STRATEGIC DESIGN THINKING PRINCIPLES

PROTOTYPING
▶ Accelerate decisions
by making ideas tangible

Prototyping Exercise:

How to translate empathy research in a tangible prototype

By the Course Coaching Team

HPI Hasso Plattner Institut
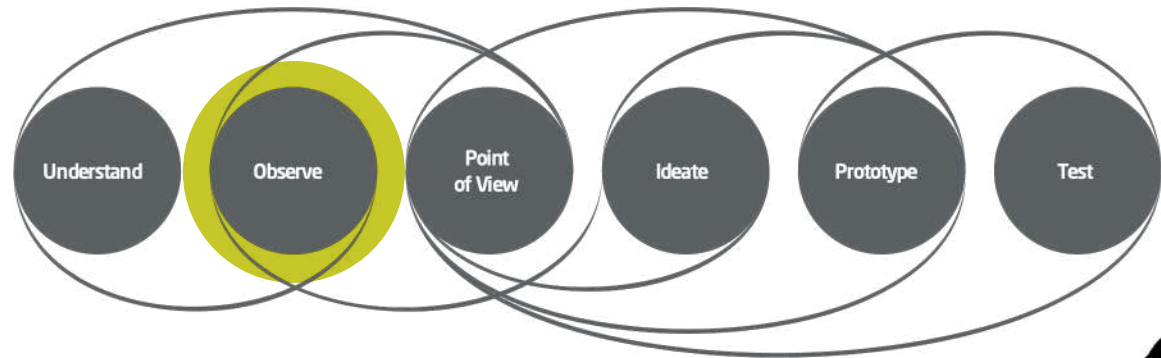HPI Academy · Education for Professionals

Course challenge:

*Redesign the learning experience
in a world where there are no schools.*

Where we have left of ...

STRATEGIC DESIGN THINKING PRINCIPLES

EMPATHY

▶ Step into your user's shoes to get game-changing inspiration

Understand — Observe — Point of View — Ideate — Prototype — Test

Documentation of Empathy exercise

EMPATHY TEMPLATE

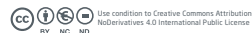» Observe and connect emotionally to a user – conduct an interview.
You want to discover needs and motivations regarding learning outside classical school situations.

PREPARATION How to prepare for your interview

1. First, chose a person that you can talk to – ideally face-to face, but a video call is also good.

2. Schedule an appointment, announce your topic and ask for approx. 15 minutes of their time.

3. Before the interview, remind yourself that you want to discover something you don't know yet. You want to activate your mirror neurons. Watch attentively. Connect emotionally to your interview partner. Ask "why" when facts are told to dig into emotions. Let the other have at least 80% of the conversation time.

STEPS How to structure your conversation

1. Introduce your topic and thank your interview partner for their time.

2. Ask about the last time the other had a remarkable good or bad learning experience outside the classical school context.

3. Let the other tell their concrete experiences, ask "why " and dig deeper when you spot emotions, tensions or something that is surprising for you.

4. Take notes during the interview, but really focus on the other: observe mood-changes and notice topics and expressions that are repeated.

5. After latest 20 minutes, end the conversation and thank the other.

DOCUMENTATION How to capture you findings and sort your empathy data

First name, age, occupation of interview partner:
Dennis, 30 y/o, Project Manager at the HPI Academy

What did surprise you?
Doing an online course in a home office means there are "two lives colliding".

Most positive quote:
"I could time the course myself."

Most critical quote:
"You have to make sure not to annoy anyone."

Functional needs:
Organization of quiet and undisturbed workspace between Dennis and his girlfriend.

Emotional needs:
Reducing anxiety of interrupting a workflow of another person and getting constantly disturbed by his girlfriend.

