Synthesizing Qualitative Data

your Washington

ABOUT THIS GUIDE

About This Guide

This guide is designed to support teams in making sense of qualitative data—from raw notes to meaningful insights. It covers key steps and best practices for working with data, synthesizing findings, and clearly articulating insights.

Each section begins with a simple checklist to help ensure nothing gets missed. You'll also find tips, examples, and additional details to guide your work along the way.

If something here doesn't quite fit your needs, that's okay—qualitative work often requires flexibility. Reach out to Your Washington at [insert contact info] and we'll do our best to connect you with other tools or help tailor these to better suit your team.

What's Included:

- Working with qualitative data
- Synthesizing qualitative data
- Articulating insights

Look for these icons for helpful tips and tricks throughout this guide

QUALITATIVE DATA MANAGEMENT

Qualitative data is inherently personal data- how people use the services, process, and materials you're trying to improve. Keeping data safe means keeping your participants safe.

Keeping your data safe and usable is an iterative process, and your research data should be **regularly** reviewed. We recommend assigning a team member to be the data lead, responsible for making sure all safe data practices are followed and creating a schedule to manage the data.

Your participants are the humans in your human centered design project. Offer control over their own data by sharing transcripts, photos, recordings, and other materials with personally identifiable information (PII) at their request, or at the end of your project.

DATA MANAGEMENT CHECKLIST

- ❑ **Create a data management plan** that outlines how data will be collected, stored, accessed, and deleted—include specific dates and review points.
- ❑ **Check folder permissions** — limit access to only the team members who need it, and avoid sharing links widely.
- ❑ **Name potential biases** before analysis begins—what assumptions, positions, or experiences might shape how you interpret the data?
- ❑ **Review and remove data** on a regular schedule to reduce risk and meet your data retention commitments.
- ❑ **Set up a secure, dedicated folder** for sensitive materials like consent forms, pseudonym trackers, and interview notes.
- ❑ **Assign a data lead** who's responsible for maintaining safe practices and ensuring the team follows the plan.
- ❑ **Schedule participant follow-up** near the end of your project to share a summary and show how their input made an impact.

QUALITATIVE DATA MANAGEMENT

Safe Data Practices

Restrict Access

Limit the number of people who can see the data. Ensure that the default for team members is viewing data, not editing data. Have your team know what data is shareable, and what is internal.

Keep Only The Data You Need

Get in the habit of removing any data that isn't critical for project analysis or documentation. Include specific dates for auditing and deleting data in your research plan.

Anonymize as Much as You Can

Use pseudonyms when referring to research participants. Keep track of the pseudonyms referring to which participants saved separately from any public facing materials and any participant contact information

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Get Informed Consent

Provide consent forms any time you're engaging people in user research. Consent forms should include: the data you plan to collect, how you'll use the data, how long you intend to keep the data, if you plan to share data or materials with people outside your research team, and what will happen to the data once you're no longer using it. *There is an example consent form in our interview guide.*

QUALITATIVE DATA MANAGEMENT

Sample Data Management Plan

Data Lead

[Research team member] will be responsible for executing the plan and onboarding new team members to safe data practices.

Types of Data Collected

➜ *List out the types of data that are being collected through your project (ex: research participant names/contact info, interview notes, quotes, photographs).*

Key Data

The team will review data collected during each research sprint to make sure it's anonymous and/or correctly stored and will delete what's no longer needed. We will delete unnecessary data permanently when the project is complete and adhere to our agency's current data privacy policy.
For archived data, we will keep it in a secure drawer or a secure online/electronic folder that adheres to our agency's privacy policy.
For deleted data, we will shred documents or permanently delete it from the online secure folder.

Data to archive includes:	Data to delete includes:
• Anonymized insights, learnings, etc. • Direct quotes (anonymized or w/ consent) • Photos, audio or video clips (w/ consent) • Forms, artifacts, or other context-building materials (PII removed) • Consent forms (secure folder)	• Raw notes and transcripts • Irrelevant photos, audio or video clips • Non-vital forms, artifacts, and context-building materials • White boards and mural boards when no longer in use

➜ *The dates below should map onto your sprints from your research/testing/implementation plan. Add calendar reminders for each date.*

Sprint 1
Review by: [date]

Sprint 2
Review by: [date]

Sprint 3
Review by: [date]

Final Audit
Review and delete unnecessary data by: [date]

Sample Data Management Plan

FOLDER PERMISSIONS

The team will use one folder for main project data, one for shareable data, and one folder for sensitive project data. Use the guide below to keep track of folder permissions.

