The Design Process

Importance for executives and guiding your team through the journey

Canada School of Public Service
École de la fonction publique du Canada

Product management

Guiding your team through the design journey

Product management is the process of managing products throughout their life cycle, from discovery to delivery.

This job aid is intended to assist you, as an executive, in supporting your team through these life-cycle stages by enhancing your strategic understanding of the concepts and tools used in the design process.

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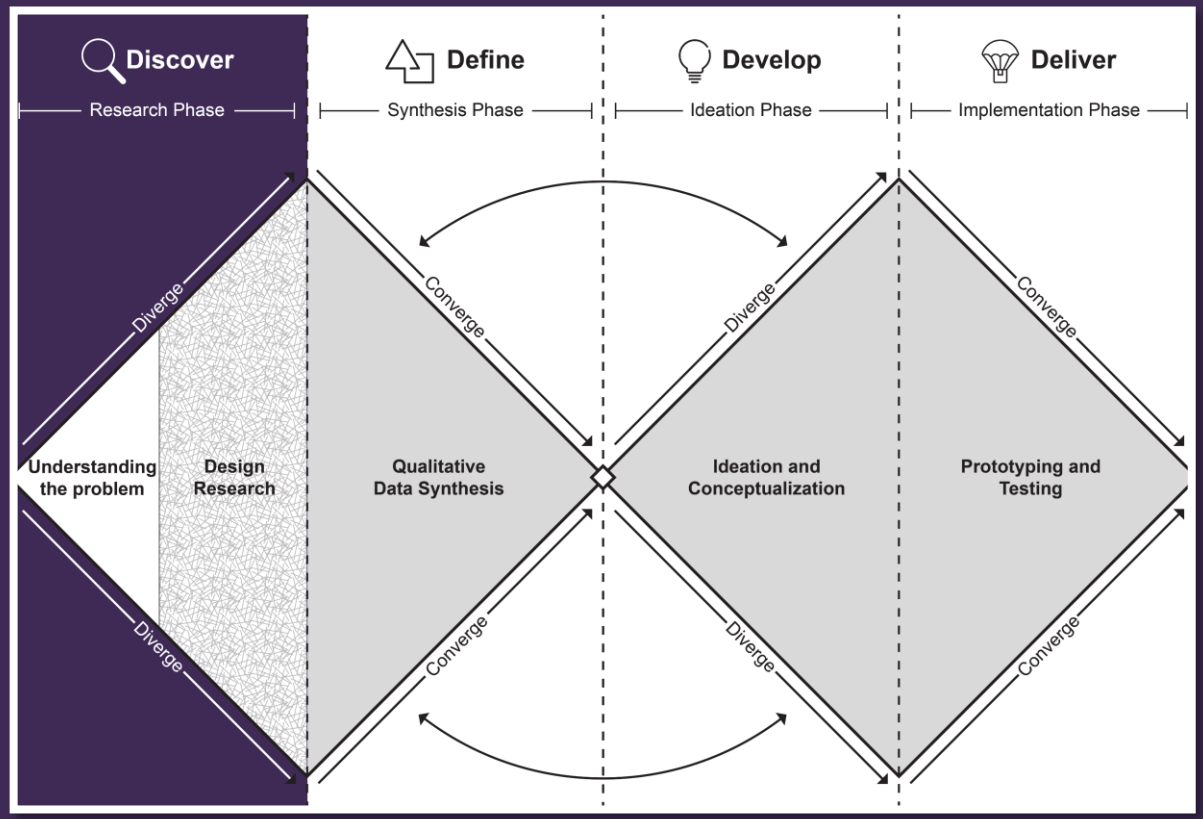
The Design Process: Job Aid for Executives

This job aid explores the five phases of the design process. Each phase is described and its importance for executives is explained. It also guides you through the design journey and provides bonus learning resources.

