

Human-Centered Learning: Leveraging Best Practices from Software Design

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Bottom Line Up Front

We build learning management software at **Meridian Knowledge Solutions**. Our specific goal is to make it easy to administer complex training at scale while never losing focus on the learner.

We're here to tell you about how we design our software – used by millions of learners, instructional designers, administrators, and analysts because we believe our process could be helpful to you in instructional design.

A Common Challenge



Whether software or learning, we design for people. People learn and people use software.

To maximize individual and scale for groups, we believe we must:

1. Be open to new ways of understanding how best to reach our audience
2. Maintain a continual focus on improvement using quantitative & qualitative data
3. Organize and break down ideas efficiently

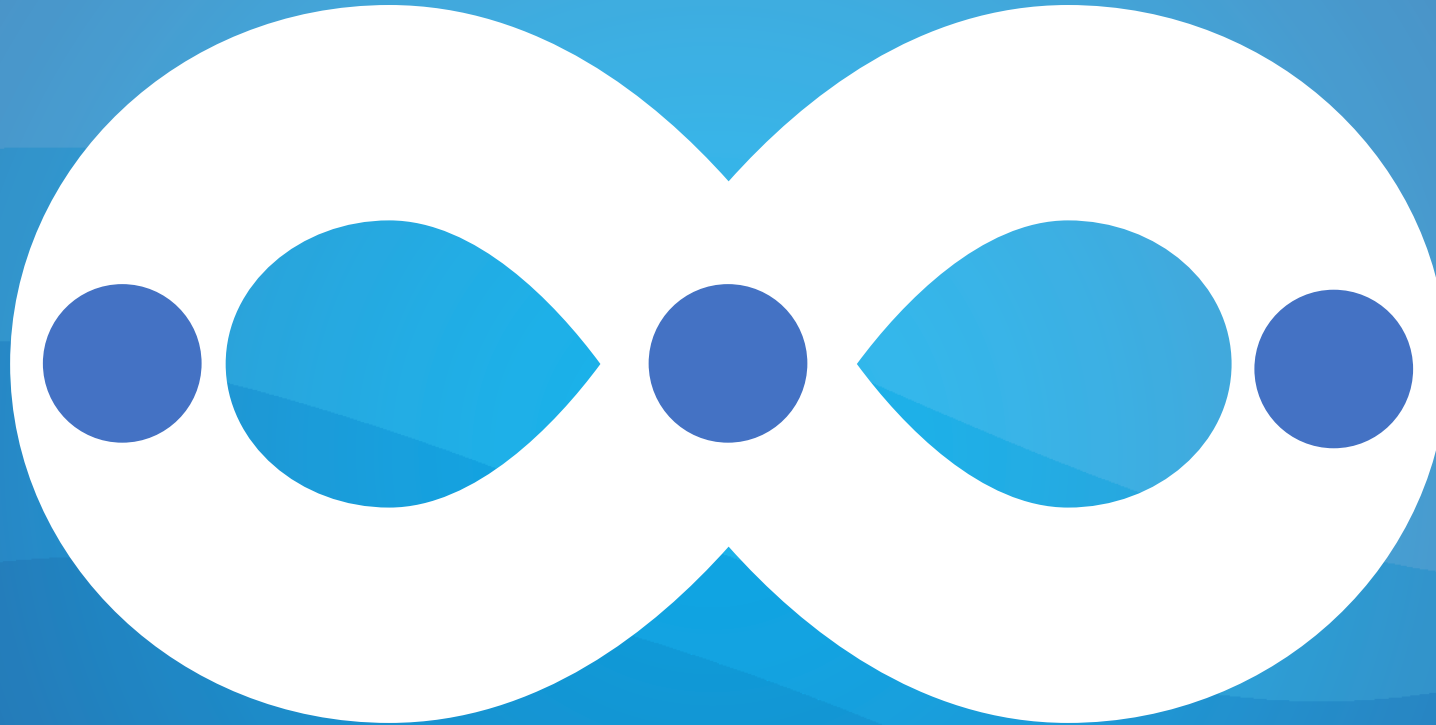
What is **Design Thinking**?

