

# SkillsBuild Learning

## What is design thinking?

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### Introduction

2 Minutes

#### Welcome to design thinking for beginners!

This course will help you understand design thinking as an approach to problem solving. It covers design thinking's terminology, concepts, and application including topics such as human-centered design, prototyping, the Keys, and the Loop.

Let's get started with a quick introduction to Enterprise Design Thinking with IBM! At the end of this course there's a quiz to test your knowledge.

**WATCH THIS VIDEO!**

🔗 [Video transcript \(assets/WWZNPVNNY85D3/Enterprise%20Design%20Thinking%20by%20IBM%20Introduction%20transcript.pdf\)](#)

To get started, click I've checked it out!

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### Creative problem solving

3 Minutes

#### What is design thinking?

Design thinking is a methodology for creative problem solving. (A "methodology" is more than just how something is done. It also covers why something is done.)

[Cookie Preferences](#)

At IBM, we define design as the intent behind the outcome: why do we want something to work in a particular way? It requires not only understanding the outcome. To design well we also have to understand the user, developing empathy for that user, and what that user is trying to accomplish while using our design.

At IBM, Enterprise Design Thinking becomes the framework for delivering great user experiences to our clients.

## From problem to solution



Enterprise Design Thinking is our approach to applying design thinking at the speed and scale of a modern enterprise. In short, it helps our teams form intent (design) and deliver the best possible outcomes.

This problem-solving methodology has its origins in creativity techniques and design methods developed in the 1950s and 1960s. The concept was further expanded in the 1980s and 1990s at Stanford University, where design thinking was taught as “a method of creative action.”

Today, corporations and designers of all kinds use design thinking as a way to respond to user needs and find solutions to broader problems.

## What is empathy all about?

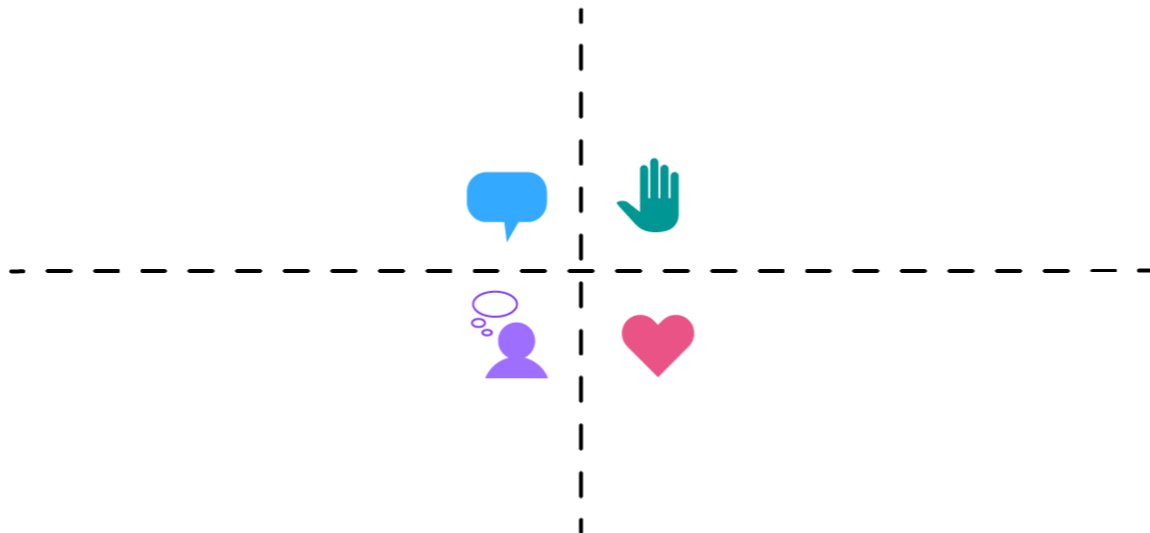
5 Minutes

Empathy is the first step in design thinking because it allows us to understand and share the same feelings that others feel. Through empathy, we can put ourselves in other people’s shoes and connect with how they might be feeling about their problem, circumstance, or situation. A big part of design thinking focuses on the impact that innovative thinking has on individuals.

### What’s an Empathy Map?

Before we start to figure out what a problem is or try to solve it, it’s a good idea to “walk a mile in the user’s shoes” and get an understanding of the user. Empathy Maps help us deepen that understanding, gaining insight into the user’s behavior.

