Validating and Improving Navigation with Tree Testing

HCD Community of Practice
August 28, 2020

Human-Centered Design
Center of Excellence (CoE)

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VALIDATING AND IMPROVING NAVIGATION WITH TREE TESTING

Presentation Panel Q&A

2

VALIDATING AND IMPROVING NAVIGATION WITH

TREE TESTING

Human-Centered Design
Center of Excellence (CoE)

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SPEAKERS

Mike Eng
Senior UX Researcher
HQR

Ian Lowrie
UX Research Lead
HQR

Stephanie Warren
UX Content Strategist
HQR

Chelsea Hunt
Sr. Design Strategist
HCD CoE

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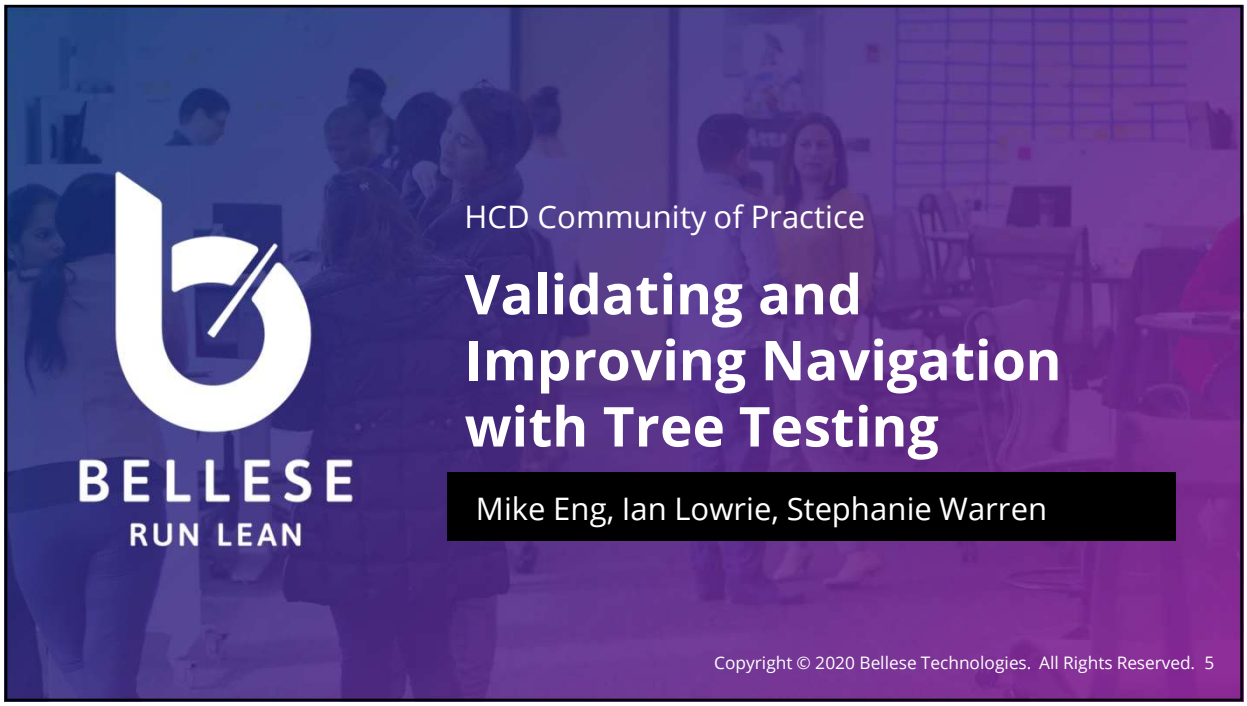
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HCD Community of Practice
Validating and Improving Navigation with Tree Testing
Mike Eng, Ian Lowrie, Stephanie Warren
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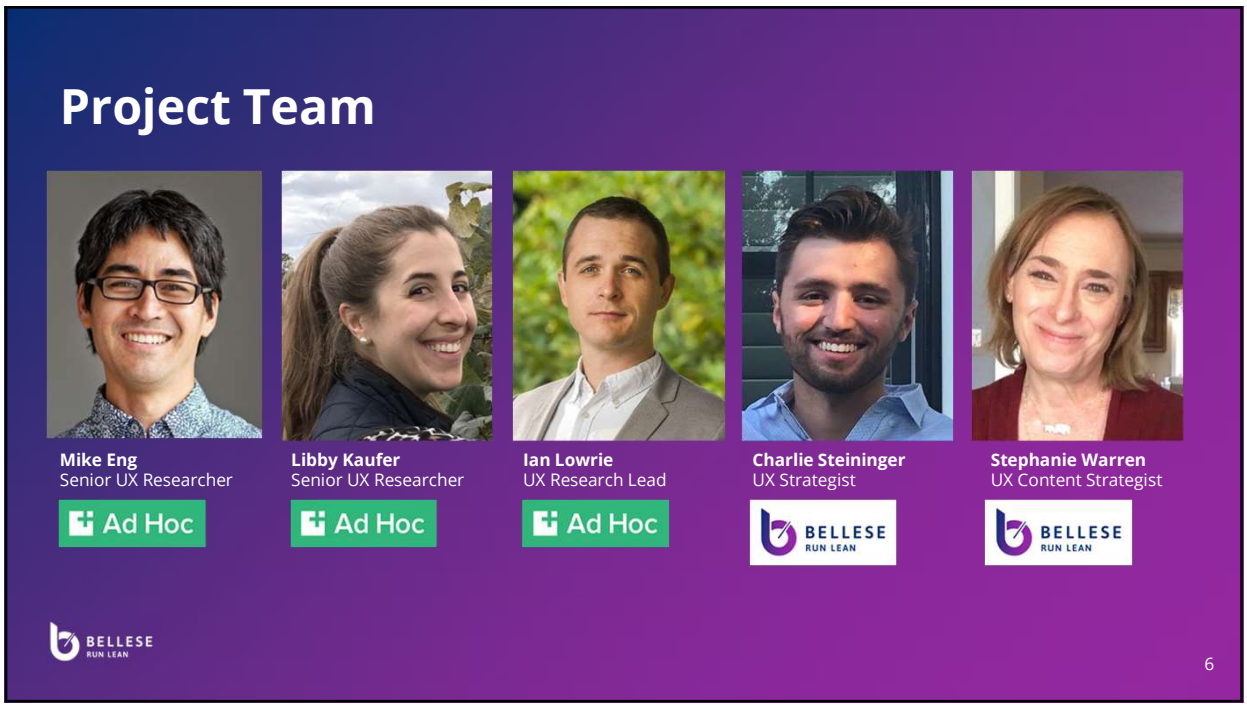
Project Team
Mike Eng
Senior UX Researcher
Ad Hoc
Libby Kaufer
Senior UX Researcher
Ad Hoc
Ian Lowrie
UX Research Lead
Ad Hoc
Charlie Steininger
UX Strategist
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Stephanie Warren
UX Content Strategist
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Agenda