“Designers don’t try to search for a solution until they have determined the real problem, and even then, instead of solving **that problem**, they stop to consider a wide range of potential solutions. Only then will they finally converge upon their proposal.

This process is called **Design Thinking**.”

Don Norman, The Design of Everyday Things

Enterprise Design Thinking: The Loop



OBSERVE

Immerse yourself in the real world to get to know your users, uncover needs, learn the landscape, and test ideas.

REFLECT

Come together and form a point of view to find common ground, align the team, uncover insights, and plan ahead.

MAKE

Give concrete form to abstract ideas to explore possibilities, communicate ideas, prototype concepts, and drive real outcomes.

This is a
hexagon-free
space.

NO HEXAGONS!



The Enterprise
Design Thinking
Loop

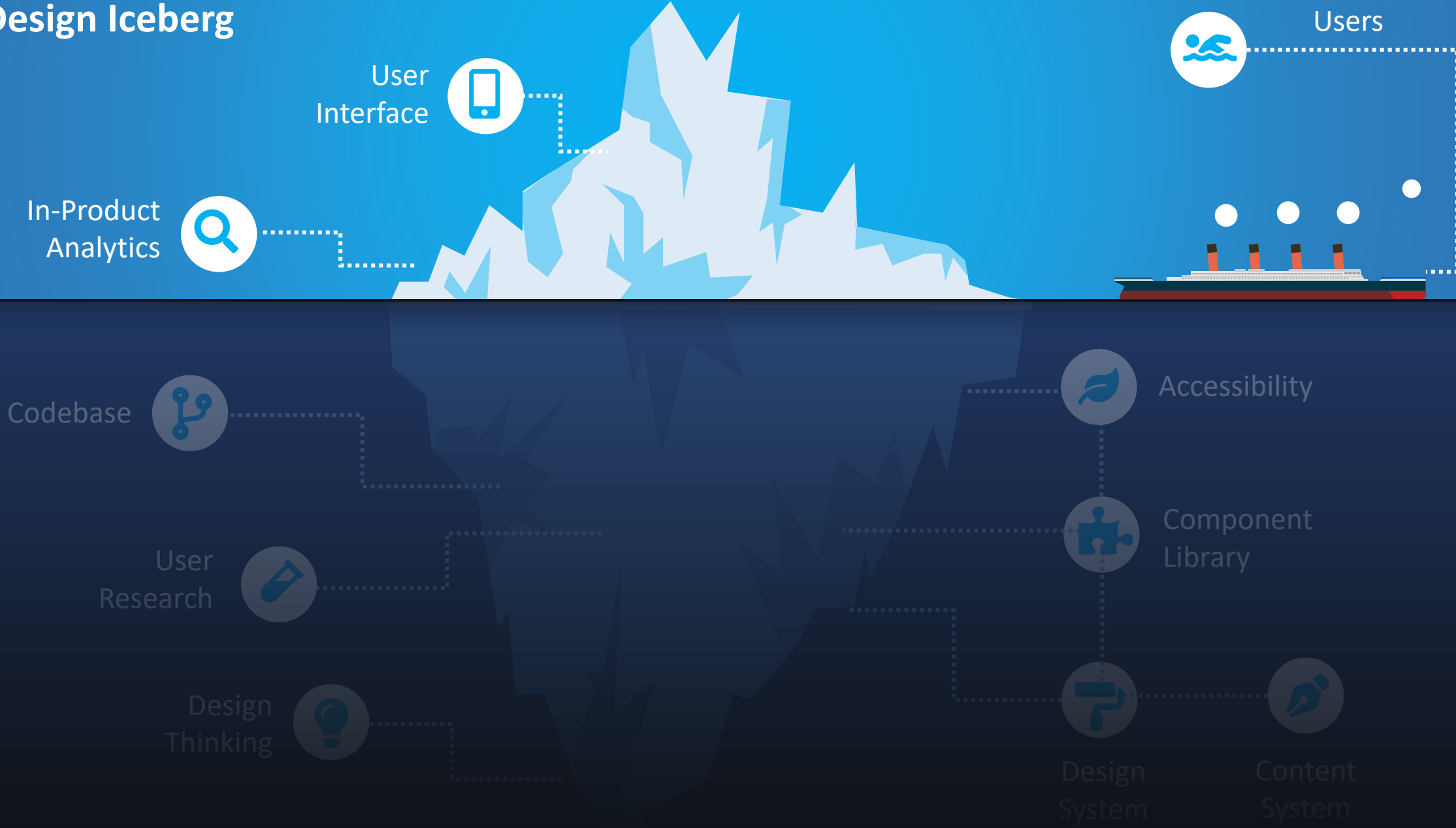
How do we apply **Design Thinking**?