To create a “persona” or profile for the user, design thinking uses the Empathy Map activity to create a realistic general representation of the user or users. Personas can include details about a user’s education, lifestyle, interests, values, goals, needs, thoughts, desires, attitudes, and actions.



### CHECK THIS OUT!

Review this great resource on Empathy Maps. The video provides professional tips while reviewing how to create an empathy map for your user.

🔗 Toolkit: Empathy Map (Enterprise Design Thinking) (<https://www.ibm.com/design/thinking/page/toolkit/activity/empathy-map>)

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## User-centered design

5 Minutes

Design as a professional discipline has undergone a tremendous evolution, from a practice focused on aesthetic style to one with an explicit **focus on users** and their hopes, desires, challenges, and needs. The “user” can be a person or a group of people who use a product or service. By establishing empathy with the user, designers are able to work toward outcomes that meet those needs more effectively.

### WHAT IS HUMAN-CENTERED DESIGN — AND WHY DOES IT MATTER?

This video by DevExplains breaks down human-centered design, also known as user-centered design, and describes why it matters for the global development community. The video also explores some of the ways that human-centered design can help organizations work more efficiently.



## DevExplains: What is human-centered design – and why does it matter?



🔗 Video transcript

(assets/RKEVKGGWXZRVW6MG/What%20is%20human%20centered%20design%20and%20why%20does%20it%20matter%20Transcript.pdf)

### Key takeaways

Human-centered design is also known as design thinking and user-centered design.

The goal of human-centered design is to put people at the core of its products and programs. It is about designing with and not just for the end user, aiming to truly meet the needs of the user or clients. In short, it means designing for people instead of problems.

Before creating a solution, human-centered design seeks to thoroughly understand the problem by spending time with users and collecting data, and then turning that information into deep insights about the target users.

Design thinking creates personalized data-driven solutions for specific user groups rather than adapting existing solutions to fit a unique requirement.

Prototyping involves bringing a version of the solution into the community, then gathering feedback for further improvements.

The three benefits of human-centered design include:

1. **Checking assumptions** – building on new and ambitious ideas
2. **Helping to cut waste** – drastically changing the way organizations use and spend resources
3. **Creating new partnerships** – bringing together different types of thinkers with different disciplinary perspectives, cultural understandings, and creative abilities

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## Embrace the Principles, the Loop, and the Keys

10 Minutes

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Before you dig too deep into Enterprise Design Thinking, let's break down its core **Principles**, discover the **Loops**, and take a look at the **Keys**.

## The Principles guide you and your team

See problems and solutions as an ongoing conversation.

### A focus on user outcomes



Prioritize the needs of the people who will use your solution. Success isn't measured by features and functions; it's measured by how well we fulfill users' needs.

### Restless reinvention



Everything is a prototype! Everything—even existing products and solutions. When you think of everything as just another iteration, you can bring new thinking to even the oldest problems.

### Diverse empowered teams



Diverse teams generate more ideas than teams where everyone thinks alike, because different perspectives provide different ideas and increase your chance of a breakthrough. Diverse members should also empower a team with the expertise and authority to turn ideas into outcomes.

