**Mission 5 – External solution test**

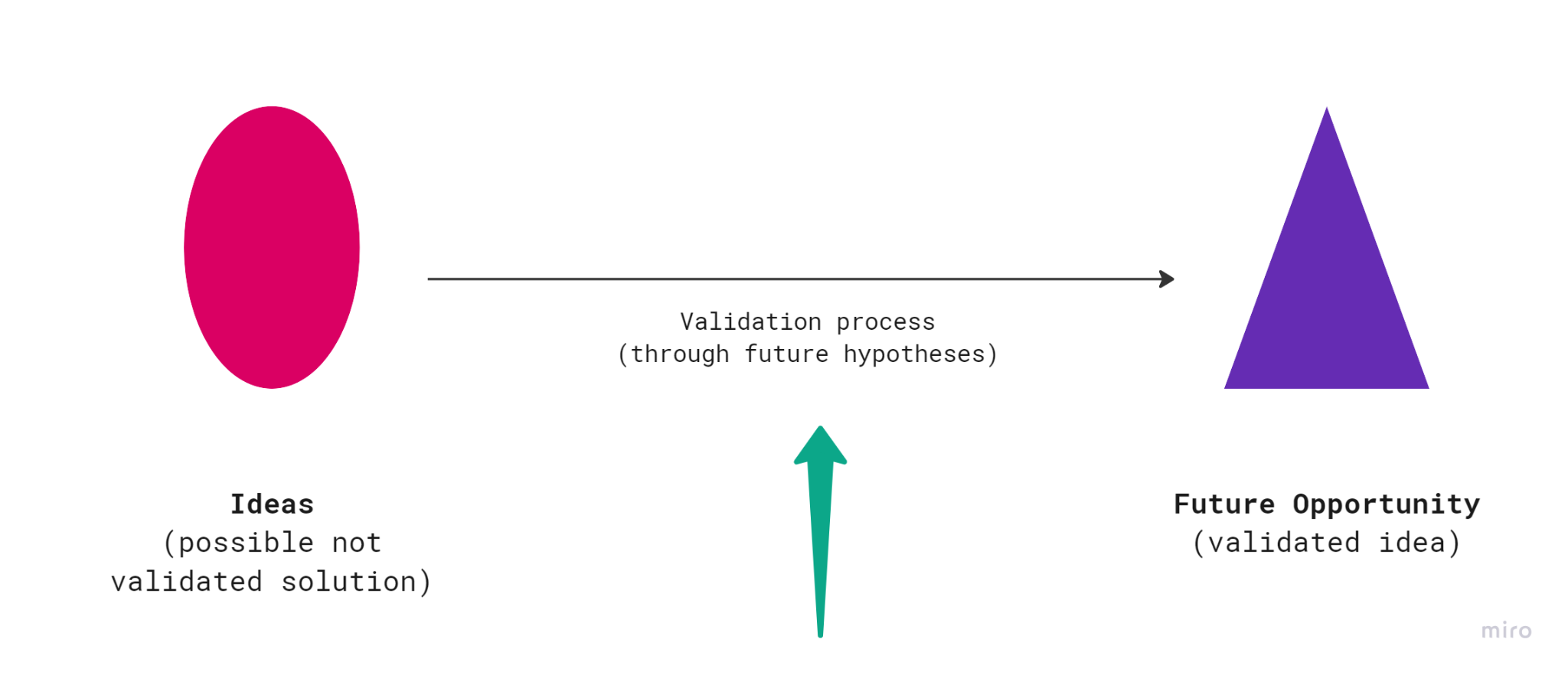
**Mindset**

“Nothing is a mistake. There’s no win and no fail, there’s only make.”

Sister Corita Kent and John Cage's rules for artspaces

**General instructions**

The goal is always to learn. This phase of the project allows you to gain insights from the perspective of solutions by transforming your Solution Hypotheses into Solution Opportunities. The purpose is to test the hypotheses you’ve made so far by building rapid, rough pretotypes to validate specific needs (and explore them further) by testing them with users. Building prototypes should now become a routine part of your projects.

While in the previous phases you learned from the context and user feedback on needs and challenges, now you need to understand if the identified needs are truly relevant through reflections on solutions. By doing so, you will become more familiar with the context of your challenge, using a more powerful means to bring your interaction with users to a deeper level. This is why it’s time to start building things, turning concepts and questions into tangible experiences that will help you think with both your mind and hands, and help users understand you better and articulate their needs more clearly.

