



**CREATE & APPLY
SHARE
HUMAN
CENTERED
DESIGN KNOWLEDGE**



**Uncover Problems and
Discover Opportunities
With Usability Testing**

March 27, 2020




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Agenda

- Overview
- Case study
- Discussion
- Quick Info

HCQIS Slack #hcd-share | WebEx chat



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Image: Unsplash, David Travis

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Usability Testing

Usability testing is the practice of testing how easy a design is to use on a group of representative users.

It usually involves observing users as they attempt to complete tasks and can be done for different types of designs, from user interfaces to physical products.

It is often conducted repeatedly, from early development until a product's release.

Source: Interaction Design Foundation



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What We Can Learn



Learn if participants can complete specified tasks successfully



Identify how long it takes to complete specified tasks



Find out how satisfied participants are with your Web site or other product



Identify changes required to improve user performance and satisfaction



Analyze the performance to see if it meets your usability objectives

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Benefits

- Help design teams, product teams, and leadership make informed decisions
- Get the right people involved in the design process
- Make the design and the product better

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Presentation

Lapedra Tolson

UX Researcher + Designer

QPP



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Case Study: Connect to an Organization Process

Image by [Amélie Mourichon](#) on [Unsplash](#)



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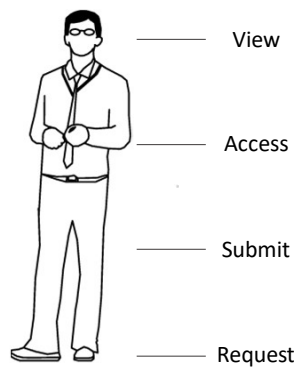
What is the Connect to an Organization Process?

It's a request process that grants authorized user access to:

- **View** a clinician's or group's eligibility information, claims measure data, MIPS performance feedback and payment adjustment information
- **Access** the Physician Compare Review
- **Submit** data on behalf of an individual clinician or a group
- **Request** a Targeted Review

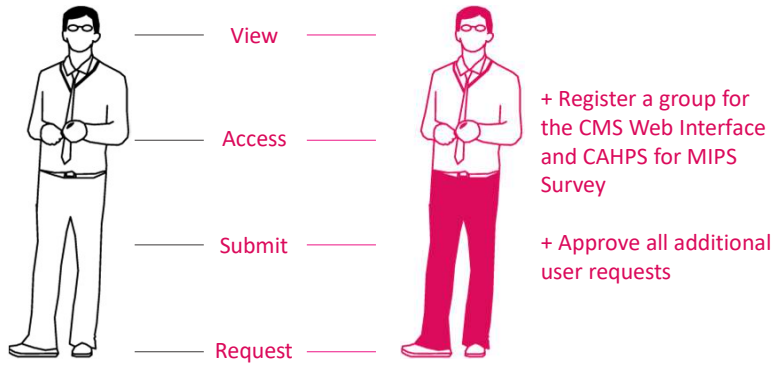
2 roles: Security Official and Staff User

What is the Staff User role?



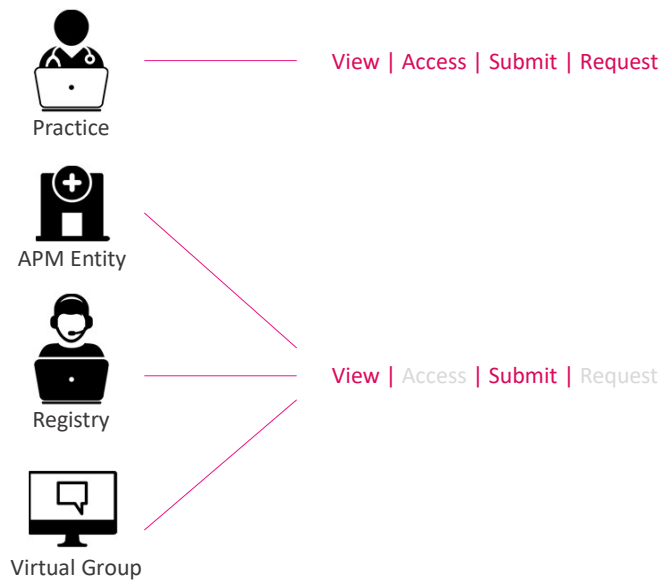
2 roles: Security Official and Staff User

What is the Security Official role?



