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User Research Methods to Inform an Incredible Employee Experience

Emily Mancini

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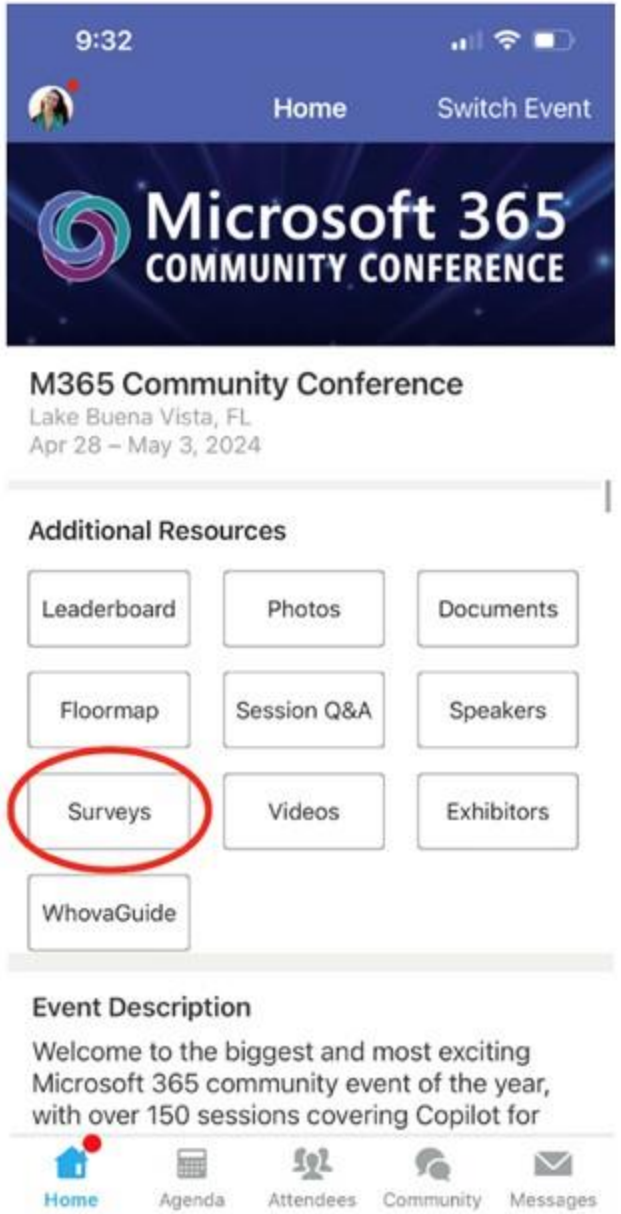

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Workshops Sept 16, 17 & 21

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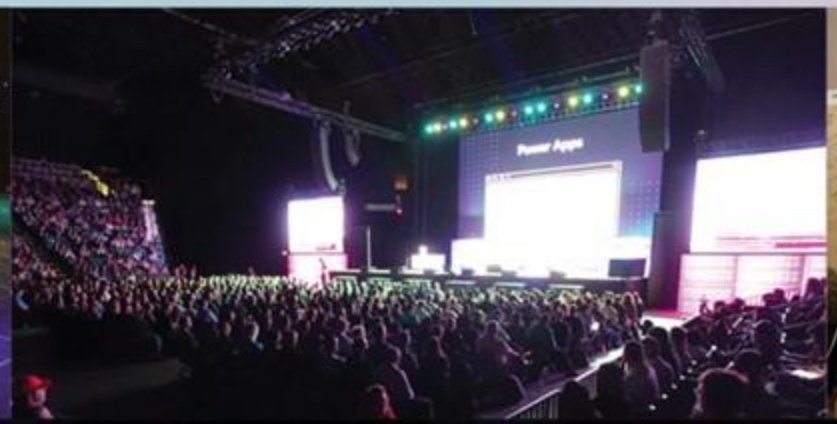

Emily Mancini

Executive Director, Left Uncharted

3-time Microsoft MVP (M365 Apps)

M365 Miami Organizer

International keynote speaker

PnP Team: Microsoft Community Content

Principal architect & user experience specialist

Previously a solo Microsoft 365 platform owner & trainer at a biotech

User research places people in the center of your design process

User Experience (UX)

Encompass all aspect of a person's interaction with a company, its services, and its products.

Customer Experience (CX)

The totality of the interactions that a user has with an organization over time

Employee Experience (EX)

The way employees internalize and interpret the interactions with their organization, and the context that underlies those interactions

User Experience (UX)

Encompass all aspects of a person's interaction with a company, its services, and its products.

UX is any way that customers and end users **realize the value provided of your product**. It includes **all the touch points and interactions** a customer has with your company and product over time.

Inspired: How the Best Companies Create Technology-Powered Products and Services, by Marty Cagan, Wiley, 2018, pp. 54.

User experience encompasses:

- User interface
- Usability
- Usefulness

Nielsen, Norman. "The Definition of User Experience (UX)." *Nielsen Norman Group*, https://www.nngroup.com/articles/definition-user-experience.

Usability is a quality attribute that assesses how easy user interfaces are to use.

Nielsen, Jakob. “Usability 101: Introduction to Usability.” 2012, *Nielsen Norman Group*, https://www.nngroup.com/articles/usability-101-introduction-to-usability/.

Usability is defined by 5 quality components:

- Learnability
- Efficiency
- Memorability
- Errors
- Satisfaction

What about utility?

Nielsen, Jakob. “Usability 101: Introduction to Usability.” 2012, *Nielsen Norman Group*, https://www.nngroup.com/articles/usability-101-introduction-to-usability/.

Usability = how easy & pleasant these features are to use

Utility = whether it provides the features you need

Useful = usability + utility

Our goal

Nielsen, Jakob. "Usability 101: Introduction to Usability." 2012, *Nielsen Norman Group*, https://www.nngroup.com/articles/usability-101-introduction-to-usability/.

Customer Experience (CX)

The totality of the interactions that a user has with an organization over time

User Experience (UX)

Encompass all aspects of a person's interaction with a company, its services, and its products.

User Experience vs. Customer Experience: What's the difference? (nngroup.com)

Customer Experience (CX)

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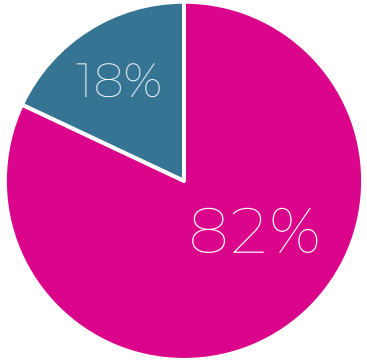
User Experience (UX)

Encompass all aspects of a person's interaction with a company, its services, and its products.

Employee Experience (EX)

The way employees internalize and interpret the interactions with their organization, and the context that underlies those interactions

Employee experience is the way in which employees internalize and interpret the interactions they have with their organization, as well as the context that underlies those interactions.



82% of employees say it's important for their organization to see them as a person

45% of employees believe their organization *actually* sees them this way

Source: Employees Increasingly Seek Value and Purpose at Work (gartner.com)

Employees are people, not just workers 💼

Work is a subset of life, not separate from it 🌳

Value comes through feelings, not just features 💞

Source: Employees Increasingly Seek Value and Purpose at Work (gartner.com)

User research is a process of gathering data and insights about users to inform the design, development, and improvement of products, services, or systems.

It involves using a variety of research methods and techniques to understand user needs, behaviors, preferences, and pain points.

How do we know when we are creating a good employee experience?

AGENDA

- Research overview
- 4 primary methods for intranet use case:
  - Interviews
  - Use cases
  - Usability testing
  - Surveys

Assemble a team 🙌

Identifying user needs involves stakeholders & users

Objectives

- Number of users depends on research method
- Stakeholder involvement increases trust in results
- Intranet team involvement creates alignment and shared understanding

Source: User-Centered Intranet Redesign: Set Up for Success in 11 Steps (nngroup.com)

Deciding what to research 🔬

FALSE CONSENSUS EFFECT

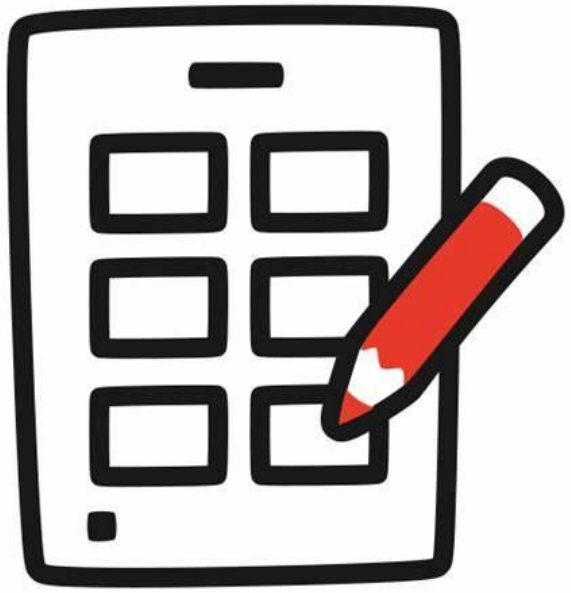
Image Source: “You are not the user!!!”- Really? - UX Magazine

Scenarios for user research

Anything you build- out of the box or custom

Most commonly:

- Migrations or modernization
- Custom solutions
- Search improvement
- Navigation design