The Double Diamond

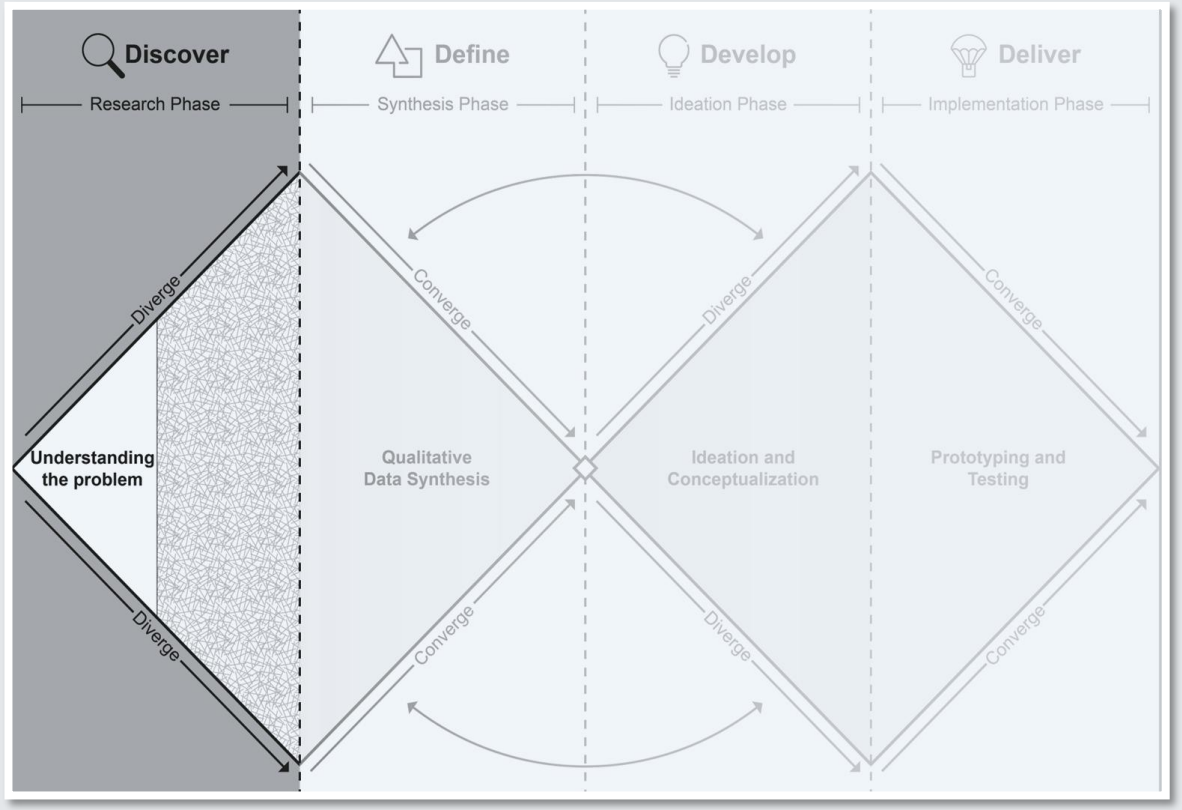
The Double Diamond is a visual representation of the way we approach the design process. It shows the steps that can be used to guide you through the steps of delivering and managing solutions to problems.

For each step of the design process, the pages that follow will provide executive-focused information and resources for each of the stages in the design process.



1. Problem Framing

Understanding the problem is the first step in the design process. It is crucial to determining which is the right problem to solve.



What is problem framing?

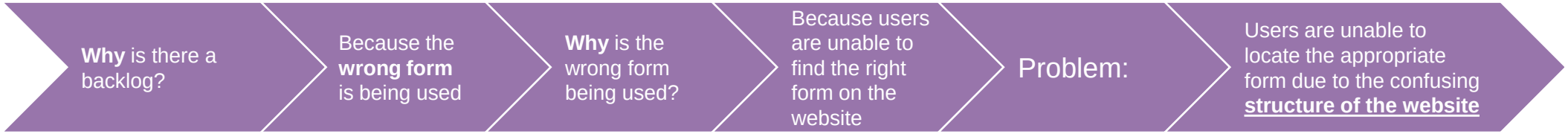
Problem framing is a method for understanding and defining a problem. Taking things one step at a time keeps you from jumping to solutions too quickly. Here's how to describe it:

What it means

Here's an example[1] of a situation in which the problem-framing steps were not applied: The Department of Fisheries and Oceans is experiencing a backlog of applications for projects near water.

