

SYSTEMS THINKING

► Manage complexity by
interrelated actions

Systems Thinking Exercise:

How to test your prototype in the needs system

By the Course Coaching Team

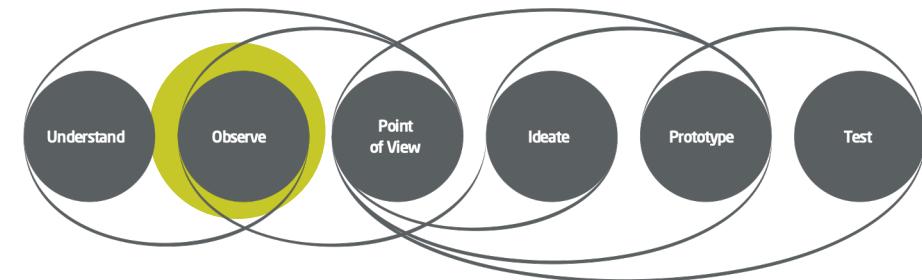
Course challenge:
*Redesign the learning experience
in a world where schools do not exist.*

Where we have left off ...

STRATEGIC DESIGN THINKING PRINCIPLES

EMPATHY

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

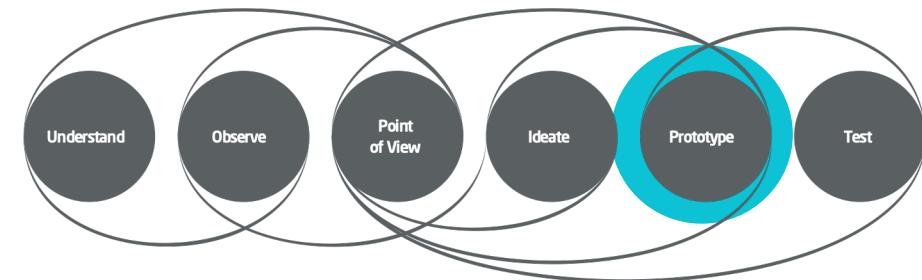


Where we have left off ...

STRATEGIC DESIGN THINKING PRINCIPLES

PROTOTYPING

- ▶ Accelerate decisions by making ideas tangible

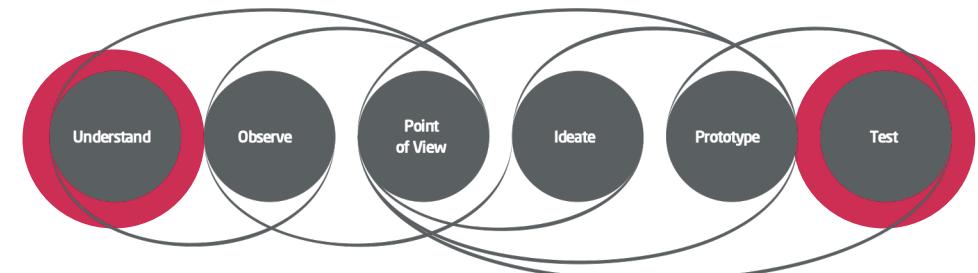


Systems Thinking in the Process

STRATEGIC DESIGN THINKING PRINCIPLES

SYSTEMS THINKING

► Manage complexity by interrelated actions



Systems Thinking exercise

STAKEHOLDER MAP

Module 3

» Test your prototyped idea in the needs system.

You want to get feedback from stakeholders and users to your initial idea.

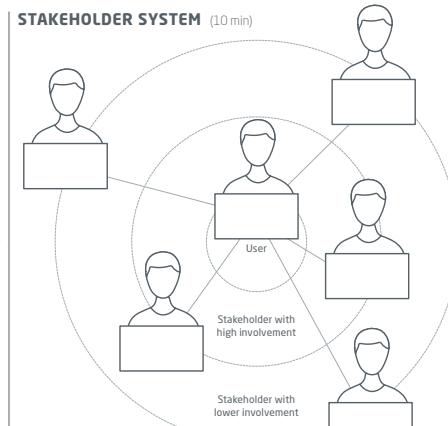
PREPARATION

1. Think of your challenge system. Fill out the Stakeholder System in order to see the different key players within.
2. Think about possible relations between the stakeholders (influence, decision taking, ...)
3. Recruit three testers: two different key players and one initial user to test your prototype with. Ask them for 10 minutes of their time.
4. Have (a photo of) your prototype ready to show.
5. Fill in Interactive Testing template with the photos of your Comic Storyboard.