This user-centered approach known as '**design thinking**' enables designers and others to address a wide range of complex business and social issues.

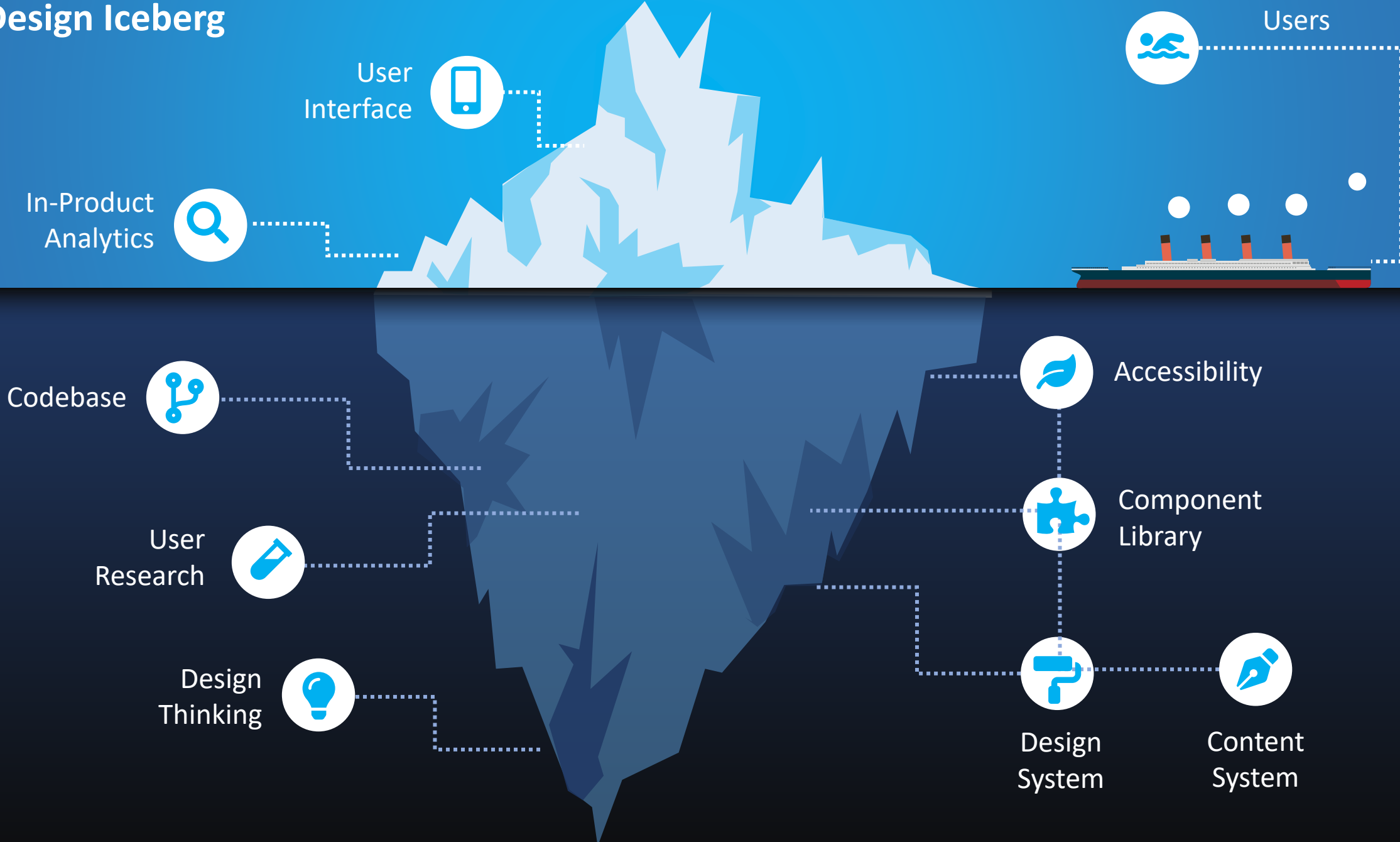
By establishing empathy with the user, designers are able to work toward outcomes that meet those needs more successfully.