Content Type	This might include…	Permission Notes
Admin + Data	• Interview guides • Downloading materials (*anonymous*) • Desktop and leadership research	**This folder is for internal use by your research team.** Even though materials are anonymous, they may contain sensitive information—limit access accordingly. We recommend an Admin + Data folder for each phase, such as: 01_Planning_Admin 02_Research_Admin 03_Design_Admin 04_Pilot_Admin
Project + Partner Materials	• Research quotes (*anonymous*) • Research plan • Synthesis materials (*anonymous*) • Photos, videos, audio (*consented*) • Reports + presentations (*anonymous*)	**This folder can be shared with others outside your core research team, like consultants or colleagues.** Ensure you have consent to share participant-related materials, even if anonymous (e.g., quotes, photos). **Remove all personally identifiable information (PII) before sharing.**
Sensitive Documentation	• Pseudonym tracker • Interview tracker • Consent forms • Raw interview notes • Photos, videos, audio	**This folder holds the most sensitive information and should only be accessed by the research team.** Only the data lead should add members or share materials externally. Use one pseudonym tracker and one interview tracker per project. *If possible, store them separately (e.g., in different folders or platforms) for added security.*

Sample Data Management Plan

RESEARCH TEAM SIGN OFF

Each member of the research team will sign their initials below to confirm they have read and understood the data management plan.

- [Research team member name] _____
- [Research team member name] _____

DATA TRANSFORMATION

Raw qualitative data is rich but messy—it's full of meaning, but not yet usable. Turning it into something clear, actionable, and sharable takes teamwork, structure, and a thoughtful process.

DATA TRANSFORMATION CHECKLIST	
❑ **Download raw data into individual notes** (also called "interview downloading") — pull key takeaways, quotes, surprises, and ideas immediately after interviews.	❑ **Work as a team** to compare notes, spot patterns, and clarify what's important. Encourage discussion of different interpretations.
❑ **Identify high-impact quotes** that are powerful, memorable, or representative of a common experience.	❑ **Break data into thought-sized bites** to make it easier to code and group later.
❑ **Start grouping related notes** to identify early themes (thematic grouping). Discuss what each note means and why it matters.	❑ **Choose your coding approach** — decide whether you'll use deductive (predefined) codes, inductive (emergent) codes, or a mix of both.
❑ **Create and assign codes** using short, descriptive phrases. Use a shared codebook to track them.	❑ **Review and refine your codes** — add sub-codes, adjust language, and remove duplicates as needed.
❑ **Organize your codes** into a flat or hierarchical coding frame, depending on the complexity of your themes.	❑ **Note any surprises, contradictions, or tensions** — these may lead to key insights later.

DATA TRANSFORMATION

CHANGING YOUR RAW DATA INTO USEABLE DATA

Qualitative data comes in many forms, from interviews, observations, surveys, and other human interactions. Once we have gathered our information, our next step is to make sense of it. We're narrowing focus based on data collected, looking for patterns and themes across the research through the lens of our project.

Working with data is a team sport

Defer judgement: Be open to any all observations and ideas from anyone. Your data may not match expectations, and that's okay. Resist the urge edit others or yourself.

Build on the ideas of others: Listen and encourage others. Think of how you can add to others' ideas and support them.

Stay focused on topic: Keep your purpose in mind. Know the scope of your project and stay in bounds.

Go for quantity: When you're transcribing things you've learned or when you're generating ideas, more is better. Edit later.

One conversation at a time: Be present in the moment. Give y our full attention to the person speaking and listen first.

High-Impact Quotes

Quotes play a critical role, serving as powerful evidence that captures the core sentiments of participants. Quotes can provide insights that shape understanding, influence decisions, and guide future strategies. When looking for quotes in our data, look for quotes that are succinct, relevant, and capable of provoking thought or discussion.

When pulling quotes from your data, here are some questions to think about:

- Does this help us define the problem?
- Is this quote representative of the data or participant?
- What stands out as important?