## The Loop drives you and your team

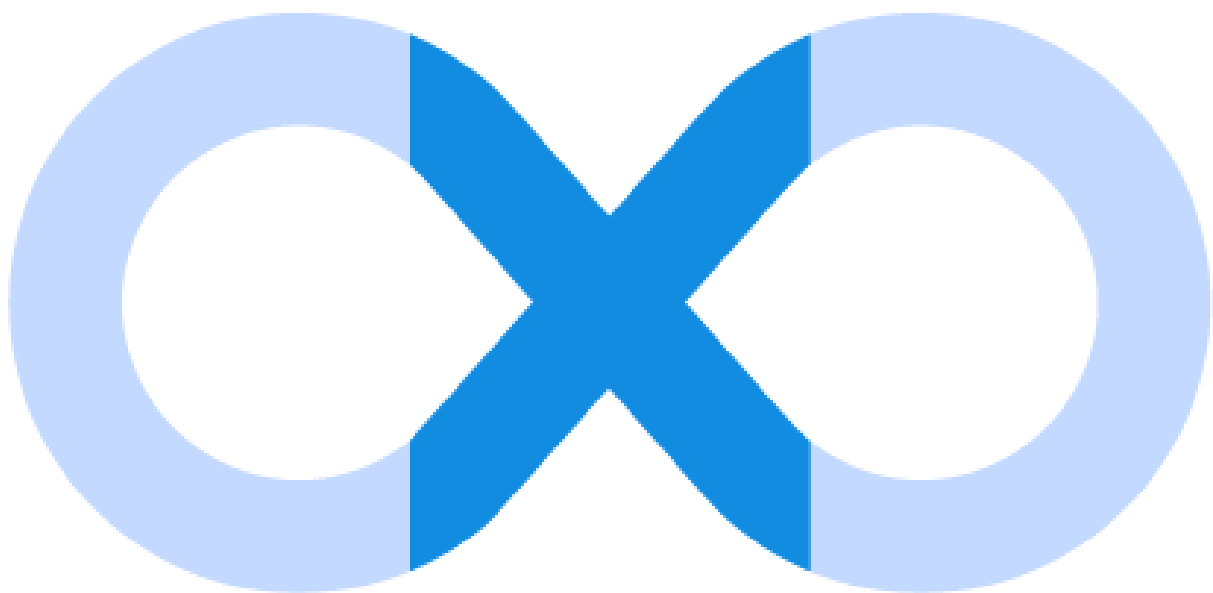
Understand users' needs and deliver outcomes continuously

The Loop drives the team to understand the present and envision the future in a continuous cycle of observing, reflecting, and making.

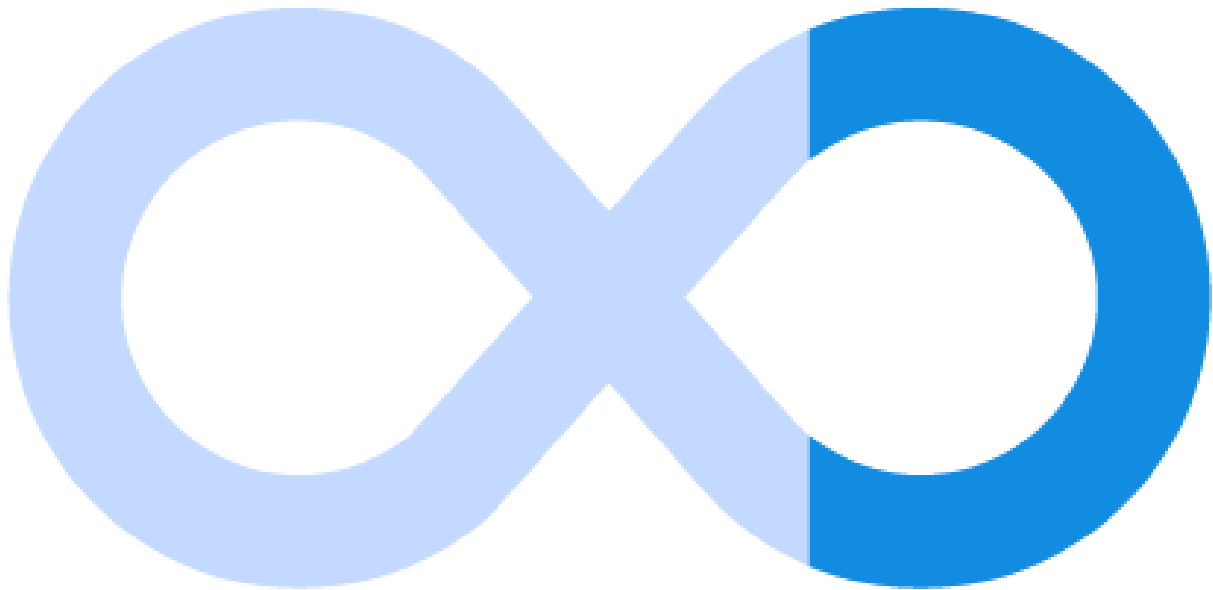
Observe



Reflect



## Make



As teams get started, they come together to understand the present and envision the future. It is everyone's job to learn more about your users' world by observing, or jump in and get started by making your ideas real.

Design thinking treats everything like a prototype. Everything is an unfinished product, that will always be iterated on, that will always be reinvented. Teams can observe, reflect, and make over and over again as they try to solve a problem.