INTERACTIVE TESTING STEPS (20 min)

1. Introduce the challenge and thank the testers for their time.
2. Present your idea by leading through the Comic Storyboard.
3. Show (a photo of) your prototype.
4. Then ask for likes, dislikes, open questions and ideas. Fill in the Testing Feedback.
5. After ideating together, draw two more sketches to fill in the blanc steps. Integrate the co-created sketches into step 3. and 4. to complete your Comic Storyboard.

Go through the Interactive Testing steps with each of the three testers.



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INTERACTIVE TESTING

Module 3

» Test your prototyped idea in the needs system.

You want to get feedback from stakeholders and users to your initial idea.

CO-CREATION

Insert the sketches of your Comic Storyboard.

1. Situation/User

2. Before/Problem

3. During/Using Solution

Leave open for Co-Creation

4. After/Benefit

Leave open for Co-Creation

TESTING FEEDBACK

Fill in the Feedback Grid.

What worked:

What could be improved:

Questions:

New ideas:

Your name and contact information optional



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Systems Thinking exercise

STAKEHOLDER MAP

Module 3



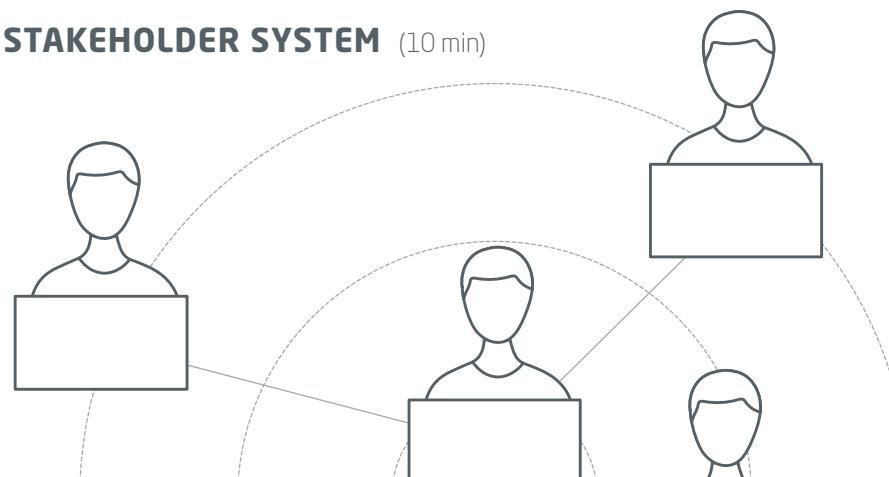
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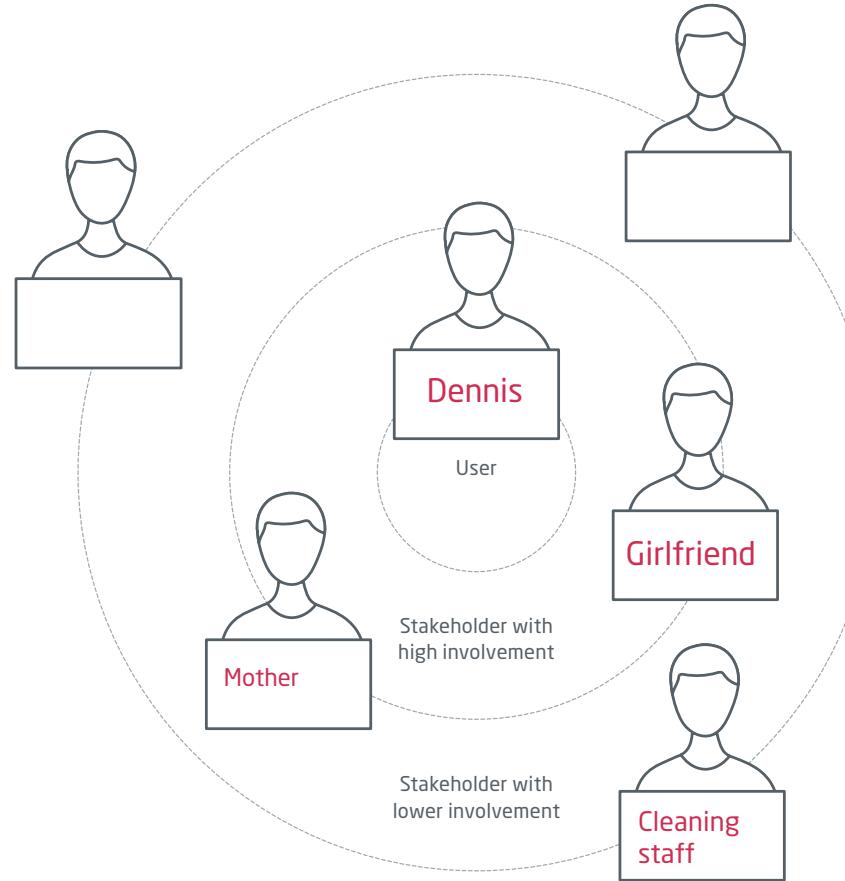
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STAKEHOLDER SYSTEM (10 min)