IBM Design Thinking Field Guide

The Design Iceberg



The Design Iceberg



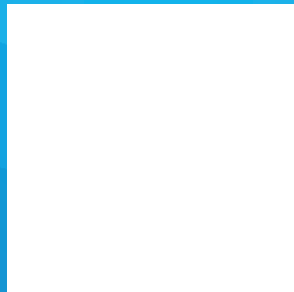
Enterprise Design Thinking: The Keys

Design Thinking is a **methodology applied to the design of innovative products and services**, whose main premise is focusing on the customer in order to detect their real needs, continual validation and iteration to offer exactly that solution which provides value



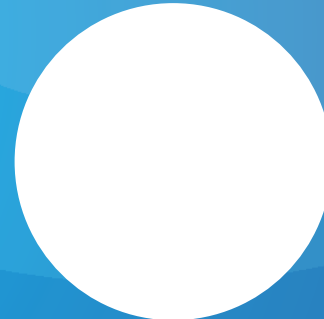
HILLS

You will sponsor a specific feature or “Hill” and see it all the way through from design to development!



PLAYBACKS

You’ll receive Playbacks of our progress along the way. This is your opportunity to share your feedback!



SPONSOR USERS

As a sponsor user, you will shape the direction of our product. Your feedback is critical to our success!

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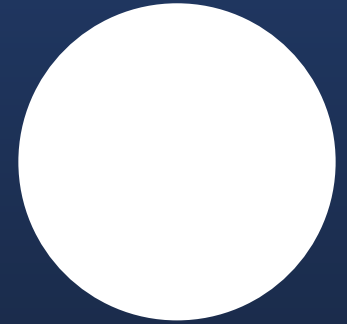
What to expect
in a Design
Thinking
Workshop

Enterprise Design Thinking: Sponsor Users

Sponsor Users are *real* people with *real* opinions. They're the *actual users* we build our product with!

Sponsor Users help surface many of the problems that we are trying to solve in a Hill.

Sponsor Users are *critical* in validating the solutions that we are envisioning, designing, and implementing.



SPONSOR USERS

As a sponsor user, you will shape the direction of our product. Your feedback is critical to our success!

EXPECTED OUTCOME:

See a feature to completion from idea to design to implementation!

Design Thinking Workshops

**As-Is,
To-Be...**

**Empathy
Maps**

**Hills
Workshop**

**Needs
Statements**

**Story
Boards**

**Feedback
Grids**

What to expect in
a Design Thinking
Workshop:

1 Hour Sessions

2 Design Exercises
per Session

3 Hills (Goals)

HILLS WORKSHOP:

Create three (and *only* three) hills.

Hills are composed of a “Who” (a specific user or group of users), a “What” (a specific action or enablement), and a “Wow” (a measurable, market differentiator).

WHO:

A specific user or group of users

WHAT:

A specific action or enablement

WOW:

Measurable market differentiator

It's often challenging for teams to focus on three (and only three) Hills because this might mean that very valid ideas are not being included. It's important to realize that additional Hills can be addressed in future releases.