DATA TRANSFORMATION

INTERVIEW DOWNLOADING

After an interview and observations, the gathered data needs to be transformed from notes and shared with your team. Your team gains a better understanding of the interview data, and you end up with one thought data "bites" that can be used for insights!

Creating one thought data bites can also be applied outside of interviews. Your first pass at survey analysis can also be done this way, pulling out meaningful quotes, and aggregated information.

Best practices:

Schedule downloads to happen within 24 hours of the interview. *Downloading sessions typically take half as long as an interview itself (So a 1-hour interview would have a 30-minute download session)*

Group downloads if possible- this way you can start to identify and patterns and themes across the interviews.

Assign one person to facilitate. If this is a virtual session, have the facilitator set up a digital whiteboard in advance, using Miro or Mural.

Gather notes and needed materials ahead of time.

Setup

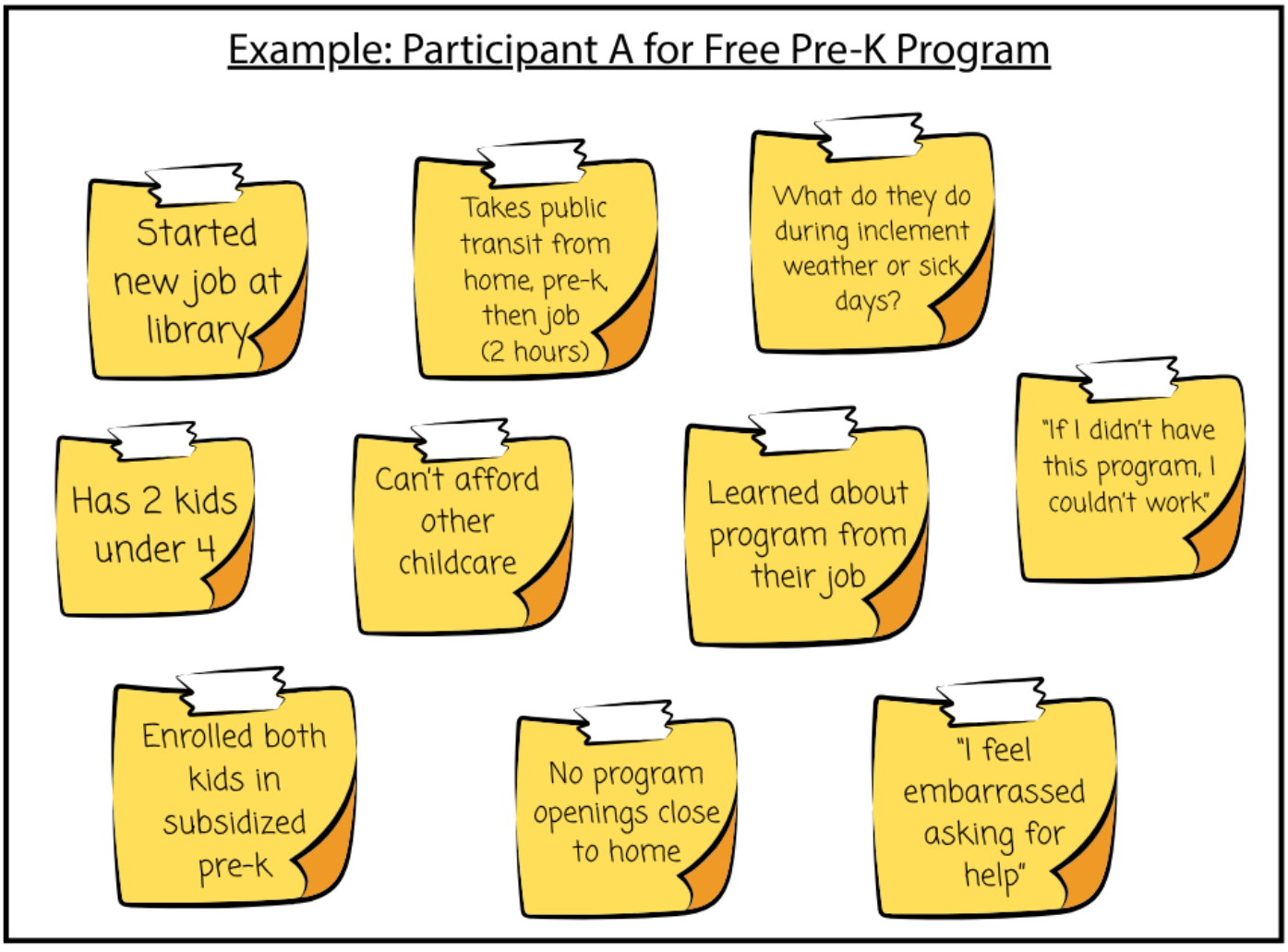
1. For each download, the notetaker from that interview reads their notes out to the group. The rest of the team are scribes, focusing on documenting, clarifying, and asking questions. Scribes write down key details as they come up, ask questions, and offer additional context. The facilitator is responsible for managing the session (keeping time, setting up necessary technology), and can be the reader or a scribe.