1. Tree testing as a research method
2. Case study: HQR navigation
3. HQR's research process

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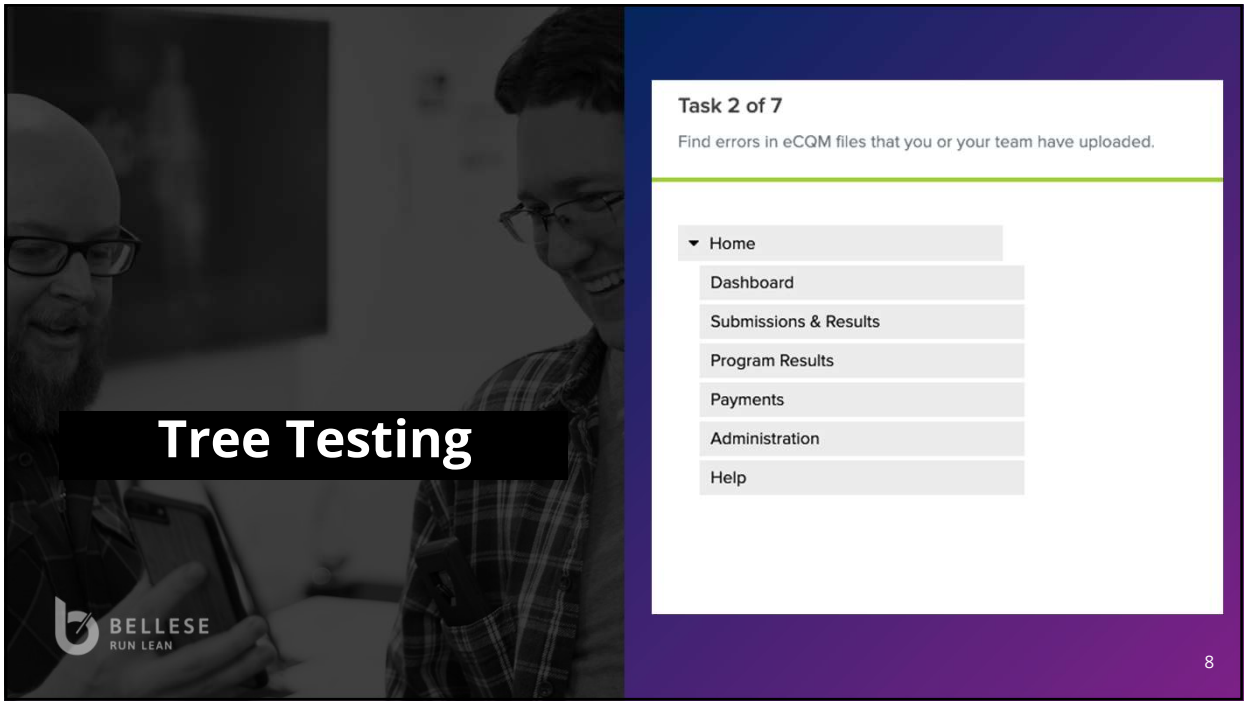

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Tree Testing Finds Problems and Validates Navigation Approaches

Best used when:

1. You want to pinpoint navigation problems in an existing site
2. You have one or multiple navigation ideas to validate

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Tree Testing Allows for Rapid Iteration

Requirements:

1. One or multiple "trees"
2. Set of navigation tasks for users to complete
3. (optional but helpful) Tree testing tool like Treejack, UserZoom, or Maze