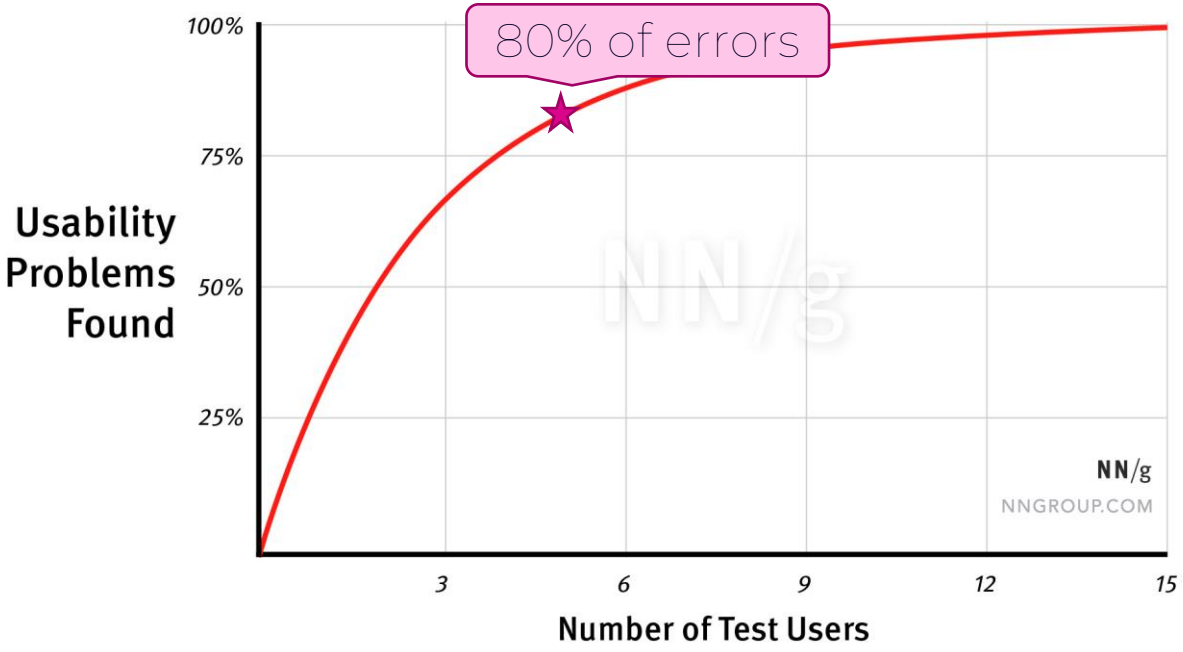
Risks of skipping user research

- Solving the wrong problems
- High risk of rework
- Additional time investment needed for adoption
  - *If you build it – they won't come if you built the wrong thing!*
- Additional time for break/fix
- Reduced likelihood of innovation

A wonderful interface to the wrong features will fail.
-Jakob Nielsen

What if there is no time or budget for user research?

If there is time and budget for break/fix, there is time and budget for user research



Source: Usability Testing 101 (nngroup.com)

Return on investment for good usability (in an intranet)

Study scope: 18 common tasks across intranet

49 minutes for low usability intranet (bottom 25%)

49% decrease

25 minutes for good usability intranet (top 25%)

(Task time) x (# of times to perform task) = Estimated hours per year

Low usability: 43 hours
Good usability : 25 hours

Spending ~10% of a project's budget on usability activities doubles usability

Source: Return on Investment (ROI) for Usability By Jakob Nielsen, J.M. Berger, Shuli Gilutz, and Kathryn Whitenton

But how do we measure and calculate ROI?

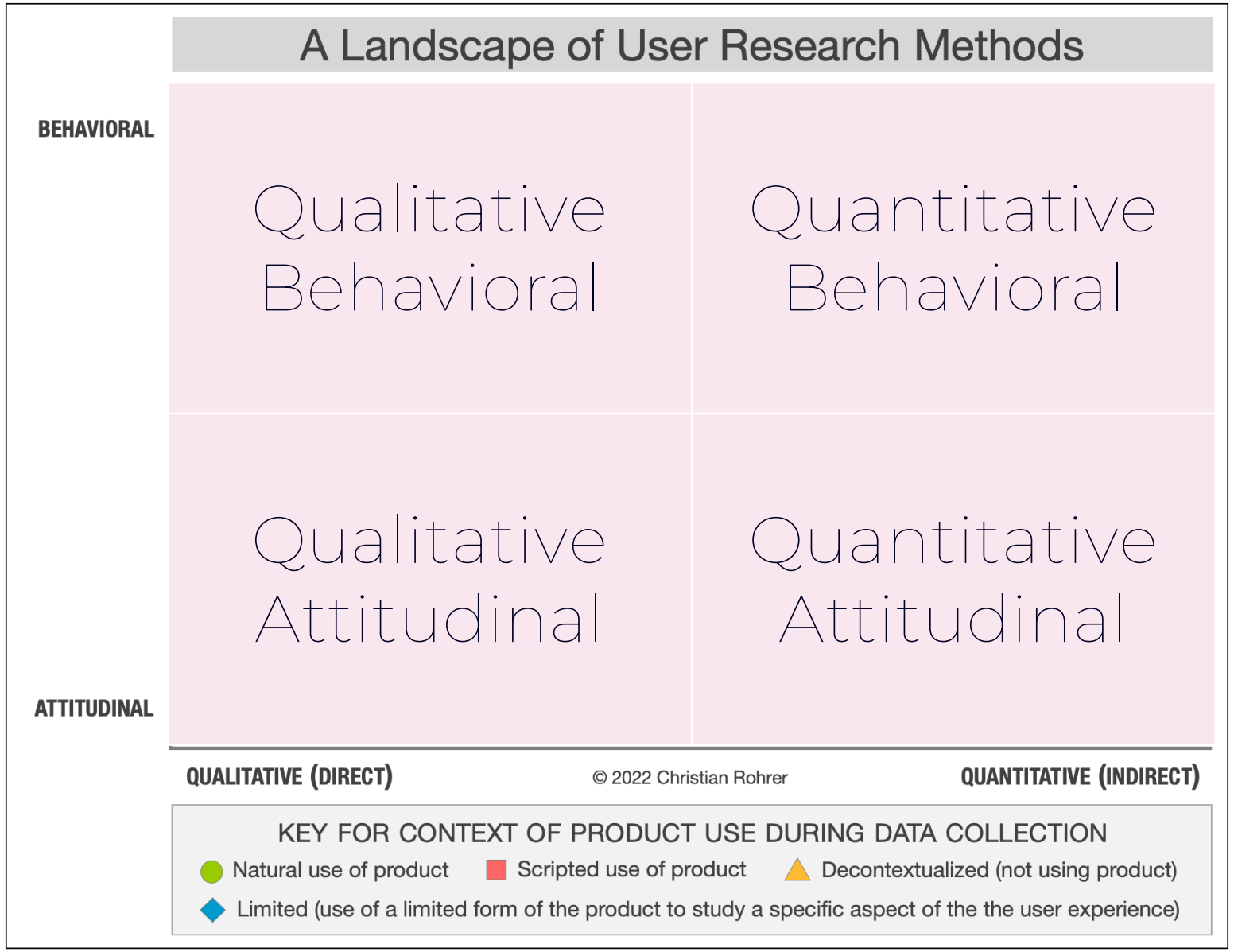
Project cost

Measured in money

Usability

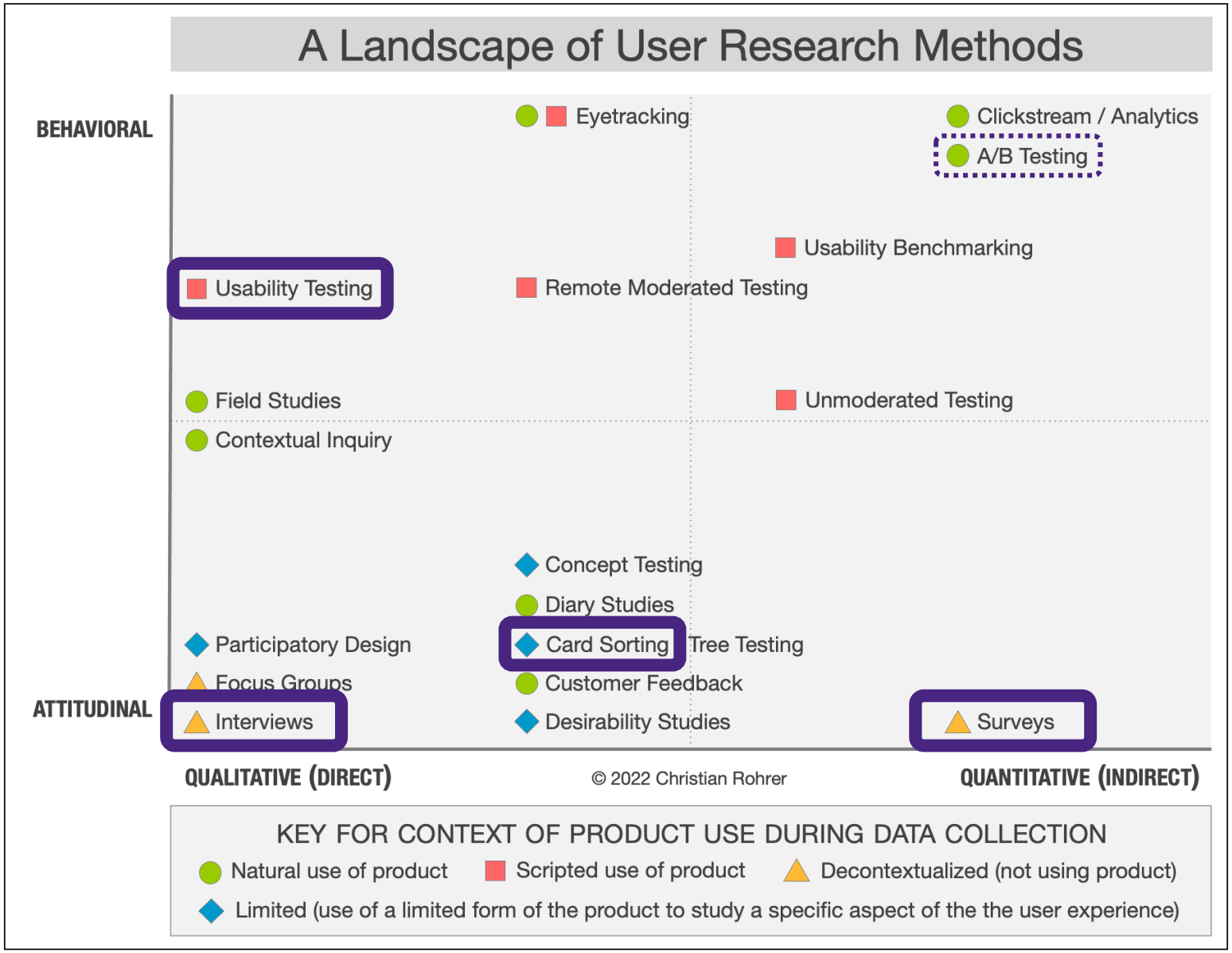
Measured in increased use, more efficient use, or higher user satisfaction

Top user research methods 💻



Source: When to Use Which User-Experience Research Methods (nngroup.com)