It may appear linear and straightforward at first sight, but is this the right problem to solve?

Here is the same example[1] with the application of problem framing:



By asking questions and understanding context and users, we are able to identify problems based on the points of view of different stakeholders.

Supporting your team through problem framing

Here are some simple and effective ways to support your team through the process of problem framing.

A Facilitate a problem-framing session with your team. Use this framework to deliver an effective 30-minute session.

B Have a **dedicated** visual **collaboration space** (physical and/or virtual) where you and your team can share ideas, feedback and ask questions. Use it frequently and encourage your team to do the same. Remember to add it to your favourites for ease of access and as a reminder to use it frequently.

C Use your **network**. Consider connecting your team members to professionals in your network who can **provide insights and perspectives** about different aspects of the problem (the stakeholders, the context, the problem).

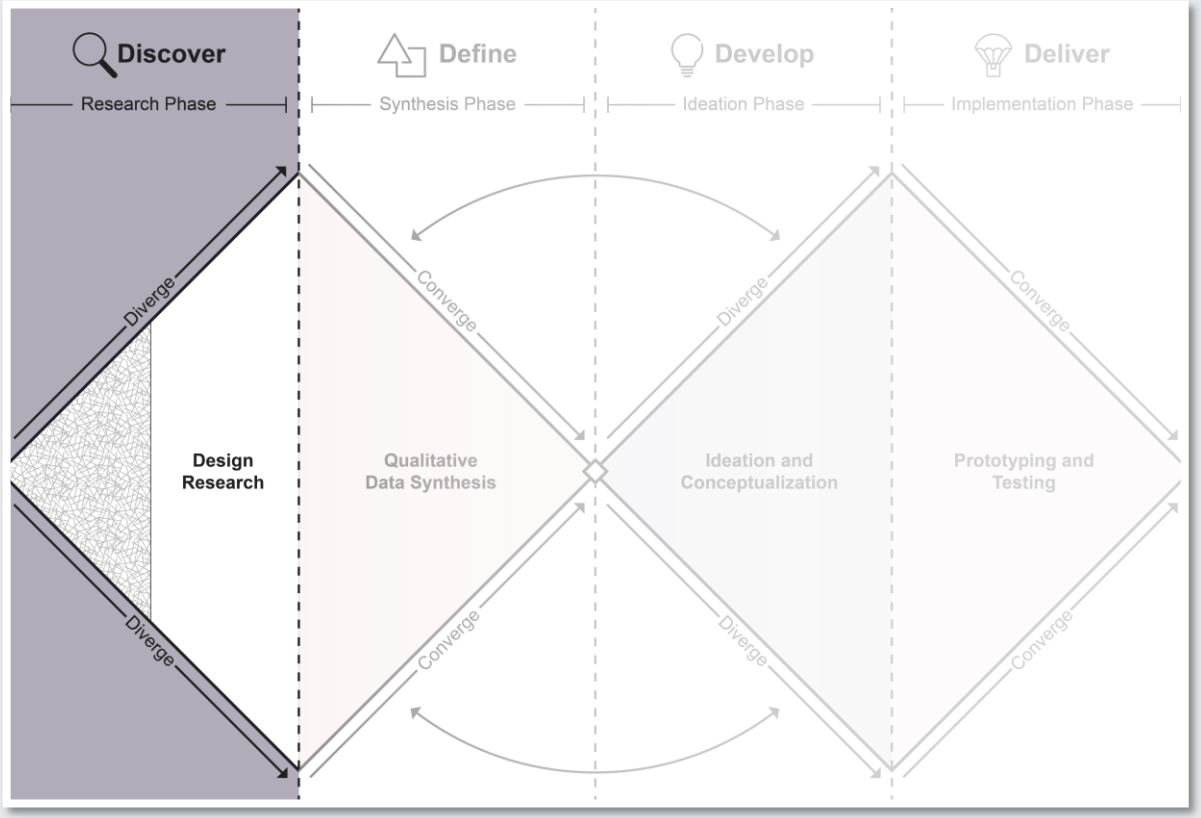
Bonus learning resources on product management and problem framing

