

# Double Diamond Design Process

An Advanced Framework for a Successful UX Design

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User Experience (UX) design has become a critical element in the modern product development, with organisations realising the value of creating user-centric products that delight and engage users. UX designers use various design processes and frameworks to ensure that the products they create meet the needs of their users. However, the UX design process is not fixed, and one should always evaluate the project, define its goals, and choose appropriate tools.

In the application design and development community, Agile and Lean UX are two prevalent approaches to UX design that aim to increase the efficiency and efficacy of the overall development process. The Agile UX approach prioritises continuous iteration and feedback, with a strong emphasis on collaboration among designers, developers, and stakeholders throughout the development process. On the other hand, Lean UX approach prioritises the creation of products that can be quickly validated by users and adapted to their needs, utilising a rapid experimentation approach.



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Double Diamond Design Process involves understanding user needs by exploring and gathering information, collaborating with different disciplines to uncover challenges and opportunities, and refining the core problem. The design approach allows to generate multiple ideas, improves them through feedback and collaboration, and creates prototypes for testing. The whole process is iterative in nature, with a focus on continuous improvement, and involves loops of learning to increase the chances of success.

However, both Agile and Lean UX approaches have limitations that require exploring new methodologies. The Agile UX approach can be complex and unpredictable, while the Lean UX approach requires a significant investment and may be met with resistance. This is where the Double Diamond Design Approach comes into focus. Developed by the British Design School by taking inspiration from Béla H. Bánáthy and Nigel Cross' model for solving complex social, economic, and environmental problems, this approach seeks

to create more intuitive and engaging designs by leveraging the best tools from both Agile UX and Lean UX approaches.

The approach divides the design process into two phases: the problem phase and the solution phase. Each phase is represented symbolically by a diamond, reflecting the divergent and convergent thinking that occurs at different steps of each phase. In the problem phase, designers explore the complex nature of the problem and come up with a clear definition. It is where the majority of the design characteristics and values are defined. In following solution phase, the ideas are generated, visualized, and tested through prototypes. The final product is created and delivered to the end user at the end of this step.

For optimal utilization of this framework, it is essential to adhere to four key principles that augment its agility. These guiding principles are as follows:

- **Collaboration** — working with others to be inspired
- **People-centered** — understand users and their needs
- **Iterate** — listen to your users and make changes as needed
- **Communicate** — speak to your users and team members in languages they understand, and use visuals as needed

## Steps in the Double Diamond Design Process

The Double Diamond Design Process is divided in two phases. Each phase again consists of two steps. The problem phase includes Discover and Define, while the solution phase comprises Design and Delivery.

## Discover

In this step, the focus is on comprehending the problem space, exploring feasible solutions, and gathering valuable insights. Teams perform field research and employ diverse tools to gather extensive information about the challenge. This step is characterized by divergent thinking, where all feasible concepts and information are examined and integrated, and akin to the Agile and Lean UX processes, uncertainty is embraced. Examples of tools used in this step are-

**Mind maps:** These are used to explore different ideas about a core problem. The main topic or issue is written in the centre and expanded upon and connected. Mind maps can be drawn on paper, whiteboards, or through the use of online mind mapping tools.

**Brainstorming and Reversed Brainstorming:** Brainstorming is a group meeting designed to explore ideas based on group discussion and the use of different perspectives. Conversely, reversed brainstorming is used when the team is experiencing a lack of ideas. In this tool, the team worsens the problem to shift their perspectives towards opportunities that can ignite solutions.

**Consumer Journey Mapping:** In this method, the design team observes the user experience while using the product or service. For example, the team can observe the user while making online ticket bookings or reservations, and use this information to improve overall user experience.

**How Might We Questions:** The “how might we...” question can be used to generate tangible statement of what is to be done or solved within a specific area of action.