Qualitative 🕵️‍♀️	Quantitative 📈
Exploratory	Collecting and analyzing
Open ended non-numerical methods	Structured methods
Descriptive data	Numerical data
Identify themes, patterns, and trends	Analyze data using statistical methods
Develop hypothesis	Test hypothesis
Gain insight and iterate	Define “proof”
Attitudinal 🗨️	**Behavioral 👀**
Understand attitudes, beliefs, and opinions	Observing and measuring behavior
Understand user motivations, preferences, needs, and to generate insights to inform product strategy and design decisions	Identify usability issues, optimize user flows and interactions, and measure effectiveness of design changes
Often qualitative	Often quantitative

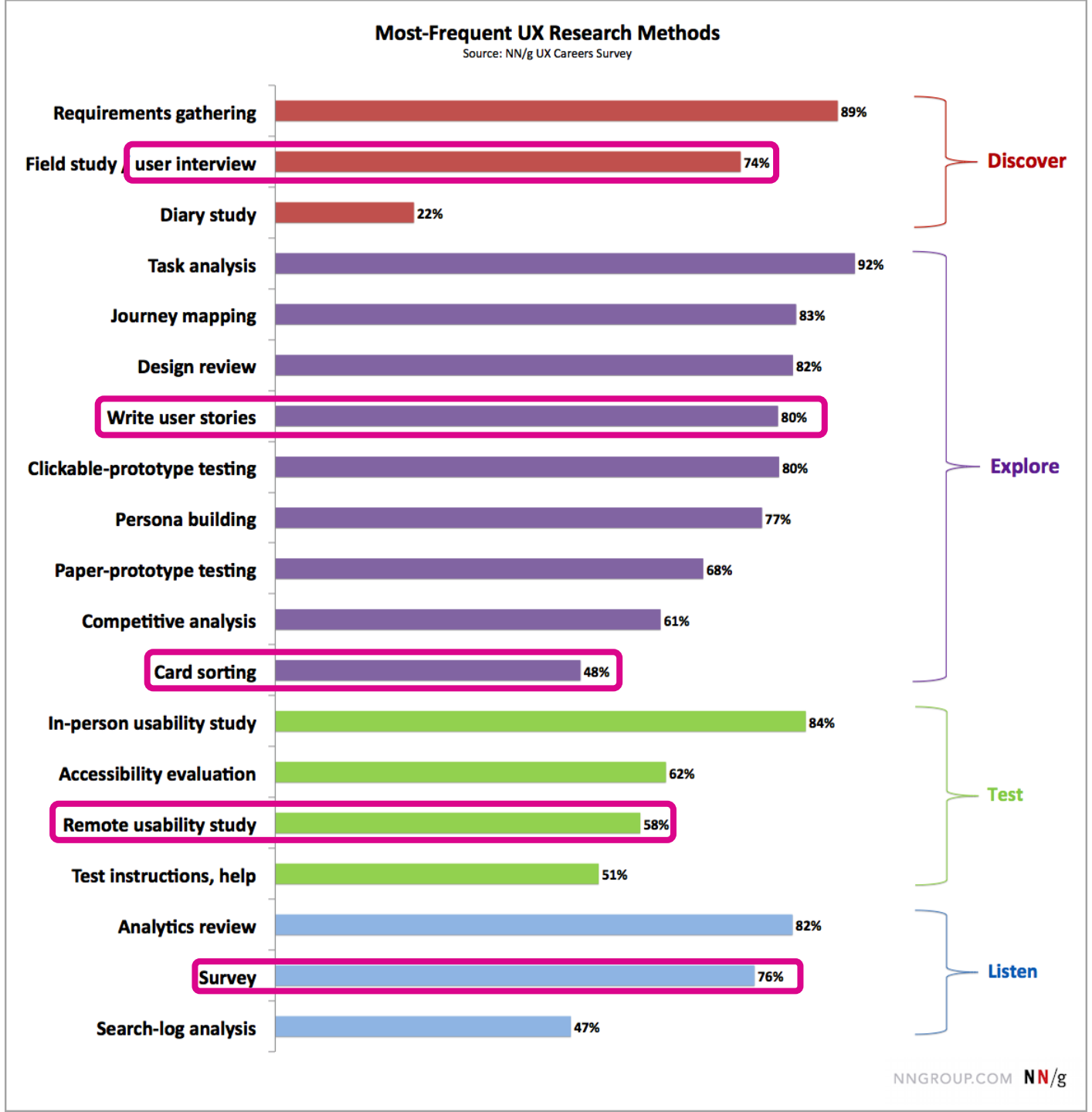


Source: When to Use Which User-Experience Research Methods (nngroup.com)

Prioritizing what to test

- What are the top tasks?
- What is risky not to test before launch?
- What has the greatest business benefit?
- What is new?
- Where are people experiencing issues?
- What features are unused that are pivotal t
  completing tasks?
- What can you feasibly make changes to?

Deciding when to research


Most-Frequent UX Research Methods
Source: NN/g UX Careers Survey
Requirements gathering 89%
Field study, user interview 74%
Diary study 22%
Task analysis 92%
Journey mapping 83%
Design review 82%
Write user stories 80%
Clickable-prototype testing 80%
Persona building 77%
Paper-prototype testing 68%
Competitive analysis 61%
Card sorting 48%
In-person usability study 84%
Accessibility evaluation 62%
Remote usability study 58%
Test instructions, help 51%
Analytics review 82%
Survey 76%
Search-log analysis 47%
Discover
Explore
Test
Listen
NNGROUP.COM NN/g

Today’s use case: Intranet redesign 🏗️

Common intranet redesign catalysts

Change in technology

Merger or acquisition

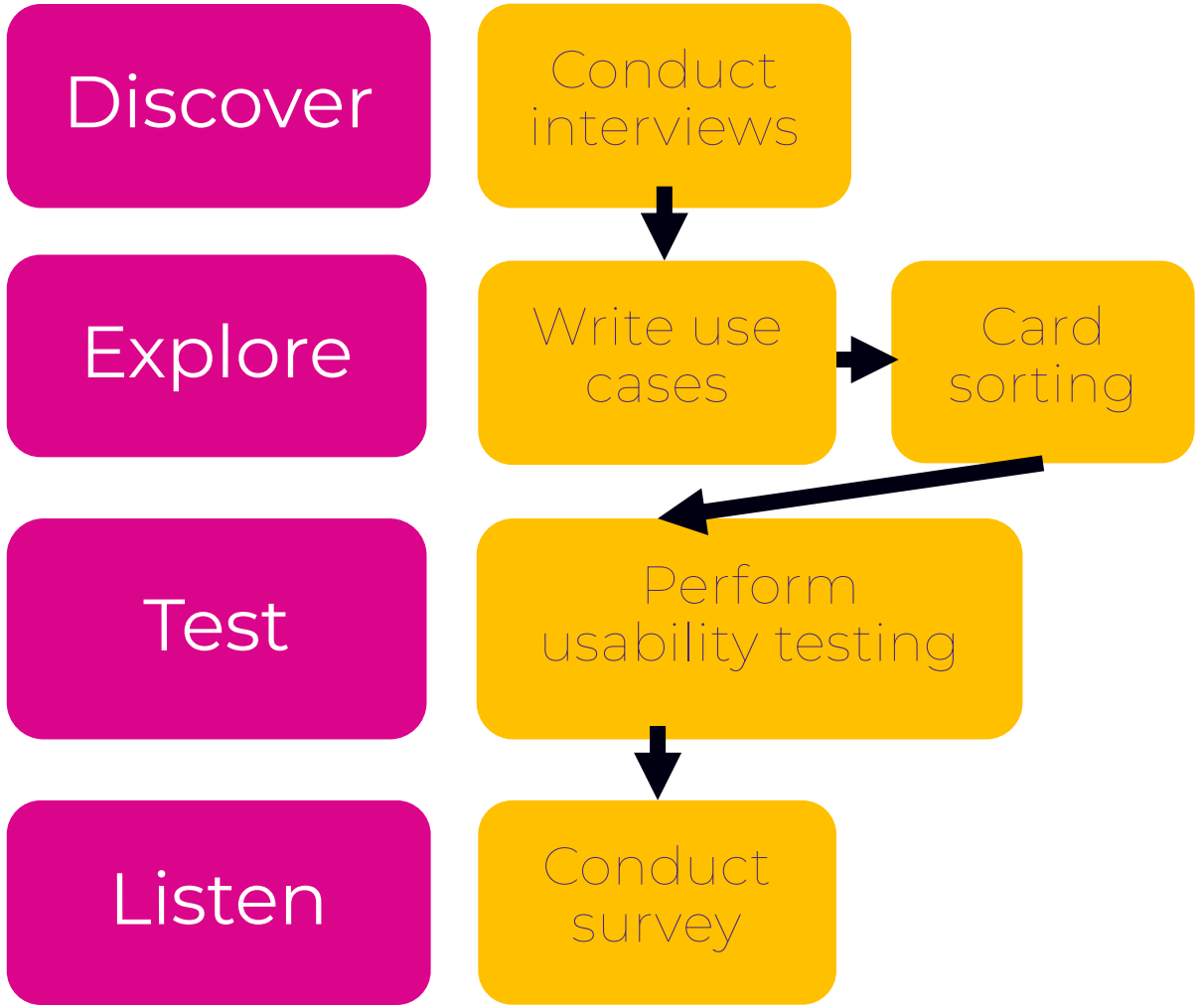
Leadership decision

Rebrand

Usability issues

Organizational transformation

Identify relevant testing methods



🌟 You may use more than one user research method 🌟

💰 Budget should be flexible to the project's specific needs rather than a fixed percentage

Source: UX Research Cheat Sheet (nngroup.com)

Develop a lite user research plan

- Assemble a team involving stakeholders
- Identify the catalyst
- Decide what to research
- Decide when to research
- Write a test plan
- Socialize test plan & iterate
- Set up each user research session

Writing a test plan

- Plan background
- Key objectives
- Objectives and success metrics
- Research scope & focus areas
- Methodology
- Participant profiles
- Timeline
- Equipment and location
- Team responsibilities

Resources

Creating a User Research Plan (with examples)

Project Management for User Research: The Plan

Methodology

1:1 user interviews

Study End Date

June 29, 2023

Focus Area

Intranet on classic SharePoint

Plan Background

Before migrating, evaluate the current opinions and perceptions on the intranet can help identify focus areas to iterate on and improve in the modernization efforts as well as change management needs.