- The article Design Thinking for Impactful Solutions can help you understand the strategic concepts that will be explored throughout the design process.
- The course Introduction to Product Management in the Public Service (DDN236) presents the fundamentals of product management.
- The course The Design Process: Understanding the Problem (DDN237) provides examples, activities and tools relative to problem framing.
- If facilitating a session is not yet your thing, try Facilitation Essentials: Fundamentals of Facilitation (TRN123) to get the skills you need.
- The course Building a Culture of Design Thinking (DDN225) is a great way to get into the mindset of promoting a design culture.

2. Design Research

Design research follows problem framing in the double diamond model. Having framed the problem that needs to be solved, it's now time to perform evidence-based research to support the development and improvement of products, services and programs.

Design research uses structured research to find out how your stakeholders behave, their motivations, what they need and their pain points.



Importance of design research for executives

- **Funding and resource allocation**
Understanding user needs lowers the number of changes that need to be made, which makes better use of resources and investments.

- **Delivering value where value is needed**
Even if a feature seems like a good idea, it won't be useful if no one uses it. User research can uncover features your users may in fact want. Satisfied users are your best advocates.

- **Leveraging the data**
The data gathered through research is a valuable asset to drive change in other initiatives/projects.

Supporting your team through design research

Here are some simple and effective ways you can guide and empower your team in conducting ethical, evidence-based research.

Cultivate an environment where your team feels safe to explore new ideas by…

A …asking questions that lead to a shift in mindset or bring about a novel perspective. Use this model of **31 powerful questions** as a starter.

B … adding challenges, failures and hardships as regular themes of your team check-in sessions, starting with one of your own experiences.

C … sharing the resources you have access to with your team to demonstrate your support and validate the value of the research.

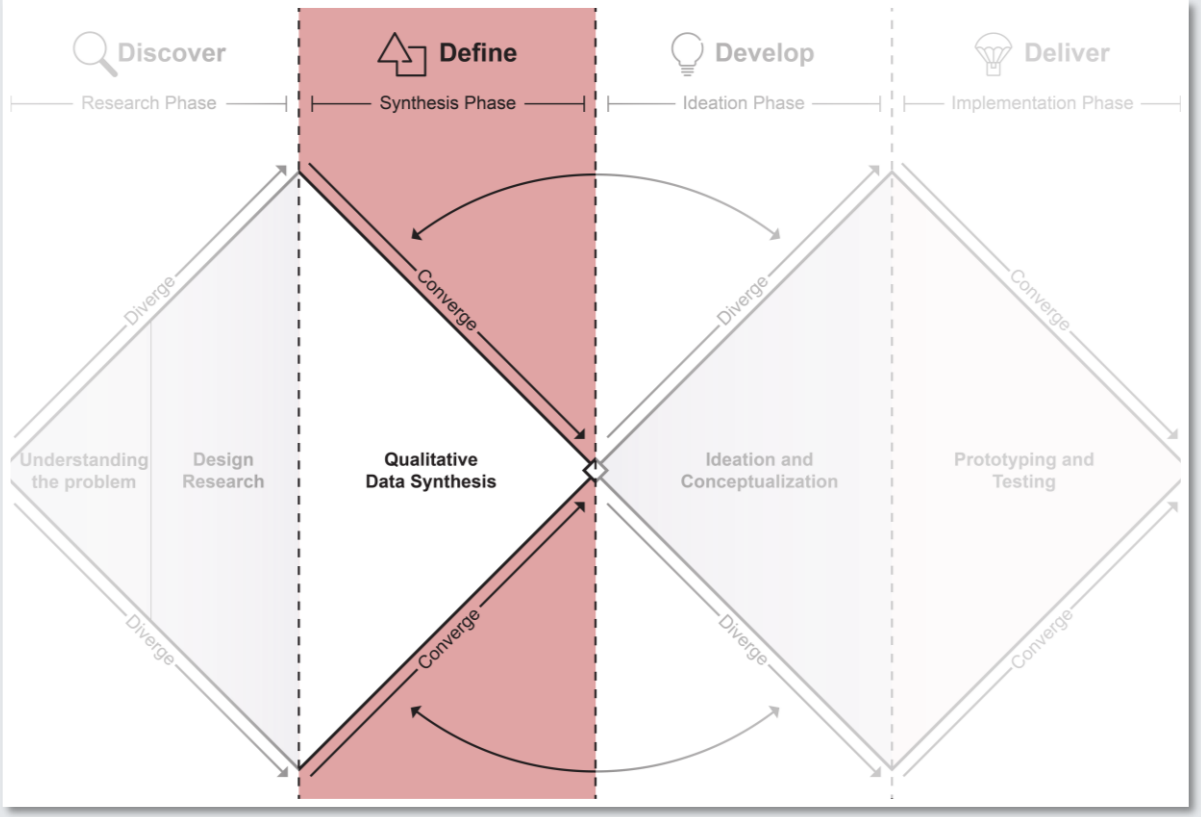
Bonus learning resources on design research