Can be done moderated or unmoderated
Can do additional rounds after revisions

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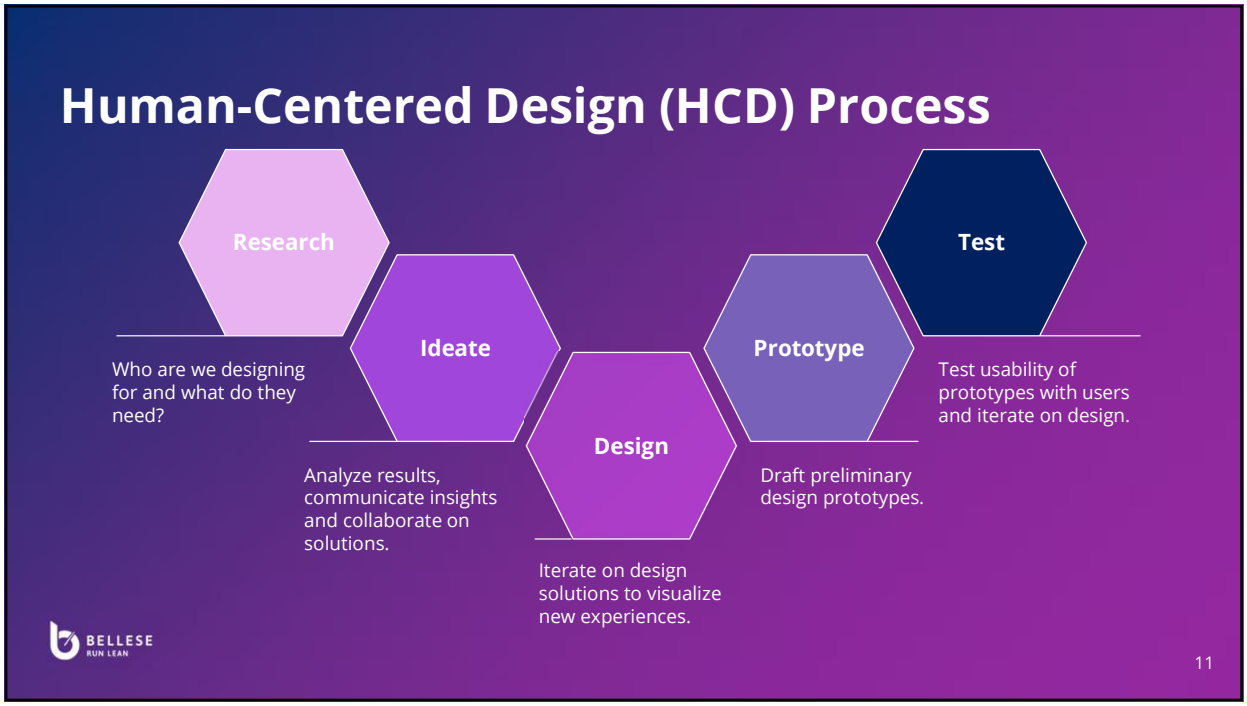
Human-Centered Design (HCD) Process
Research
Who are we designing for and what do they need?
Ideate
Analyze results, communicate insights and collaborate on solutions.
Design
Iterate on design solutions to visualize new experiences.
Prototype
Draft preliminary design prototypes.
Test
Test usability of prototypes with users and iterate on design.
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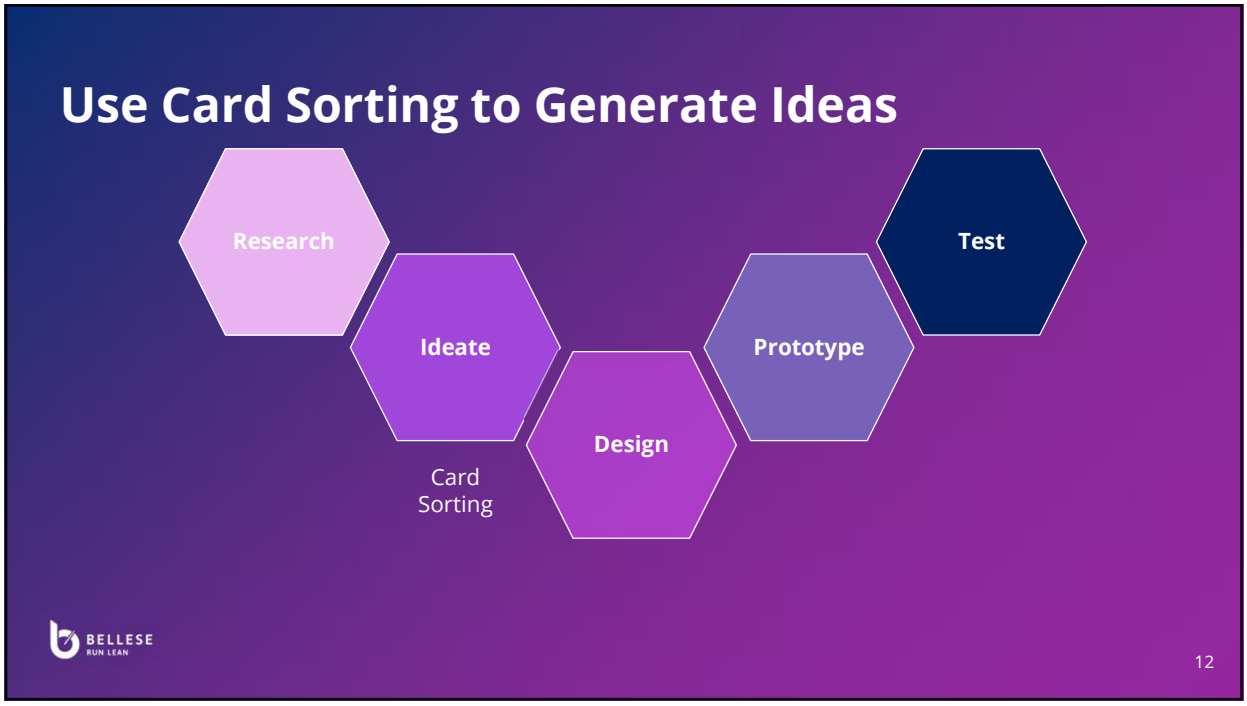
Use Card Sorting to Generate Ideas
Research
Ideate
Card Sorting
Design
Prototype
Test
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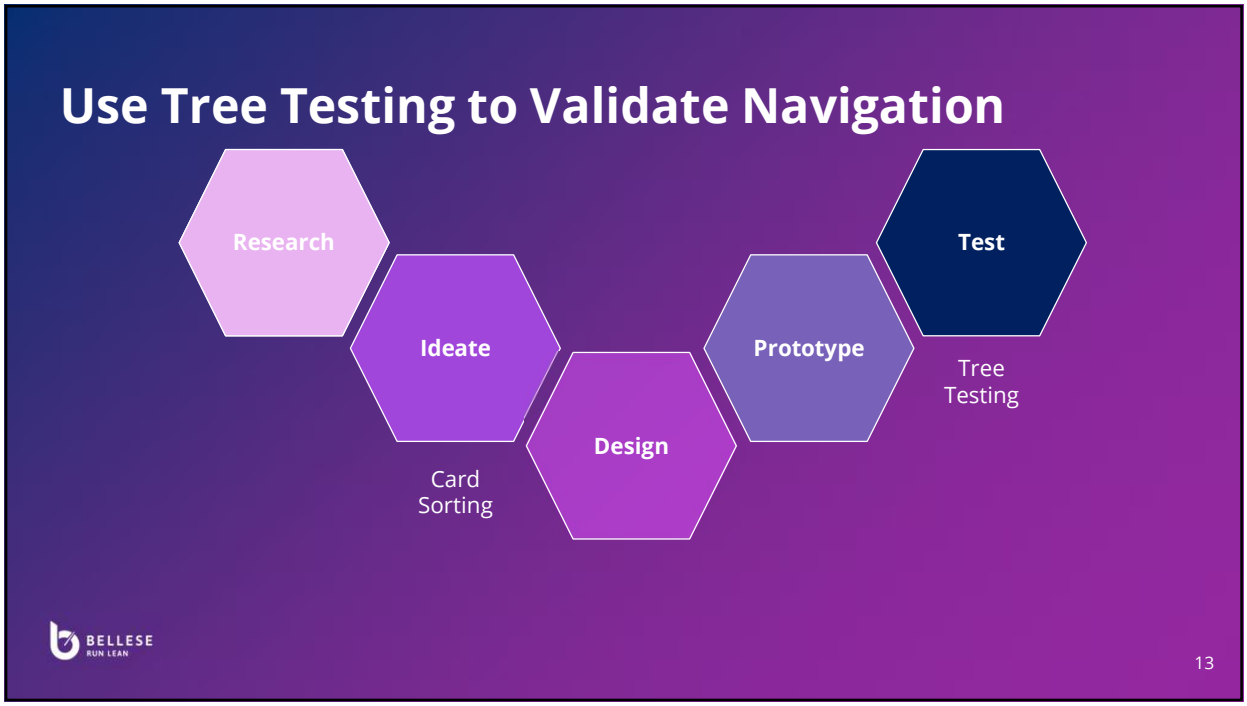
Use Tree Testing to Validate Navigation
Research
Ideate
Card Sorting
Design
Prototype
Test
Tree Testing
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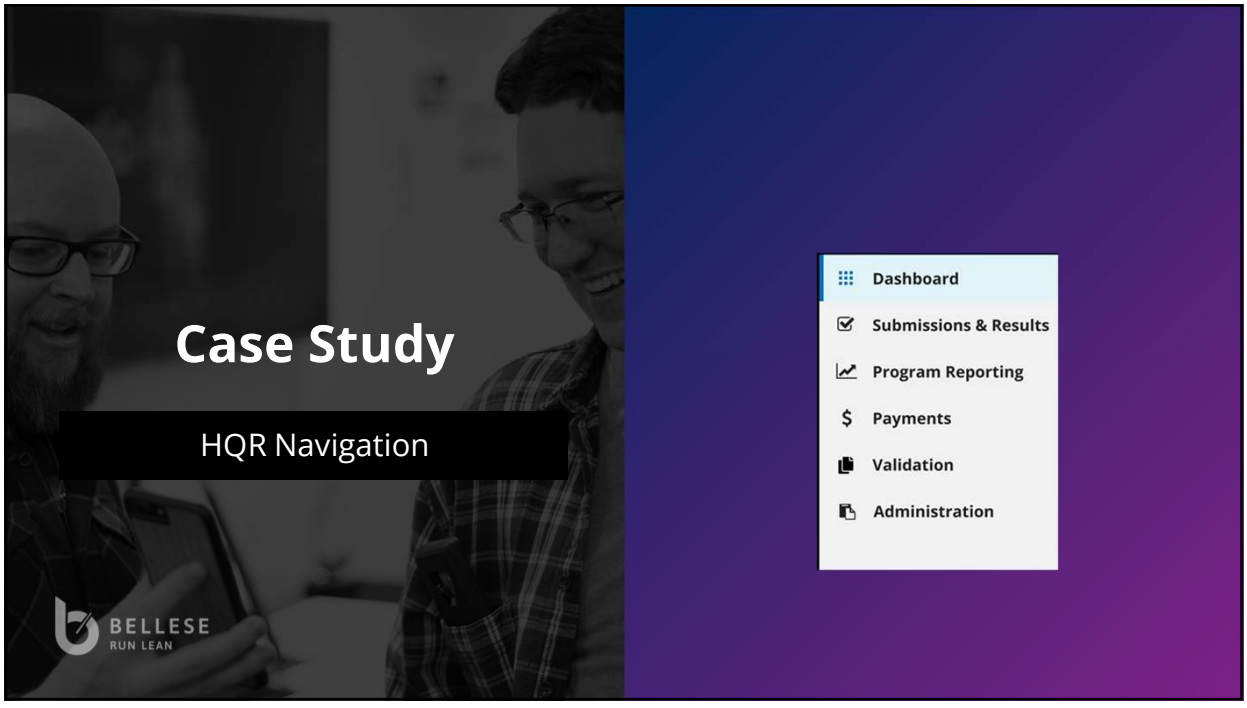
Case Study
HQR Navigation
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Dashboard
Submissions & Results
Program Reporting
Payments
Validation
Administration