Objectives

To collect insights from a large pool of employees for their preferences, attitudes and opinions on the intranet.

Participants

15+ participants

Must represent:
-Officers
-Managers
-Individual contributors
-New hires

Equipment

Computer with Microsoft Teams

All sessions will be recorded through the meeting.

Location & Dates

June 5-8, 2023

Virtual only

Responsibilities

UX Team:
Emily Mancini
Lionel Messi
Sergio Busquets

Moderator:
Emily Mancini

Client recruitment:
Lauren Laissue

Stakeholders:
Kimberly Zzyzx
Judith Sikora

Writing plan backgrounds with the 5(ish) W's

- Who is affected by the problem?
- What is the problem?
- Where does this problem occur?
- When does the problem occur?
- Why is the problem important?

Problem statement from client:
Search does not work in SharePoint and we want to optimize it.

Problem statement after 5 W's:
Employees are unable to find human resources content on the intranet and resort to sending emails to HR representatives. There is an opportunity to make the content easier to find.

Source: Problem Statements in UX Discovery (nngroup.com)

Discover 🔬

Interviews

User Interviews

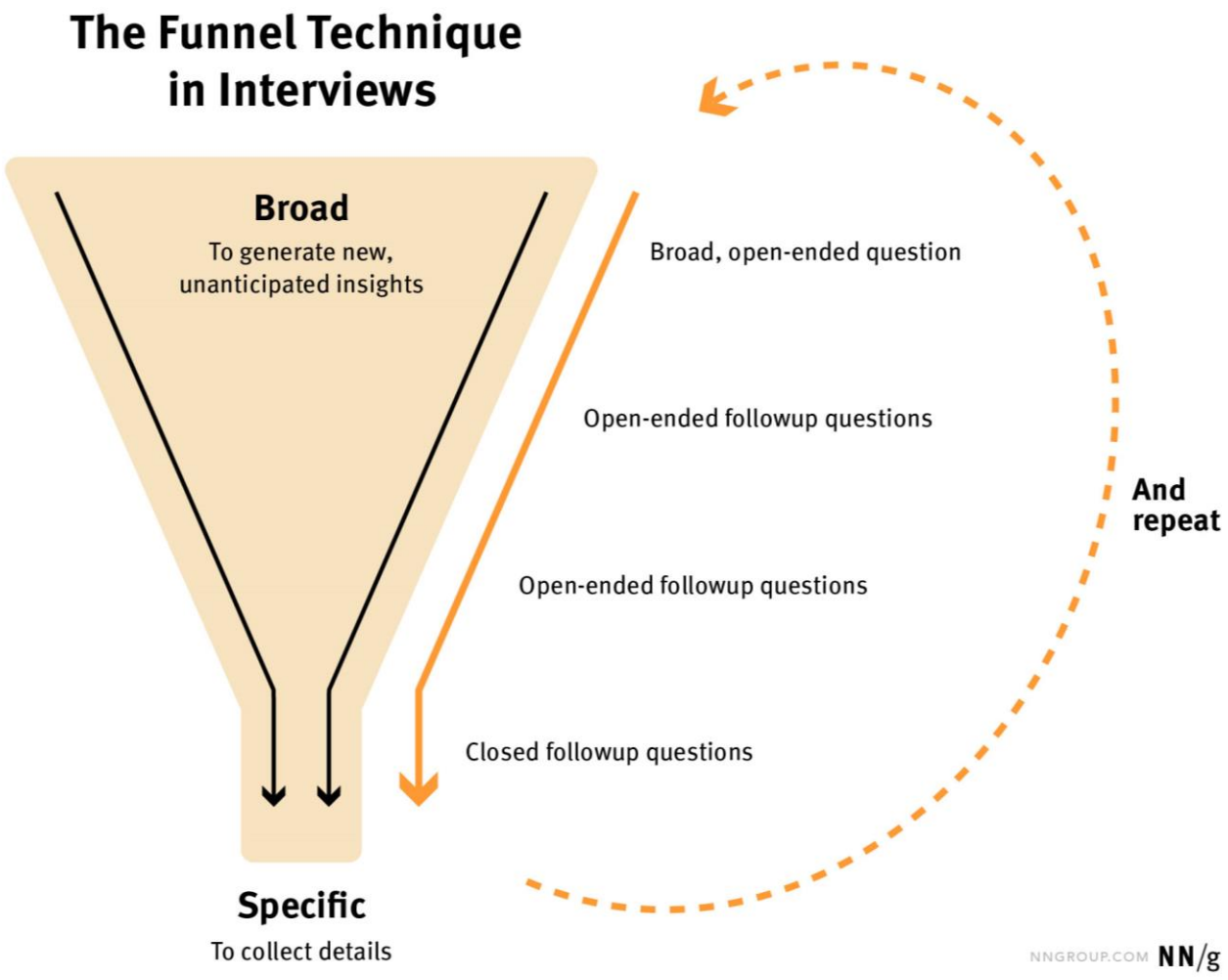
Qualitative & Attitudinal

1:1 user interviews

Why?	What users think
When?	When you are gathering requirements/needs End of usability test for verbal responses
How?	Virtual or in-person 1. Set the goal 2. Prepare questions & follow-up questions 3. Create rapport with the interviewee 4. Guide through interview questions

Source: User Interviews: How, When, and Why to Conduct Them (nngroup.com)

Use the funnel technique to structure questions



Source: The Funnel Technique in Qualitative User Research (nngroup.com)

Start with 5-8 broad open-ended questions

- Gets the participant comfortable talking
- Allows the participant to begin sharing stories
- Generates lots of new, unanticipated information
- Avoids the researcher priming the participant

What tasks do you perform for your role where you need the intranet?

As an executive assistant I...

Source: The Funnel Technique in Qualitative User Research (nngroup.com)

Follow-up after each with probing questions

Open questions

- Can you expand on that?
- What do you mean by that?
- How do you feel about that?
- Why do you think that?
- If you had a magic wand, how would you change that?

Closed questions

- How often do you complete this task?
- How long does it take?
- Are you always in the same location?
- Do you use different devices?

The Funnel Technique in Qualitative User Research (nngroup.com)

When do I stop conducting interviews?

How do you decide to shop at one grocery store over another?

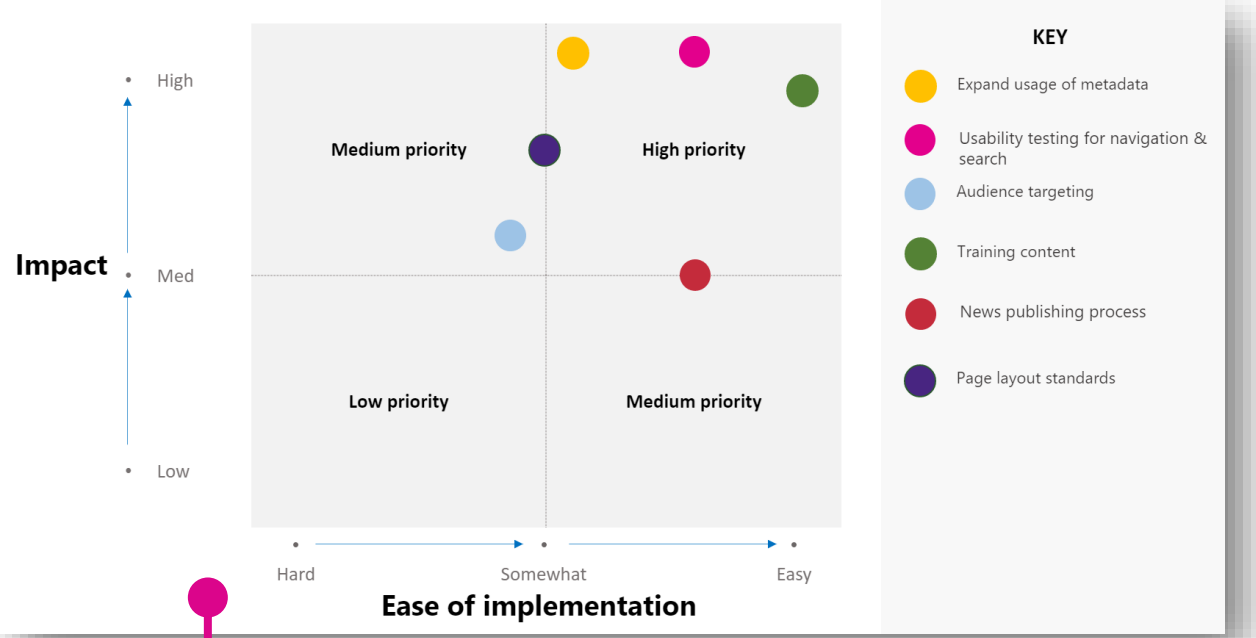
Deciding to shop at one grocery store vs another

- Location
- Hours of operation
- Range of goods sold
- Store presentation
- Customer service
- Price

Saturation: nothing new or material is being repeated

Identify effort vs impact and next steps

Focus Area	Why it is important	Next steps
Improving the current information architecture (I.A.) through metadata usage	Supports search, findability, and the ability to centralize content across site collections (to keep permission model simple and reduce destinations for content authors).	• Schedule an information architecture workshop for the core project team to demo how metadata supports findability of content through search
Usability testing for navigation and search	Identify specific pain points to refine focus and resource allocation for Waves 1-4	• Draft user research outline for review and participant recruitment Oct 31-Nov 4
Audience Targeting	Supports personalization and reduces content overload	• Identify audiences
Creating Microsoft 365 support content for content owners	Their role will be expanding, and current content owners feel ill equipped to edit pages due to infrequency of edits	• Identify training content location (Viva Learning, Learning Pathways, Quick Cards, videos) • Review current Governance document
Define news publishing and page layout standards	Supports consistent user experience across sites; easier creation, consumption, and findability of content; impacts provisioning plans; impact OCM (roles & respon ities, training plan, etc.)	• Schedule a news publishing workshop • Schedule a page layout design session