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4 organization types: Practice, APM Entity, Registry and Virtual Group



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Where did it all begin?

- Out with the Old
 - Previously, users requested access to organization(s) through the Enterprise Identity Data Management (EIDM) System.

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Where did it all begin?

- ~~• Out with the Old~~
 - ~~• Previously, users requested access to organization(s) through the Enterprise Identity Data Management (EIDM) System.~~
- In with the New
 - Now, users can request access to organization(s) by signing into the QPP website.

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Where did it all begin?

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 - ~~Previously, users requested access to organization(s) through the Enterprise Identity Data Management (EIDM) System.~~
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 - Now, users can request access to organization(s) by signing into the QPP website.
- Opportunity to enhance the UXperience
 - If a user requires access to multiple organizations, they'd have to repeat every step for each organization.

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How might we provide a better user experience?

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The current Connect to an Organization Process

The screenshot shows the Quality Payment Program dashboard for Chris Sullivan. The top navigation bar includes links for MIPS (Merit-based Incentive Payment System), APMs (Alternative Payment Models), About (The Quality Payment Program), and Chris (My Account). The main content area features a welcome message and a progress timeline with four stages: Dec 1, 2019 (Submission Window is open), Mar 12, 2020 (Last Day to submit 2019 data), Mar 13, 2020 (Preliminary Performance Feedback Available), and Summer 2020 (Final Performance Feedback is available). A prominent notification box titled "Preliminary 2019 Performance Feedback Available" includes a "VIEW FEEDBACK" button and a note that the final score will be available in Summer 2020. A sidebar on the left lists navigation options: Account Home, Eligibility & Reporting, Performance Feedback, Physician Compare Preview, Reports, Manage Access, and Help and Support. The URL <https://mp-app.cms.gov/user/dashboard> is visible at the bottom left.



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THE RESEARCH PLAN: C20 BATCH REQUEST

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A research plan keeps your overarching research goals in mind as you work through the logistics of your research project

Goal:

- Identify the strengths and weaknesses of the Connect to Organization Batch Request Process design, evaluate the time-on-task and provide opportunities for improvement.



A research plan keeps your overarching research goals in mind as you work through the logistics of your research project

Goal:

- Identify the strengths and weaknesses of the Connect to Organization Batch Request Process design, evaluate the time-on-task and provide opportunities for improvement.

Hypothesis:

- If we create an intuitive Connect to Organization **Batch Request** Process for users accessing QPP for multiple organizations, then users will be able to connect with less errors, time and effort.



A research plan keeps your overarching research goals in mind as you work through the logistics of your research project

Research Questions:

- Will the new batch request design and user flow increase the efficiency of connecting to multiple organizations at once?
- What issues have users encountered with the current Connect to Organization process?
- What course of action do users follow when there's an issue?
- What is the user's preferred method when requesting 5+ practice roles?
- Will users find value in the formatted CSV template?
- What is the user's expectation when requests have been approved?