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Project setup

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Prior rounds

- Card Sorting (PI 6)
- Tree Testing (PI 7)
- Moderated Usability Testing (PI 11)
- **You are here >** Tree Testing (PI 12)

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Two Navigation Approaches Tested

V2

Data Submissions		
	eCQMs	
		File Upload
		File Accuracy
	Chart-Abstracted	
		File Upload
		File Accuracy
	Population & Sampling	
		File Upload
		File Accuracy
		Data Forms
	HCAHPS	
		File Upload
		File Accuracy
		Data Forms
	Audit Validation	
		File Upload
		File Accuracy
	Web-Based Measures	
		File Upload
		File Accuracy
		Data Forms
Data Results		
	eCQMs	
	Chart-Abstracted	
	HCAHPS	
	Audit Validation	
	Web-Based Measures	

V3

Submissions & Results		
	eCQMs	
		File Upload
		File Accuracy
		Measure Results
	Chart-Abstracted	
		File Upload
		File Accuracy
		Measure Results
	Population & Sampling	
		File Upload
		File Accuracy
		Web Forms
	HCAHPS	
		File Upload
		File Accuracy
		Web Forms
		Measure Results
	Audit Validation	
		File Upload
		File Accuracy
		Measure Results
	Web-Based Measures	
		File Upload
		File Accuracy
		Web Forms
		Measure Results
	Claims Details	

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Participants

Mix of all programs
User roles: Hospital, Hospital System, Vendor

V2: **8** participants
V3: **7** participants

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Analysis & Findings
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Multiple paths to success

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"Find whether your team has provided all the data needed, or if there's something else CMS needs"

A journey…

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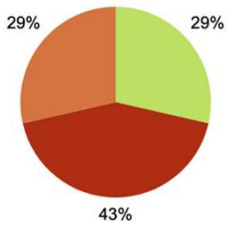
v3

5. Find whether your team has provided all of the data needed or if there's something else that CMS needs.

Program Results > *Reporting Requirements* > ***Select by program***



	Success	Direct Indirect	0 2	2	0% 29%	29%
	Fail	Direct Indirect	3 2	5	43% 29%	71%

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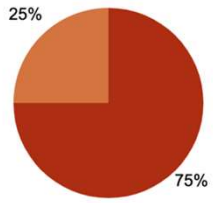
v2

5. Find whether your team has provided all of the data needed or if there's something else that CMS needs.

Performance > Program Acceptance > Select by program



Success	Direct	0	0	0%	0%
	Indirect	0		0%	
Fail	Direct	6	8	75%	100%
	Indirect	2		25%	