Define focus areas, why it is important, and next steps

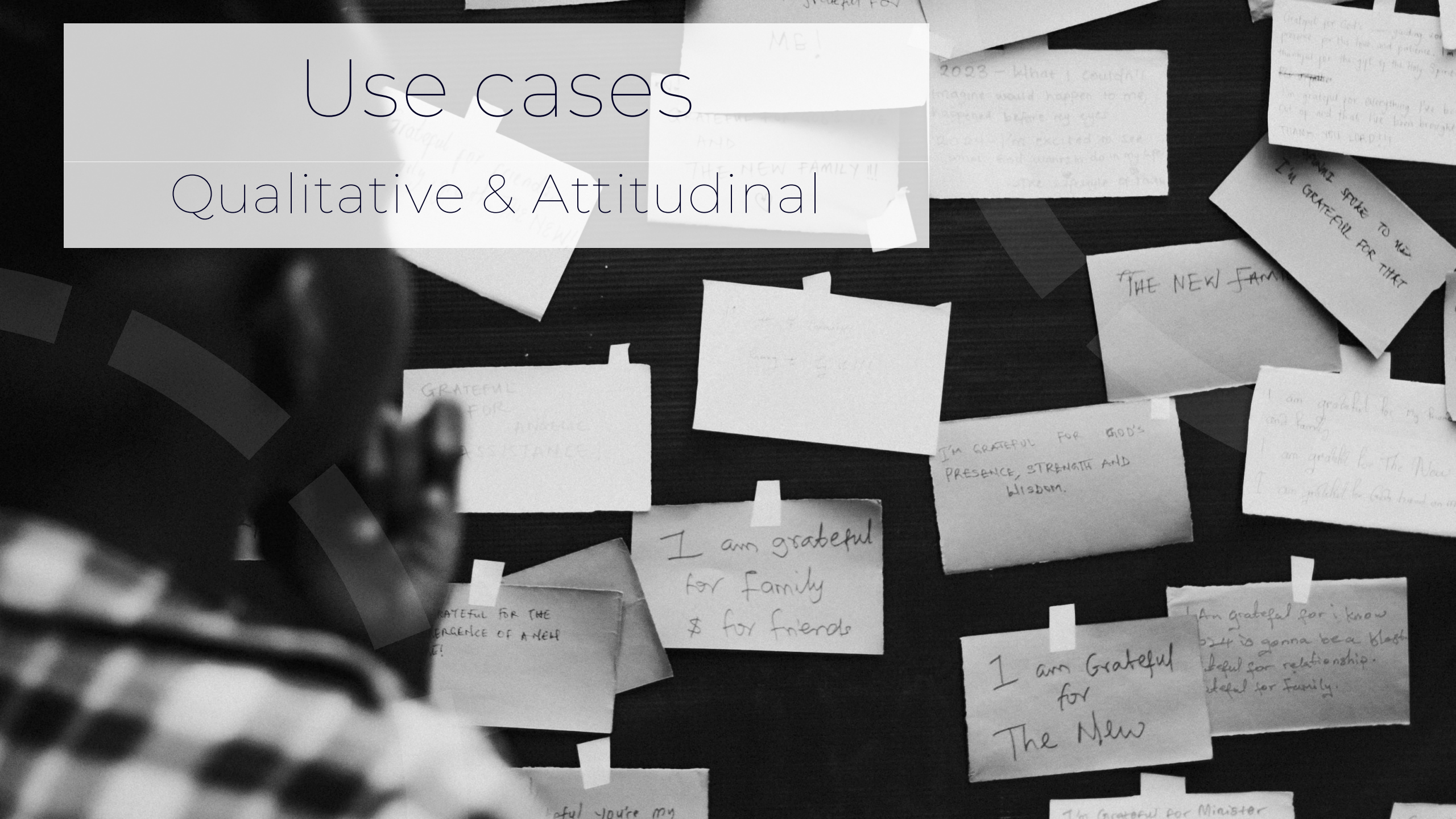
Chart focus areas to define priority

Explore 🗺️

- Use cases
- Card sorting

Use cases

Qualitative & Attitudinal



A user need statement is an actionable problem statement summarizing who a particular user is, the user's need, and why the need is important to that user.

User	Need	Goal
An individual contributor	Understand the shift to company strategy	I can make an informed decision on reprioritizing

Source: User Need Statements (nngroup.com) & Plan your SharePoint communication site

User	Need	Goal
An individual contributor	Understand the shift to company strategy	I can make an informed decision on reprioritizing
A new hire	Identify benefits options	Elect my benefits for the first time
A manager	Find the performance review process	Lead an effective meeting with my direct report

Source: User Need Statements (nngroup.com) & Plan your SharePoint communication site

User	Need	Goal	Company Goal
An individual contributor	Understand the shift to company strategy	I can make an informed decision on reprioritizing	Increased transparency in decision making
A new hire	Identify benefits options	Elect my benefits for the first time	Create an inclusive and supportive employee experience
A manager	Find the performance review process	Lead an effective meeting with my direct report	Challenge ourselves to grow and advance daily

Source: User Need Statements (nngroup.com) & Plan your SharePoint communication site

User need statements to define outcome goals

The most successful intranets help people get their jobs done.

Focusing on the tasks that need to be completed and putting them into user stories help define the important components for each site.

These user stories serve as our “true north” to inform:

- the site build
- hierarchy of information in the homepage and navigation
- task-based testing

to ensure we met the outcome goals that were identified.

Card sort

Qualitative & Attitudinal

Open Card Sorting

Nielsen, Jakob. "Card Sorting: Uncover Users' Mental Models for Better Information Architecture." *Nielsen Norman Group*, 2004, www.nngroup.com/articles/card-sorting-definition/.

Closed Card Sorting

About	Human Resources	New York	Service Ticket
Functions	Information Technology	Seattle	Security
Location	Mission	Mexico City	
Help	Org Structure	Contacts	

Closed Card Sorting

About	Functions	Locations	Help
Mission	Human Resources	New York	Service Ticket
Org Structure	Information Technology	Mexico City	Security
Contacts		Seattle	

Closed Card Sorting

About	Functions	Locations	Help
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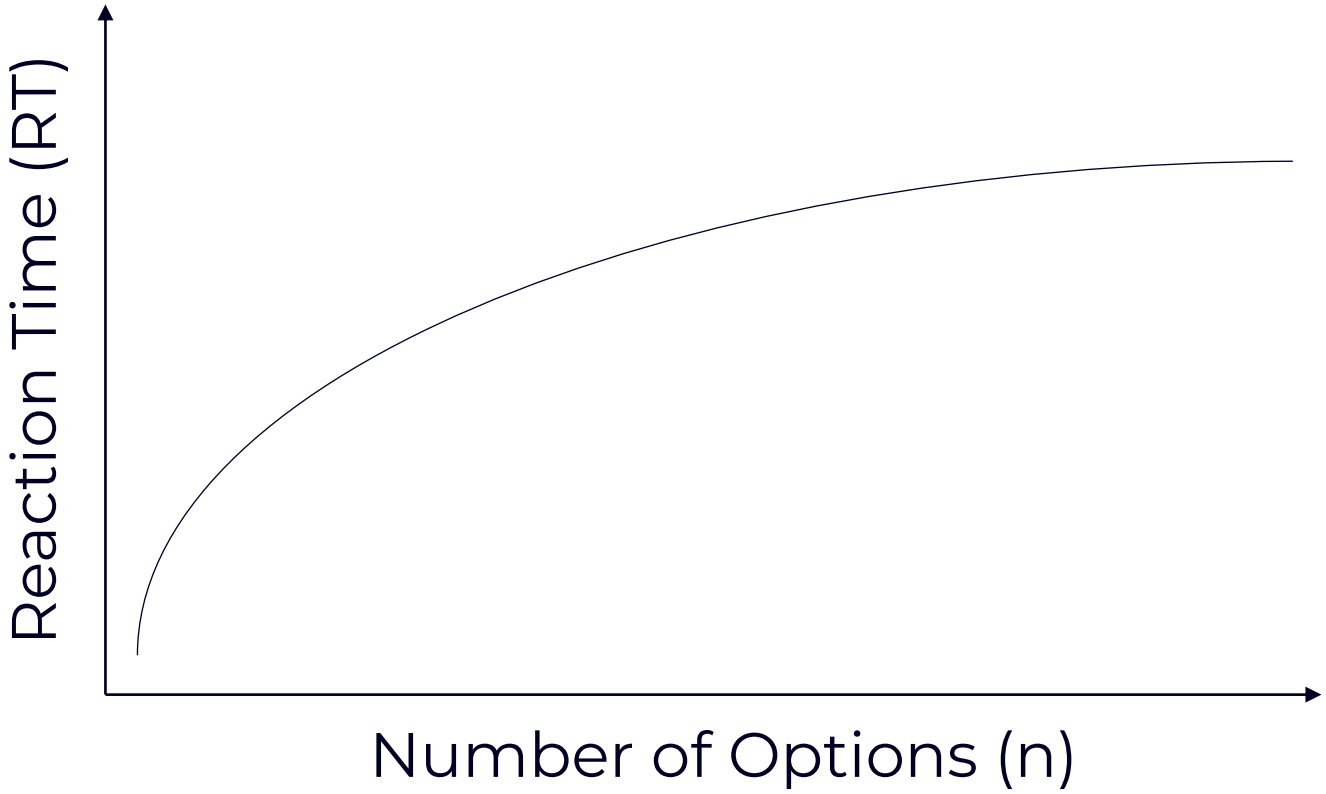
	Security	Seattle	

Hick-Hyman Law



$RT = a + b \log_2(n)$

RT is the Reaction Time

(n) Is the number of stimuli

a and **b** are constants

Test 🧪

Usability testing

Usability testing

Qualitative & Behavioral

Usability testing

Why?

Identify problems

Uncover opportunities to improve

Learn user behavior & preferences

When?