A research plan keeps your overarching research goals in mind as you work through the logistics of your research project

Research Questions:

- Will the new batch request design and user flow increase the efficiency of connecting to multiple organizations at once? [Testing the UI and user flow](#)
- What issues have users encountered with the current Connect to Organization process? [Pain Points](#)
- What course of action do users follow when there's an issue? [Understand Help Desk pain points](#)
- What is the user's preferred method when requesting 5+ practice roles? [Manual vs upload options](#)
- Will users find value in the formatted CSV template? [Impact and value for users](#)
- What is the user's expectation when requests have been approved? [Mental model for receiving notifications](#)



A research plan keeps your overarching research goals in mind as you work through the logistics of your research project

Participants:

- 3 - 5 Practice Managers, or anyone working on behalf of multiple organizations
- 3+ years of experience as a QPP participant
- Interfaced with the current QPP C2O request process within the past year

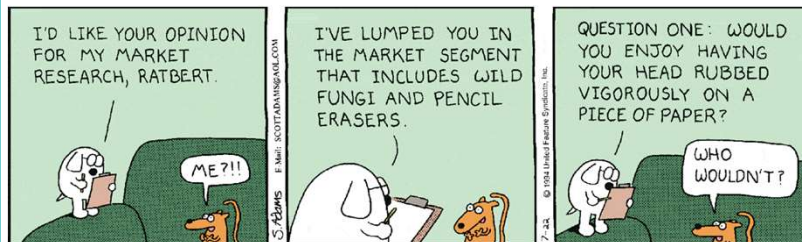
Methodology:

- 35 - 45 min remote-moderated usability test
 - Via Zoom, recorded
 - Click-through InVision prototype with proposed user flow and design



A research plan keeps your overarching research goals in mind as you work through the logistics of your research project

Be sure to find the right research participants!



MODERATION (DISCUSSION) GUIDE

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Moderating allows you to connect with your users and communicate with them as a peer to glean the “how” and “why.”

Study: Connect to Organization Request Process UAT

Dates: Jan 13 - 17, 2020

Moderator: Lapedra Tolson, Agile Six

Audience/Persona: Practice Managers

Research Goal(s): Identify the strengths and weaknesses of the *Connect to Organization Batch Request Process* prototype design, evaluate the time-on-task and provide opportunities for improvement.

Important Links:

User Research Plan	https://docs.google.com/document/d/1EgZT5z2G2VRtqnF3ScdlGnBZhGs8g1KAPXIVxWDkOX0/edit#heading=h.pmhdkstj7jxZ
Participants List	https://docs.google.com/spreadsheets/d/1yRpwTr4Vr-Czw2vJmH_kUhUV6pVVQOiryWygaadits/edit#gid=0
Prototype	https://agilesix.invisionapp.com/share/38VKHSTUWZA#/screens/396199110
Consent Form	https://forms.gle/begpuKgQKLXV33kb6

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Moderating allows you to connect with your users and communicate with them as a peer to glean the “how” and “why.”

Introduction - 5 Mins

This section sets the tone for the interviewee. We'll introduce ourselves and "set expectations" for the discussion.

1. Hi, how are you today?
2. Well, my name is Lapedra Tolson.
3. I am a UX Researcher from Agile Six, in support of CMS and the Quality Payment Program.
4. Thanks again for speaking with us today.
5. You may have noticed others on the call. They are observers from the CMS HCD team.
6. So, at the end of our discussion, they may have a few questions for you.
7. **Before I continue, do you have any immediate questions?**
8. So, let me give you a little background on why your feedback is important today.
9. In the past, if you required multiple practice roles, for example, you needed a **Security Official** role at **5** organizations and a **Staff User** role at **3** organizations, you would have to complete the entire request process for each - individual - organization. So, with this new design, which you'll see later, we hope to make the process more efficient.

Quality Payment PROGRAM | HCD team



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Moderating allows you to connect with your users and communicate with them as a peer to glean the “how” and “why.”

Background Questions

- Tell me a little about yourself and the work that you do?
- What roles do you currently hold, if any?

Focused Questions

- How would you describe the Connect to Org request process to a new colleague?
- Walk me through your level of understanding of each role and the associated level of access and responsibilities?
- Describe a time when you needed to request multiple roles at once?



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**Moderating
allows you to
connect with
your users and
communicate
with them as a
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the “how” and
“why.”**

Detailed Questions

- Walk me through a scenario where you faced a challenge while using the Connect to Org process?
- Tell me about a time when you contacted QPP Support for help resolving a C2O issue?
- Describe a time when you needed to de-associate a TIN when the relationship with a clinician or hospital has been terminated?