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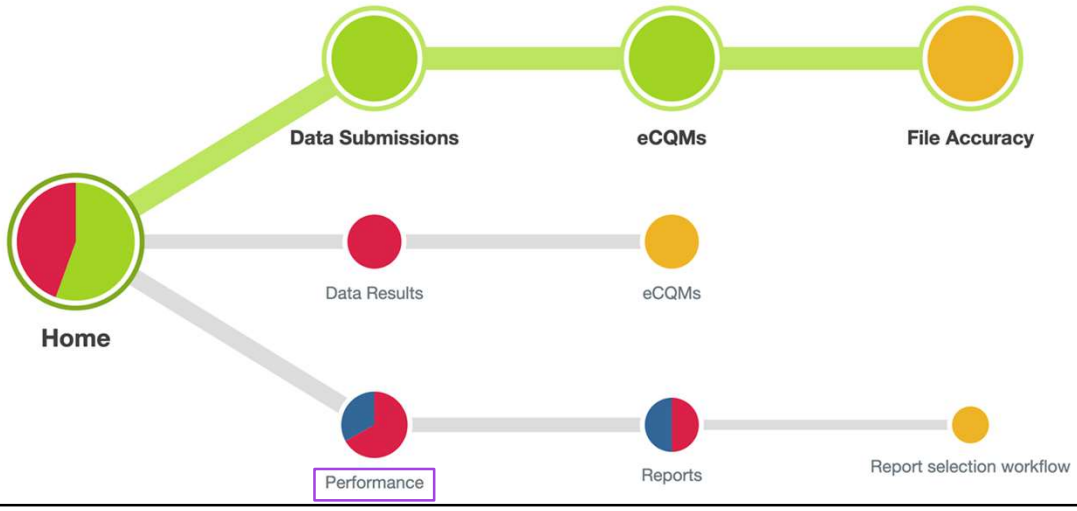
"Find errors in eCQM files that you or your team have uploaded"



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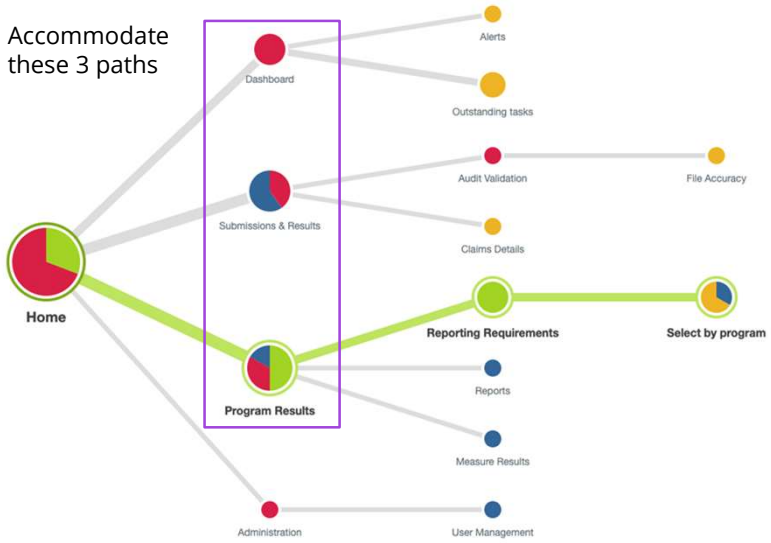
"Find whether your team has provided all the data needed, or if there's something else CMS needs"



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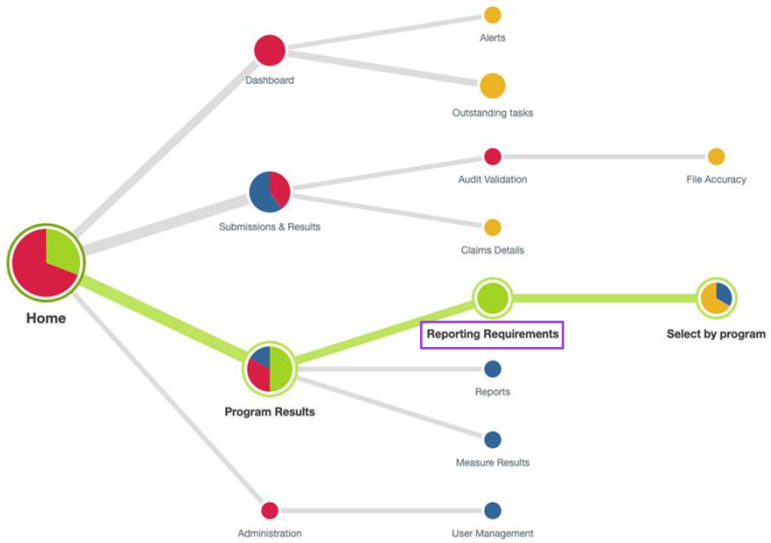
But will people confuse "Reporting Requirements" with measure specs?



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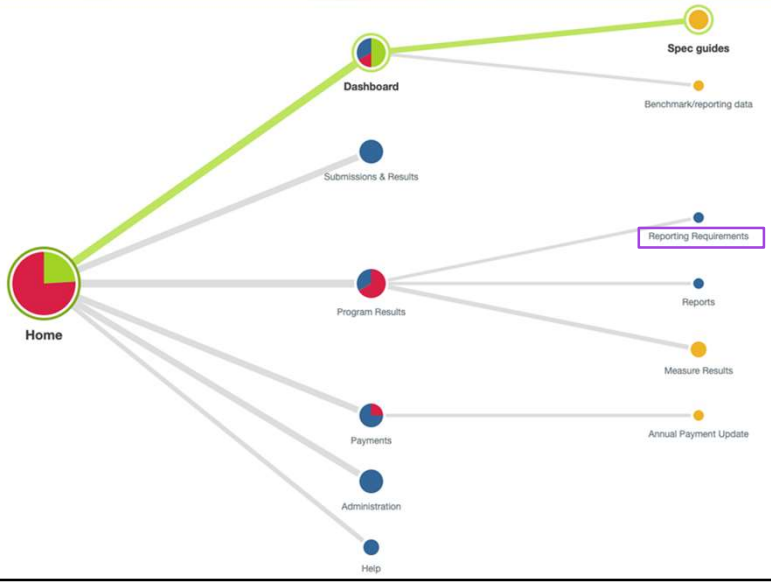
"Find documentation on how CMS calculates scores"