During design process with prototypes

In test phase to iterate

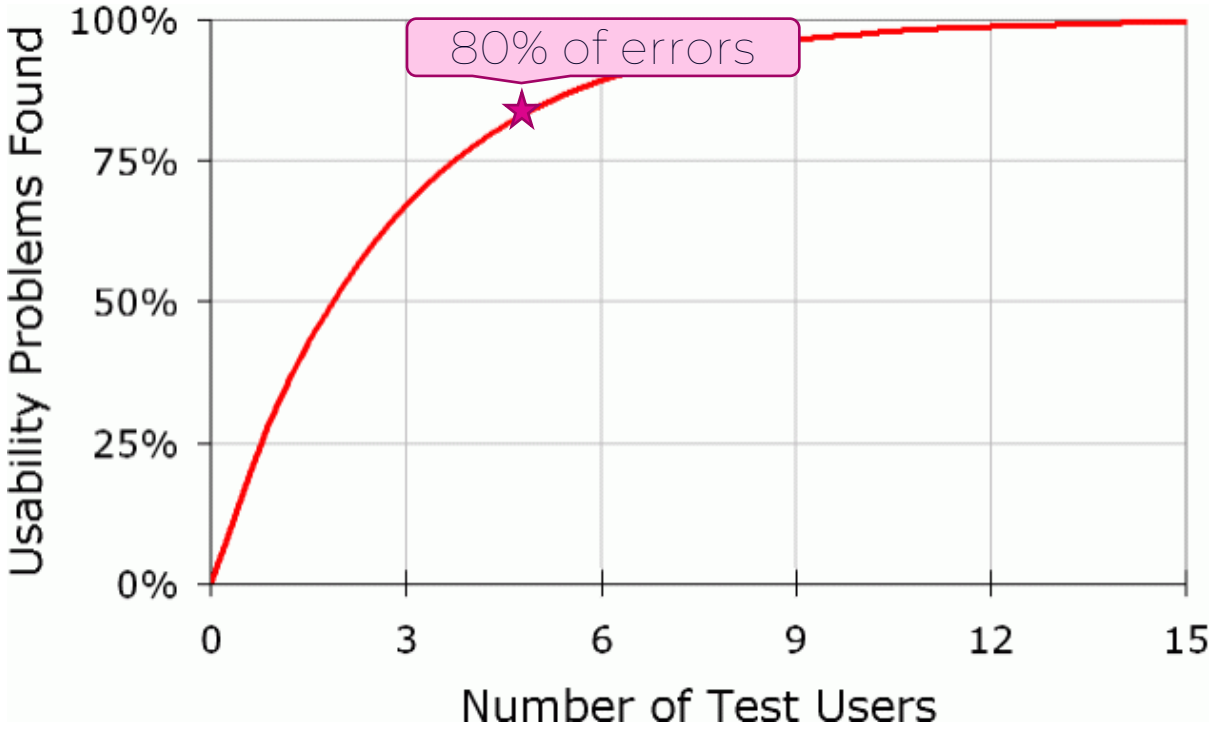
How?

Virtual or in-person

1. Set the goal
2. Review test tasks with stakeholders
3. Recruit testers & send invites
4. Welcome testers, introduce observers, and sign forms
5. Explain test procedure

Source: Thinking Aloud: The #1 Usability Tool (nngroup.com) & Usability Testing 101 (nngroup.com)

Test with a minimum of 5 users for 80% of issues



Iterate between 3 tests with 5 users for all usability issues!

If you cannot afford the time or budget for any other study- do this one!!!

Usability test process

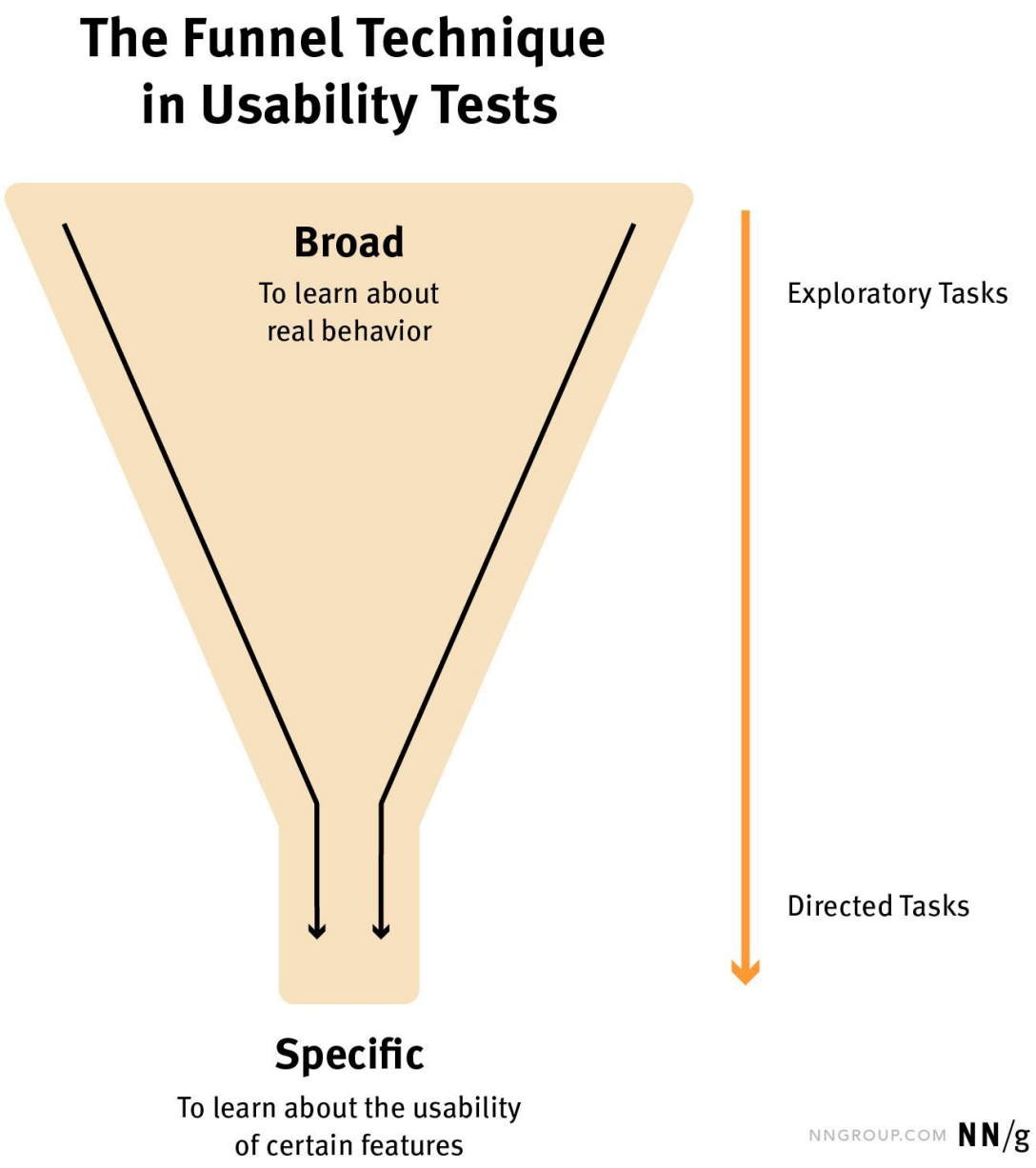
1. The facilitator gives the user a task
2. The user reads it aloud
3. The user works on it while thinking aloud
4. The facilitator stays mostly quiet
5. The task ends
6. The facilitator asks follow-up questions
7. The facilitator gives the user the next task

Usability Testing: Flow of Information

Usability Testing 101 (nngroup.com)

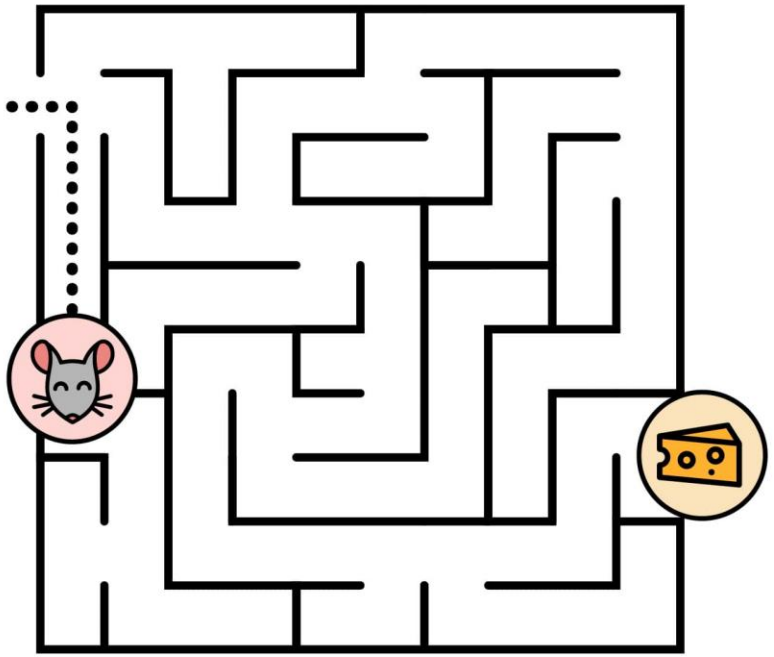
Writing effective tasks

- Base it on realistic activities
- Give minimal context
- Keep language neutral
- Leave out clues or hints
- Involve stakeholders in writing/reviewing tasks
- Create stepped tasks to lead broader questions

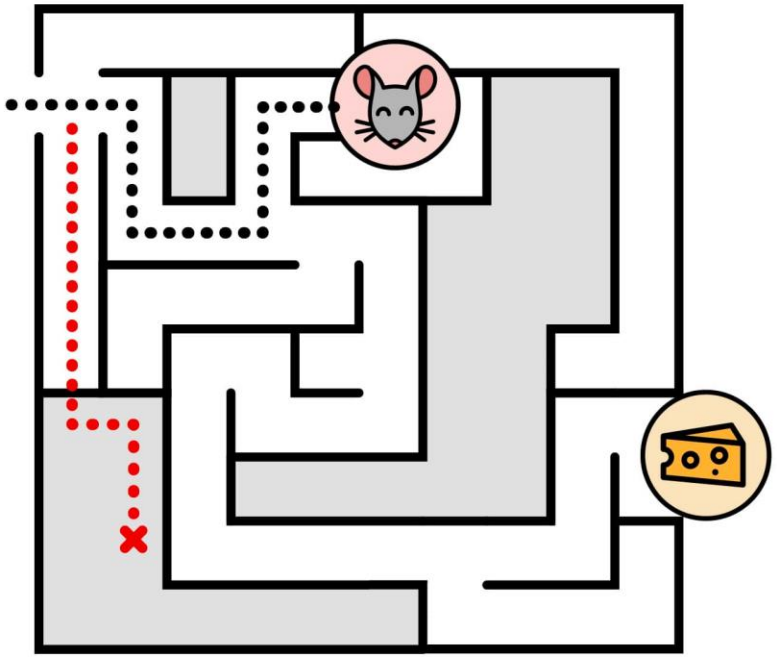


The Funnel Technique in Qualitative User Research (nngroup.com)

