iN/tend the incubator hub by Healthy Teen Network

Ideation and Prototyping: Quick Guide

Ideate

Ideation is the process of generating, developing, and refining ideas through **brainstorming** and **synthesis**. It's a crucial stage in Human-Centered Design (HCD) where teams explore and evaluate potential solutions. Ideation involves cycles of:

- Divergent thinking: Generating lots of ideas through brainstorming activities.
- Convergent thinking: Grouping, narrowing down, and selecting ideas through synthesis activities.

Brainstorming

Brainstorming is the classic way to ideate. The goal is to generate as many ideas as possible, regardless of practicality or feasibility. Good brainstorming sessions stimulate creativity and allow everyone, regardless of role or expertise, to contribute their ideas.

Rules for brainstorming

Defer judgement. Creative spaces are judgment-free zones. There are no bad ideas at this point. There will be plenty of time to narrow them down later.

Encourage wild ideas. Even if an idea doesn't seem realistic, it may spark a great idea for someone else. Embrace the most out-of-the-box notions. There's often not a whole lot of difference between outrageous and brilliant.

Build on the ideas of others. Try to use "and" instead of "but." It encourages positivity and inclusivity and leads to tons of ideas.

Stay focused on topic. Keep the discussion on target. Divergence is good but keep our eyes on the prize.

One conversation at a time. All ideas need to be heard, so that they may be built upon.

Be visual. Draw our ideas, not just write them down. Stick figures and simple sketches can say more than words.

Go for quantity. Set an outrageous goal—then surpass it. The best way to find one great idea is to come up with lots of ideas first

Methods for brainstorming

Rapid Brainstorming: Generate as many ideas as possible in a short period of time.

Reverse Brainstorming: Think about how to make a problem worse, not better.

Mash-Ups: Combine multiple ideas to come up with new ones.

Synthesis

After generating lots of ideas, synthesis helps organize, refine, and prioritize them. It involves looking for patterns, themes, or connections between ideas. This process helps us turn many scattered ideas into a few clear insights or directions we can work with.

Methods for synthesizing ideas

Dot Voting: Vote with a certain number of dots per team member.

Top Five: Select the top five ideas according to various prompts.

Venn Diagram: Sort ideas in a Venn Diagram prioritizing the overlap, usually with categories of desirability, feasibility, and viability.

Prototype

During this phase, we build parts of our idea. Prototyping helps test an assumption and/or gain insight into how something might work.

Why we prototype:

- To make abstract ideas tangible
- To learn new aspects of our idea
- To allow our ideas to evolve
- To see our ideas in action and to bring them to life
- To uncover hidden user needs
- To save resources by identifying what won't work early

Tips for prototyping:

- Go quickly
- Prioritize action over perfection
- Start with low-fidelity models
- Use existing products when you can
- Explore different prototyping methods
- Stay flexible–don't get too attached
- Embrace pivot

Methods for prototyping

Physical Model: A hands-on prototype that brings an idea to life using basic methods and materials. It helps us explore form, function, and interaction by building a rough version of a product, space, or service.

Diagram: A quick way to visualize how ideas, services, or systems connect. It helps clarify relationships, identify gaps, and organize information before moving into higher-fidelity prototyping.

Storyboard: A visual sequence of frames that represent the journey or story of a product or service.

Roleplay: A quick and easy prototype where you act out scenarios to test ideas and gather feedback from users.

Wireframe: A basic visual structure or layout that outlines content and functionality for digital products, focusing on the user journey.

Assumptions

As we move into prototyping, it's essential to recognize and address assumptions—the beliefs we hold about our users, their needs, and how they'll interact with our idea.

We all bring assumptions into the design process, and that's natural. The key is to recognize and test them, then refine our ideas based on real insights.

Assumptions are:

- Beliefs or views that we hold about our users, their context, or their goals
- Things we believe to be true but lack evidence to support
- Sources of uncertainty and risk as we develop our ideas
- Shaped by past experiences, professional knowledge, or personal intuition

How do we prioritize our assumptions?

As we prototype, we'll use a 2x2 matrix to assess assumptions based on their level of risk and how much we know about them. The goal is to reduce uncertainty and risk before moving too far into development.

More Risky	**Look for Indicators** These are high-stakes assumptions, but we have some confidence in them. Keep an eye on them during testing.	****Focus Here**** These are our biggest areas of uncertainty, so we want to prototype and test them first.
Less Risky	**Accept Assumptions** Accept these assumptions as true for now, without immediate validation.	**Look for Indicators** These are still uncertain, but they won't make or break our idea. Look for indicators while testing to confirm or refine them.
	More Known	**More Unknown**

Testing

After creating prototypes, test them in the real world. The goal of testing is to gather feedback that helps improve our idea. Remember, avoid selling our idea while gathering feedback—focus on inviting honest input by presenting it as a "work-in-progress."

To create an effective testing session:

- Set up context without over-explaining
- Encourage authentic interaction while thinking aloud
- Observe behavioral cues
- Ask open-ended questions

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