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**Moderating
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Scenario

- Over the past few years, your co-worker held several practice roles for multiple practices, however, she’s accepted a new position and is leaving the department. As a result, you’ll need to request a practice role for those practices.
- Thinking aloud as you go, walk me through your steps for requesting access to both a Security Official and Staff User role for four practices.



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PROTOTYPE, PAIN POINTS, AND INSIGHTS

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Select Organization Type

Step 1:

- Select Organization type

Connect to Organization


Step 1 of 5

Select Organization Type

- Practice**
A representative of a single ID can request a practice role. The first Security Official will need to provide the PTAN and NPI of a single clinician that is part of that practice.
- APM Entity**
A representative of an APM entity with direct reporting requirements (Shared Savings Program, Next Generation and Comprehensive Primary Care Plus) can request an APM entity role. The first Security Official may need to provide different data based on model.
- Registry**
A representative of a CMS-approved registry can request a registry role. The first Security Official will need to provide the Vendor ID for the registry.
- Virtual Group**
A representative of a CMS-approved virtual group can request a virtual group role. The first Security Official will need to provide the IDs of 2 participating practices.

CONTINUE

Quality Payment PROGRAM



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Choose a Method

Step 2:

- Manually connect to practices
- Upload a formatted CSV file

Insights:

- Users would download the practice template
- 5 organizations is the breakpoint for option 1

Quality Payment PROGRAM

Account Home Manage Access

Connect to Organization

Step 2 of 4

Choose a method

OPTION 1
Enter practice information manually

How many practices are you connecting to?
Type number of practices

OPTION 2
Upload a formatted CSV file

First, Download the template
Practice Information Template

UPLOAD FILE

BACK CONTINUE

Quality Payment PROGRAM

Developer Tools Resource Library Help and Support Training Events

Privacy Notice Accessibility

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“ It would just allow me to skip typing in information about the practices that I would need to connect to. ”

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“

I know my Excel is correct, because in my world there's this affectionate term called churn, so my list is always updated.

”

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Find Practices

Step 3:

- Find practices by legal business name of 9-digit TIN
- Add additional practices

Connect to Organization

Step 3 of 5

Find Practices

Search for a practice by using the practice's 9-digit TIN or legal business name (e.g. 12345678 or ACME Clinic) and select a role for each practice.

Find Practice

Greenville Medical Clinic

Find Practice

Acme Clinic

Find Practice

Seton

Seton Medical Center Austin

Seton Northwest Hospital

Seton Medical Center Hays Hospital

Seton Southwest Hospital

+ ADD ANOTHER PRACTICE

BACK

CONTINUE

Quality Payment PROGRAM



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“

It's allowing you to do multiple practices. What a dream!

”

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Select Roles

Step 4:

- Select the role(s) for each practice
- Input Practice NPI and PTAN

Insights:

- Users preferred a look-up tool or system automation vs. manually entering the NPI and PTAN numbers

Quality Payment

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“ I think it you could put the clinic in or the system gives you the option to copy/paste the numbers, that would be great. ”

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Error Message

Step 4:

- We presented the user with an **error** to assess the quality of the error message (UI)
- Understand the **impact** an error has on the user experience

Insights:

- Participants suggested a “save and continue” option to continue with the process

Account Home | Manage Access

Connect to Organization

Step 3 of 4

Find Practices and Select Roles

Search for a practice by using the practice's 9-digit TIN or legal business name (e.g. 123456789 or ACME Clinic) and select a role for each practice.

[Learn more about roles.](#)

Note: The following organizations have either an invalid Practice NPI or PTAN: ACME Clinic. Please provide the correct information before continuing.

