DATA VISUALIZATION, SYNTHESIS, AND ANALYSIS

DEVELOPING KEY INSIGHTS

Summarizing main findings in a concise and actionable format for communication within and across project teams.

Duration	0.5–4 hours (depending on complexity and amount of data)
Physical requirements	Research wall or any other form of accessible research data, personas, journey maps, system maps, paper, pens, masking tape
Energy level	Low
Researchers/Facilitators	Minimum 1 (a better approach is to have teams of 2–3 researchers)
Participants	2–12 with good knowledge of the research data (optional)
Expected output	Key insights

First insights are often generated based on patterns you find while you are collecting data, building your research wall, or codifying your data.[01] It helps to write down initial assumptions, hypotheses, and intermediate insights at any stage of the research process and then critically reflect on them using your collected research data. If you don't have enough data to critically reflect on an assumption, use this as a starting point for another fieldwork session and collect more data. Design research is iterative![02]

Key insights help researchers to summarize and communicate their main findings. They should be built on research data and supported by raw data, such as quotes, photos, and audio and/or video recordings. Use indexing to keep track of the raw data that supports your key insights. Key insights should be carefully phrased as they will serve as points of reference for the further design process. You might use them as the basis for ideation or later on to evaluate ideas, concepts, and prototypes.[03]

01 See also #TiSDD 5.1, *The process of service design research*, and method description *Building a research wall*.

02 "In contrast to this abundant data, insights are relatively rare. […] When they are generated, though, insights derived from the smart use of data are hugely powerful. Brands and companies that are able to develop big insights – from any level of data – will be winners." Kamal, I. (2012). "Metrics Are Easy; Insight Is Hard," at *https://hbr.org/2012/09/metrics-are-easy-insights-are-hard*.

03 #TISDD 5.1, *The process of service design research*, provides more information on indexing and how much data you need to collect during your research until you reach theoretical saturation.

There are many ways to formulate insights, and which framework makes sense will depend on the research data and the aim of your project.

ONE WAY TO FRAME AN **INSIGHT** IS WITH THIS TEMPLATE:

..... *(persona, character, role)*

..... *(activity, action, situation)*

because

..... *(aim, need, outcome)*

but

..... *(restriction, obstacle, friction).*

For example: "Alan eats chocolate because it makes him feel safe, but it makes him fat." Formulating insights in such a way is particularly useful when your research is followed by an ideation stage to improve a given situation. The structure of this key insight framework allows you to tackle the issue on three different levels:

— **Activity/action/situation:** Looking at the activity/action/situation level ("eats chocolate") could lead to a design challenge like "Which alternative or additional activities could Alan do so that he still feels safe, but that positively affect the given friction of the

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A Using templates or a specific structure helps to develop key insights, but constantly ask yourself if every aspect of your insight is specific and clear enough and if it is backed by sufficient research data.

original activity?" (This opens up the opportunity space to think about, e.g., offering additional sport activities so that he can still eat chocolate, but also achieves his goal of not getting fat.)

— **Aim/need/outcome:** Looking at the aim/need/outcome level ("it makes him feel safe") could lead to further research questions like "Why does Alan not feel safe?" or to a design challenge like "What other things might help Alan feel safe?" (This opens up the opportunity space to offer alternatives that might help make him feel safe, like self-defense courses or anything else that might affect his self-confidence, but also help him achieve his goal of not getting fat).

— **Restriction/obstacle/friction:** Looking at the restriction/obstacle/friction level ("makes him fat") could lead to a design challenge like "What other food could Alan eat that doesn't make him fat, but still makes him feel safe?" (This opens up the opportunity space to offer other food options, like low-carb chocolate or fruits or vegetables, that still make him feel safe but also help him achieve his goal of not getting fat).

Step-by-step guide

1 Prepare and print out data
Key insights are normally created iteratively together with data collection to gain a quick overview of your research data and to formulate further research questions, hypotheses, or assumptions. Use your research wall or prepare your research data by printing out key pictures, writing out great quotes, visualizing audio recordings or videos as quotes or screenshots, and putting out your collected artifacts. Prepare the room with materials, such as paper, sticky notes, pens, and of course your research data, as well as existing personas, journey maps, or system maps. Also, think about who you should invite to develop key insights.

2 Write initial insights
Go through your research data and write down initial insights based on your research findings or patterns you find within your data. If you work in teams, split up into subgroups of 2–3 participants and list initial insights based on your research. In this first step, it is important to document many potential insights; in the following step, you'll merge them and prioritize them to create a limited number of key insights.

3 Cluster, merge, and prioritize
Hang up your insights on a wall and cluster similar ones next to each other. You can merge similar insights or rephrase them to make clear that they are different. Then try to prioritize them, for example, from a customer's perspective: which of these have the biggest impact on the overall customer experience?

4 Link key insights to data
Key insights should always be based on solid research data. Link your key insights to your research data (e.g., by using an indexing system). When you present your key insights, it helps if you add some of your research data to back them. If possible, prefer first-level constructs as evidences for your key insights, such as photos, videos, or quotes from real people.

5 Find gaps and iterate
Are you missing some data for your key insights? Use these gaps as research questions and iterate your research to fill the gaps

with data. Also, consider inviting real customers or employees to review your insights and give feedback on them.

6 Follow-up

Document your progress with photos and write a summary of your key insights. Support each key insight with at least 2–3 pieces of evidence from your research data. If you have more, use an indexing system to link your insights to all the underlying data.

Method notes

→ Key insights like these need to be phrased carefully, concretely, and precisely. If they are formulated too vaguely, the design challenges and opportunity spaces they lead to are usually too vague as well.

→ Developing key insights may seem easy, which can lead design teams to formulate them too quickly and not carefully enough. These insights must actually be built on extensive research and supported by raw data.

→ Use strategies like peer review and co-creative workshops to ensure that your key insights are meaningful for your team and for the project and that they are useful as a springboard for a later diverging ideation stage.[01]

→ Try "laddering" insights for depth. For example, if your insight is "Alan wants to eat fewer cookies because he wants to lose weight," follow this with "Alan wants to lose weight because … ." Then take the answer to this question and feed it into a third insight, and so on. In each stage, the "because" statement of one insight becomes the "what" statement of a new one. You will soon come to the limits of your data, which could guide some more research. ◄

01 See #TiSDD 5.1, *The process of service design research*, for more information on peer review and co-creative workshops, as well as chapter 6, *Ideation*, on how to use key insights for ideation.