Your name and contact information optional

Miriam Steckl
Learning Experience Manager
miriam.steckl@hpi-academy.de

HPI Hasso Plattner Institut
HPI Academy · Education for Professionals

HPI Hasso Plattner Institut
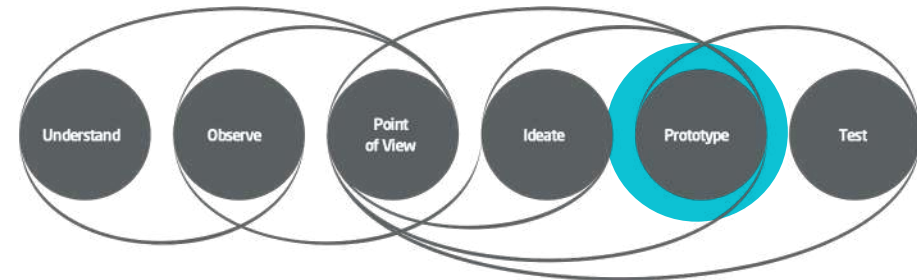HPI Academy · Education for Professionals

Prototyping in the Design Thinking Process

STRATEGIC DESIGN THINKING PRINCIPLES

PROTOTYPING

▶ Accelerate decisions by making ideas tangible

Understand Observe Point of View Ideate Prototype Test
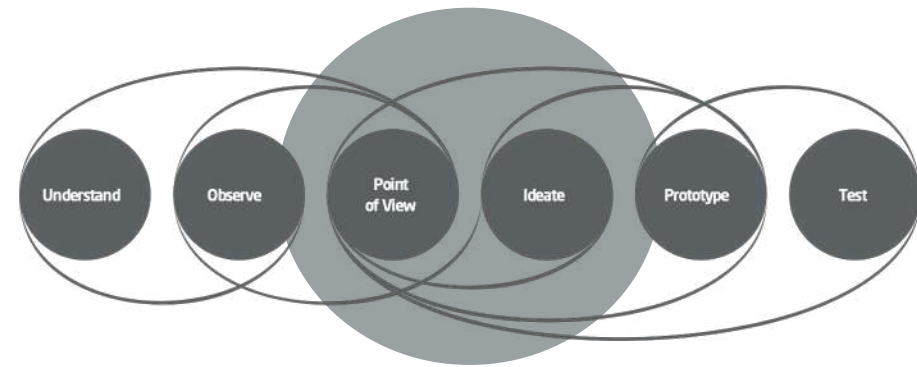
HPI Hasso Plattner Institut

Prototyping in the Design Thinking Process

STRATEGIC DESIGN THINKING PRINCIPLES

PROTOTYPING

▶ Accelerate decisions
by making ideas tangible

Understand   Observe   Point of View   Ideate   Prototype   Test

Prototyping Template 1

PROTOTYPING TEMPLATE 1

○○○○●○○

» **Translate your observation of a user's need.**
First you want to come up with ideas how to help the user to fulfill the observed need.

TRANSLATION

Formulate your How-Might-We-Question.

How might we help Name of your user
to Need or quote that you want to find an answer to. Choose from your interview documentation what inspired you the most.

Who is an extreme performer in what you want to achieve for the user?
Think of other fields of life.

Come up with three ideas to solve the How-Might-We-Question.
How would the extreme performers solve the problem? Take it as an inspirational springboard.

Select one idea and move on with the idea description.

IDEA

Name of the idea

Description Product, process, service, …

Key function for user Helps the user to better (functional need) …

Emotional benefit So that the user feels (emotional need) …

Your name and contact information optional

HPI Hasso Plattner Institut
HPI Academy · Education for Professionals

HPI Hasso Plattner Institut
HPI Academy · Education for Professionals

How Might We Question

PROTOTYPING TEMPLATE 1

» **Translate your observation of a user's need.**
First you want to come up with ideas how to help the user to fulfill the observed need.

TRANSLATION

Formulate your How-Might-We-Question.

How might we help Name of your user
to Need or quote that you want to find an answer to. Choose from your interview documentation what inspired you the most.

How Might We Question

How might we help *Name of your user*

to *need or quote that you find an answer to.
Choose from your interview documentation
what inspired you most.*

HPI Hasso Plattner Institut
HPI Academy · Education for Professionals

How Might We Question

How might we help *Name of your user*

to *need or quote that you find an answer to. Choose from your interview documentation what inspired you most.*

How Might We Question

How might we help **Dennis**

to *need or quote that you find an answer to.*
Choose from your interview documentation
what inspired you most.