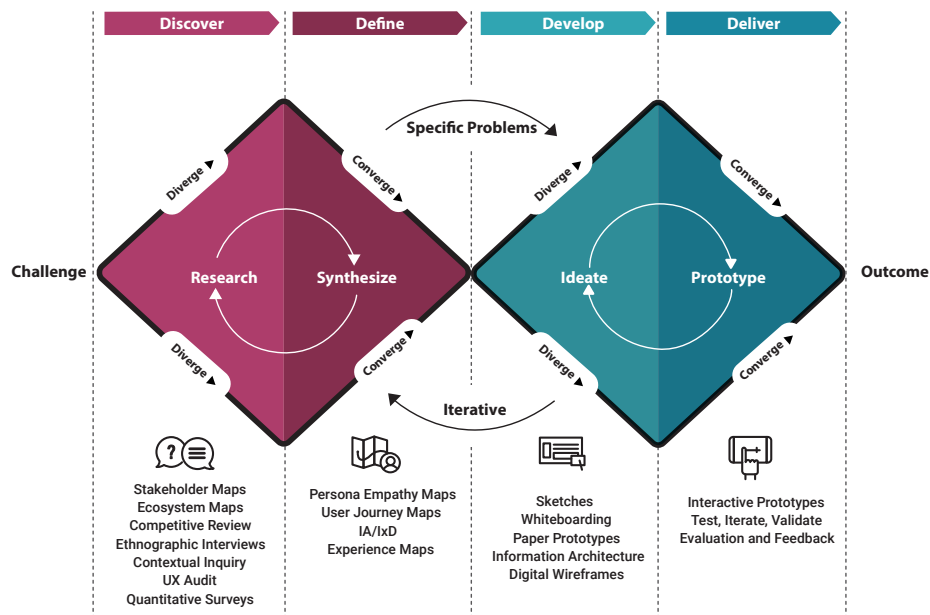
## Define

This is the convergent part of the problem phase. In this step, the team converges their ideas and narrows down the problem definition

The Double Diamond Design Process is an outcomes-based Framework which encourages creativity and innovation while focusing on the core issue and its impact on end-users. It is a widely institutionalised methodology today for identifying a problem and developing a solution. The article describes this modern framework and how designers and developers can apply the principles to deliver successful UX design projects.



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## Double Diamond UX Design Process

to move on to the next steps of prototyping and testing. This step involves analysing the evidence collected in the previous step and filtering ideas to reach a clear workable brief. Some tools that can be used in this step include:

**Root-cause analysis:** This tool helps in examining collected information and identifying the underlying cause (root problem) in order to find a sustainable solution. It investigates the data in terms of six key areas: Measurements, Materials, Personnel, Environment, Methods, and Machines.

**Affinity diagram:** It allows you to organise the data and prioritise these data based on its importance. Then, you can set your problem description based on the data priority recorded.

## Develop

In this step, prototypes are built and tested through a divergent approach. For this, a team creates a persona for each target user. A persona is a virtual character representing the user and helps the design team consider the user's characteristics during the prototype and development process. Several tools are used in this process:

**Minimum Viable Product (MVP):** It is a scaled-down version of the product with only essential features to make it workable. This allows users to test the product, and the team can evaluate it in a real-life scenario, using feedback to improve the final product.

**Consumer Journey Mapping:** Similar to aforementioned usage in Discover step, a team can use this tool to test the application and evaluate it.

## Deliver

The relationship between the designer and the product extends beyond the product release. Once the product is released, the team seeks to gather user feedback and expert evaluations, which are used to enhance future versions. This step represents a crucial stage where concepts are refined to arrive at the final product. Tools that can be employed in this step:

**Surveys:** They are the most common tool to get feedback through users' comments and opinions about the product.

**Think Aloud:** In this tool, the consumer uses the product while describing the experience loudly. Designers take notes of the consumer experience.

**Shadowing:** Another testing tool is where one design team follows the user (as a shadow) and takes notes as the user uses the product.

## Conclusion

Double Diamond Design Process incorporates the best practices of Agile and Lean UX methodologies. It recognizes that the design process is non-linear and the process of forming, visualising, and evaluating ideas does not follow a linear process. This allows teams to jump directly back and forth to any step depending on the finding through frequent user testing.

Contact for more details

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