# Dimension and Diagram

# Identifying and structuring information to frame the problem.

Just as a doctor asks a patient more about the different dimensions of their life to assess their health, so you should identify the different dimensions of your project. These dimensions can be used in simple diagrams with arrows and annotation that will help you visualize your project, its complexities, and how you might solve for them. Diagramming isn't about drawing well. It's about identifying elements and their relationships and representing them with basic arrangements, shapes, lines, and arrows—then adding information with annotation. Different layers of annotation can be used to address different categories of information.

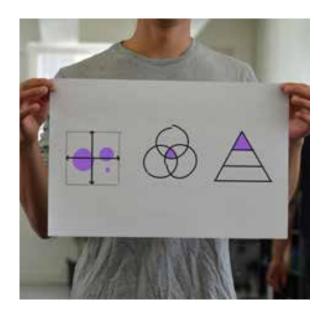
# Dimension and Diagram

Identify and structure information to frame the problem.

## **GET STARTED**

- 1 Write down everything you know about the problem area on individual sticky notes.
- 2 Look for themes or patterns. Physically reorganize your individual sticky notes based on what's similar (don't worry about 'getting it right'). Label each theme and document with your camera phone.
  - Adjust grouping to be mutually exclusive and keep each theme at the same level of detail or scope.
- **3** Do it again! Physically reorganize the same sticky notes into new groups to identify additional patters or themes.
- **4** Create many different simple diagrams that show potential relationships across 1 or 2 themes (and their sub-themes). Try using different types of diagrams: journey map, 2x2, matrix, venn diagram, onion model...
- **5** Identify the visual diagrams that best frame an opportunity and point towards a "so what" or clear action.

#### **DIMENSION AND DIAGRAM IN A NUTSHELL**

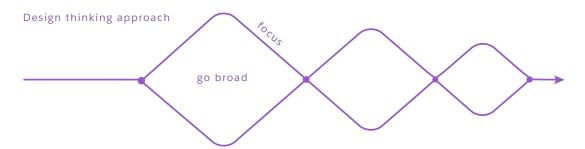


Create simple visuals to express the relationships between the dimensions in order to highlight opportunity.

Create building blocks for assessing and structuring the problem by identifying the different 'dimensions'—categories of information like values, needs and activities within the problem space.

Select the best structure—the one that best describes the opportunity and points towards clear action—to frame and direct your future work.

#### **DAY-TO-DAY PRACTICES**



Clarify your existing understanding of the problem space by documenting all that your team knows on sticky notes and organize for themes.

Generate a list of potential hypotheses to inform further inquiry and avoid jumping to a single solution.

Identify specific design elements of existing solutions to inform ideation.

Diagram the specific steps in your user's current experience to identify potential issues or to communicate the ideal future experience.

Create business models, solution maps, and value webs to help visualize the sources of value and frame the big picture.

# **Affinity Clustering**



Take any large list of ideas or notes and sort them into a smaller number of separate groups. Then name the groups to create an information structure and discover themes.

## HOW TO

- 1 Use a brainstorm or other Collaborative Cycle to generate a collection of content, ideas, or issues on individual sticky notes.
- 2 Now sort the items into groups. Take one item and make it the first item in the first group. Take the next item and ask, "Is this similar to the first one or something different?" Either place it in the first group or into its own group.
- **3** Continue item by item, placing things that are similar together and creating new groups when they don't fit.
- **4** After you're done grouping, you should have 5 to 10 groups. Name the groups based on what the items represent together.
- **5** Your named groups can now be used to describe what you have, help generate more items in a group, or help you see gaps you haven't addressed.

### TIPS + TRICKS

Move through the grouping quickly–don't overthink it! It's a creative exercise. Group, reflect, and rearrange. Practice makes you better and the results more useful.

#### PAIRS WELL WITH

- Collaborative Cycle
- Concept Sheets

#### TIME

20 minutes

# **TEAM SIZES**

3-5 people

#### **MATERIALS**

Sharpies, sticky notes

# **Empathy Mapping**



Empathy for a user's experience is at the heart of creating meaningful solutions. An empathy map helps your team articulate the user's perspective.

