders
Usability Test Video Analysis with MAXQDA

- import, play, transcribe, paraphrase, and directly code video footage for UX usability video analysis
- “Multimedia Browser”: playing and coding videos just like coding a text document
- Exporting still images for publications
- Saving still images as image documents in MAXQDA for further analysis
- Exporting short video clips, e.g. for presentations or analysis sessions
Usability Test Video Analysis with MAXQDA

Supported video formats:

- *MP4
- MOV
- MPG
- AVI
- M4V
- on Windows: WMV

*MAXQDA recommends the MP4 format
Usability Test Video Analysis with MAXQDA

To import a video file to a UXR project in MAXQDA
Usability Test Video Analysis with MAXQDA

See the imported files in your document system
Usability Test Video Analysis with MAXQDA

The Multimedia Browser: to play a usability test video file

Right-click the document in Document System and select Open Video File

Clicking on the play symbol
The Multimedia Browser

**VIDEO WINDOW**

- Control Panel
- Memo Buttons
- Clip Selection Buttons
- Video image and export buttons

**Timeline**

**Waveform**

**Code**

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The Multimedia Browser: three cool functions for UX researchers

- Copy video/image to clipboard
- Insert video/image as a document in Document System
- Export coded video clips
Steps to follow:

• Start by marking a segment in the waveform (a so-called “clip”)
• Set the beginning and end of a segment in a media file precisely
• To roughly mark a segment, keep the left mouse button pressed and select the segment by dragging the cursor over the waveform
Coding in the Multimedia Browser

Steps to follow:

To play a media file and then pause exactly at a position where you want to set a new coding:

1. Press the button Play/Pause.
2. When the play head is at the designated position, click the button Start of clip selection or press the F7 key on the keyboard. If necessary, use the arrow keys on the keyboard or click and drag the clip borders to fine-tune the start of the clip.
3. Resume playback and pause at the position where you want to end the coding. Click the button End of clip selection or press the F8 key. If necessary, make a fine adjust of the end of the clip.
Coding in the Multimedia Browser

ready to code the selected segment now!
Coding in the Multimedia Browser

- right-click on the selected/marked area to open a context menu that has different options for coding
Coding in the Multimedia Browser

OR

- drag and drop the selected area on to an existing code in the code system
- or drag and drop an existing code on to the selected clip area
Coding in the Multimedia Browser

Displaying the coded segments in the Multimedia Browser:

- coding indicated by a horizontal coding stripe
- code name on the left below the coding stripe
- the waveform colored with the color of the code
Coding in the Multimedia Browser

Displaying the coded segments in the Multimedia Browser:

- click on a coding stripe to select a coded segment
- double click on the coding stripe to play the coded clip segment
Adding memos to usability test video segments

To add memos to a selected segment,

• Click on the code stripe and select the coded segment
• Click on New memo icon
• Type in your memo note in the text window and close the window
• See the memo icon attached to the very beginning of the corresponding selected segment
Exporting Usability Test Video Clips

select short usability video clips and export them as distinct video files via “Multimedia Browser”

insert these short clips as new video files or new documents into your MAXQDA UXR project

• useful for UXR presentations
• useful for UXR data analysis sessions
• useful for sharing the convincing voice of the user with stakeholders
Exporting Usability Test Video Clips

- select a section in your usability test video in the “Multimedia Browser”
- right-click on the selected section and choose Export Video Clip in the context menu
- in the dialog window that opens, specify the quality and resolution of the clip
Exporting Usability Test Video Clips

SINGLE VIDEO CLIP EXPORTED TO MY DESKTOP
Exporting Usability Test Video Clips

To export all the coded usability test video segments of one or more codes from the “Multimedia Browser”:

• in the toolbar, click on the Export coded video clips icon.
• in the dialog window, select the code(s) whose coded segment(s) you would like exported
• specify the quality and resolution of the clips, export folder, and click OK
Code System of UX Issues

• a hierarchical structure of codes with multiple subcodes, followed by subcodes of subcodes
• all of the codes shown in the “Code System” window

[Code System diagram]

Major code with subcodes
Major code with subcodes
Major code with no subcodes
Code System of UX Issues

**Code System**

- **elements of positive UX**

- **elements of negative UX**
  - **Miscellaneous**
    - Overall evaluation of website
  - **Task 4- Reaching out to company to ask about a service**
    - how did you hear about us section to be revised
    - bad UX due to lack of FORM SENT SUCCESSFULL
  - **Task 3- Registering for a webinar**
    - registration for the wrong training
    - frustration over having to find a training manually
  - **Task 2- Finding out what site offers**
    - frustration over Search Bar results
    - Services tab needs details about type, fees, dates...
    - training descriptions need more details about what...
    - size of boxes of announcements found hard to see
Creative Coding to Organize UX Issues