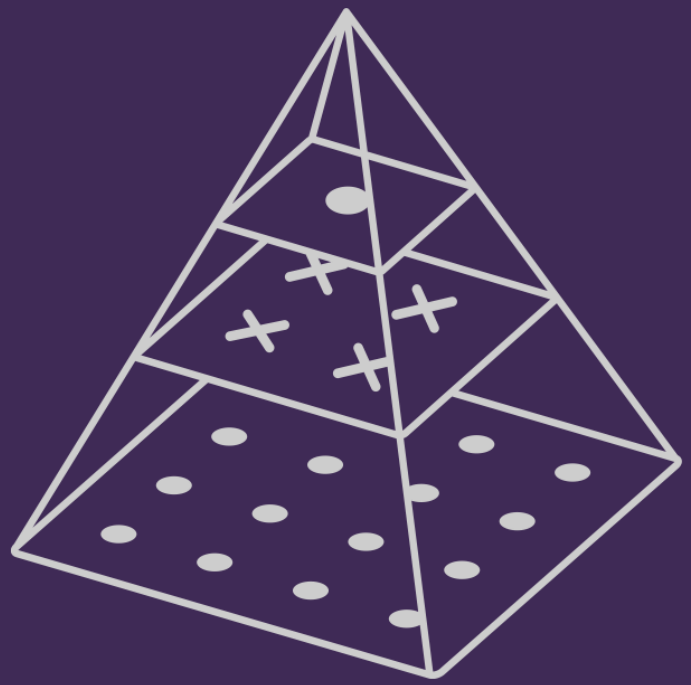
- The article Creating a Failure-Safe Workplace for Employees suggests different ways of fostering a creative-safe workplace.
- The course The Design Process: Design Research (DDN244) explores the benefits and methodologies of effective design research.
- The Canada.ca blog Improving content on Canada.ca is a valuable tool that showcases real projects in which user research led to significant service delivery improvements.

3. Data Synthesis

Your team and you now have a clear understanding of the problem to be solved and of different research methods. It's time to think about how to group and use data to solve the problem effectively.

Qualitative data synthesis is the process of applying structured methods to organize, analyze, interpret and synthesize data, to turn information into knowledge that informs decision-making.





Importance of data synthesis for executives

- **Expanding horizons**

The outputs resulting from the data synthesis can uncover new patterns and trends in user behaviours that you can use to further other initiatives.

- **Keeping up with the trends**

Use this opportunity, individually and as a team, to experiment with different tools such as AI for data synthesis.

- **Team alignment**

Data synthesis also boosts team cohesion by creating a shared understanding of answers to research questions.

Supporting your team through data synthesis

Here are some simple and effective ways to guide and empower your team in organizing and interpreting the data collected.

A Support your team by suggesting high-level strategic data labels and themes that will help them perform better and produce high-quality insights.

B Following guidelines and best practices, encourage your team to experiment with AI to combine anonymized data and check previous assumptions.