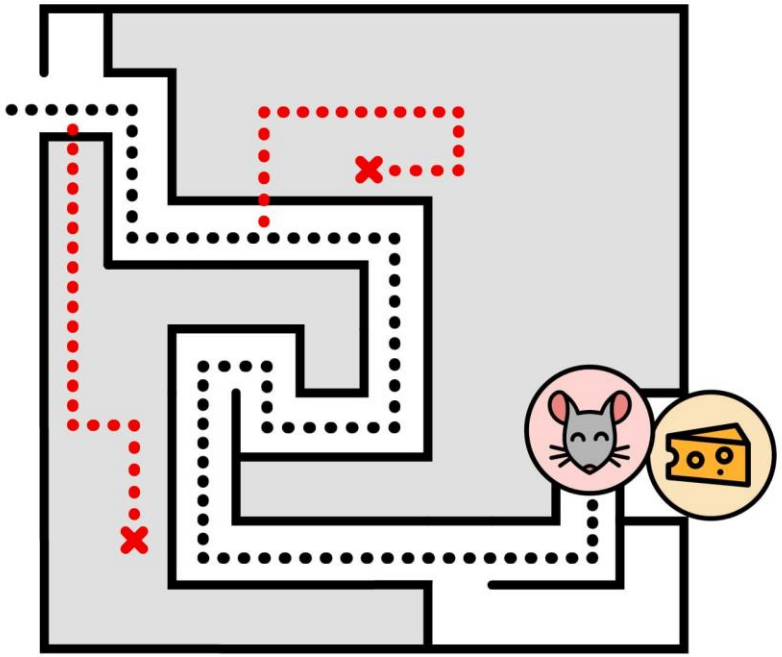
Mouse in a Maze Metaphor



The mouse starts looking for the cheese with access to the entire maze...



Then, if it can't find the cheese on its own, the researcher starts closing off pathways...



Finally, the mouse finds the cheese.

NNGROUP.COM NN/g

The Funnel Technique in Qualitative User Research (nngroup.com)

Moderator tips

- Ensure you have permissions to record
- Invite stakeholders to observe
- Provide tasks verbally and written
- Keep list of neutral replies & think aloud prompts
- Record timestamps next to notes
- Arrange session at users' location
- Allow additional time for virtual sessions
- Identify incentive opportunities
- Identify top tasks and "if time" tasks

STAY NEUTRAL, UNBIASED, DON'T BE REACTIONARY

Think aloud prompts

- What would you normally do?
- What would you do if you were in [situation at work]?
- What do you think?
- Any other thoughts or comments?
- Can you tell me more about that?
- Share more about what led you to that.
- Was anything particularly easy or difficult?

Neutral replies

- Thank you for sharing your thoughts
- Thank you for trying that out
- Thank you for your input, it is helpful to hear different perspectives
- I appreciate your feedback
- I understand
- Let's move on to the next task
- Okay let's try that again with a different approach

Satisficing:
People look until they find an answer that's adequate for the information need

Information Scent:

Signal that tells the user how likely it is to contain the information they need

ANIMAL FORAGING		INFORMATION FORAGING
Food	**Goal**	Information
A site containing one or more potential sources of food	**Patch**	A website (or other source of information)
Search for food	**Forage**	Search for information
The animal's assessment of how likely it is that a given patch will provide food	**Scent**	How promising a potential source of information appears to the user
The totality of food types that an animal may consider in order to satisfy hunger	**Diet**	The totality of the information sources that a user may consider in order to satisfy an information need

Rate of gain = Information value / Cost associated with obtaining that information

Budiu, Raluca. "Information Foraging: A Theory of How People Navigate on the Web" Nielsen Norman Group, 2019, www.nngroup.com/articles/information-foraging

SUMMARIZE THEMES

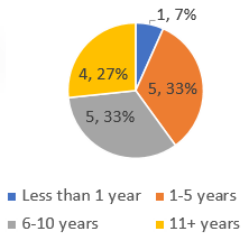
Usability Testing Summary

15 end users: 6 Individual contributors, 8 Managers, 1 Officer

Represented departments

[redacted]

Tenure



Entity

[redacted]

Research Themes

Search is used **45%** of the time to find content on [redacted]. 20% of searches used Control F to find answers in the resulting document or page.

Navigation is used second most for wayfinding at **28%**.

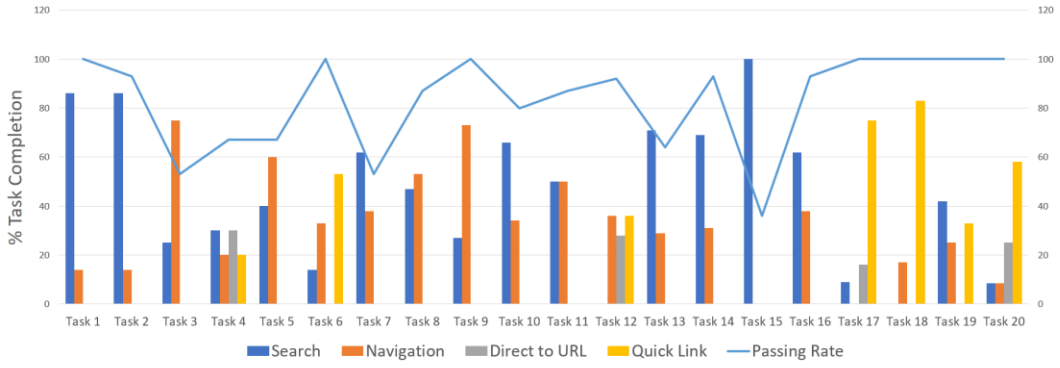
End users will use their preferred method (search or navigation) until they cannot find content. Then they will use the other.

End users will go directly to the system if they know the content is there.

End users will repeatedly check the same page for content, if they think it should be there.

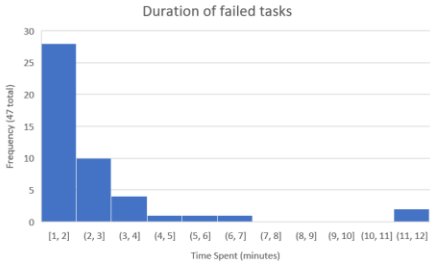
End users will cross references search results with URL path to find on the site to confirm accuracy.

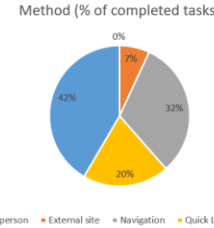
User behavior varied finding content across all successfully completed tasks



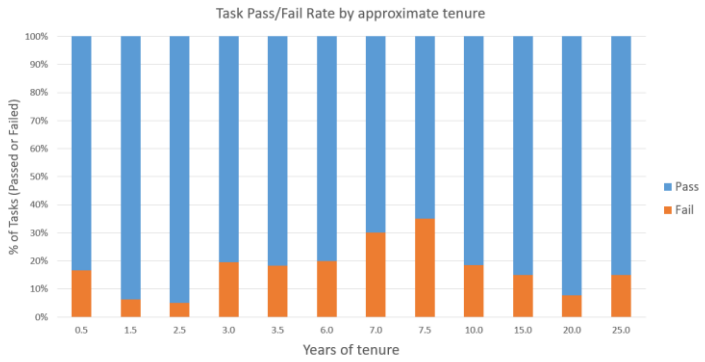
When Quick Links are available, their usage typically surpasses any other method
When participants are unsure, they will use search to start their discovery.

Tasks were quickly completed or failed





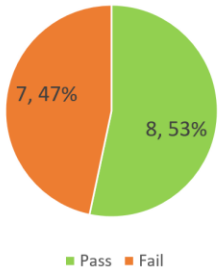
Tenure did not impact Task Success rate



INCLUDE DETAILS

7. Find out whether you can use company systems for personal use

Focus Area: Policies



Avg time to task: 3min 38sec
Avg errors before completion: 2.5

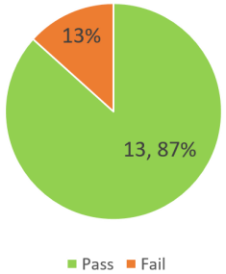
63% of participants found the policy via **navigation**

Participants will **return to the same place multiple times** if they are confident information should be there

0 participants went directly to ePolicy

8. You need to make a presentation. Find the [redacted] PowerPoint templates.

Focus Area: Marketing & Branding



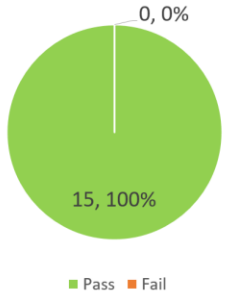
Avg time to task: 1min 0sec
Avg errors before completion: 0

54% of participants found templates via **search**

Failed tasks either used a local copy or a random presentation from the search results

9. Find the most recent list of officer promotions and hires

Focus Area: News



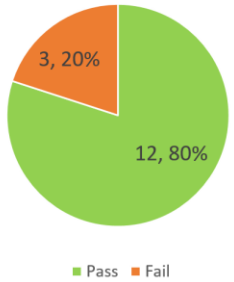
Avg time to task: >1min
Avg errors before completion: 0.2

27% of participants **searched** for the promotions

75% of the participants that used search **began their search from wherever they were** from the last task

