## Design Thinking & User Experience

Both methods are fundamental for any interactive media projects. Despite obvious similarity between method there are some significant different between them. The user-centered design or UCD and design thinking or DT method became extremely popular in finding solution to a problem.

## User Centered Design

**UCD is** **an approach to design that place users’ needs front and in the center. Method is carried out based on iterative design process where user is involved on every iteration. Major part of design decisions is made based on user’s expectations and needs, however** requirements of the company are still considered and taken to process. The main purpose of UCD is to work with an user and create a product that will satisfy all desires and functional wishes of an user.

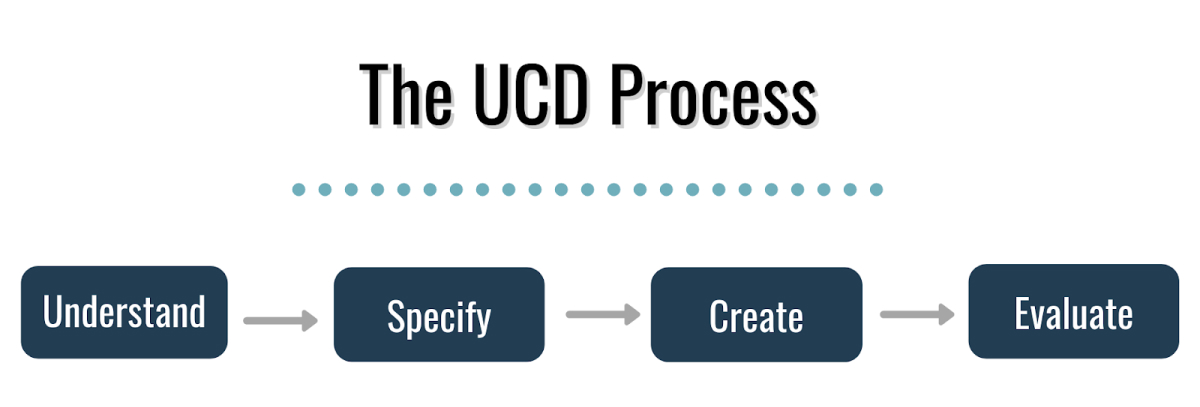
There are five key principles that guide user-centered design and four main steps that make up the UCD process.

To successfully used this method, it is important to follow main principles of UCD:

The main principles of UCD are:

* An end user involvement. User must be involved at the very beginning.
* A clear comprehension of goals and user needs
* Regular “check-in”, analysis, and collection of feedbacks from the user.
* Keep using iterative design until goal is reached and user is happy
* Implementation of an user-centric approach is crucial.
* Employing a user-centric approach to product development and delivery procedures

The four steps of the UCD process are following from 5 main principles. Those steps are illustrated below.



1. **Customer insights and understanding of a problem and a context of use.**
2. **Specify. Why this product is beneficial for an user and a company.**
3. **Create design solutions.**
4. **Evaluate. Design checking and testing.**

After all iterations of the UCD process has been completed, there is no need to stop, company should keep iterating through them until desired solution is created.

## Design Thinking

When creating an app or game or website - one of the most important aspects must not be forgotten it is to design a user-centered product. Companies often believe that they have the perfect solution for their customers and want to participate in the development process before asking themselves - “Is this really what my customers / users want?” Design thinking is a creative problem-solving process and is the key to how new project should be started. Design thinking discourages everyone from starting with assumptions and building products on them before testing their validity. Rather, it encourages the team to take a step back and focus on the people product will be created for. This will ultimately lead to better, more useful apps. Design Thinking is the process by which users research, gather facts, identify personas, consult with subject matter experts, and brainstorm to generate maximum ideas. From these ideas, the best idea is prototyped and quickly tested what works best for the user and how it works best to improve.