C Lead a session with your team to share the results of the analysis and connect it back to your problem statements to ensure alignment.

D Consider investing in technology and tools, for yourself and your team, to facilitate data synthesis on the subject and further learning opportunities.

Bonus learning resources on data synthesis

- The course The Design Process: Qualitative Data Synthesis (DDN245) presents practical methods for organizing, analyzing and synthesizing qualitative data.

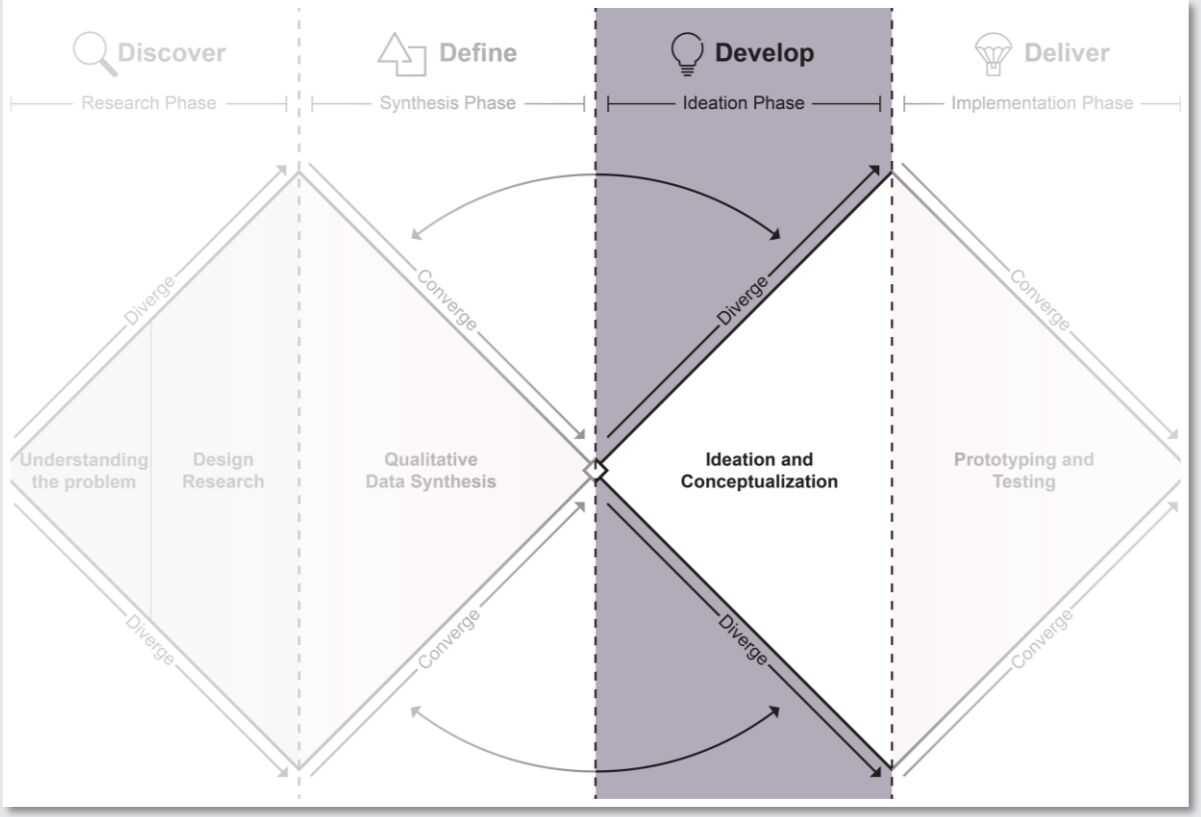
- The article Coding Qualitative Data: How to Code Qualitative Research is a deep dive into the core concepts of effective qualitative data research methods.