2. The facilitator finds a quiet space to host the session, ideally with a whiteboard and where notes can be left undisturbed until all interviews from the research phase is complete. The room should have sticky notes, markers, highlighters, and any other needed materials.

DATA TRANSFORMATION

Process

1. As the reader reads the notes from an interview, scribes record key details. There should be one thought per sticky note and then placed on the whiteboard (or where everyone from the team can see them). The details noted down should capture the most important information from the interview, including
    - Contextual information about the individual
    - Details about their general involvement with the research area
    - Project-specific details and challenges, positive and negative
    - Meaningful quotes
    - Open questions
2. Document the whiteboard at the end of session. The facilitator should take photos or transcribe the notes and add them to a team shared space.



DATA TRANSFORMATION

Thematic Grouping

Thematic grouping means clustering research insights into meaningful themes.

Setup: Start with your data in "thought bites"—individual insights pulled from your interview download boards.

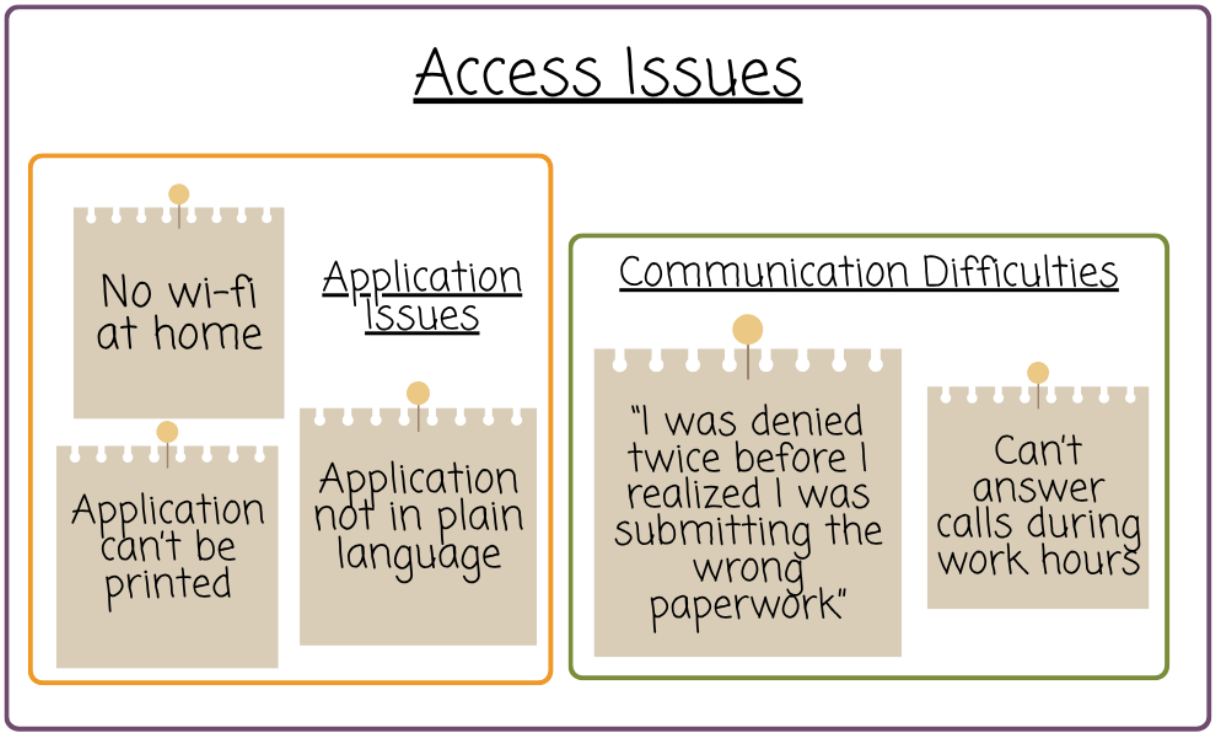
How to Begin:
As a team, begin moving notes around, clustering related ones together. When you move a note, talk through what it says and what it means for your project.