## HOW TO

- 1 On a large easel pad, draw the base empathy map with four quadrants: 1. Say, 2. Do, 3. Think, 4. Feel.
- 2 Notice that "say" and "do" are very explicit and "think" and "feel" are implicit.
- **3** Consider a specific user's experience and populate the map, writing down on sticky notes what the user said, did, felt, or thought.
- 4 Use another color for another user's experience.
- 5 Once populated, step back and reflect on the content. Look for patterns and inconsistencies. What's at the heart of this experience? Write down these observations and insights.

#### TIPS + TRICKS

Don't fall back on stereotypical descriptions of users' actions or feelings. Use fieldwork and conversations with users to inform your map with real data.

## PAIRS WELL WITH

- · Ways of Statements
- · Show and Tell Interview
- Observation

#### TIME

45-60 minutes

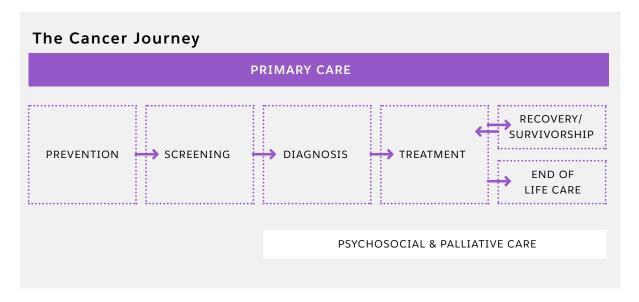
# **TEAM SIZES**

2-5 people

# **MATERIALS**

Easel pad, chisel tip markers, different colored sticky notes

# **Journey Mapping**



To see if you understand a user's journey, create a diagram representing the distinct activities within their experience. This is a foundation for many useful analyses.

#### HOW TO

- 1 Decide what part of the user's journey you'll represent. It could be at a high level (a day in their life) or a more detailed activity (taking their meds).
- 2 Draw a labeled shape for each key activity in their experience.
- **3** Arrange them in a sequence or a cycle so you can trace their experience over time.
- **4** Use arrows to show direction, paths, alternatives, etc.
- **5** Use color or size to identify groups or different kinds of activities.
- **6** Once you have a base diagram, you can add more "layers" of information with labels or annotations.
- **7** Consider where trouble happens, where technology may play a role, what might be unnecessary, or where help would be best targeted.

#### TIPS + TRICKS

Use sticky notes as a way to quickly brainstorm activities and arrange them in ways that are helpful. Have a graphic designer help improve the representation.

# PAIRS WELL WITH

- · Ways of Statements
- · Show and Tell Interview

# TIME

45-60 minutes

# **TEAM SIZES**

2-3 people

#### **MATERIALS**

Sharpies, sticky notes, or diagramming software

# 2 x 2 Matrix



Find two dimensions and plot elements on a simple chart to show patterns or gaps in the information. Use it to make a case for targeting an area with ideas or to shift strategy.

## HOW TO

- 1 Any list of similar elements can be placed on a 2×2: a set of ideas, competitors in a market, or elements of a user experience.
- 2 Try different dimensions to spread the ideas out on the map—things like cost, quality, time, ease of implementation, etc.
- **3** Cross two of the dimensions and plot your elements. If they spread out or form an interesting pattern, you're on to something!
- **4** If they don't spread out, you haven't found a dimension that differentiates the list of elements.
- **5** Play with a few different 2×2s that work.
- **6** Facilitate a reflective discussion about what the pattern might mean for your project. There may be a gap in the chart suggesting an untapped area to target.

#### TIPS + TRICKS

Try to create a dimension unique to your list of elements rather than typical axes. Simply trying different axes helps develop a better understanding of the list you're dealing with.

#### PAIRS WELL WITH

Concept Sheets

#### TIME

15 minutes

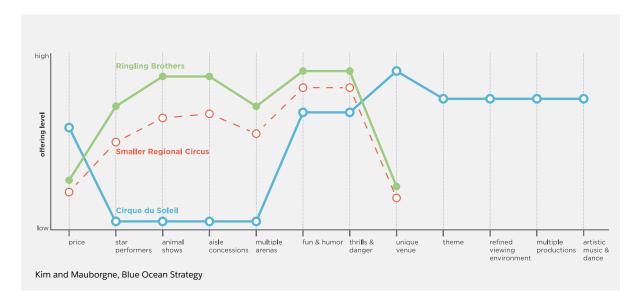
#### **TEAM SIZES**

1-5 people

# **MATERIALS**

A large surface to plot out the elements and form groups

# Value Curve



Innovators often change a fundamental assumption that defines an industry, product, or service. Play with Value Curves to imagine how you might change things.