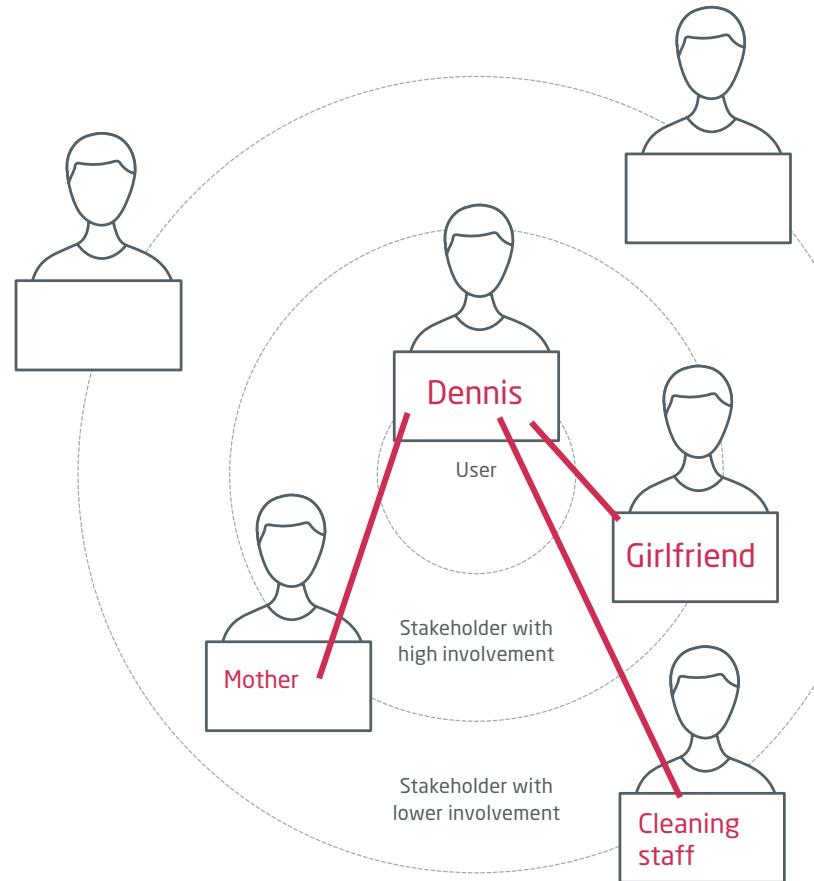


Stakeholder System



Who else in the user's system is important for the success of your solution?

Stakeholder System



Relations in regards to learning

Girlfriend: Learning concentration

Mother: Learning image

Cleaning staff: Service performance

Systems Thinking exercise

STAKEHOLDER MAP

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Interactive Testing

COMIC STORYBOARD

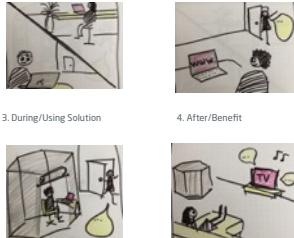
» Make your idea tangible.
Build an interactive prototype that fulfills the user's need.