- Add notes to existing groups, or create new ones when you notice new patterns.
- Label each group with a theme once a clear idea emerges. Don't worry about perfect wording yet—this step is about spotting connections across interviews or observations.
- Continue to combine and refine groups as needed.

Your final themes should reflect the most important takeaways from your research and be both relevant and actionable for your project's scope.

Seek root causes. Focus on fewer, broader themes rather than many specific ones. This helps us address root causes instead of just applying quick fixes.

Stay focused while creating themes. Keep your project statement and key questions visible to guide your thinking.



DATA TRANSFORMATION

Data Coding

Data coding is the process of labeling and organizing qualitative data so you can identify patterns, trends, and relationships between ideas. The goal is to make meaning from the data and lay the groundwork for identifying themes.

Think of it like this:

Imagine your data is a giant cookbook with no index. You start adding sticky notes to each section—labels like *"ingredients," "directions,"* or *"tips."* Now it's easier to find what you need. Next, imagine you also color-code those sticky notes by dish type—soups, salads, sandwiches. Now you can see patterns across recipes, like which ingredients show up most often in soups. That's the power of coding: it helps you organize, compare, and make sense of what you're seeing.

General Process:

Choose your approach: Decide whether you'll use *deductive coding* (based on predefined categories) or *inductive coding* (let patterns emerge from the data). Learn more on page 14.

Read and familiarize: Read through your data to get an overall sense of the content.

Assign initial codes: Start labeling chunks of data that seem meaningful using short descriptive phrases.

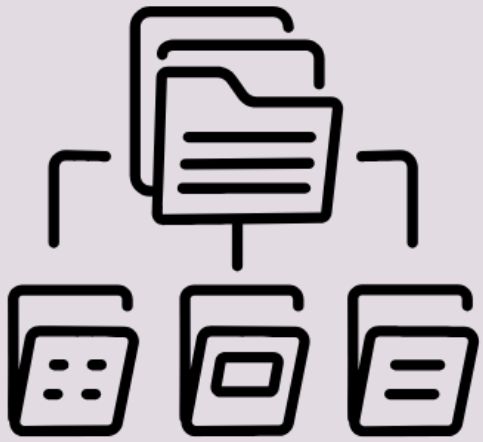
Refine and go deeper: Review your first round of codes. Add more detailed or specific codes if needed.

Group and categorize: Begin organizing codes into categories or buckets. Look for relationships between them.

Identify themes: From your categories, pull out overarching themes that represent the key insights from your data.

DATA TRANSFORMATION

Deductive Coding vs. Inductive Coding

Deductive Coding	Inductive Coding
With deductive coding, you start with a predefined set of codes and apply them to your qualitative data. These codes might come from previous research, existing frameworks, or themes you already want to explore. *Recipe book example:* Since you know the content is recipes, you come in with ready-made codes like *"ingredients," "directions,"* or *"advice."* This approach can save time and provide structure—but be mindful: it may lead to overlooking new patterns or reinforcing existing assumptions. 	**Inductive coding starts from scratch—you don't bring in any pre-existing codes.** Instead, you let the data guide you, creating new codes based on what you observe. *Recipe book example:* You read through the content and start to notice a pattern based on the type of dish (e.g., soups, salads, sandwiches), which leads you to create new labels accordingly. This method is more exploratory and open-ended. It allows the data to speak for itself and often reveals unexpected insights. 

In practice, it's common to use both deductive and inductive codes. Deductive codes can help you get started with a basic structure, while inductive codes allow you to uncover new insights and fill in gaps as you analyze the data.

