

HOUSING SUPPLY CHALLENGE

Design Thinking Module **3**

Define and Refine

Turning insights into an actionable problem statement.

At this point, your team has already completed some primary and secondary research to better understand how your housing supply challenge statement fits within a larger system, interviewed key stakeholders, and analyzed their responses for key insights. You've done a lot of work to gather information, and now is the time to make sense of it all. In Module 3: Define, you will be turning everything you've learned into a clear problem statement that reflects local context. You started this process off with a broad challenge statement, at this stage you're narrowing that down to a clear and precise problem statement. This will help ensure that the housing supply challenge solution that you explore will address key problems.

WHY THIS STEP?

Crafting a precise problem statement will help you determine the specific part of the housing system you can target to make an impact. This is where you go from the big, daunting, complicated challenge statement you started with to something that is specific and you can further refine with stakeholders to explore tangible solutions.

WHAT TO EXPECT?

This is when the challenge statement you started with begins to feel like something that can lead to impactful solutions. This is where you begin to feel more in control. Up to this point, you've been gathering a lot of information from different parts of the system and trying to wrap your head around how big the challenge is. Now, you finally get to see how addressing one (seemingly small) part of the system can create a huge impact.

KEY CONSIDERATIONS

You want to end up with the right-sized problem. It shouldn't be too narrow or straightforward. More importantly, the problem shouldn't be too broad or big to solve. When you're crafting your problem statement, think about what you can realistically address within the timeline, with the available resources and with the capacity of your project team. Be ambitious but be realistic.

During this module it is also important to re-engage key stakeholders to ensure that the problem resonates with everyone. This step is crucial as it will help when it is time to implement the solution.

STEPS

This module describes a series of activities that could be integrated into a workshop or a series of web based working sessions with members of your team and stakeholders. A few approaches that you could use are described below.

- 1** Conduct a sense making session
- 2** Developing a How Might We Question

1 Conduct a sense making session

Sense-making is a means of coming together and making meaning from your experiences to figure out what is happening in the system and why. (MaRS, 2019) There are many different approaches to and tools for sensemaking. Some additional tools are noted in the resource section. The simplified activities described in the workshop outline below are intended for a small group of 15-20 people. This should include members from the team who conducted interview and research described in **Modules 1 and 2**. The sensemaking process might involve a few workshops or involve a series of web based sessions.

- 1 Working in small groups of 4-5** people maximum and ensure each person has reviewed core insights from the research and stakeholder interviews and various maps created in **Modules 1 and 2**. Create the following headings on a worksheet:

Needs	Challenges	Dig Deeper	Ideas that could Help	Unexpected Insights

- 2 Brainstorm:** One participant at a time shares their interview stories and insights (5 minutes per story) while the other participants write down any insights that fall into the categories using sticky notes. Each participant gets a chance to share their stories.
- 3 Categorize:** At the end of each story sharing round, participants share their sticky note insights and decide which bucket they think they should put the insight into.
- 4 Repeat:** You might do 5-6 rounds of this.

After you do a sense making round, you might find that you have more questions, more assumptions and more uncertainty. This is ok and should lead you to revisit the research or to conduct some additional research. Ultimately this process will help ensure that your housing supply challenge solution will address the needs of stakeholders in the system.

Additional Resources

[The Living Guide to Social Innovation Labs – Sensemaking.](#)

[Sensemaker software](#), which communicates information gathered about the system in a visually appealing way.

2 Developing a How Might We Question

Every problem is an opportunity for design. By framing your challenge as a “how might we” question, you’ll improve your team’s ability to identify innovative solutions. (IDEO, n.d.) This exercise describes the steps you can take to help identify innovative solutions.

You should do this exercise in real-time with your team, and make sure that everyone has the ability to participate.

1 Create insight statements

In **Module 2: Empathize and Analyze** (Step 1), you clustered your learnings into themes. You’re going to use those themes to create short insight statements. For example, if one of your themes is “affordability and location”, some insight statements might look like:

“Most people who want affordable housing can’t live in a neighbourhood that has quick access to rapid transit and other community amenities.”

“People who need affordable housing are on long wait list.”

“People don’t usually consider maintenance operating costs when looking for an affordable home.”

You should end up with about 3 statements for each theme.

2 Narrow down insight statements

Remove any insight statements that don’t relate directly to your challenge statement. As a team, go through the remaining insight statements and pick 3-5 that really resonate.

3 Develop problem statements that synthesize your insight statements

This is your opportunity to articulate what’s wrong in your challenge area in a way that brings together all the relevant insights you’ve collected. Going back to the example we used in Step 1, you might bring together the three insights into the following problem statement:

“People who need affordable housing often have to travel longer distances to work because housing close to rapid transit is not affordable.”

“Affordable housing typically costs more to operate and maintain in the long run.”

“People who need affordable housing often spend less time with their families because they have to travel longer distances to work.”