Greenville Medical Clinic TIN 123456789 5200 Manchester Ln, Greenville, OH 01234 Practice NPI: 1234567890 PTAN: 1234567890	Select Role Security Official
Acme Clinic TIN #123456789 5200 Manchester Ln, Greenville, OH 01234 Practice NPI: 1234567890 PTAN: 1234567890	Select Role Security Official
Seton Northwest Hospital TIN 123456789 Seton Northwest Hospital, 1113 Research Blvd, Austin, TX 78759	Select Role Staff User
St. David's Children's Hospital TIN 123456789 12221 N Mopac Expy, Austin, TX 78758	Select Role Staff User

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“

I would like to pause that or come back at a different time and go ahead and finish these other three.

”

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Verify Organizations

Step 5:

- Verify the organizations
- Remove erroneous organizations
- Click Submit

Insights:

- Users liked the addition of addresses due to similarly-named practice

Account Home | Manage Access

Connect to Organization

Step 4 of 4

Verify Organizations

Please verify that these are the correct organizations that you wish to connect to and that the correct roles have been assigned to them.

Greenville Medical Clinic as Security Official TIN 1234567890 5200 Manchester Ln, Greenville, OH 01234	Remove
Acme Clinic as Security Official TIN 1234567890 5200 Manchester Ln, Greenville, OH 01234	Remove
Seton Northwest Hospital as Staff User TIN 1234567890 Seton Northwest Hospital, 11113 Research Blvd, Austin, TX 78759	Remove
St. David's Children's Hospital as Staff User TIN 1234567890 12221 N Mopac Expy, Austin, TX 78758	Remove

BACK SUBMIT

Quality Payment PROGRAM

Developer Tools | Resource Library | Help and Support | Training Events

TEXAS HEALTH & HUMAN SERVICES | THE UNIVERSITY OF TEXAS AT AUSTIN

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“ Ok, that’s helpful. I’m glad that it has their addresses, because there’re a lot of similarly named medical facilities. ”

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Manage Access

Step 6:

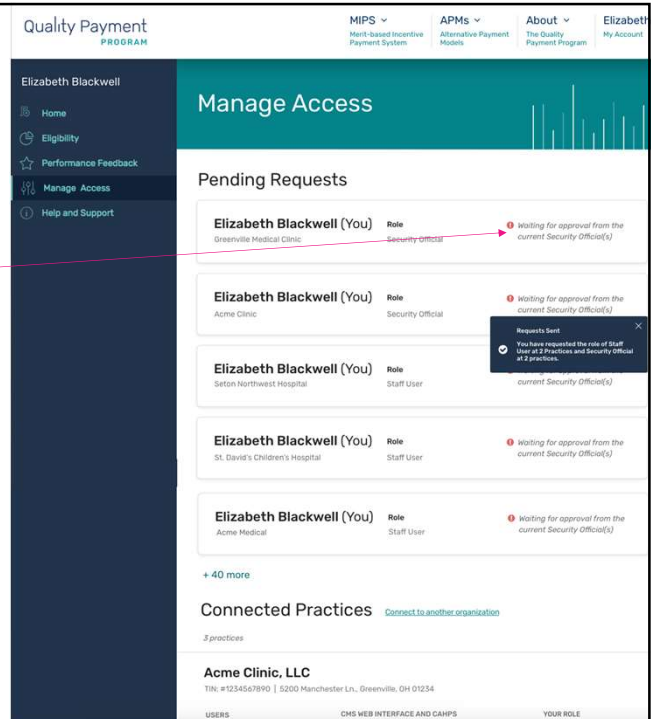
- View pending requests
- Connect to another organization
- View connected users for each organization

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Manage Access

Insights:

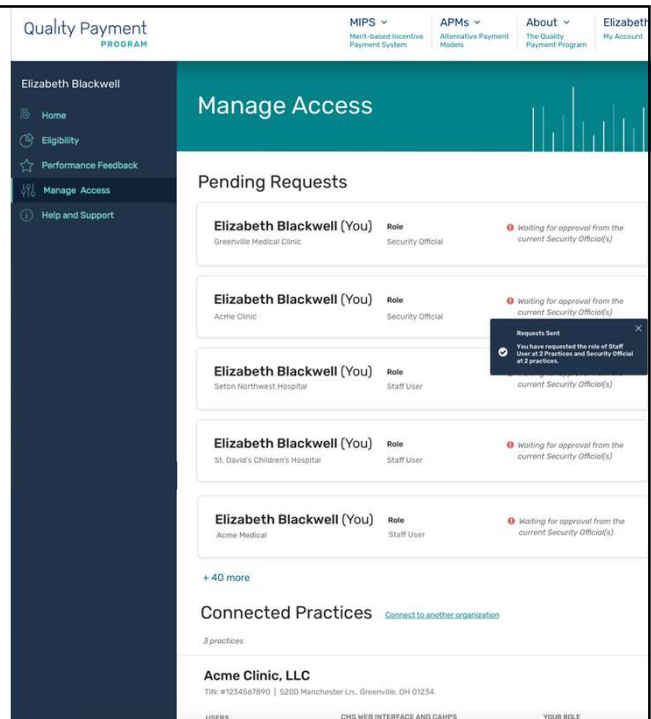
- Pending requests are an issue and some remain unresolved
- The inability to de-associate a TIN
- The inability to remove or transfer a Security Official
- No email support for pending requests approval/denial notifications



Manage Access

Additional Insights:

- Maintain up-to-date FAQs and related documents
- Consider developing a chat feature with 3rd party integration
- Ensure QPP Help Desk reps maintain accurate information through consistent knowledge sharing initiatives



Every research study uncovers a theme or two.

Overall, the Connect to an Organization design was well received.

- 7 out 10 for user flow and design

Two themes emerged:

1. Self Service
2. Automation

Next Steps:

- Prioritize and implementation with devTeam



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“

It was a very clear layout.
It was visually appealing.
It wasn't busy or confusing and
it was evident going from
one step to the next.

”

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The Art of Facilitation: Tips for Usability Testing

TEDW Framework

TEDW Open-ended Question Framework

T = "Tell me more..." or "Take me through why..."

E = "Explain why..." or "Explain how..."

D = "Describe why..." or "Describe how..."

W = "Walk me through..."

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The Art of Facilitation: Tips for Usability Testing

Facilitation Techniques

- Boomerang Technique
 - When faced with a question from the participant during the test, rather than answer it, find a way to ask the question back to the participant.



"Should I click this button?"



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The Art of Facilitation: Tips for Usability Testing

Facilitation Techniques

- Boomerang Technique
 - When faced with a question from the participant during the test, rather than answer it, find a way to ask the question back to the participant.



“Should I click this button?”



“What would you do if you were really doing this on your own?”

The Art of Facilitation: Tips for Usability Testing

Facilitation Techniques

- Echo Technique
 - The echo technique involves simply repeating the participant’s phrases by turning them into a question. The goal is to get the participant to further expand on a comment.



“This table is weird, well, hmmm, not sure what, uh...”

The Art of Facilitation: Tips for Usability Testing

Facilitation Techniques

- Echo Technique
 - The echo technique involves simply repeating the participant's phrases by turning them into a question. The goal is to get the participant to further expand on a comment.



"This table is weird, well, hmmm, not sure what, uh..."



"Table is weird?" or "Not sure what?"

The Art of Facilitation: Tips for Usability Testing

Facilitation Techniques

- Columbo Technique
 - Made famous by Lt. Columbo in the late 1960's television series
 - This technique involves trailing off a question or sentence, leaving space for the participant to step in and provide insight.



"If I close here, will I lose my work?"

The Art of Facilitation: Tips for Usability Testing

Facilitation Techniques

- Columbo Technique
 - Made famous by Lt. Columbo in the late 1960's television series
 - This technique involves trailing off a question or sentence, leaving space for the participant to step in and provide insight.