DATA TRANSFORMATION

DATA CODING TIPS

How do you make inductive codes from scratch?

1. Break your dataset into smaller, digestible samples.
2. Read one sample and create codes that will cover the sample. Re-read the sample and apply the codes.
3. Read another sample of data, apply the codes previously created.
4. Note where codes don't match, or where you need additional codes.
5. Create new codes based on the additional sample.
6. Go back and recode.
7. Repeat from step 3 until all your data is coded!

When creating your codes, here are some things to keep in mind:

- Avoid commonalities
- Capture both positive and negative
- Group based on themes, rather than specific words
- Strike a balance between too much and too little information

Use a Codebook

A codebook helps you keep track of the codes you apply during analysis. Include the code label, a description of the theme or concept, the date it was last updated, and any notes about how it connects to other codes.

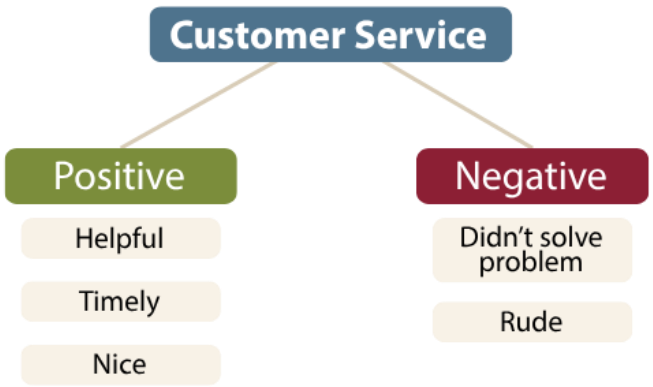
Organize with a Coding Frame

A coding frame is the structure you use to organize your codes and themes. It helps you make sense of the relationships between concepts in your data.

➢ **Flat Coding Frame**
A flat frame puts all codes at the same level of importance. This works well for small datasets but becomes harder to manage and prioritize as your number of codes grows.

CODE	NOTES
Helpful	Solved issue, good customer service
Confusing	Unclear, relates to process and communication
Clean	Tidy, dirty, cluttered

➢ **Hierarchical Coding Frame**
A hierarchical frame groups related codes under broader categories. It helps you manage complexity by showing how detailed codes relate to larger themes.



DATA INSIGHTS

Insights turn patterns in your data into meaning—they help explain what's happening, why it matters, and what to do next. In human-centered work, good insights create a bridge between what people experience and the decisions teams need to make.

DATA INSIGHTS CHECKLIST

- ❑ **Define the purpose of your insights** — focus on what your audience needs to understand, decide, or do based on the research.
- ❑ **Frame insights in human-centered terms** — connect them to real experiences, needs, or barriers identified in the data.
- ❑ **Write insights clearly and concisely** — avoid jargon and keep each insight to one main idea.
- ❑ **Use plain language** and frame insights as actionable takeaways, not just summaries of what participants said.
- ❑ **Include supporting evidence** like direct quotes, examples, or patterns in the data that back up each insight.
- ❑ **Avoid common pitfalls** — don't generalize too broadly, stack too many ideas into one insight, or confuse an insight with a recommendation.
- ❑ **Consider how to visualize your insights** — use charts, diagrams, or illustrations that support understanding (e.g., journey maps, quote clusters, Venn diagrams).
- ❑ **Choose visuals that match the type of insight** — for example, use a heat map for frequency patterns, or a fishbone diagram to show root causes.

DATA INSIGHTS

Data insights are the interpretive findings that emerge from analyzing qualitative data — like interviews, focus groups, or open-ended survey responses. These insights reveal meaningful **patterns, themes, or takeaways** that go beyond surface-level summaries. They help us understand the *so what* of the data – what it tells us, what it implies, and how it connects to larger contexts.

What are insights for?

Insights help:

- ❑ Focus attention on the most **critical issues** affecting users
- ❑ Inform and inspire **design decisions**
- ❑ Keep the process **human-centered** and grounded in lived experience
- ❑ Share compelling **stories** rooted in real data

An insight should reflect a **core truth** about the user experience, based on multiple data points — not just one quote or anecdote.

