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الهيئة العامة للمنشآت الصغيرة والمتوسطة
Small & Medium Enterprises General Authority

Enhancing Innovation Skill

Contents

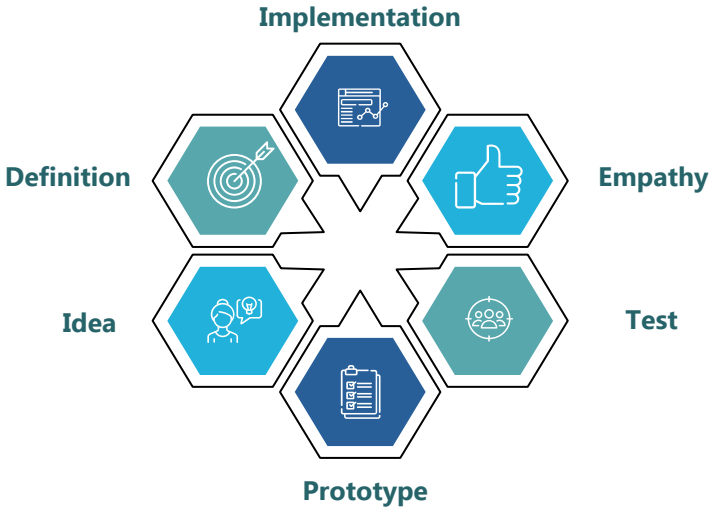
Introduction

There are many variables to the design thinking process used today, containing three to seven stages. However, all forms of design thinking are very similar.

Elements of the design thinking framework:

1. Understanding
2. Exploration
3. Materialization

The following stages fall under the elements of the design thinking framework:



It is important to understand that the stages of an innovative project are not always sequential, and there is no specific order that must be followed. Instead, they should be viewed as a general overview of the situations or stages that contribute to the project's success.

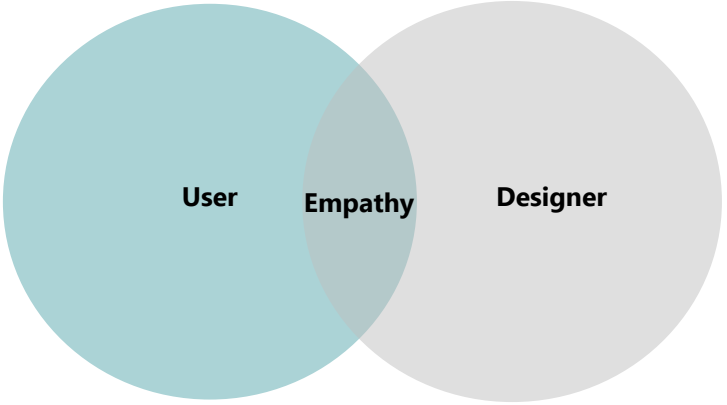
Element of Understanding

The element of understanding involves researching and talking to experts to gain insights into who we are designing for. It is crucial to identify stakeholders and create a user profile that focuses on the user's needs. Some key questions to consider when building a user profile include:

- Who is the user?
- Are there multiple user groups?
- What demographics do these user groups share, and are these commonalities relevant to the product or service?
- What part of the user profile information is relevant to your product or service?

Element of Understanding

Empathy is the ability of the project owner to see things through the eyes of the customers, create a mutual understanding of who the customer is, and develop awareness of the problem they see.



For example, if you are working to improve user experience, you need to understand their needs by:

- **Talking to a group of actual users**
- **Observing what they do, how they think, and what they want**
- **Asking "What motivates or encourages users?" or "Where do they feel frustrated?"**

The goal:

Collect observations centered on empathy with users and their perspectives, as empathy requires research to develop knowledge about what the user does, says, thinks, and feels.

Empathy Map

empathy map helps to:

01 **Identify who the user or persona is**

02 **Discover gaps in your current knowledge and identify the types of research needed to address them**

03 **Compile empathy maps to create personas that simulate individual users**

04 **Classify and understand qualitative research notes, survey responses, and more**

Element of Understanding

Communicating with users or other individuals:

The empathy map is a quick way to clarify user positions and behaviors once created. It should serve as a reference throughout all stages of the project, so it must be protected from bias or unfounded assumptions. Ensure that empathy maps remain active by refining and modifying them during further research.

Directly collecting data from the user:

When empathy maps are filled directly by users, they can be used as a secondary data source and represent a starting point for summarizing the user session. In addition, conducting interviews helps gather feelings and ideas that users may not have explicitly stated. Visualizing user positions and behaviors in the empathy map helps to deeply understand end users.

Types of Empathy

Traditional Empathy

The speech circle: Contains what the user says out loud in an interview or other usability study.

The thinking circle: Embodies what the user thinks throughout the experience. Understand what matters to the user, why they hesitate to participate, and their emotional state.

The action circle: Surrounds the actions the user takes from research. Understand what the user does physically and how they go about doing it.

The feeling circle: Is the emotional state of the user, which is represented in many religions as a quality in addition to a short sentence for context. Understand what worries and excites the user.