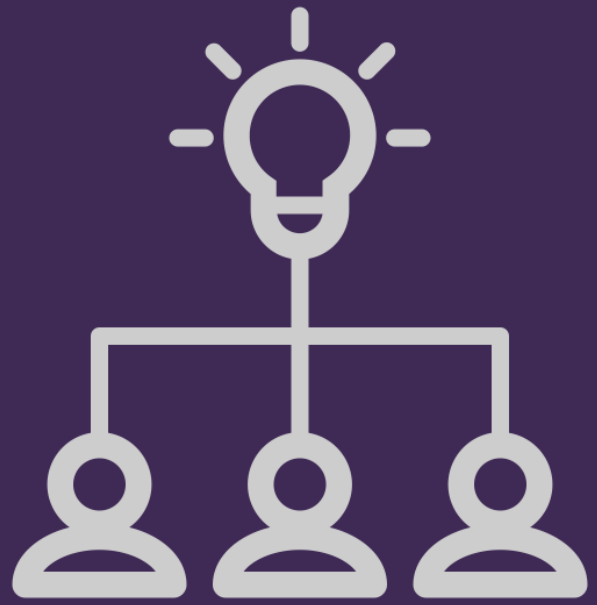
4. Ideation and Conceptualization

We're at the fourth phase of the design process and it's time to get creative!

Ideation is the process of generating ideas to solve a problem. During this phase, your team will create and evaluate different options to solve a problem.

But there's more! Your team will also go through conceptualization, the process of turning ideas into actionable plans to prepare them for prototyping.





Importance of ideation and conceptualization for executives

- **Efficiency gains**

Ideation reduces the likelihood of multiple implementation attempts, ultimately saving valuable resources down the road.

- **Real value, where it matters**

Using research data during ideation and conceptualization allows for the discovery of solutions that align better with real user needs.

- **Collective knowledge**

The artifacts created during this phase can serve as a collective knowledge base of ideas for use in future initiatives.

Supporting your team through ideation and conceptualization

Here are some simple and effective ways you can foster the ideal environment for your team, generate great ideas and turn them into plans.

A

During the ideation phase, there are no bad ideas. Encourage your team to bring any and all ideas to the table. Provide your team with the space to share ideas freely, even anonymously, if it encourages participation.

B

Explore different ideation techniques to find what best fits your team structure. Take the course The Design Process: Ideation and Conceptualization with your team.

This short article is another great starting point for concepts and practical tools.

C

Diversity can promote creativity. Consider bringing in team members from different departments and backgrounds to join in on a brainstorming session.

Bonus learning resources on ideation and conceptualization

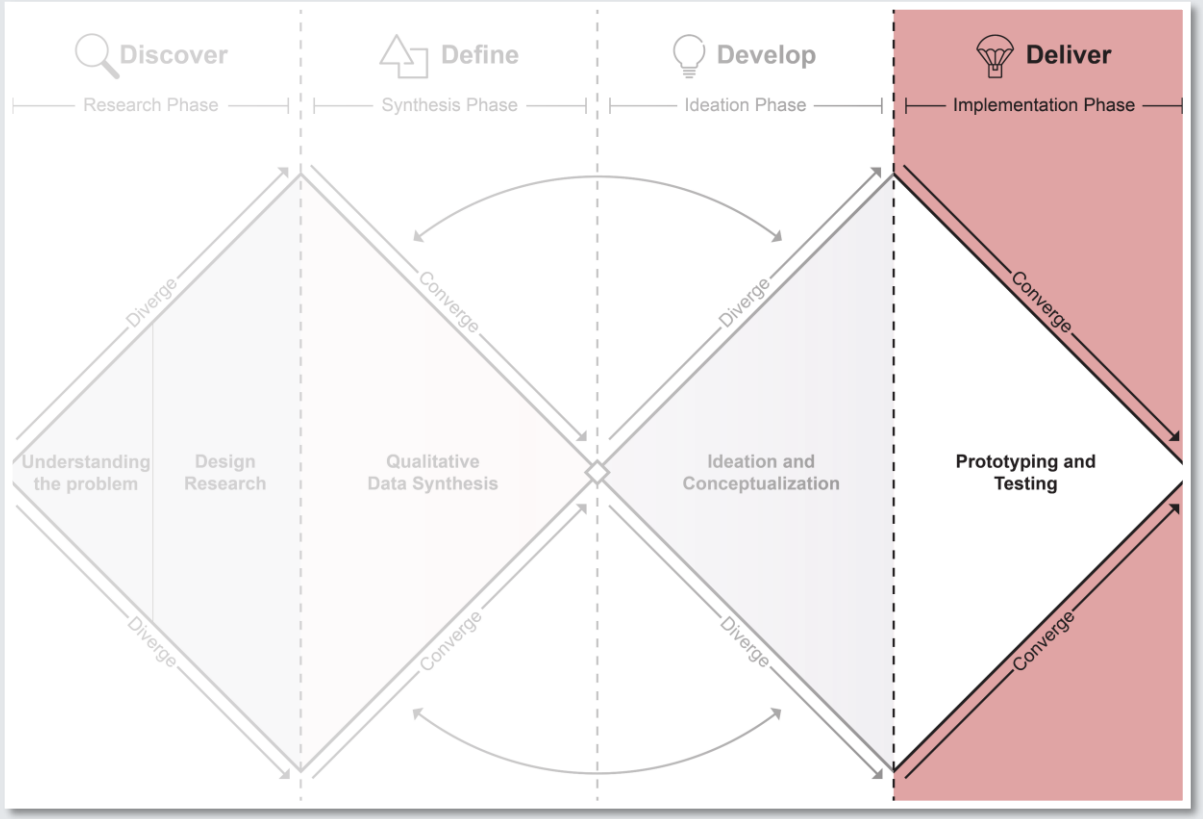
- This article on how to prepare for ideation sessions is a comprehensive read on the topic of ideation.
- The course Design Thinking for Innovation: Brainstorming and Ideation (TRN239) will spur your creative thinking, improve collaboration and provide even more ideation techniques.