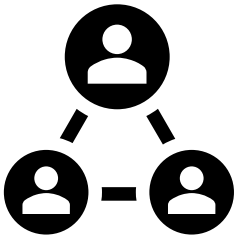
What Insights Are *Not*

- ≠ **Not solutions.** We're still in the discovery phase. Insights describe the problem space, not the answer.
- ≠ **Not isolated complaints.** A strong insight connects multiple data points into a cohesive theme.
- ≠ **Not summaries.** Simply restating what was said isn't enough — an insight interprets and finds meaning in what was shared.

Why Insights Matter in Human-Centered Design

In the Human-Centered Design process, insights:

- ✓ Uncover the **underlying needs** and barriers users face
- ✓ Show us where change is needed — and where it's possible
- ✓ Create a foundation for **equitable and empathetic design**



They help us move from hearing data to understanding people — and ultimately, to designing solutions that respond to what matters most.

DATA INSIGHTS

How to Write Data Insights

Insights should be **grounded, evidence-based interpretations** that highlight patterns or takeaways from your data — and suggest why they matter.

1. Make a Claim - What are you noticing?

   - Write a clear, focused statement of what's emerging in the data. Avoid overstating or assuming consensus — signal patterns, not absolutes.

Example: "Many participants felt disconnected from the planning process and unsure how their input would be used."

2. Gather Evidence – What's backing this up?

   - Summarize how the data supports this insight. Use brief quotes or paraphrased content to give the takeaway context and credibility.
   - Can include frequency (how many people expressed it), representative quotes, or sub-themes.

Example: "This was reflected in multiple comments expressing frustration or uncertainty. One participant asked, 'Are we just talking to a wall?' while another said, 'I've filled out so many surveys, but I never hear back.'"

3. Develop Implications or Meaning - Why does it matter?

   - Connect the insight to the bigger picture: how it relates to your goals, informs next steps, or highlights a gap.

Example: "This suggests a need for clearer feedback loops and more visible accountability in public engagement efforts. Without that, trust and participation may continue to erode."

Keep in mind your audience; your decision makers need to find these helpful

DATA INSIGHTS

Helpful Tips

DOs – Good Practices for Writing Data Insights	Why it Matters
Start with a clear, specific takeaway. e.g., "Several community members described inconsistent access to services."	Helps the reader quickly grasp the key point.
Ground your insight in the data. Use quotes, paraphrased examples, or descriptions of patterns.	Adds credibility and shows the insight is evidence-based.
Use tentative but confident language. e.g., "This suggests…" or "The data points to…"	Balances clarity with recognition of complexity.
Link the insight to the larger purpose. e.g., "This highlights a barrier to achieving equitable outreach."	Shows relevance and helps inform next steps.
Acknowledge tensions or nuance. e.g., "While some felt supported, others described feeling overlooked."	Reflects the full range of perspectives.
Write for your audience. e.g., decision-makers, community partners, internal teams.	Increases impact and usability of the insights.

DON'Ts – Common Pitfalls to Avoid	Why it Matters
Don't just summarize or describe the data. e.g., "Ten people mentioned transportation."	Summaries aren't insights — they lack interpretation or meaning.
Don't draw conclusions without support. e.g., "The program is ineffective."	Risk of overclaiming or misrepresenting the data.
Don't cherry-pick only the most dramatic quotes.	Can skew the interpretation and reduce trustworthiness.
Don't assume consensus where there isn't any. e.g., "Everyone agreed…"	Oversimplifies the data and erases diverse views.
Don't use jargon or overly academic language.	Makes insights less accessible and harder to act on.
Don't skip the "so what?"	Every insight should connect to why it matters or what it implies.

Visualizing Qualitative Data

A picture is worth a thousand words. Visuals can make complex qualitative findings easier to understand, remember, and act on. They can also bring your insights to life — helping others see patterns, stories, and human experiences more clearly.

Simple tools like **Excel** or **PowerPoint** can be used to create effective visuals that support your insights and spark engagement.

Why visualize qualitative data?

