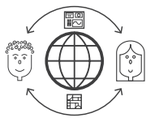
Amsterdam University of Applied Sciences | DIGITAL SOCIETY SCHOOL

Agile, multidisciplinary team-based projects

Design method toolkit

www.designmethodtoolkit.com

The Digital Society School's Design Method Toolkit enables you to get started and enrich your design process. A collection of design and research methods: categorised to help you select, time based to help you plan. Plan and execute your design research, ideation, experimentation and creation within short iterations.



Detailed task-based descriptions help teams divide and assign tasks between team members. This makes the Design Method Toolkit perfect for lean, agile environments and multidisciplinary teams.

Use the Design Method Toolkit in combination with the DMT Plan Board, your Scrum Board and experience it's full potential!

Select

Research/ Create

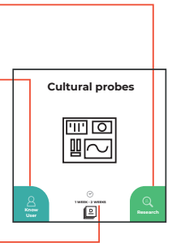
To help you select which method to follow, the cards are split into either research or create.

Category

Depending on the stage the project is in, you might have different goals. These categories help you select the method based on that. The methods can be about defining goals, knowing the user and context, framing insights, ideation, prototyping and testing.

Estimated duration

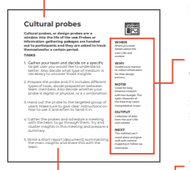
This is an estimate of how long it wil take to execute the method, this range depends on the complexity of the project and your experience with the method.



Execute

Short Description

The short description allows you to quickly read what the method is about and help you decide if it suits your specific needs.



Recommendations

This section guides you as to how to apply the method in stages and allows for a simplified process.

Tasks

This section is crucial in dividing the tasks between team members and understanding your responsability within the process.

Research

Create

In an ideal design process there is a constant flow between researching and creating. That is why these cards are divided into two types, Research and Create.

Research focuses on gathering information and making sense of it.

The results of the research methods will give you insights that will supply new design criteria.

Create focuses on having a tangible object (report, visualization, prototype, etc) that you can show.

The output of the create methods may propose new research material.

Know user

Explore the background of the project, the context, the situation, location, time and social/technical context.

Get to know the people involved, their wants, goals, needs and feelings.

Define intentions

Define your challenge's vision, objectives, scenarios, scopes and constraints. Ask yourself questions that relate to the why, what and who of your challenge and sense what trends, opportunities and possible constraints might affect it in the process.

Frame insights

Draw conclusions from your research and make lessons learned explicit. Try to narrow down the information

Can you extract the most valuable and important elements from your insights? What impact will these insights have on your design?

Ideation & concepts

Generate ideas, explore possibilities andwork out concepts.

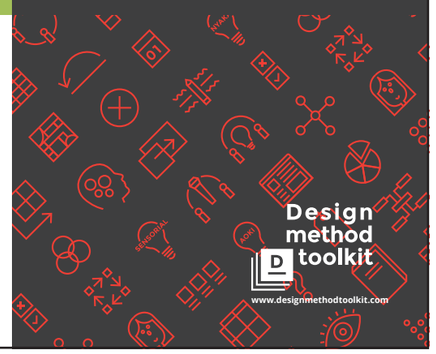
How can you visualize, sketch and conceptualize the requirements arising from your research insights?

Prototype & test

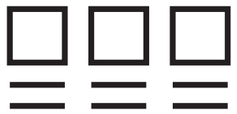
Ways to get from concepts to production, prototyping and testing.

Are your ideas valid? Can you create working prototypes from your concepts? How can you test your prototypes with users? How do you get the best and most realistic test results?