- a creative process to generate and organize codes as user experiences including pain points or user issues in a hierarchical structure

- a large workspace on which to move UX issues, form meaningful UX issue groups, place UX issues that belong together next to one another, insert parent UX issue codes, rename codes, change their color, and create a logical structure

- should be used AFTER long periods of open coding and working closely with the codes
Creative Coding to Organize UX Issues

• click Creative Coding in the Codes menu tab
• MAXMaps activating Creative Coding Mode

Please drag all the codes you want to organize into this area. Click button "Start organizing codes" (top left) when you are ready to start organizing.
Creative Coding to Organize UX Issues

Main steps for the Creative Coding process:

• drag the UX codes of interest from the "Code System" into the Creative Coding workspace with the mouse (subcodes automatically dragged with the main code). Remove the codes you wish BEFORE starting creative coding process

• when ready, start organizing the UX codes: create new codes and subcodes if necessary, add new links, change the color of the codes as desired and do several other format features
Creative Coding: How It Looks Like

Usability Test-UX Issues

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Creative Coding to Organize UX Issues

options available in Creative Coding:

• creating relationships between codes as UX issues
• creating new codes as new UX issues
• merging codes as UX issues
• change code colors and appearances
• displaying code frequencies and coded segments
• getting a copy of creative coding map
Creative Coding to Organize UX Issues

to create relationships between codes as UX issues

• click on Link (Define as Subcode) symbol on the Start menu tab
• click on the desired top-level UX issue code and draw an arrow to the desired UX issue subcode.
• to delete an arrow, right-click on it and select Remove from Map
Creative Coding to Organize UX Issues

to create new codes as UX issues

- click on the New Code symbol on the Start menu tab
- create the new code as another UX issue and see the new code in the top left
- rename the code by double-clicking on its label
Creative Coding to Organize UX Issues

To merge two codes, proceed as follows:

- drag a code with the left mouse button pressed down onto another code and release the mouse button on the code
- see the following confirmation message and click on Yes
Creative Coding to Organize UX Issues

To change the color and appearance of the codes:

• first, make sure that the Link Mode is off. If necessary, click on the white surface once to turn off Link Mode
• click the code whose color you wish to change (draw a border around the codes with the mouse to select multiple codes at once)
• once codes selected, click on Code Color and make changes accordingly
Creative Coding to Organize UX Issues

Code color changed
Creative Coding to Organize UX Issues

To change the appearance of the codes and for several other formatting actions:

• select one code or codes to activate the Format menu tab (ctrl+A to select all the codes and subcodes on the map)
• change font, font size, font color; add borders, background colors; change or hide code symbols; change height and width of the codes and several other things...
Creative Coding to Organize UX Issues

Task 4 - Reaching out to company to ask about a service

Task 3 - Registering for a webinar

Lower rating due to lack of immediate "form sent" feedback

USP about us section wanting to leave site due to lack of immediate feedback

Bad UX due to lack of FORM SENT SUCCESSFULLY feedback

Frustration over having to find a training manually registration for the wrong training
Creative Coding to Organize UX Issues

To display code frequencies and coded segments of a code:

- clicking on the Code Frequencies symbol on the Start menu tab
- code frequency automatically displayed in brackets after the code name
Creative Coding to Organize UX Issues

To inspect the coded segments of a code:

• right-click on a code to see the context menu and choose Overview of Coded Segments
### Creative Coding to Organize UX Issues

<table>
<thead>
<tr>
<th>Comment</th>
<th>Document group</th>
<th>Document name</th>
<th>Code</th>
<th>Beginning</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Remote Mode...</td>
<td>jasmine-usabil...</td>
<td>elements of ne...</td>
<td>0:50:53.7</td>
<td>0:51:18.3</td>
</tr>
<tr>
<td></td>
<td>Remote Mode...</td>
<td>Jennifer-usabil...</td>
<td>elements of ne...</td>
<td>0:47:39.7</td>
<td>0:50:04.4</td>
</tr>
<tr>
<td></td>
<td>Remote Mode...</td>
<td>Jennifer-usabil...</td>
<td>elements of ne...</td>
<td>0:50:04.4</td>
<td>0:50:45.3</td>
</tr>
<tr>
<td></td>
<td>Remote Mode...</td>
<td>Mary-usability...</td>
<td>elements of ne...</td>
<td>0:49:00.1</td>
<td>0:55:59.8</td>
</tr>
<tr>
<td></td>
<td>Remote Mode...</td>
<td>jessica-usabilit...</td>
<td>elements of ne...</td>
<td>0:44:18.0</td>
<td>0:44:37.9</td>
</tr>
</tbody>
</table>
Creative Coding to Organize UX Issues