PROTOTYPING (15 min)
Build a quick prototype of your described idea.
Insert a photo of it here.



USER JOURNEY (15 min)
Draw a Comic Storyboard in four steps of how the user will interact with your prototype.

1. Situation/User
2. Before/Problem
3. During/Using Solution
4. After/Benefit



Your name and contact information optional
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Module 2

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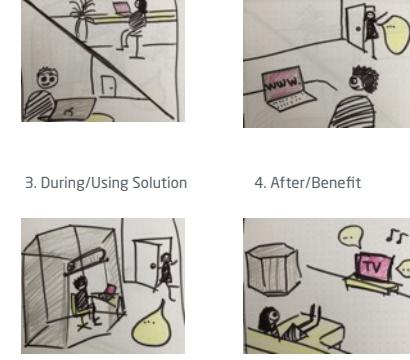


INTERACTIVE TESTING

» Test your prototyped idea in the needs system.
You want to get feedback from stakeholders and users to your initial idea.

CO-CREATION
Insert the sketches of your Comic Storyboard.

1. Situation/User 2. Before/Problem 3. During/Using Solution 4. After/Benefit



Leave open for Co-Creation

TESTING FEEDBACK
Fill in the Feedback Grid.

What worked:	What could be improved:
Questions:	New ideas:

Your name and contact information optional

Module 3

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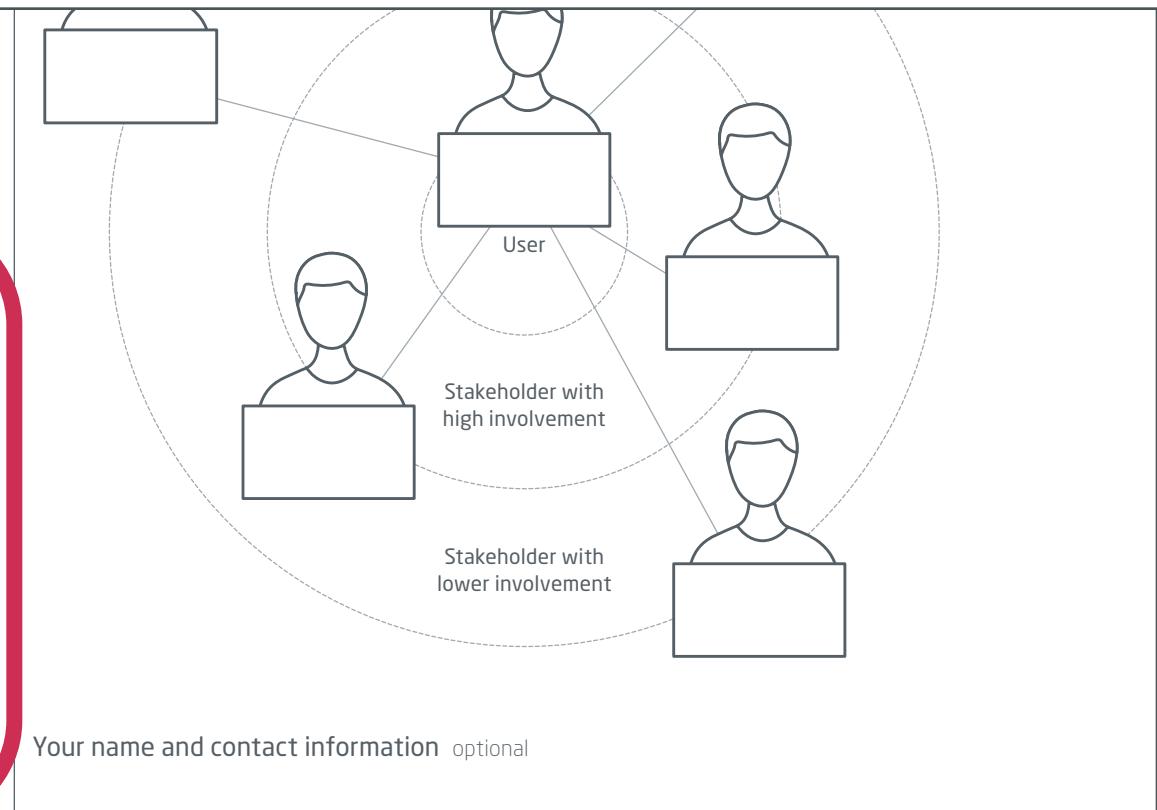
Systems Thinking exercise

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Go through the Interactive Testing steps with each of the three testers.