### The Keys align you and your team

The Keys help keep teams focused and aligned on outcomes that matter to users.

Enterprise Design Thinking introduces three core practices—the Keys—to help solve well-known issues that IBM experiences on complex projects. These can be briefly described as:

- **Hills** align us as teams.
- **Playbacks** align us across time.
- **Sponsor users** align us with their reality.

The Keys help keep teams focused on outcomes that matter to users, and keep in touch with real-world needs.

Click each title to learn more about these practices.

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### Hills help the team to get in sync



**Hills** are the elements of a development plan that can focus your project on big problems and outcomes for users, not just a list of feature requests. A Hill specifies where to go, not how to get there, providing the space needed to generate breakthrough ideas.

[Cookie Preferences](#)



The purpose of a hill is to ensure alignment across the team on an important goal, from the end user's perspective. Since Hills define the scope of a project, it's important that your hill statement is do-able within the time allowed. Each Hill statement should contain three Ws: Who, What, and Wow.

#### Who is the target user?

– that is, the user you want to serve

#### What is the outcome being delivered?

– that is, the outcome you want to **enable users to achieve**

#### Wow is the differentiator that will make your solution worthwhile.

– that is, a description of how this outcome will delight the customer

Here are a few examples that show you how the three Ws fit into a single statement:

A high school student [Who] can produce an eight-page history project [What] in under 24 hours without parent help [Wow!].

I believe that this nation [Who] should commit itself to achieving the goal [What] [...] of landing a man on the Moon and returning him safely to Earth [Wow!]. – John F. Kennedy, American President, 1961

### Playbacks help the team stay in sync



**Playbacks** align our team, stakeholders, and clients around the user value we will deliver, rather than on project line items. Playbacks are delivered to clients and teams in the form of user stories, ensuring that the focus is on what user value is being delivered rather than on technical details. By using playbacks throughout the release cycle, everyone involved stays informed and aligned. Playbacks happen at many points along the way.

Here are a few best practices to keep in mind:

- As the team develops hills, a **Hill Playback** helps to ensure that everyone agrees on the project's intended outcome.
- Once the team believes they have reached a proposed solution for each Hill, they schedule the next milestone: **Playback Zero**. This session is a time for the team and stakeholders to agree on what the team will actually commit to deliver.
- As the solution develops, the team holds **Client Playbacks**, where they presents their plan, their three Hills, and the user experience they intend to deliver. In return, the clients provide feedback for the team to continuously improve on the plan.

### Sponsor users help teams understand the “real” users



**Sponsor Users** may not be managers or executives. More commonly they are users or potential users who bring their experience to your team. They participate alongside the team to help deliver an outcome that meets user needs.

Sponsor Users do not replace research. Instead their feedback will give direct insight into users' specialized needs. Their experiences help close the gap between the team's assumptions and the user's day-to-day reality.

## Careers that use design thinking

### Infographic

5 Minutes

Design thinking crosses many job roles and industries. It's a great skill to learn to collaborate with others, understand user needs, and solve problems. Design thinking applies to everyone, and it's not just used by "designers." You can apply design thinking in so many professional and academic situations.

Download this infographic for a summary of design thinking concepts, and to find out what kind of careers in design thinking might interest you and the skills that are required.

#### CHECK THIS OUT!

🔗 Infographic: Design thinking (PDF) (<https://ibm.box.com/s/2o37w0ewhn56wej37k40lbqkfxpyp4t2>)