- ❑ Makes patterns, relationships, and themes **visible and accessible**
- ❑ Helps communicate key takeaways **quickly and clearly**
- ❑ Encourages **shared understanding** across teams
- ❑ Keeps the focus on **people, not just data**

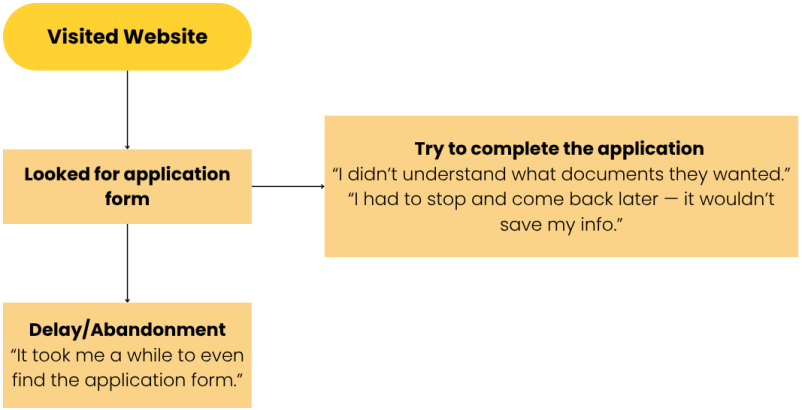
> Well-crafted visuals can help people *feel* your insights, not just read them. Use them to connect data with meaning, and decisions with people.

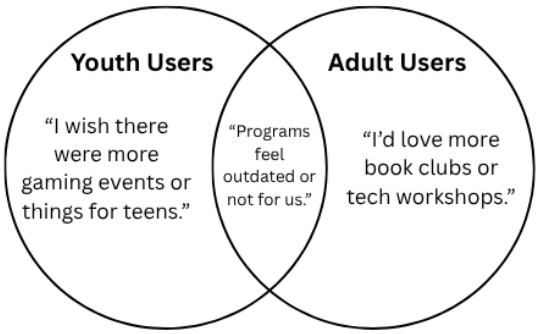
Examples of Effective Visuals

Flow Chart

What it shows: Steps, barriers, or loops in user experience

Use it when: You want to illustrate how someone moves through a process (or gets stuck)





Venn Diagram

What it shows: Overlapping needs, behaviors, or experiences

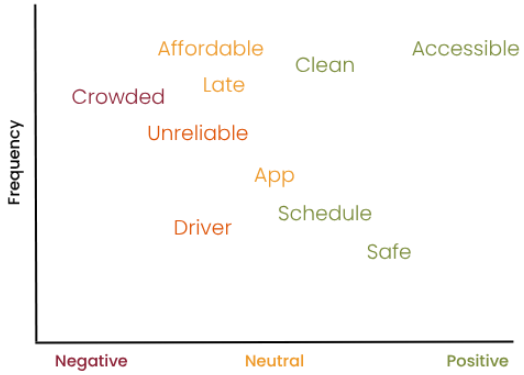
Use it when: You're comparing different user groups or experiences

More Examples of Effective Visuals

Word Clustering Chart

What it shows: Relationship between sentiment (x-axis) and frequency (y-axis) of specific words or phrases

Use it when: You want to show how often something is said **and** how it's emotionally charged



"The portal was full of info, but I didn't know where to start."

Icons or Simple Illustrations

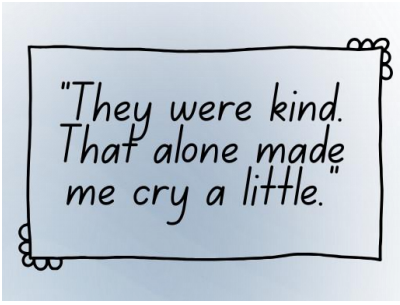
What it shows: A visual way to represent users, values, or issues

Use it when: You want to humanize your data without overloading it with text

Quote-as-Image Display

What it shows: A single quote, styled like a visual object (e.g., in a box or on a sticky note)

Use it when: You want a quote to stand on its own and be noticed like a headline



DEPARTMENT	EASE OF USE	CLARITY	FEATURES	SUPPORT
Customer Service				
Finance				
IT				
Human Resources				
Operations				

Heat Map

What it shows: Intensity or concentration of issues across categories or areas

Use it when: You want to show where the pain points or energy are strongest

Fishbone Diagram

What it shows: Root causes of a specific problem or barrier

Use it when: You're unpacking a complex issue into contributing factors