Short demo for Interactive Testing

Course challenge:

*Redesign the learning experience
in a world where schools do not exist.*

Interactive Testing

INTERACTIVE TESTING

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You want to get feedback from stakeholders and users to your initial idea.

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Module 3 

TESTING FEEDBACK
Fill in the Feedback Grid.

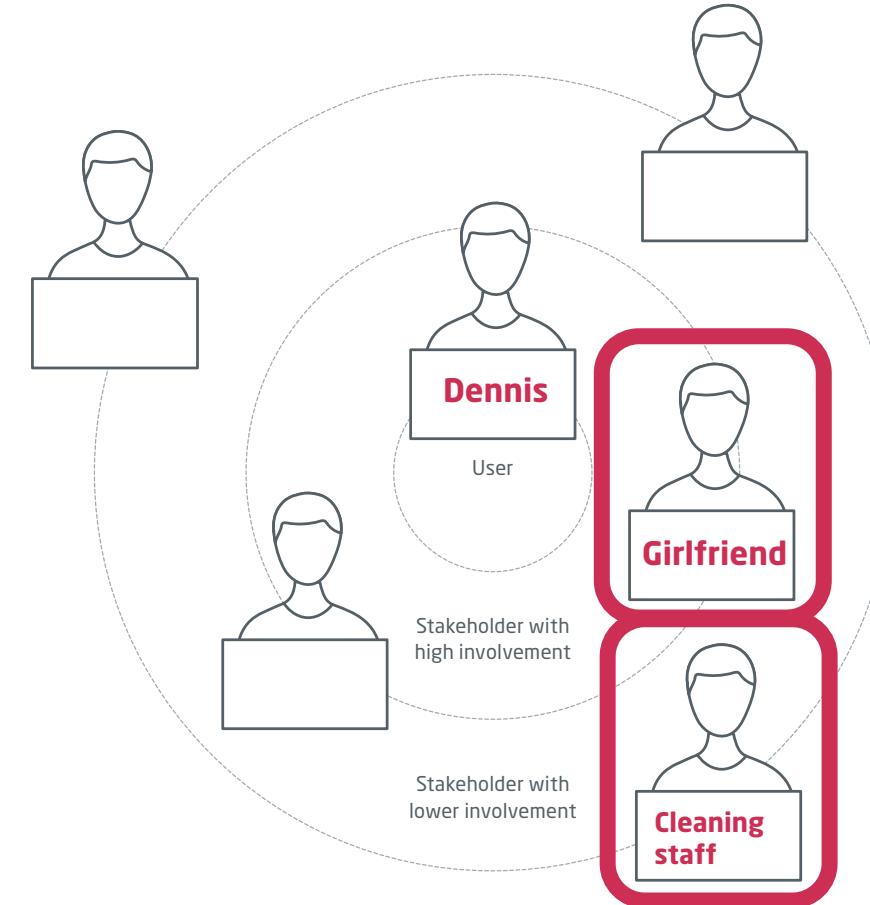
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Interactive Testing

INTERACTIVE TESTING

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4. After/Benefit


TESTING FEEDBACK

Fill in the Feedback Grid.