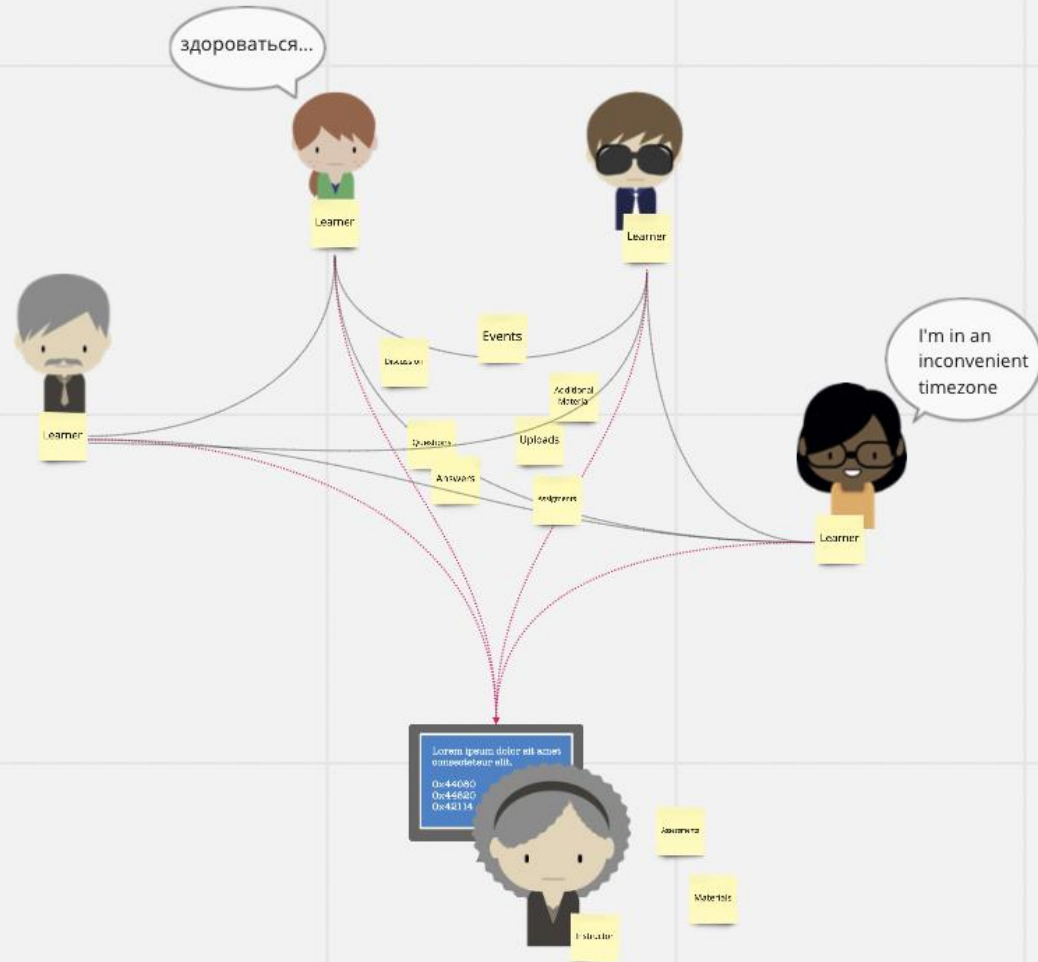
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EXPECTED OUTCOME:

3 Hills (Goals)

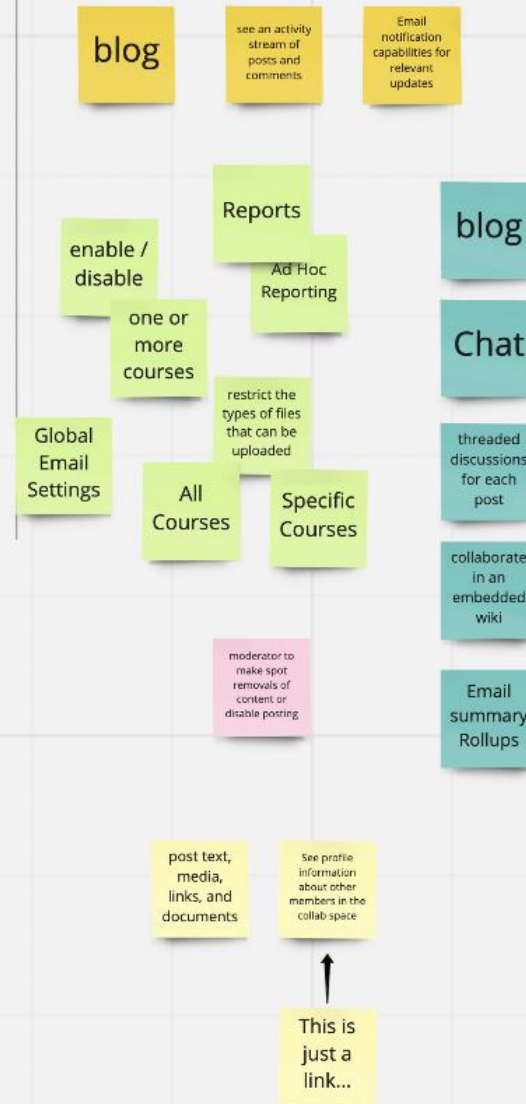
Collaborative Learning



WHO



WHAT



WOW!



Example Hill: Instructor Hill

Instructors can post **text, images, videos, or files** to update **participants** on the latest information.

WHO:

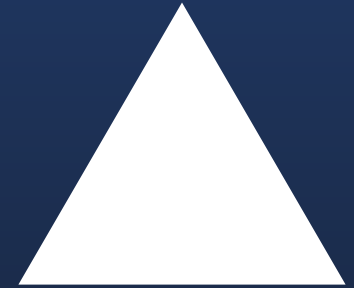
Instructors

WHAT:

Can post **text, images, videos, or files**

WOW:

to update **participants** on the latest information!



HILLS

As a sponsor user, you will sponsor a specific feature or “Hill” and see it all the way through from design to development!

EXPECTED OUTCOME:

3 Hills (Goals)

Scenario Mapping (As-Is/To-Be)

As-is Scenario Maps help to document collective understanding of user workflows and are best used as precursors to exploring new ideas.

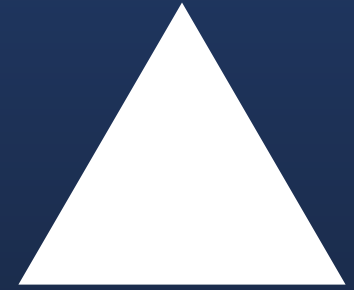
To-be Scenario Maps tell the story of a better experience for your user

As-Is, To-Be Scenario Map

Doing

Thinking

Feeling



Scenario Mapping

The solutions presented in a To-be Scenario Map should ideally be correlated to the “pain points” identified in the As-is.

EXPECTED OUTCOME:

As-Is &
To-Be

Use this when you have a specific situation/ circumstance you want to improve.

What experience are you trying to improve/ change?
Instructional designers and/or instructors have a need to create tests that assess knowledge gained. These need to be made available to the right audiences at the right time, and then someone needs to look at the data to see gaps in learning and/or problems with the test itself.

Know your user. Create proto-personas for made-up people who fit your user's profile. This helps keep think critically your users' needs and motivations.