To get a copy of your creative coding map:

• save it as a map on MAXMaps
• copy the display of the map on your clipboard
• export the map as an image file
QTT Feature to Generate UXR Deliverables

Questions - Themes - Theories (QTT): a bridge between your MAXQDA project and your UX research report as a UXR deliverable

- a super memo to enter and bring together UXR findings, record conclusions, develop insights, and share design recommendations

- create a separate worksheet to include:
  - related codes & themes
  - important coded segments
  - related memos
  - visualizations and concept maps
  - integration of insights
QTT Feature to Generate UXR Deliverables

To start the QTT workspace:

• go to Analysis menu tab
• click on QTT: Questions – Themes – Theories.
Creating a Worksheet in QTT

To create a new worksheet in QTT:

• click on New Worksheet icon or Create Worksheet button in the center
Creating a Worksheet in QTT

- enter a name for the worksheet at the top
- enter your UX research subject/topic and UX research questions
Creating a Worksheet in QTT

After clicking OK, the worksheet is created, and you can start inserting elements from your MAXQDA project into the worksheet:

Related Codes & Themes
Inserting Elements into a Worksheet in QTT

Related codes & themes

• Click the Add Element(s) button to get a selection dialogue with the current code system.
• Select individual codes or click Activated Codes to insert the currently activated codes (if already activated in the code system).
• Click OK and see the selected codes inserted into the worksheet.
Inserting Elements into a Worksheet in QTT

Related codes & themes

Below the codes you can record your UX insights about each UX issue code in the text box

Four of the five participants indicated that not being able to see the fee information confused them as website users. This tells us that the users have a tendency to wish to see the fee information as soon as possible, which needs to be considered in the design of the announcement visuals placed on the relevant page of the website.
Inserting Elements into a Worksheet in QTT

Important Segments: several ways to insert one coded segment (or several at once) into the QTT

• from the "Document Browser", right-click on the associated coding stripe, select the option Send to QTT Worksheet and then the desired worksheet
Inserting Elements into a Worksheet in QTT

• from the "Retrieved Segments" window, right-click on the associated coding stripe, select the option Send to QTT Worksheet and then the desired worksheet
Inserting Elements into a Worksheet in QTT

- alternatively, drag the coding stripe directly into the QTT window with the mouse
Inserting Elements into a Worksheet in QTT

Concept maps from MAXMaps

- click the Add element(s) button in the Concept Maps section to get a listing of all maps in the project.
- select a map and click OK
Inserting Elements into a Worksheet in QTT

Creative Coding (4)

- Task 4: Reaching out to company to ask about a service
- Lower rating due to lack of immediate follow up
- Wanting to leave site due to lack of

- Elements of negative UI
- Usability test UX issues
- Task 3: Finding out what site offers
- Frustration over search bar results
- Task 2: Registering on a website
- Task 1: First impression of site
- Services tab needs details about (price and fees, dates etc.)

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Inserting Elements into a Worksheet in QTT

Below each concept map you can record your UX insights in the text box:

Frustration over having to find a training manually
registration for the wrong training
reaction to Speed & Security and the other two icon phrases
and reaction to short explanation of paragraph on homepage
mixed reactions to Our Trainings paragraph on homepage

Enter your insights here...
Inserting Elements into a Worksheet in QTT

Integration of Insights

the place where to bring together all UXR findings
Inserting Elements into a Worksheet in QTT

Export Worksheet

• to export the entire worksheet as a Word file in DOCX format, click the corresponding icon in the menu tab of the QTT window
• each section starting on a new page
Inserting Elements into a Worksheet in QTT

Export Worksheet

• specify the file name and location
Usability Test

Subject
the usability test of certain features of the company website

Research Question(s)
Do the users discover the Services section easily? Can they find accurate/useful information within the Services section?
Does Service Intake Form feature work efficiently and effectively?
Can users successfully register for a service offered by the company?
Can users successfully create a services request form? Can they submit it successfully?
Are users satisfied with their interactions with the site? If yes, to what extent? If no, why not?

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Related Codes & Themes
- elements of negative UX > Miscellaneous > fee information seen as missing in training announcements
- elements of negative UX > Task 4 - Reaching out to company to ask about a service > bad UX due to lack of FORM SENT SUCCESSFULLY feedback
- elements of negative UX > Task 3 - Registering for a webinar > frustration over having to find a training manually
- elements of negative UX > Task 2 - Finding out what site offers > frustration over Search Bar results

Insights
Four of the five participants indicated that not being able to see the fee information confused them as website users. This tells us that the users have a tendency to wish to see the fee information as soon as possible, which needs to be considered in the design of the announcement visuals placed on the relevant page of the website.

Important Segments

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