What worked:	What could be improved:
Visually not distracted Probably able to concentrate Desk mess inside tent	Small - more space Dark - natural light Claustrophobia?
Questions:	New ideas:
How can Dennis leave his stuff in the tent and still fold it together like a briefcase that he can put in a corner after a working day?	Mirrors on the inside to "fake" more space Place office-tent next to a window to look outside. Straps like in a picnic basket to fold it together while keeping his stuff inside

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Module 3 

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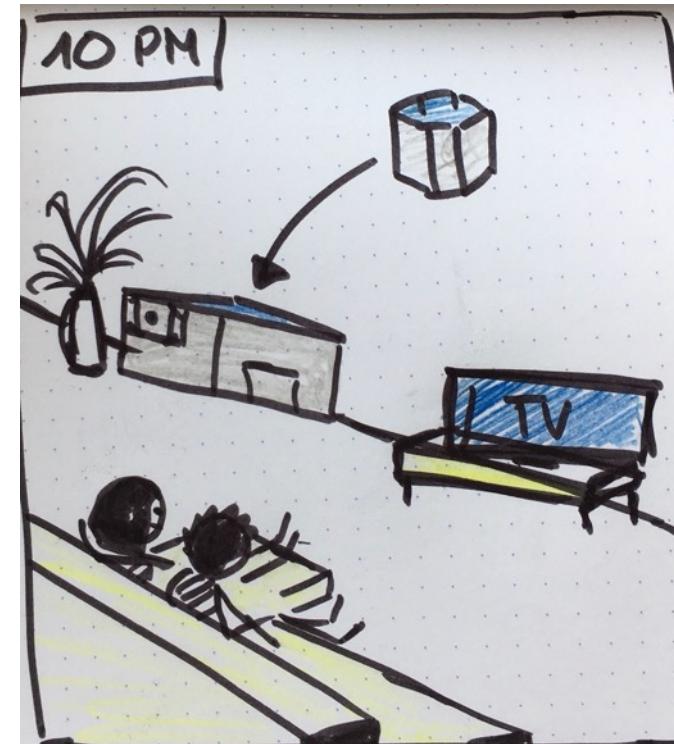
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Co-Creation

3. During/Using Solution
Leave open for Co-Creation



4. After/Benefit
Leave open for Co-Creation



Interactive Testing

INTERACTIVE TESTING

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Module 3 

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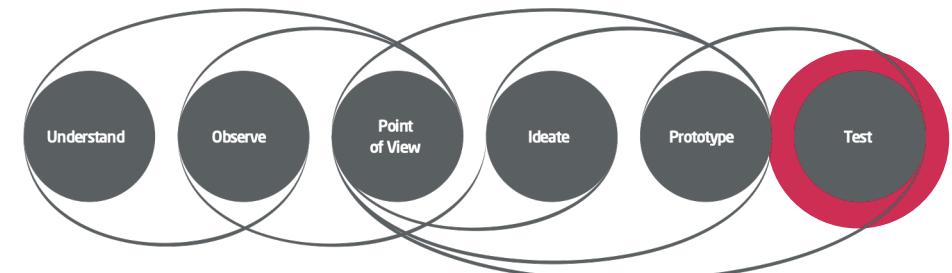
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Systems Thinking in the Process

STRATEGIC DESIGN THINKING PRINCIPLES

SYSTEMS THINKING

► Manage complexity by interrelated actions



Documentation Block 1



Iterated Idea

Module 1



Module 2



Module 3



IDEA DOCUMENTATION BLOCK 1

» Review your idea after testing it in the system.

You want to incorporate the feedback from stakeholders and users by adding details and/or modifications to your initial idea.

For documentation, paste your How-Might-We-Question from the Idea Springboard template here.

| Draw a quick sketch of your iterated idea and insert a photo of it here.

ITERATED IDEA (15 min)