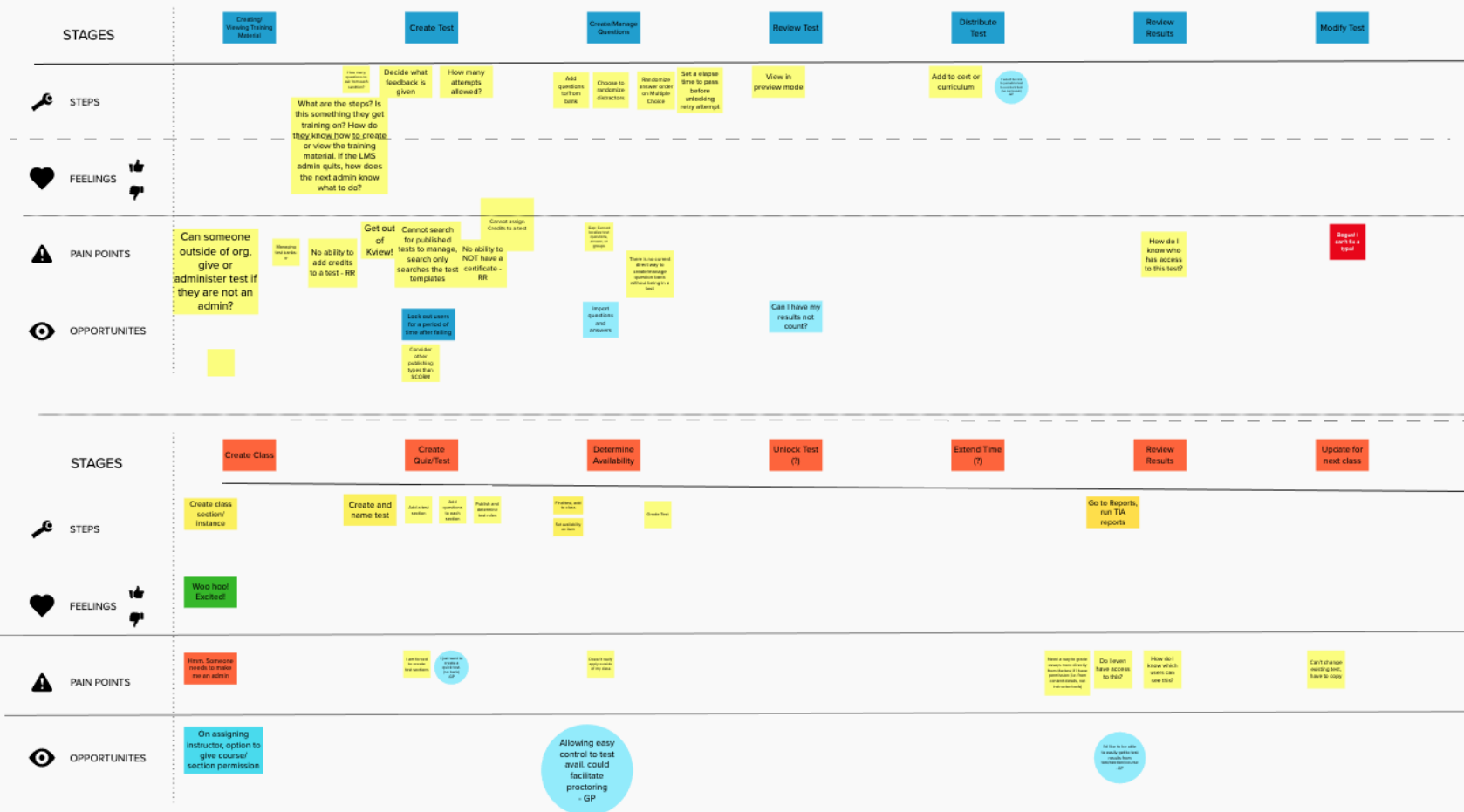
Persona 1 should be your primary persona, i.e. your ideal user



Persona 2 should be a different profile from Persona 1 so you can explore different perspectives.



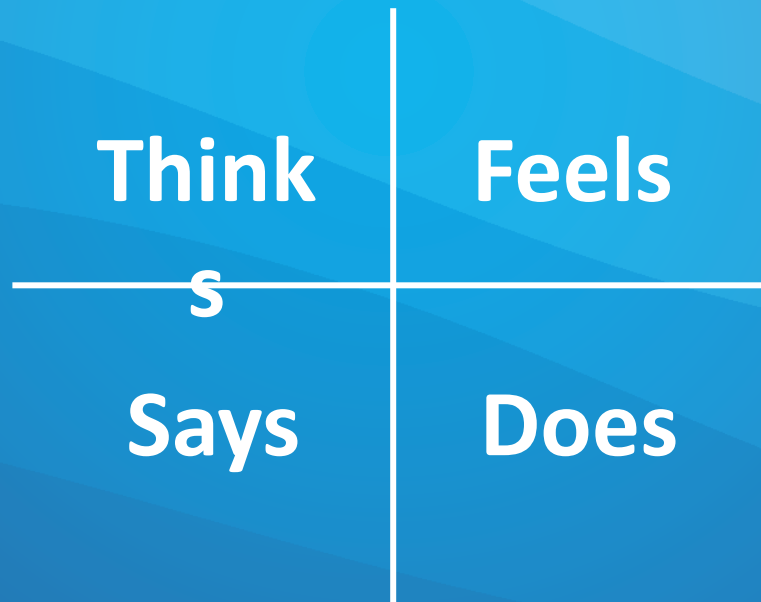
Define the different stages of the situation you've defined - Stage 1 being the first thing that happens chronologically. Fill out the columns below based on the personas you defined in the previous step.