5. Prototyping and Testing

This is the fifth and final phase of the design process. It's time to put pen to paper!

Prototyping is the process of creating a scaled-down version of your solution. During this phase, your team will develop visual representations of the different levels of complexity of your chosen solution.

Your prototypes will also go through testing. This will enable you to learn lessons, test hypotheses and iterate directly with users.



Importance of prototyping and testing for executives

- **Mitigating risk**

Prototyping allows you to test and improve your solution before investing substantial resources in the actual product.

- **Get the buy-in**

Prototypes tell a much more compelling story than simply describing the potential of your solution. Use them to get the senior management support you need to implement your solution.

- **Directed feedback and user connection**

Learning and iterating based on direct user feedback is a clear way to meet user needs while demonstrating a commitment to their expectations

Supporting your team through prototyping and testing

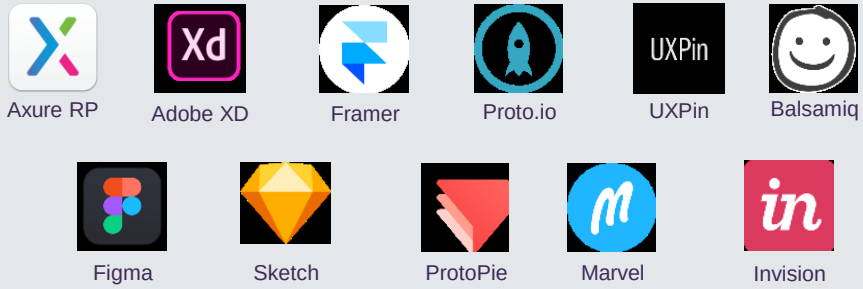
Here are some simple and effective ways to inspire your team to create effective prototypes for your solution.

A

Create vision and set goals: Align the team with a common purpose and provide them with the time and resources required to focus on developing the prototype.

B

Explore different prototyping tools with your team. Here are just a few!



C

Facilitate a role-playing session with your team where you take turns playing the role of the user while interacting with the prototype. It can be an enlightening exercise in empathy and user-centricity!

Bonus learning resources on prototyping and testing

- Want more information on a prototyping tool? Here is a quick read on the 13 Best Prototyping Tools to Explore and Test Ideas in 2024.

- Keep exploring the topic with the upcoming course Prototyping as Part of the Design Process (DDN249). It will help you and your team to select the most suitable prototyping and testing methods for your solution.