Frame several problem statements to take forward into next steps.

NOTE: Your final problem statements will each bring together 2-3 of your most relevant insights and leave out the rest.

4 Reframe your problem statement as a “how might we” question

The “how might we” format allows you to move from insight statements to questions that you can start to think of answers to. Words matter and switching the sentence structure a bit can spur your thought process and help you consider the change that could happen. For example, your problem statement that people contribute to waste because they prioritize affordability and ease of access over durability turns into:

“How might we develop more affordable housing units that are energy efficient and close to rapid transit so that who need affordable housing can reduce their travel times?”

5 Narrow down and refine your “how might we” questions

Read through your questions and consider if they could offer a variety of solutions. You want to make sure your questions aren't too broad or unmanageable. Your questions should lead to ideas for solutions that you have the capacity and resources to implement. A question like:

“How might we restructure our entire housing system?”

might be a bit too broad and ambitious. But something closer to:

“How might we change the number of housing units close to X rapid transit stop for low-income families in X City?”

could be a bit more manageable and realistic. These questions will help you generate many possible solutions.

6 Choose your favourite “how might we question”

Sometimes people need a little distance to help them settle on a problem statement. Once you have several viable problem statements, take a break. This could be a 30-minute break or even a night's sleep. During your break, take some individual time to consider the different statements and what they might lead to. What does your gut say? What feels more appropriate for your timeline, resources, and capacity? Come back together and take turns sharing your thoughts without commenting on one another's contributions to the discussion. Once everyone has shared, eliminate questions that haven't received any support. Discuss the rest of the questions. Based on your team dynamics, consider whether voting or consensus is more appropriate. If consensus is selected, explore the differences between the questions and the personal interest in those differences. Enlist support from your local partner and coaches to add more perspectives. Continue to discuss, research, and invite outsider perspectives until a preferred question emerges naturally.

Calibrating and Scaling a How Might We Question

Once you've selected a question, there's the issue of scale. Some questions are simply too big and some are way too small. Here are two questions to explore to bump up, scale down, or simply test your question:

QUESTION 1: What's stopping us?

To help you scale down and focus, “what's stopping us” allows you to explore the specific barriers that lead to a problem. Let's use it on the question:

“How might we change the number of new affordable housing units close to X rapid transit top for low-income families in X City?”

You might find that a lack of awareness of the impact of housing options is why there are so few affordable housing units near rapid transit stations. is what is stopping more units from being built. In this case, your question becomes more specific:

“How might we **raise awareness** about the impacts of X number of new affordable housing units close to X rapid transit top for low-income families in X City?”

Alternatively, you might find that a major barrier is the lack of information about the availability of affordable housing unites in other regions. In this case, your question might become:

“How might we provide a **desirable alternative** to X number of new affordable housing units close to X rapid transit for low-income families in X City?”

The more you ask the question “what's stopping us”, the more specific and focused your “how might we” gets. This leads to narrower criteria for viable solutions.

QUESTION 2: Why is this important?

To help you scale up and broaden your focus, "why is this important" allows you to explore the larger motivations behind solving a problem. Again, let's use it on the question:

"How might we change the number of new affordable housing units close to X rapid transit for low-income families in X City?"

This might be important because of the cost of maintaining older affordable housing units is having a negative impact on families. In this case, your question could become much more general:

"How might we **reduce the impact** of high maintenance costs on families and reduce GHG emissions?"

Formulating your question this way broadens the audience and changes the focus of your problem-solving. But this is now a much bigger question (perhaps too big) with much broader implications (perhaps too broad).

Alternatively, you might think the reason why this issue is important is that the location of affordable housing units is set by municipal governments and does not include suitable land close to rapid transit for low-income families. In this case your question might become:

"How might we help X municipal governments identify suitable land close to the rapid transit that could be used to build affordable housing?"

This is an example which is slightly bigger than your initial question, and which opens the door to a slightly wider range of solutions.

The more you ask the question "why is this important", the bigger your "how might we" gets. This leads to broader criteria for viable solutions.

Use these two questions in any order to test and scale your "how might we". When you start to feel comfortable addressing your "how might we" within your timeline and with your resources, team, and capacity, stop! A good question will lead to fruitful brainstorming and a good number of possible solutions.

Additional Resources

IDEO "How Might We" design kit will help set you up for innovative solutions by framing your challenge as how might we question.

Thrive's Five Principles of Effective Insight Definitions can also provide you with helpful tools to craft compelling insight statements for your lab.

REFERENCES

IDEO. (n.d.). How might we questions. Retrieved from IDEO Design Kit:
<https://www.designkit.org/methods/how-might-we>

MaRS. (2019, October 01). Sensemaking. Retrieved from Living Guide to Social Innovation labs: <https://mars-solutions-lab.gitbook.io/living-guide-to-social-innovation-labs/seeing/design-research/sense-making>