Not a common error

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Solution: where to see if you've met reporting requirements

1. Dashboard
2. Submissions & Results
3. Program Results > Reporting Requirements

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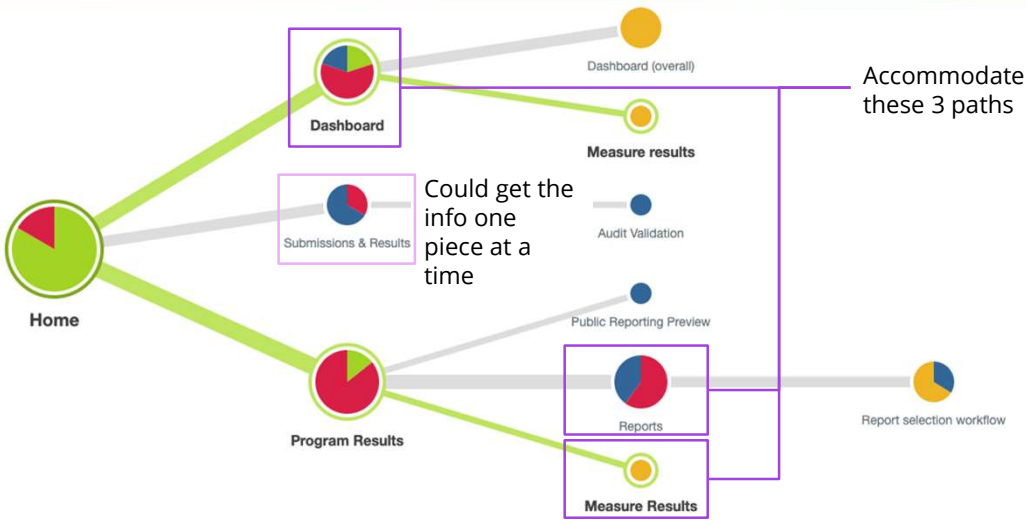
"Find a single place to see your calculated scores across ALL data collected so far"



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"Find a single place to see your calculated scores across ALL data collected so far"

1. Dashboard
2. Reports
3. Program Results > Measure Results

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Other Findings

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Submissions & Results separated vs combined

V2

Data Submissions		
	eCQMs	
		File Upload
		File Accuracy
	Chart-Abstracted	
		File Upload
		File Accuracy
	Population & Sampling	
		File Upload
		File Accuracy
		Data Forms
	HCAHPS	
		File Upload
		File Accuracy
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	Audit Validation	
		File Upload
		File Accuracy
	Web-Based Measures	
		File Upload
		File Accuracy
		Data Forms
Data Results		
	eCQMs	
	Chart-Abstracted	
	HCAHPS	
	Audit Validation	
	Web-Based Measures	

V3

Submissions & Results		
	eCQMs	
		File Upload
		File Accuracy
		Measure Results
	Chart-Abstracted	
		File Upload
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		File Upload
		File Accuracy
		Measure Results
	Web-Based Measures	
		File Upload
		File Accuracy
		Web Forms
		Measure Results
	Claims Details	

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People expect file accuracy and measure results to be combined

v3 with "Submissions & Results" more successful than v2 for:

1. Finding if a file submitted has errors
2. Checking whether you've met IPP
3. Finding a single place to see scores across all data collected
4. Overall satisfaction

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Quality is a Team Sport

1. "**I don't enter all these things** so I might not know where to go for HCAHPS or even eCQM but I need to be sure all is entered."

"I don't enter all the data myself so some of the questions didn't pertain to me. It is important to understand that **hospitals have many people that HELP enter data.**"

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Slide 34

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1 Can we get user types / titles, if known, here? (and throughout)
Ian Lowrie, 8/27/2020

1 Unfortunately we don't have that for this one since we didn't track identities
Mike Eng, 8/27/2020

Satisfaction ratings

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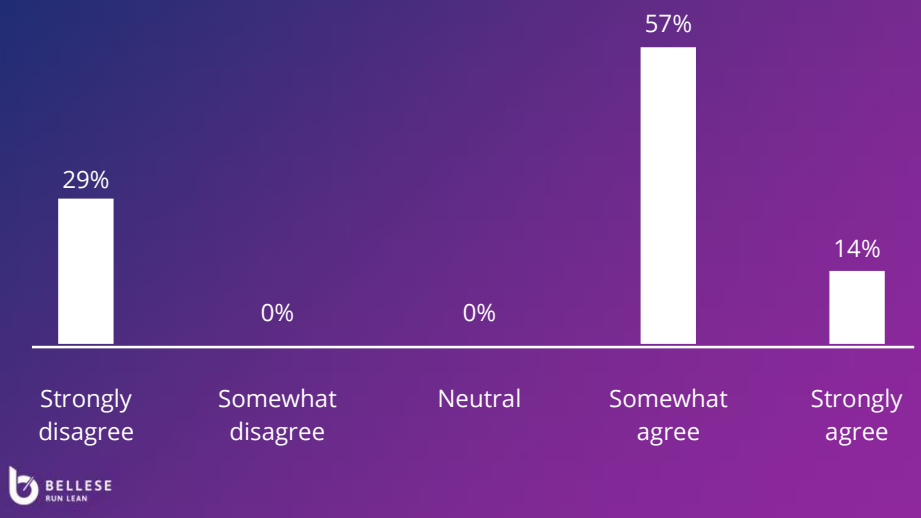
The tasks were easy to navigate to



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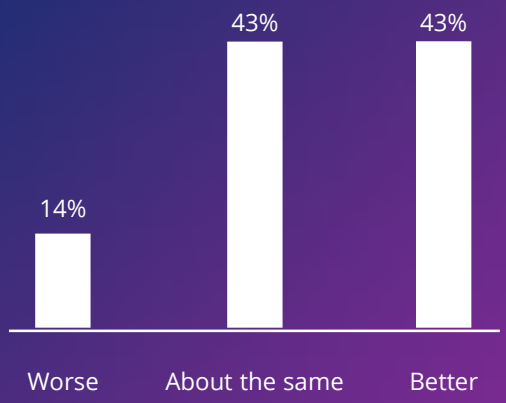
Compared to current QualityNet organization of data, this is…



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"I would strongly prefer this over QualityNet.org - especially the 'new' set up of their pages. I would just need more time to understand where everything was housed."