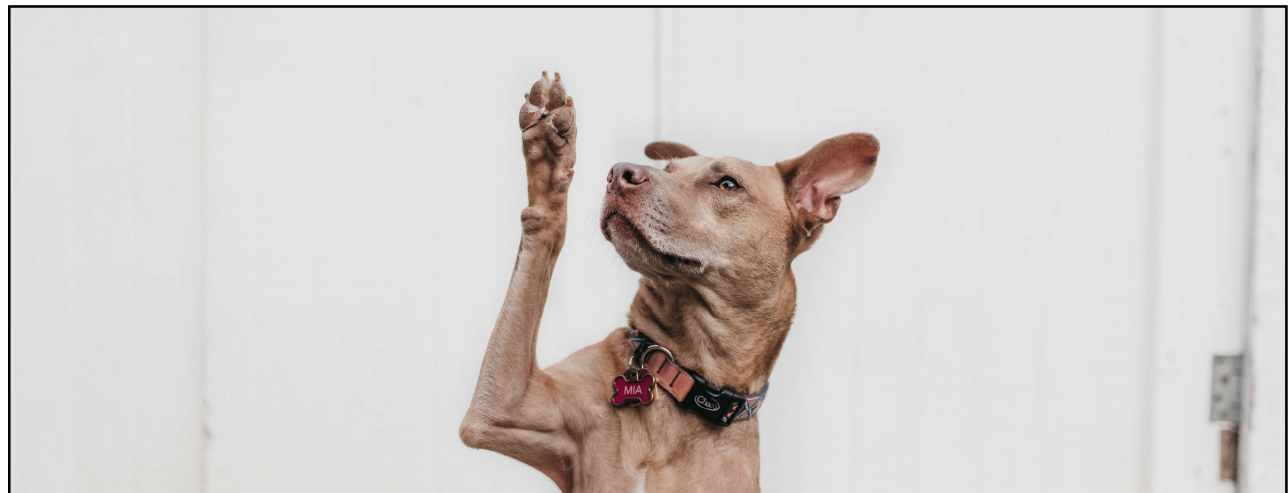
“If I close here, will I lose my work?”



“Uhm, you are wondering if [pause] you might [pause.]”



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Discussion

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RECRUITMENT

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PROTOTYPE

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FACILITATION

HCQIS Slack #hcd-share | WebEx Chat

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FINDINGS

HCQIS Slack #hcd-share | WebEx Chat

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STAYING CURRENT

HCQIS Slack #hcd-share | WebEx Chat

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Resources

[Apps and Testing Resources](#)

[Beginner's Guide to Usability Tests](#)

[Checklist for Planning](#)

[Thinking Aloud: Test Protocol](#)

[Usability.gov](#)

[Why You Only Need to Test with 5 People](#)

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Quick Info

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Contact

HCQIS Slack #hcd-share

hcd@hcqis.org

<https://confluence.hcqis.org/display/HCD>



Human-Centered Design

Center of Excellence (CoE)



Standards



Services



Advocacy



Resources

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Create, Share, and Apply HCD Knowledge

- Open call for presenters, panelists, and such
 - HCQIS Slack #hcd-share or email hcd@hcqis.org
- Top topics of interest
 - accessibility
 - brainstorming
 - case studies
 - content strategy
 - interaction design
 - visual design
- Next HCD CoP program
 - Metrics and Customer Journeys on Friday, April 24 at 1 PM



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So, what do you think?

See survey link on HCQIS Slack #hcd-share or WebEx chat




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Lapedra Tolson
lapedra.tolson@agile6.com
Hit me on Slack!



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Thank you.





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CREATE & APPLY
SHARE
HUMAN CENTERED
DESIGN KNOWLEDGE

Contact
HCQIS Slack #hcd-share
email hcd@hcqis.org
<https://confluence.hcqis.org/display/HCD/>

 **Human-Centered Design**
Center of Excellence (CoE)