Empathy Mapping

As-is Scenario Maps help to document collective understanding of user workflows and are best used as precursors to exploring new ideas.

Empathy Map



Scenario Mapping

The solutions presented in a To-be Scenario Map should ideally be correlated to the “pain points” identified in the As-is.

EXPECTED OUTCOME:

Empathy Map

Learner

Thinks

Feels

User

Points

Do I have to participate?

How do I compare to my colleagues

This is not relevant

Nervous about working with my classmates

Confidence

Is my english good enough?

Like a Winner

Nervous to Calaborate

Concerned about Peer Judgment

Will someone answer if I ask?

This training is really relevant!

I can't see or hear

What can other people see?

I don't understand the materials

Better save a copy of it

I have to do this training

What time zone do I need to be in?

Has someone already answered that?

Who are these other people?

Can someone help me with this?

Convos

What to do about technical difficulties?

Do this without time constraints

Meet at a certain time

I am forced to do this

DM each other

Does

Share Docs

Co laborate

Discussion Group

Answer Questions

Post Questions

Says

Instructor

Thinks

Who are these people?

Should not allow upload of video etc

Can I control what I have?

Feels

These people are idiots

Concerned about offensive content

I am concerned about inappropriate content

User

Ten Points to Gryffindor!

Announcement

Consensus Building

Reminder

Solicit Feedback

Moderate Content

Curate Content

Moderate Discussion

Post Course Materials

Reviews Content

Says

Does

Enterprise Design Thinking: Playbacks

Playback each phase of the design process.

A real, human story should be at the core of every Playback. Show how your tool or concept solves a problem in your user's real-world workflow. You'll receive Playbacks of our progress along the way. This is your opportunity to share your feedback!



1 **3x**
Hour Meetings



PLAYBACKS

EXPECTED OUTCOME:

You'll receive Playbacks of our progress along the way. This is your opportunity to share your feedback!

Enterprise Design Thinking: Heuristic Review

We've created a separate, client-facing Usability Survey, based on the Meridian Heuristic Evaluation. This survey link may be shared out to anyone

1. Visibility of System Status
2. Match Between System and the Real World
3. User Control and Freedom
4. Consistency and Standards
5. Error Prevention
6. Recognition Rather Than Recall
7. Flexibility and Efficiency of Use
8. Aesthetic and Minimalist Design
9. Recognize, Diagnose, and Recover From Errors
10. Help and Documentation



Heuristic Review

EXPECTED OUTCOME:

Include ALL users in your design process by offering them the ability to review your content using this template!

Let's do an Empathy Map Right now!

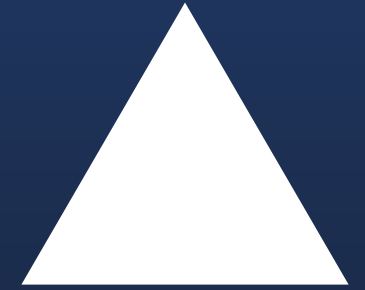
Thinks

Says

Instructional
Designer

Feels

Does



Empathy Mapping

The solutions presented in a To-be Scenario Map should ideally be correlated to the “pain points” identified in the As-is.

EXPECTED OUTCOME:

Empathy
Map

The background of the slide features a series of horizontal, wavy bands in various shades of blue, creating a sense of depth and movement. The colors range from a light, airy blue at the top to a deeper, more saturated blue at the bottom.

Questions?

Download these Design Thinking resources to help you design!

You may download all of the resources discussed in this session on Meridian's website!

<https://www.meridianks.com/human-centered-learning-leveraging-best-practices-from-software-design/>

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