How to use the toolkit



Storyboard



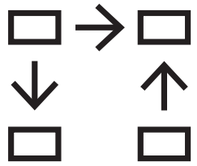
Test

2 HOURS - 1 DAY

D

Create

Navigation map



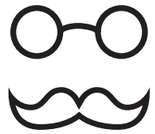
Test

2 HOURS - 4 HOURS

D

Create

Heuristic evaluation



Define Intentions

2 HOURS - 1 DAY

D

Research

Prototype for empathy

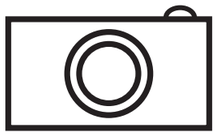
Know User

2 HOURS - 1 DAY

D

Create

Photo safari



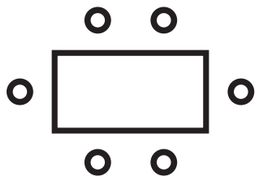
Know User

1 DAY - 1 WEEK

D

Research

Focus group



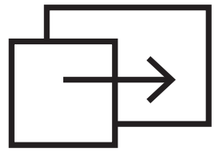
Know User

4 HOURS - 1 DAY

D

Research

Boundary shifting



Define Intentions

1 DAY - 2 DAYS

D

Research

Survey

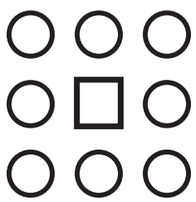
Test

2 HOURS - 1 DAY

D

Research

Lotus blossom



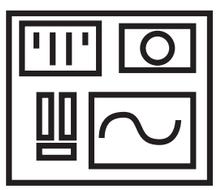
Ideation & Concepts

2 HOURS - 4 HOURS

D

Create

Cultural probes



Know User

1 WEEK - 2 WEEKS

D

Research

Empathy map

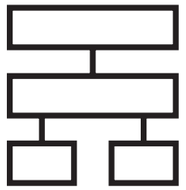
Frame Insights

4 HOURS - 1 DAY

D

Create

Problem tree



Define Intentions

2 HOURS - 4 HOURS

D

Create

Prototype for empathy

Prototype for empathy helps to understand users' needs and problems when using a concept.

For example: make a website to display information in a way that is similar to how the website would look for someone who is color blind. This helps you to understand what needs this user group has with regards to use of colors and contrast for the design of a website.

TASKS

1. Identify specific aspects of a user experience that the team might not have clarity on.
2. Do a brainstorm on how to understand the possible problems the user might face.
3. Develop a quick prototype and test it among the design team.
4. Collect all insights into a list, use those insights to refine the design idea.

WHEN
On the first phases of the project.

WHY
To allow team members and (stakeholders) understand users.

NOTE!
The prototype aims to help the design team (and stakeholders) understand user behavior, it is not a prototype built to test a design concept.

OUTPUT
A prototype and insights to understand the user better.

NEXT
Use the insights gained to develop concept(s).

http://designmethodtoolkit.com/prototype-for-empathy/

Heuristic evaluation

Also known as expert evaluation. It is used to identify user problems. Experts analyze whether a user interface follows a list of usability heuristics.

TASKS

1. Establish a list of panel experts, recruit and invite them to a location.
2. Select a moderator and introduce the topic of the session, establish a set of evaluative criteria.
3. Hand out current designs that are similar to your design problem. Each expert evaluates the interface individually, observe the behavior of the experts and take notes.
4. Collect and aggregate all the results, cluster them in topics, similarities and differences.
5. Identify problems, opportunities and difficulties and list them in a report.

WHEN
Early in the design process.

WHY
Experts will have insights that someone who has little knowledge of the topic, might miss.

NOTE!
Experts might have professional bias and/or strong opinions.

OUTPUT
Knowledge based on experience in the field from the experts.

List of problems, sorted on priority.

NEXT
Brainstorm on ways to solve the problems that have been identified.

http://designmethodtoolkit.com/heuristic-evaluation/

Navigation map

Navigation maps or Flowcharts are used to depict the way people move through a website or application and gain insights on how they experience the product.

TASKS

1. Represent each page or location of the design (website, app, route, etc) as a box. Connect the boxes to display how they connect to each other.
2. Go through the design and check if the flow of the different tasks is correct. Evaluate if the way the design works is logical for the users.
3. If needed, move the boxes around, delete some, add extra steps, etc. Once that is done go over the design again and check if it is logical.
4. Document the version(s) that you think work best for the users and the intended design.

WHEN
After identifying what steps the design needs, but when it is still in conceptual phase.

WHY
It allows to check the flow of the design and to make sure it is clear for users.

NOTE!
Structure boxes in a logical way, that gives you insight rather than confusion.

OUTPUT
An understanding on how many pages there are and the most logical flows.

NEXT
Take the concept and polish it, make a mid-high fidelity prototype.

http://designmethodtoolkit.com/navigation-map/

Storyboard

Storyboard is a narrative tool derived from cinema. It's a form of prototyping which communicates each step of an activity, experience, interaction or event.

TASKS

1. Decide on a story/interaction/experience you want to communicate. Make the message very clear.
2. Write/draw the global storyline. Think of the steps of the story and how to communicate them in images. Make sure you convey all the important information in a simple but complete and intelligible way.
3. Start drawing a quick sketch, then start refining it (storywise).
4. To make sure that every important step is clear for the reader. Go over the drawings with someone who is unfamiliar with the story, ask feedback and add short (text) explanations where needed.
5. Present the storyboard to stakeholders. Make notes of the feedback received.

WHEN
After ideation, and when you want to see how users experience your design.

WHY
Storyboards allow to display an entire story and get feedback on specific stages of an experience.

NOTE!
Not everyone is an artist, it's alright if the sketches aren't beautiful.

Its alright to mess up and start over.

OUTPUT
A storyline of an event, interaction, activity or experience that can be presented.