Innovative Empathy

Define scope and goals: Start by setting an empathy map for each user.

Gather materials: Create a suitable system to empathize with the team as a whole.

Gather research: Conduct research that feeds empathy maps, including qualitative inputs such as listening sessions.

Select and assemble blocks: Use an assembly activity to facilitate discussion and alignment once your empathy map is assembled.

Single user / empathy maps: Help specialists to experience the users' perspectives to understand their needs

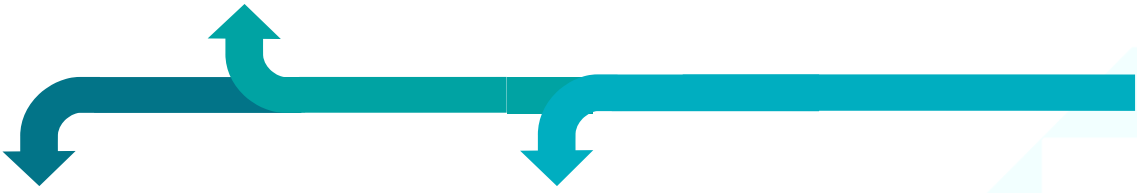
Exploration Element

Idea Stage:

During the idea stage, the team should strive to understand the data and the challenge framework thoroughly. For example, in the case of a meal delivery service in a certain region of the world, when looking at the problem of malnutrition, the team realized, after careful observation, that the scope of the problem was much larger, and they needed to redesign the entire experience, not just for those who receive meals, but also for those who prepare them. By doing so, they were able to produce better meals, which, in turn, improved customer satisfaction with the service.

Appropriate methods for reaching the correct definition of the problem or challenge:

Formulate the problem definition in a way that encourages ambitious solutions based on a comprehensive understanding of user context and academic research.



Combine all research findings to pinpoint the areas where your users face challenges. When identifying user needs, start highlighting potential innovation opportunities.

Identify the conditions that require a solution

When defining the problem to external clients, it's essential to keep in mind that sometimes the problem that needs to be addressed is not the one initially identified. Many people tend to jump into exploring the solution space without adequately exploring the problem space. It's a wrong approach to empathize and relate the mentioned problem only with one's own experiences. Instead, understanding the problem must be based on a comprehensive understanding of the information obtained from the previous stage of problem identification. It's essential to ensure that the focus is on the real problem that needs to be addressed.

Service Blueprint:

The service blueprint is a visual representation of a user's experience of a specific service and the operational processes that support it. It can be used to describe current practices and potential future user experiences related to a new service concept. To create a service blueprint, start by identifying the planned processes and the user segments to be addressed.

Exploration Element

First: User Journey

The user journey is a combination of established and evolving practices. Established practices involve identifying and defining selected processes based on data from field research. Then, user activities are defined on a timeline and touchpoints, representing the user's interaction with the service. Evolving practices involve visually refining relevant processes when developing a new service concept. This is the time to step-by-step describe the potential user experience according to touchpoints (the user's interaction with the service).

Second: Frontstage Activities

- Describe the user's interaction with frontline employees to support the user journey.
- Separate activities from the journey with an "interaction line" that represents the touchpoint that the employee has with the user.

Third: Backstage Activities

Invisible activities performed by contact center employees who support the user journey.

Fourth: Support Operations

Describe all necessary activities that do not involve contact center employees

Fifth: Tangible Guide

The top part of the service blueprint describes the actual guide that guides the user throughout their journey. These elements can affect their perception of service quality.

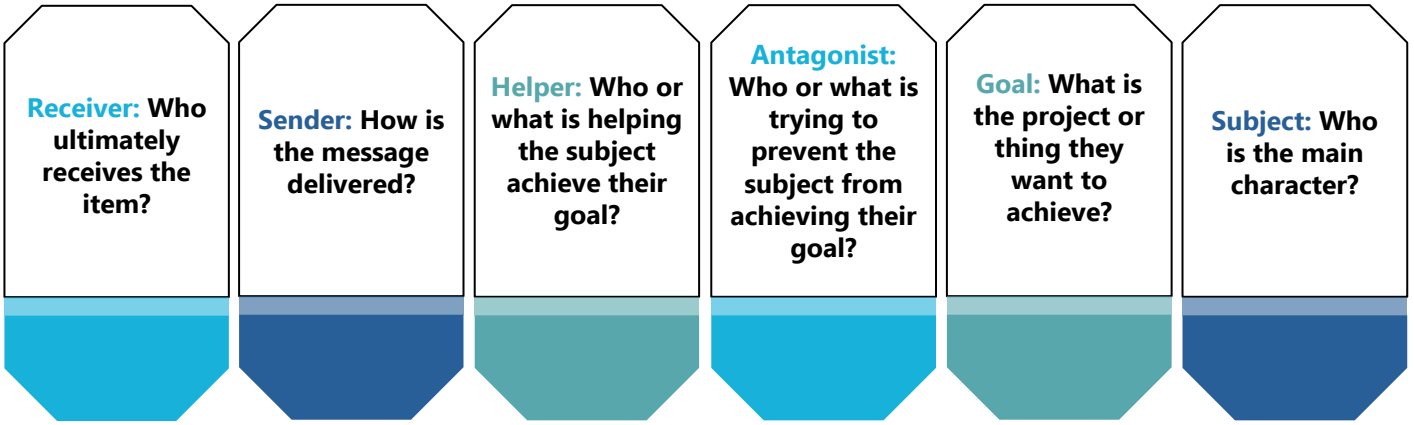
Sixth: Evaluation

Identifying and evaluating needs and problems that require research by testing them with users and other stakeholders.