Name of the iterated 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

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Solution

Module 4



Module 5



Module 6



Module 7



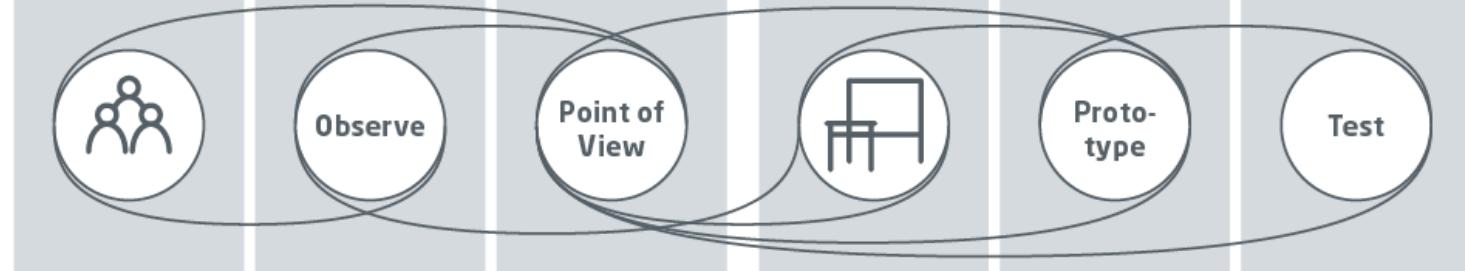
Module 8



Module 9



Good Solution



Idea Documentation Block 1

IDEA DOCUMENTATION BLOCK 1

Module 3

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Idea Documentation Block 1

IDEA DOCUMENTATION BLOCK 1

Module 3

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ITERATED IDEA (15 min)

Name of the iterated idea

Description Product, process, service, ...

Idea Springboard

IDEA SPRINGBOARD

» 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 (3 min)

Formulate your How-Might-We-Question.

4 min: How might we help Name of your user **Dennis**
to Need or quote that you want to find an answer to. Choose from your interview documents what inspired you the most.
reduce his anxiety of interrupting the workflow of his girlfriend and getting constantly disturbed himself?

3 min: Who is an Extreme Performer in what you want to achieve for the user?
Camper on campsites, business class passengers on airplanes, jockeys and their horses in horse-racing.

3 min: 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.

Pop up tent for living room

Curtain for own cabin

Glasses with blenders

IDEA (5 min)

Select one idea and give it a name

Pop up office-tent

Description Product, process, service, ...

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

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

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

It helps Dennis feeling in peace, being undisturbed and ensures him not to annoy his girlfriend while working.

Your name and contact information optional

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Idea Documentation Block 1

IDEA DOCUMENTATION BLOCK 1

Module 3

» Review your idea after testing it in the system.

You want to incorporate the feedback from stakeholders and users by adding details and/or modifications to your initial idea.

For documentation, paste your How-Might-We-Question from the Idea Springboard template here.

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

ITERATED IDEA (15 min)

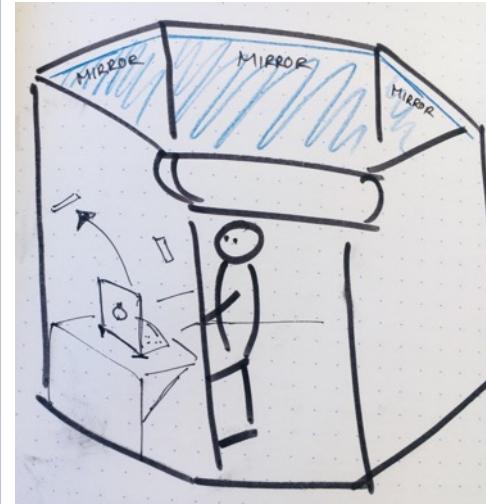
Name of the iterated idea
Foldable panorama office-tent

Description Product, process, service, ...
A tent made of soundproof material including mirror walls, which can be popped up in the living room and folded together, while keeping his stuff organized.

Key function for user Helps the user to better (functional need) ...
It gives Dennis an unshared small space within one room of his apartment. He can put the tent wherever he wants it to stand and his girlfriend can still work within one room. The mirrors on the walls visually expand the small room and give Dennis the feeling of more space. After finishing his work in the tent, it can easily be folded together with straps and elastic bands to keep his stuff organized. This enables a quick switch from work to leisure.

Emotional benefit So that the user feels (emotional need) ...
It helps Dennis feeling in peace, undisturbed and ensures him to not annoy his girlfriend while working. The office-tent enables him staying organized while quickly switching to off-work mode.

Draw a quick sketch of your iterated idea and insert a photo of it here.



Your name and contact information optional
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SYSTEMS THINKING

► Manage complexity by
interrelated actions

Systems Thinking Exercise

Have fun
and share your results and learnings
with the community!

By the Course Coaching Team

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