#### HOW TO

- **1** Use sticky notes to brainstorm the fundamental dimensions of your industry's offering.
- **2** Line up the industry dimensions along the bottom of a chart. The vertical axis is "importance or level of offering" and goes from low to high.
- **3** Plot your organization's curve on the dimensions.
- **4** Plot competitors on the dimensions. Look for significant patterns.
- **5** Now, consider radically changing one or more of the dimensions. Try offering way more or less quality in one or more dimensions or eliminating some.
- **6** Consider adding dimensions that customers would value and would differentiate your solution.
- **7** Continue playing with the dimensions to better understand the current industry and possible strategies for improvement.

### TIPS + TRICKS

Keep the number of dimensions to between 7 and 10. Use the exercise in a group to question what your industry takes for granted. Gain confidence by seeing examples from other industries.

# PAIRS WELL WITH

- · Analogous Examples
- Solution Maps
- · Service Prototypes

#### TIME

30-60 minutes

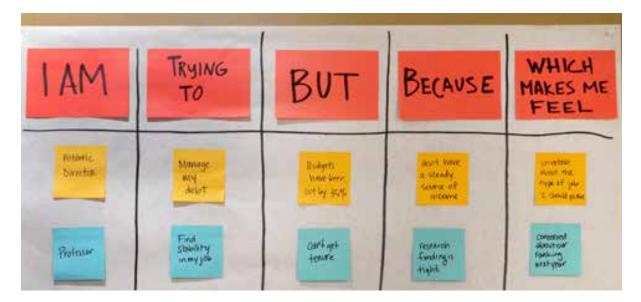
# **TEAM SIZES**

2-5 people

#### **MATERIALS**

Easel pad, chisel tip markers, or diagramming software

# **Problem Statement Matrix**



Take what you've seen and heard from users to reframe your project challenge in human terms. This helps provide a fresh, user-centric perspective.

## HOW TO

- 1 Use the problem statement template. Each team generates problem statements in the users' words, filling in each of the 5 phrases. Do this for multiple users, capturing each phrase on a sticky note and creating a matrix.
- 2 Have the team spend a few minutes looking at the matrix as a whole, jotting down notes to self about things that struck them, surprises, patterns, and themes.
- **3** Share the notes and discuss them as a team. Pay special attention to insights that surface that offer a fresh view into the problem. Sort and organize the notes into groups.
- 4 Your named groups can now be used to describe what you have, help generate more items in a group, or help you see gaps you haven't addressed.

#### TIPS + TRICKS

Use a different color sticky note for each user. Write in the user's words, not yours. We've even seen interviewers give this to users to fill out (and interview them after to understand why).

#### PAIRS WELL WITH

- Observation
- Collaborative Cycle
- 3-Part Observation

#### TIME

30 minutes

# **TEAM SIZES**

2-5 people

# **MATERIALS**

Problem statement template, sticky notes

# **Product Levers**



An exploration of categories and products to better understand product attributes and their benefits and how to use them in different ways.

#### HOW TO

- 1 Go shopping and buy a bunch of products. Look for competitive products in category but also interesting packaging, flavors, ingredients and messaging out of category.
- 2 Take pictures (sneakily!) in stores of merchandising displays, shelves, and products.
- **3** Also search online for images of products and packaging.
- 4 Sort and cluster products and/or images into categories (e.g. occasion, who it's for, form, flavor) to reveal defining characteristics and features and how they tie to benefits.
- 5 Sort products and/or images along a variety of spectrums to show the scope of product attributes in a tangible way. Examples of spectrums are healthy to indulgent, fun to boring, natural to processed, morning to evening, kid to adult, etc.
- **6** Capture notes on post-its and photograph sorts and spectrums for later reference.
- 7 Look for gaps in the category that might reveal product opportunities.

#### TIPS + TRICKS

Printed photos work well if you don't have access to the actual products. Use the product you buy; open the package, evaluate the layers to get the full experience.

# PAIRS WELL WITH

· Trend Immersion

### TIME

30-90 minutes

# **TEAM SIZES**

1-5 people

#### **MATERIALS**

Different colors/sizes of sticky notes, pens, camera