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Resources

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Learn more about these methods

1. Nielsen Norman Group - Tree Testing: Fast, Iterative Evaluation of Menu Labels and Categories: nngroup.com/articles/tree-testing
2. 18F Methods: methods.18f.gov

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HQR's (IA) Research Process
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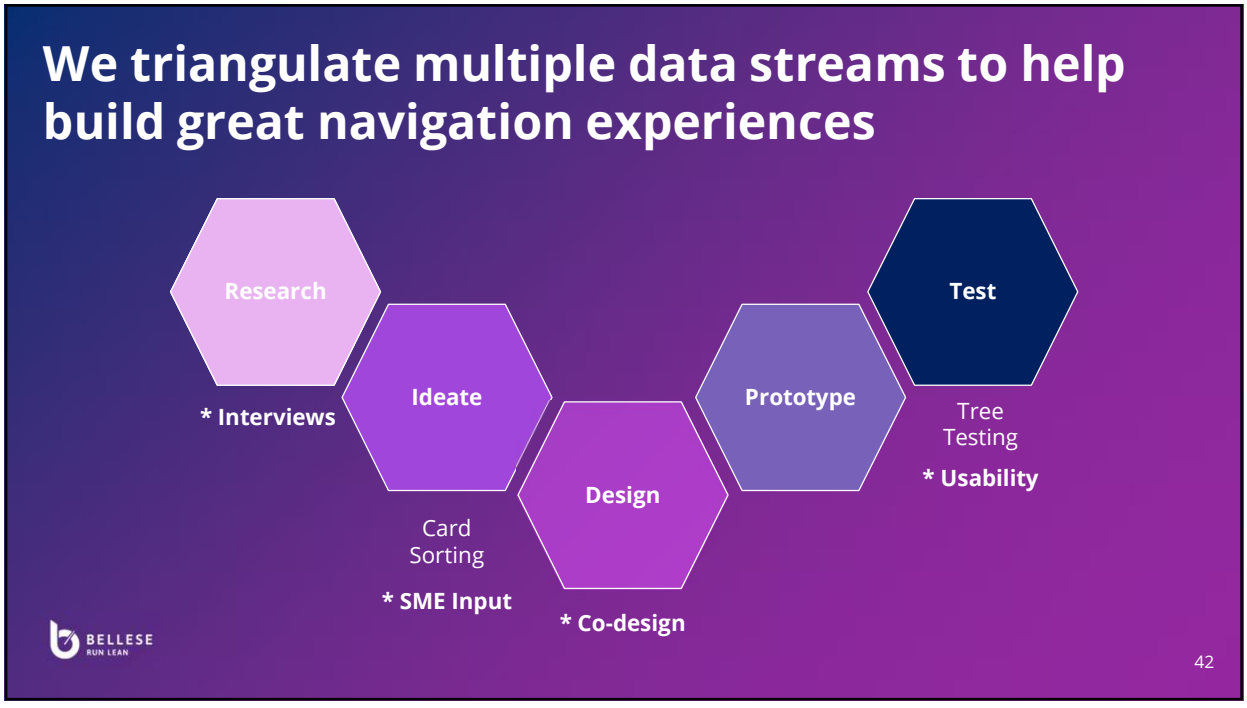
We triangulate multiple data streams to help build great navigation experiences
Research
* Interviews
Ideate
Card Sorting
* SME Input
Design
* Co-design
Prototype
Test
Tree Testing
* Usability
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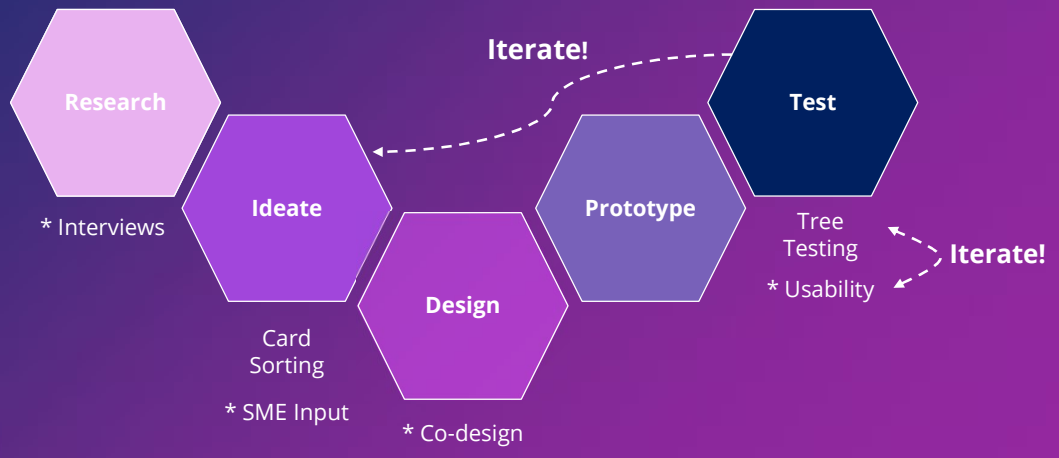
And we iterate until we get it right!



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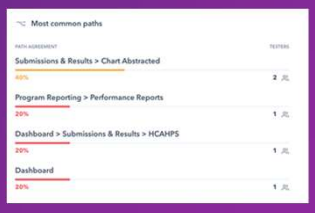
Our team has moved to Figma and Maze for rapid prototyping and testing

- Figma prototypes are quick to build and “high enough” fidelity for iterative testing
- Maze lets us use one tool for both discovery and usability
- Heatmaps add an additional layer of insight into navigation
- Great “participant experience” and “researcher experience”
- Low cost and responsive support