The term "prototype" derives from the Greek *prototypos*, a compound of *protos* ("first") and *typos* ("stamp," "model," "impression"). In this phase of exploring the context through solutions, we need to learn to present ideas in an undefined manner. This is known as low-fidelity prototyping (or pretotyping). Unlike high-fidelity prototyping, this method requires less time, specialised skills, and resources. Its purpose is not to impress users, but to learn from them. Instead of impressing people with our product or service, the goal of low-fidelity prototyping is to have users surprise us with their comments and thoughts. In a way, this technique facilitates listening and learning rather than selling. On the other hand, a high-fidelity prototype would focus users on details rather than concepts, providing feedback that is not useful for determining if the Solution Hypothesis is truly an opportunity.

You will know your pretotyping is correct if it opens up a conversation where user needs, designer intentions, and stakeholder hypotheses are discussed and aligned. If the focus is on details, then the pretotyping likely doesn’t work.

**Attention!** It may seem obvious, but often designers forget this fundamental step and fall in love with their ideas, developing a prototype too thoroughly by defining all the details or making it “beautiful” for presentation. Therefore, it’s a good idea to frequently stop and ask yourself, “Why are we doing this?” “What need am I investigating with this idea?” “What question am I trying to answer with this prototype?”

When testing, remember that in this phase we are not interested in what people reveal about your pretotyping, but rather in what the pretotyping reveals about people. A pretotyping is an attempt to answer questions you have about people; it is a way to test hypotheses while raising questions you hadn’t even considered.

**Example:** Pretotyping to test the hypothesis: "People need quick meals and time-saving in meal preparation."

Here, the team defined a conversation prototype, writing a script and a menu indicating order times and consumption times, and then tested it by starting various conversations with people in a bar or cafeteria at lunchtime about whether/how time savings are a problem or a factor in their choice. They then presented the menu with various options showing the order and consumption times, asking which they would choose and why.

**Tools**

**Activity 1: Pretotyping**

Now it’s time to start making your ideas tangible. A pretotyping, or a physical representation of your concept, allows you to share the idea with others, get feedback, and explore the research question. Remember that you are testing a hypothesis and that pretotyping is a means, not an end.

Prototyping involves preparation (*what do we need to test*?), building (*creating a testable and "experiential" representation of your idea*), testing (*putting your prototype into use and collecting feedback*), and reflecting on test results to decide how to influence your project direction. It’s an iterative process of smart planning, building, and reflecting.

To start developing pretotypes, choose the Solution Hypothesis you found most promising for each EPO developed during PHASE 3: each member has a maximum of 5 points to allocate to the hypotheses he considers more decisive for the proposed challenge.

**General Rules:**

* Ensure your prototyping is well-focused... or you might end up developing non-critical parts.
* Prototype early and often... or risk running out of time. The only way to fail a prototype is not to prototype at all.
* Take time to reflect on test results... or risk not learning from your work and chasing your tail.

Use this to ensure there is a clear WHY for each prototype:

A screenshot of a computer

Description automatically generated

Repeat until you get interesting feedback.

**Activity 2: Testing**

User feedback is one of the most valuable tools in developing an idea.

In design thinking, there are at least two crucial points to talk to people: at the start of a project for inspiration, and when you have prototypes, to get feedback. Even at this stage, the feedback you collect should be generative so you can continuously adapt your pretotype.

The feedback will still be exploratory, rather than validation-based: it’s not about knowing if the idea is right or wrong—it’s about understanding how the idea might contribute to meeting a need. This is where the opportunity lies, in understanding which hypotheses might create value.

Feedback interviews focus on learning what users think about your pretotype: the goal is to get honest feedback, both positive and negative, to evolve your ideas.



REFLECT

Feedback is invaluable for developing an idea but can also be quite confusing. What you hear from different users may be contradictory or not align with your goals. Organise the responses you receive and decide what to integrate into the next iteration of testing. This activity is for learning, so let yourself be guided by the insights.

SHARE IMPRESSIONS

Start a conversation within the team and compare each other's learnings. Take notes while considering the following prompts:

* What did participants appreciate the most?
* What excited them?
* What would convince them of the idea?
* What parts do participants want to improve?
* What didn’t work?
* What needs further investigation?

**Activity 3: Identify Solution Opportunity**

Share the impressions you captured immediately after conversations with users. Write down the feedback received on post-its. Organise and group feedback by themes: What was received positively? What concerns emerged? What suggestions did you identify? What “activates” people? Which elements of the idea are recognized as valuable?

Take a moment to revisit the starting point. What were you trying to learn? Look at your learnings and previous ideas. Was your original intent still valid based on the feedback you received? Did your test pretotype address or clarify the original intent? Did it succeed in investigating unmet needs and original hypotheses?

Based on the learnings, identify the most relevant Solution Opportunity. Write why it is an opportunity, what value is identified for stakeholders, and why it should be interesting for the discipline.

Remember that an opportunity:

* Addresses a need
* Is tangible for users
* Has an impact on society

Good luck!!