<https://freshworks.io/design-thinking-process/>

### Design thinking it is a process which is highly and progressively user-centric. There are 4 principles of Design Thinking:

1. The human rule. All design activity is social in nature.
2. The ambiguity rule. Ambiguity is inevitable – experiment at the limits of your knowledge.
3. All design is redesign. While technology and social circumstances may change, basic human needs remain unchanged.
4. The tangibility rules. Prototypes help to make ideas tangible, enabling designers to communicate the effectively.

## The Five Phases of Design Thinking

From these four principles 5 stages of design thinking follow. There are Empathize, Define,Ideate, Prototype, Test and the sixth is Implement, but sixth one is not going to happen until product is ready passed all stages, sometimes more than ones.

Graphical user interface

Description automatically generated with medium confidence

<https://freshworks.io/design-thinking-process/>

While these steps may seem sequential, it's important to understand that design thinking does not follow a strictly linear process. At each step of the process, you can make new discoveries that require you to go back and repeat the previous step.

**Stage 1: Empathize**

Research and process the user's needs and wishes, you need to gain an empathetic understanding of the problem you are trying to solve, usually through user research. One of the keys of this step is -leaving all assumptions behind and let a customer to speak. This way you gain real insight about users and their needs.

<https://canvas.unl.edu/courses/73802/pages/5-stages-of-design-thinking?module_item_id=1968000>

### **Stage 2. Define**

Based on what have been learned during the empathy phase, the next step is to define a clear statement of the problem. Problem statement identifies the specific challenge needs to be solve. It will guide the entire design process from now on, give a fixed goal to focus on. When crafting problem statement, it is necessary to focus on the needs of users rather than the needs of company. A good problem statement is people-centered, broad enough to be creative, but specific enough to provide guidance and direction.

<https://www.invisionapp.com/inside-design/what-is-design-thinking/>

## Stage 3. Ideation

In this step Challenge Assumptions and idea creation is happening

The knowledge base learnt from the first two stages now can be used "thinking outside", looking for alternative ways of looking at problems, and identifying creative problem solution statement. Brainstorming is especially helpful at this stage.

<https://canvas.unl.edu/courses/73802/pages/5-stages-of-design-thinking?module_item_id=1968000>

**Stage 4: Prototype**

After all ideas have been narrowed down to a few, next step is turn them into prototypes or "miniature" versions of the product or concept needs to be tested. The prototyping phase gives a chance to “build” something tangible that can be tested on real users. This is important to maintain a user-centric approach. Depending on what needs to be tested, prototypes can take many different forms, from basic paper models to interactive digital prototypes. Before create a prototype, a clear goal must be in mind; know exactly what prototype need to represent and then test it.

<https://www.invisionapp.com/inside-design/what-is-design-thinking/>

**Stage 5: Test**

Improve the product During this phase, by running/making tests for the product using the discoveries and solutions discovered during the prototyping phase. While this is the final stage of design thinking, it's important to note that this is not where it stops. Because the design thinking process is iterative, the results generated from testing can often lead users to redefine the problems that needs to be solved. This means you can regularly go back and revisit other design stages to refine the product to be as efficient as possible. Thorough testing can really give a deeper understanding of a product and users. Therefore, returning to other phases should not be considered as failure, but improvements.

<https://www.maqe.com/insight/the-design-thinking-process-how-does-it-work/>

### CONCLUSION

By using Design Thinking method natural flow is created, which makes process of idea and research to rollout faster and easier.

Dive into “customer head” can produce a very important data which can be transformed into insights, which might lead to change of a design.

## Different between DT and UCD

## Simple Venn diagram illustration of the differences and similarities between design thinking and UCD

In conclusion there are a lot of similarity between those two methods - both methods are contained 4 stages that should be iterated constantly.

Main different between those two methods is focus. UCD is focused on user needs and feedback, on the other hand DT is based on desirability, feasibility, and viability.

https://careerfoundry.com/en/blog/ux-design/design-thinking-vs-user-centered/