## Design thinking in 10 minutes

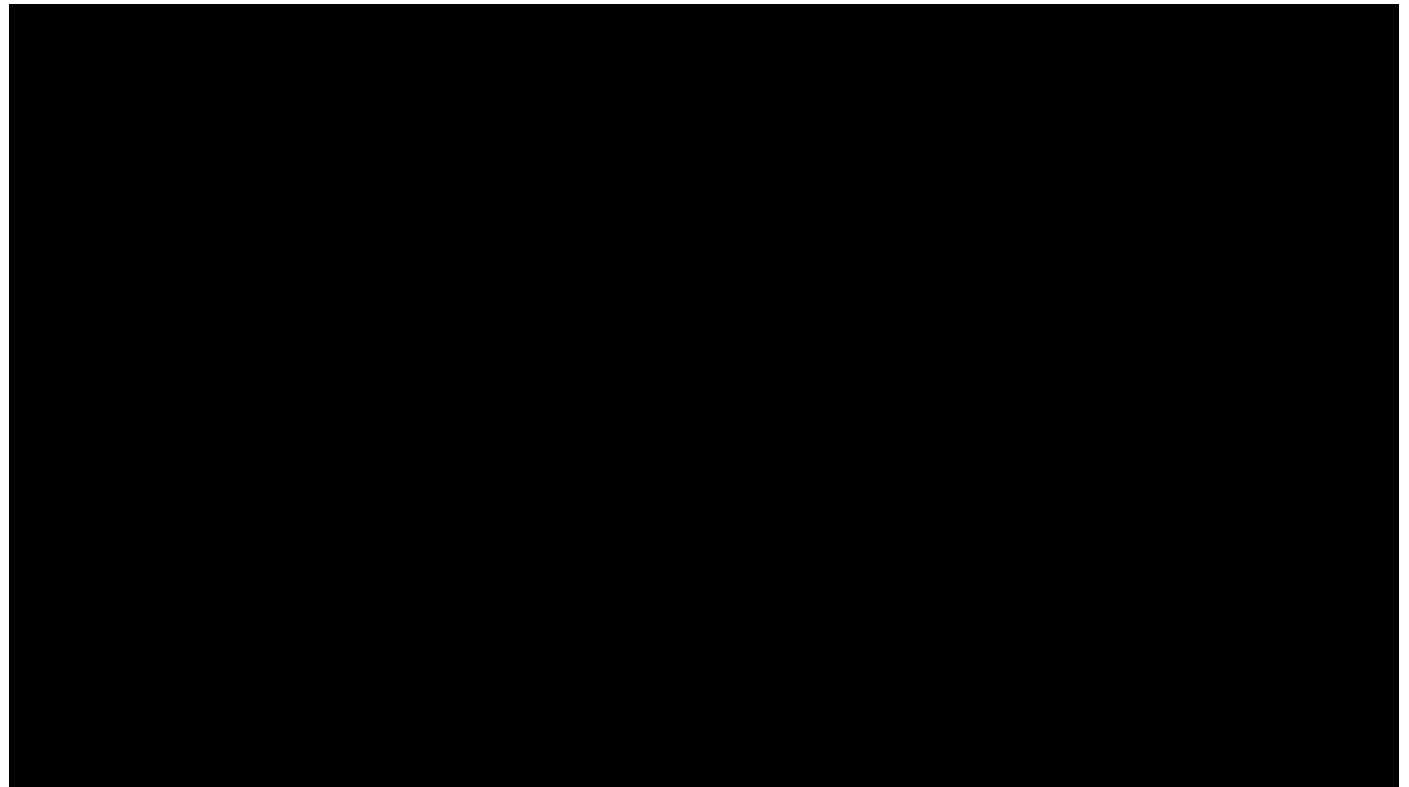
### Mini-quiz

15 Minutes

Let's put it all together and see design thinking in action.

In this video, Mirko Azis speaks to the basics of IBM Design Thinking (now called Enterprise Design Thinking). He presents the Keys to IBM Design Thinking, Hills, Playbacks, and Sponsor Users, and explains the Design Loop.

#### UNDERSTAND DESIGN THINKING IN 10 MINUTES



🔗 Video transcript (assets/MKPDKRNVJNW4YY7/Understand%20IBM%20Design%20Thinking%20in%2010%20minutes%20transcript.pdf)

### Key takeaways

- There are three principles of design thinking: focus on user outcomes, empower diverse teams, and restlessly reinvent.
- Design thinking uses the Loop to continuously understand users' needs and deliver outcomes. Teams use the Loop to try to solve an open-ended problem as they observe, reflect, and make.
- Everything is a prototype in design thinking, an unfinished product that can always be iterated and reinvented.
- The Keys are used to make design thinking work at scale. Hills align us across teams, Playbacks align teams over time, and Sponsor Users align us with our users' reality.
- Design thinking empowers teams to try more audacious ideas. That freedom inherently leads to more breakthrough outcomes and better ideas.

### Mini-quiz

Next, check your knowledge of design thinking with this five-question quiz!

Click **I've checked it out!** to get started.