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PANEL

Photo by Daniel Cheung on Unsplash

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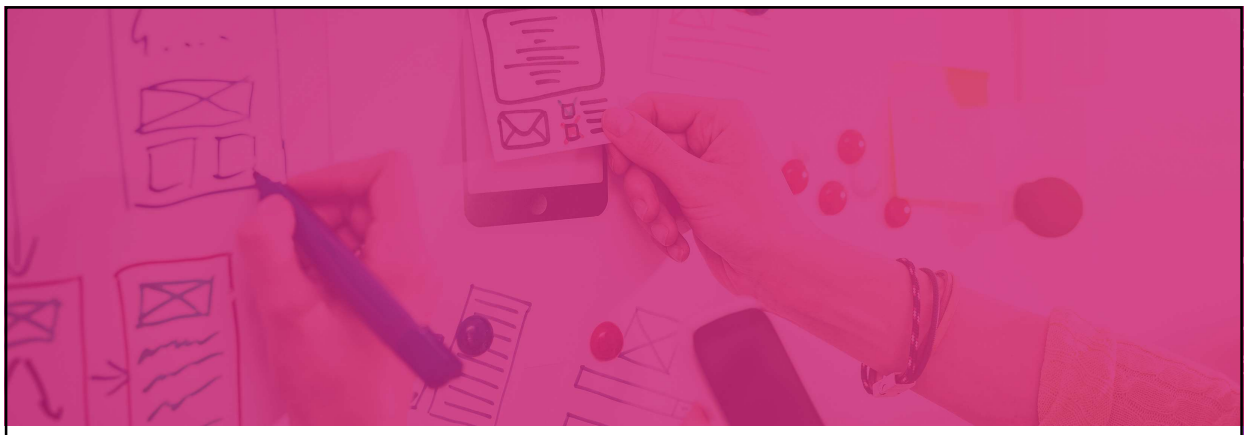

Prioritizing Information Architecture Research

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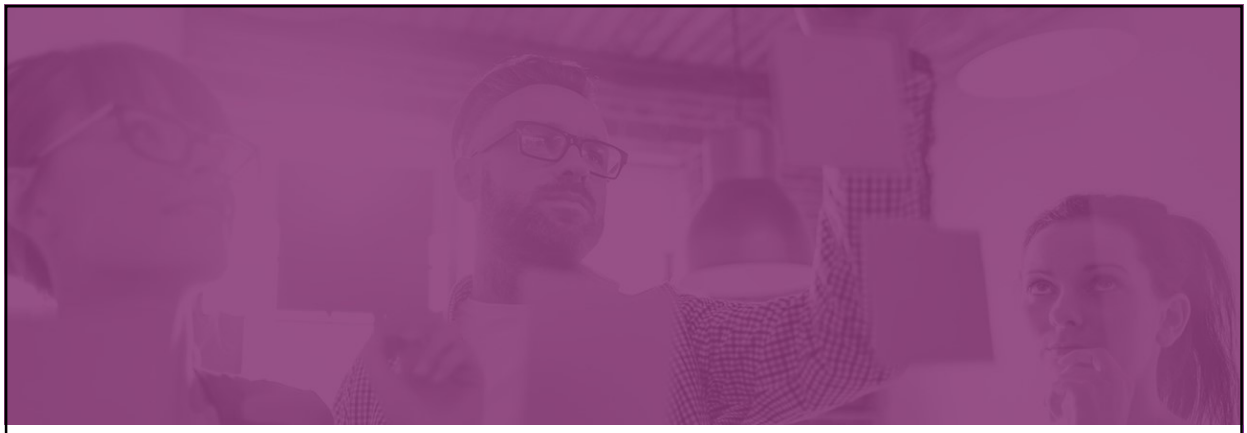

Operationalizing Findings

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Getting Started

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Q&A

Unmute or Zoom chat

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QUICK INFO

Photo by Ramiz Dedaković on Unsplash

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World Usability Day

November 12, 2020

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UPCOMING

Community of Practice Contributors
- Top topics: case studies, interaction design, visual design
- HCQIS Slack #hcd-share
- email hcd@hcqis.org

Coming up
- World Usability Day – call for speakers next week
- Community of Practice – September 25
- World Usability Day - November 12

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MUCH APPRECIATION

Mike Eng
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Chelsea Hunt
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HCD CoE

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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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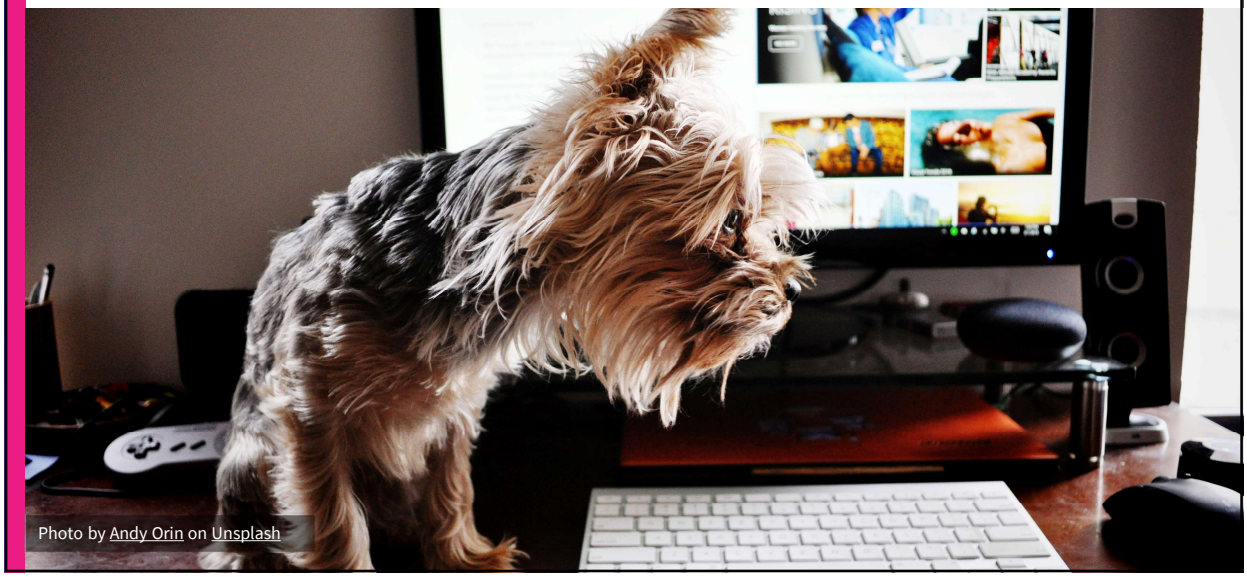
THANK YOU



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CREATE & APPLY
SHARE
HUMAN CENTERED DESIGN KNOWLEDGE

Contact Us

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hcd@hcqis.org

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