10. Register them as a visitor to [redacted]

Focus Area: Shared Services/Security



Avg time to task: 1min 25sec
Avg errors before completion: 0.5

67% of participants found visitor registration via **search**

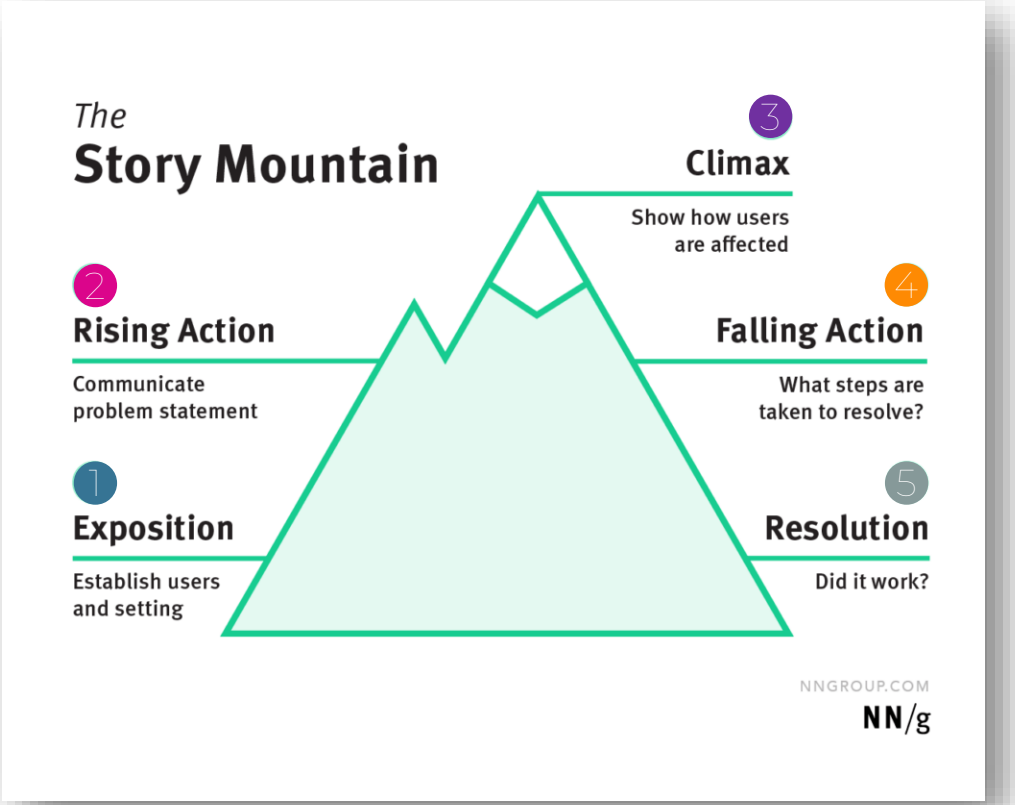
Failed tasks cited speaking to the security desk

If you had a magic wand, what would you change about [redacted]?

Focus Area: Attitudinal

Better practices for sharing your anecdotes

Use the Story Mountain framework to share engaging insights from usability testing



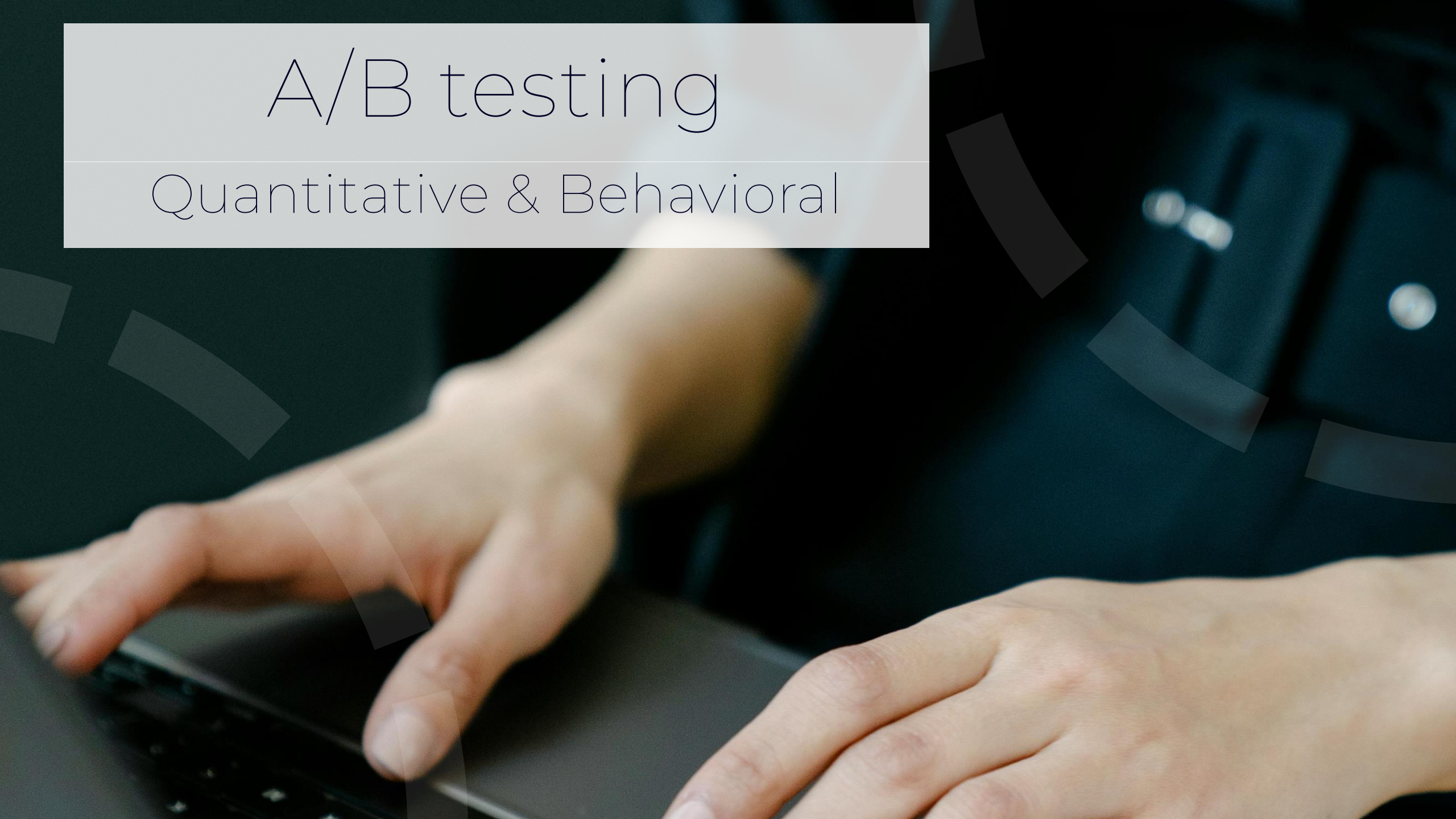
⭐ Consider how artificial intelligence can be part of the solutions! ⭐

Copilot created a new presentation in less than a minute that had sections for Project Summary, Current Status, Recent Accomplishments, What's Next, and Risks. Wow!
5 Saved me hours of work, and it's actually a more professional looking presentation than I could have created myself. This is the new way.

How do I handle a conflict?

A/B testing

Quantitative & Behavioral



A/B testing

Why?	Measure actual behavior and small performance differences
When?	When a design is complete *Must include more than 1 full design*
How?	1. List elements that influence target audience 2. Determine goal 3. Create 2+ designs, a control and a challenger 4. Use sample size calculator to determine recruiting 5. Direct users to each to test ONE element 6. After a set amount of time, measure results

Limitations of A/B testing

🎯 Must have one clear goal to measure

💻 Goal must be measurable by a computer

🖼️ Only works for fully implemented design

Putting A/B Testing in Its Place (nngroup.com)

What do I do after I launch my new intranet/solutions?

Listen 👂

Surveys

Surveys

Quantitative & Attitudinal

Surveys

Why?

What users think

When?

When you are gathering requirements/needs

After you have made changes

How?

Optional: Run qualitative survey before quantitative to define questions.

- Test survey: 4 rounds of testing, 1 person each round
- Use existing survey tools (like Microsoft Forms or a SharePoint list)
- Front-load most important questions
- Keep it short in length (>20 questions) and instruction text

3. What is your primary work setting?

More Details Insights

[illegible]	30
[illegible]	11
[illegible]	3
Remote workplace, connected t...	8
Other	2

4. What is your primary method for navigating to external applications or systems?

More Details Insights

Personal bookmarks (browser, d...	25
Intranet navigation	24
Through other applications (suc...	3
Ask a colleague	0
Other	2

5. How often do you use the navigation in the intranet to access applications?

More Details

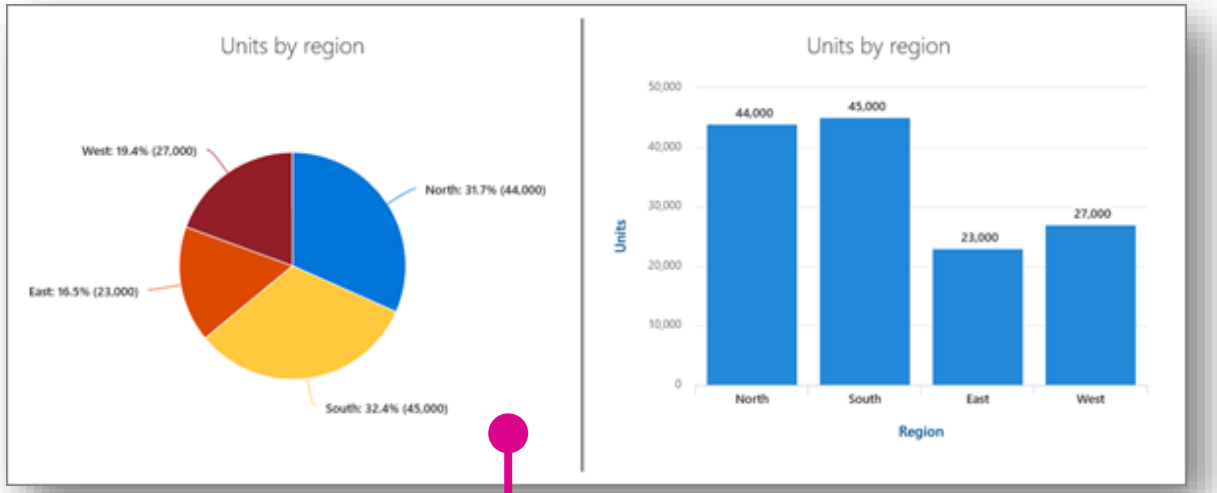
Daily	40
Weekly	9
Monthly	1
Infrequently	4

6. What is your current experience using the intranet navigation to access applications?

More Details

Poor	2
Fair	11
Good	32
Very good	9

Use Microsoft Forms to collect data and immediately see pie charts reflecting your data



Use a SharePoint list connected to a Quick Chart web part to socialize results

Reasons to continue past surveys

- Shallow data
- Pain to complete = low effort replies

Also look at:

- Support tickets
- Search query analytics for no result and abandoned

Source: Microsoft Search Usage Report – Queries | Microsoft Learn

Resources

- When to Use Which User-Experience Research Methods (nngroup.com)
- User Interviews: How, When, and Why to Conduct Them (nngroup.com)
- Usability Testing 101 (nngroup.com)
- User Need Statements (nngroup.com)
- A/B Testing 101 (Video) (nngroup.com)
- "Customer Surveys are No Substitute for Actually Talking to Customers" (Harvard Business Review)