Exploration Element

Interactive Model

The Interactive Model is a tool used to explore possible relationships and procedures to enhance the development process. It has been used to study roles and functions and serves as a reference list for the main actors in the project by creating a cohesive picture of the relationships, functions, and potential procedures. The model consists of six roles:



The actors are placed on three axes:

1. Project axis:

Displays the subject (the main character) and their goal.

2. Conflict axis:

Displays the antagonist who is trying to prevent the subject from achieving their goal.

3. Communication axis:

Displays the end of the story with the sender who delivers the goal to the recipient.

Exploration Element

Starting the project axis by exploring who or what should achieve the goal.

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- **Exploring the communication axis: How does the subject enter the goal? and who or what should get the thing?**
- **Revealing the conflict axis: What kind of resistance might the subject expect? and what kind of help is needed to overcome this resistance?**
- **Creating the interactive model that reflects the situation and follows possible scenarios.**

Choosing the right problem to solve and defining it in the right way is the most important part of the process, yet it is the least appreciated and most repeated step.

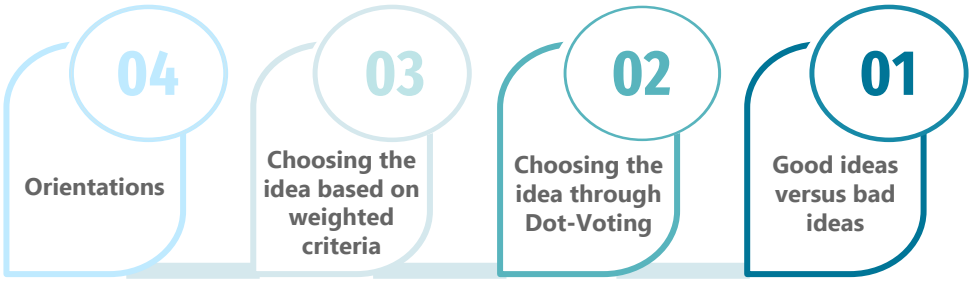
Element of Materialization

Design thinking adds creativity to the equation. It is not enough to analyze the problem; you must be able to reach a solution and test customers' acceptance of it. At this stage, mutual thinking should be applied to explore challenges and develop many ideas for potential solutions.

- **It's important to explore many different types of ideas to push your concepts of what is possible, even if you have a favorite idea.**
- **The thinking process works best when alternating between divergent thinking through idea exchange activities and convergent thinking through idea evaluation.**

Element of Materialization

Some of the methods and tools that can help you in this stage are:



The Prototype Stage:

- Convert ideas into testable models.
- Make your ideas tangible to achieve the purpose of investment with the least possible amount.
- Build a real representation of a subset of your ideas.
- The initial model should be understood as a physical representation of the idea, which can convey specific features to stakeholders for feedback.

The goal:

The goal of this stage is to understand the elements that work in your ideas and those that do not, and to balance the impact versus the feasibility of your ideas through feedback on your initial models. To achieve this, you need materials to build your first models, as well as data materials as a source of knowledge and inspiration.

There are many advantages of initial models:

- Design models that develop and test your ideas in a tangible way.
- Providing initial models when using them to develop and test ideas from early stages and continuously before implementation.
- The initial model takes an iterative approach to developing the idea where people constantly evolve and change their ideas in sync with testing initial models. In this way, aspects of ideas that may not otherwise be realized can be revealed.

Element of Materialization

The Test Stage:

- Formulate the critical path to success.
- Formulate critical assumptions.
- Test the initial model to verify the assumptions.

A key question to ask at this stage is, "Does this solution meet the needs of users?"

Once you have created your initial models based on the ideas you have generated, it's time to collect feedback from the people you are testing. Improving the feedback collection process and learning from the initial models and users is essential for saving time and resources in the early stages of the design thinking process. This enables a quick transition from creating an initial model to testing and collecting feedback, and ultimately to creating a new and improved iteration of the idea.

The Implementation Stage:

- Implement the vision.
- Ensure that the solution is embodied and touches the lives of end-users.
- While it may seem easy at first, turning an idea into something real is not a simple task.
- Flexibility and adaptation to meet your needs.
- Remember that the design thinking process is not a step-by-step description of achieving success, but rather a framework to support you whenever and wherever you need it.

It's important to note that the design thinking process is iterative, rather than purely linear. It's common to return to earlier stages, such as understanding, empathy, and clarification, after building and testing an initial model. This is because experimental models are not prepared until tangible representations of the design are created, and your ideas become a reality, giving you a real representation of your design.

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