Documentation of Empathy exercise

EMPATHY TEMPLATE

○○●○○○○

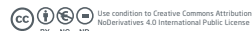» Observe and connect emotionally to a user – conduct an interview.
You want to discover needs and motivations regarding learning outside classical school situations.

PREPARATION How to prepare for your interview

1. First, chose a person that you can talk to – ideally face-to face, but a video call is also good.

2. Schedule an appointment, announce your topic and ask for approx. 15 minutes of their time.

3. Before the interview, remind yourself that you want to discover something you don't know yet. You want to activate your mirror neurons. Watch attentively. Connect emotionally to your interview partner. Ask "why" when facts are told to dig into emotions. Let the other have at least 80% of the conversation time.

STEPS How to structure your conversation

1. Introduce your topic and thank your interview partner for their time.

2. Ask about the last time the other had a remarkable good or bad learning experience outside the classical school context.

3. Let the other tell their concrete experiences, ask "why " and dig deeper when you spot emotions, tensions or something that is surprising for you.

4. Take notes during the interview, but really focus on the other: observe mood-changes and notice topics and expressions that are repeated.

5. After latest 20 minutes, end the conversation and thank the other.

DOCUMENTATION How to capture you findings and sort your empathy data

First name, age, occupation of interview partner:

Dennis, 30 y/o, Project Manager at the HPI Academy

What did surprise you?

Doing an online course in a home office means there are "two lives colliding".

Most positive quote:

"I could time the course myself."

Most critical quote:

"You have to make sure not to annoy anyone."

Functional needs:
Organization of quiet and undisturbed workspace between Dennis and his girlfriend.

Emotional needs:
Reducing anxiety of interrupting a workflow of another person and getting constantly disturbed by his girlfriend.

Your name and contact information optional

Miriam Steckl
Learning Experience Manager
miriam.steckl@hpi-academy.de

HPI Hasso Plattner Institut
HPI Academy · Education for Professionals

Emotional need:
Reducing anxiety of interrupting the workflow of his girlfriend and getting constantly disturbed by himself.

HPI Hasso Plattner Institut
HPI Academy · Education for Professionals

How Might We Question

How might we help **Dennis**
to **reduce his anxiety of interrupting the workflow of his girlfirend and of getting constantly disturbed himself?**

Creative Technique: Extreme Performers

PROTOTYPING TEMPLATE 1

» **Translate your observation of a user's need.**
First you want to come up with ideas how to help the user to fulfill the observed need.

TRANSLATION

Formulate your How-Might-We-Question.

How might we help Name of your user

to Need or quote that you want to find an answer to. Choose from your interview documentation what inspired you the most.

Who is an extreme performer in what you want to achieve for the user?
Think of other fields of life.

Creative Technique: Extreme Performers

EXTREME PERFORMERS

NEED: RAPID TEAM COMMUNICATION

NEED: BELONGING TO A GROUP
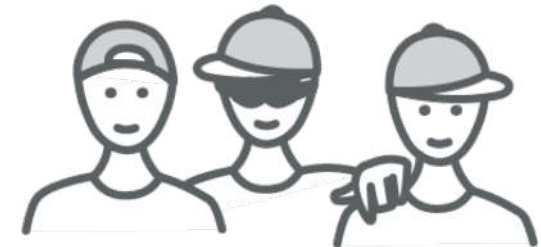
Who is doing well in what you want to achieve?

Creative Technique: Extreme Performers

How might we help **Dennis**
to **reduce his anxiety of interrupting the workflow of his girlfirend and of getting constantly disturbed himself?**

**Who is doing
well in what
you want to
achieve?**

Creative Technique: Extreme Performers

Ideation

Come up with three ideas to solve the How-Might-We-Question.

How would the extreme performers solve the problem? Take it as an inspirational springboard.

Select one idea and move on with the idea description.

HPI Hasso
Plattner
Institut
HPI Academy • Education for Professionals

Ideation

How might we help **Dennis**
to **reduce his anxiety of interrupting the workflow of his girlfirend and of getting constantly disturbed himself?**

1. Pop up tent for living room

2. Curtain for own cabin
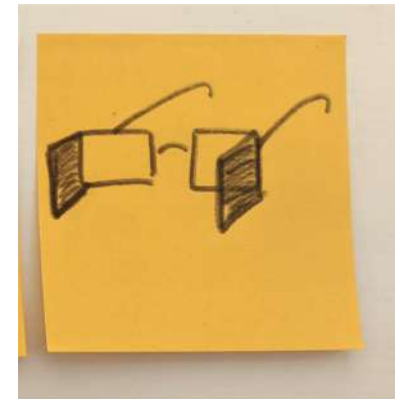
3. Glasses with blinders

Idea Description

IDEA
Name of the idea

Description Product, process, service, ...

Key function for user Helps the user to better (functional need) ...

Emotional benefit So that the user feels (emotional need) ...

Your name and contact information optional

Name of the idea Pop up office-tent

Description A tent made of soundproof material, which can be popped up in the living room and folded together.

Key function for the user It gives Dennis an unshared small space within one room of his apartment. He can put the office-tent where ever he wants his small working place to stand in his apartment and his girlfriend can still work within one room.

Emotional benefit It helps Dennis feeling secure, in peace and being undisturbed and ensuring him to not annoy his girlfriend while working.

Prototyping Template 2

PROTOTYPING TEMPLATE 2

○○○○●○

» Make your idea tangible.
Build an interactive prototype that fulfills the user's need.

PROTOTYPING How to make the hypothesis of a user need tangible

Build a quick prototype of your described idea.
Stick a photo of it here.

USER JOURNEY

Draw a comic storyboard in four steps of how the user will interact with your prototype.

Your name and contact information optional

HPI Hasso Plattner Institut
HPI Academy · Education for Professionals

HPI Hasso Plattner Institut
HPI Academy · Education for Professionals

Prototyping Template 2

USER JOURNEY

Draw a comic storyboard in four steps of how the user will interact with your prototype.

1. Situation / User
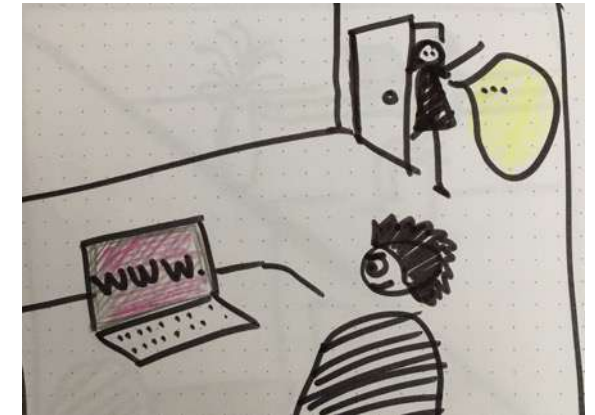
2. Problem

3. Prototype

4. Benefit

Prototyping Template 2
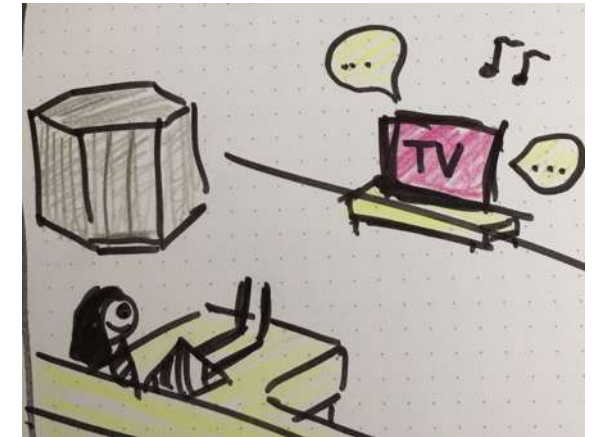
1. Situation / User

2. Problem

3. Prototype

4. Benefit

PROTOTYPING

▶ Accelerate decisions
by making ideas tangible

Prototyping Exercise

Have fun

and share your learnings with the community!

By the Course Coaching Team

HPI | Hasso Plattner Institut

HPI Academy • Education for Professionals

For internal use only

HPI Hasso Plattner Institut

HPI Academy · Education for Professionals

Hasso-Plattner-Institut Academy
August-Bebel-Str. 88
14482 Potsdam
Germany

Phone: +49-331-5509-565
Fax: +49-331-5509-128
Email: info@hpi-academy.de

www.hpi-academy.de