NEXT
Do a lo-fi prototype of the concept and test it.

http://designmethodtoolkit.com/storyboard/

Survey

A survey or questionnaire, is a primary research tool. In most cases it is designed for statistical analysis.

TASKS

1. Define and prepare questions to research, structure questions so that the survey has a clear flow. Already think about sections or constructs you would like to focus on in your analysis.
2. Choose between creating an online or paper survey. Online: look for a suitable platform (e.g. Google Forms) and test it before sending.
3. Distribute the surveys to all participants and collect them after filling them in. Make sure you get a valid sample size with the right amount of variety in demographics. Do not change the questionnaire after you send it.
4. Collect surveys and aggregate them, if you use software for surveys, this will be done automatically.
5. Analyse the results of the survey.

WHEN
When there is a need to validate information in a quantitative way.

WHY
To get an agregation of answers regarding a specific topic.

NOTE!
Make sure the questions are worded correctly and that people understand them.

OUTPUT
Statistical information regarding the topic you are researching.

NEXT
Use the findings of the survey to make decissions.

http://designmethodtoolkit.com/survey/

Boundary shifting

Boundary shifting is a way to discover solutions and features outside of the boundaries of the system related to the defined problem; and applying them to the problem at hand.

TASKS

1. Identify the current problem that needs to be solved, this will be defined as problem 1.
2. Research into a problem that may have the same principles or complications, this will be defined as problem 2.
3. Identify solutions for problem 2, write them down.
4. Go through the different solutions for problem 2 and identify which of them can be used to solve problem 1.
5. Make a plan to apply the solutions to solve the problem.
6. Implement the solutions that have been identified and can help solve or mitigate the problem.

WHEN
When the team is stuck and needs inspiration to innovate.

WHY
Finding solutions that work in another system can give insights on the one you are working on.

NOTE!
The alternative system should have as many overlaps or parallels as possible with the problem or idea you are working on.

OUTPUT
"Out of the box" solutions.

NEXT
Apply the solutions or ideas to the problem and test them.

http://designmethodtoolkit.com/boundary-shifting/

Focus group

Focus groups are group discussions of 6 to 12 people, led by a moderator. This method is used to get feedback about a product or service design in an open conversation.

TASKS

1. Select a moderator and decide on a common thread. Plan the session, write the questions, procedure and agenda for the session.
2. Recruit participants (based on your target group and goals).
3. Arrange a room/space where the group can sit around a table and discuss according to your questions.
4. The moderator prepares the session and starts, manages and wraps up the conversation.
5. Assign someone to take notes and afterwards transcribe the session.
6. Analyze the session and summarize findings in a document.

WHEN
When there is an already existing solution or to identify current opportunities in a specific field.

WHY
To get different views on a product or service.

NOTE!
The moderator has to keep the conversation close to the topic and ask relevant questions.

OUTPUT
A (video) recording or a transcription of the conversation and a document with main findings and conclusions.

NEXT
Process the main findings by adjusting the product, design or service where needed.

http://designmethodtoolkit.com/focus-group/

Photo safari

Photo safaris are assignments, where users photograph topics that are relevant for the project. This gives clear insights on how the user perceive specific subject(s).

TASKS

1. Define a topic for the photo safari, it should be open enough to allow interpretation from the users, but specific enough for the photos to have a theme.
2. Prepare a guide for the users, have questions regarding different topics. (Take a photo of your workplace, take a photo of what makes you happy, etc.)
3. Collect the participants' photos and compare them, if possible invite the users to tell stories about their photos.
4. Collect insights and identify common threads.

WHEN
When there is not enough knowledge of the user.

WHY
To understand how users view their context.

NOTE!
Make sure the photo safari is a fun activity and that it adapts to the user's lifestyle (using a digital camera for the elderly might be confusing for them).

OUTPUT
Collection of photos and insights that can be used for inspiration.

NEXT
Use the input to make concepts and the photos to identify a style that can be used with the designs.

http://designmethodtoolkit.com/photo-safari/

Problem tree

A problem tree is a tool to clarify the hierarchy of problems addressed by the team within a design project; it represents high level problems or related sublevel problems.

TASKS

1. Brainstorm a list of design problems and write them down.
2. Sort the list by importance or degree of abstraction.
3. Write down the main problem close to the core branch, write the sublevel problems as branches of the problems they are related to.

WHEN
At the beginning of the project.

WHY
To have an overview of the problems faced.

NOTE!
It might help to write down each problem on a small piece of paper, so you can shuffle them easily.

The hierarchy could be from important to less important, or abstract to practical.

OUTPUT
An overview of which problems are at the core of a project, and which are concrete.

NEXT
Solve the problems, try to start with core problems. If this isn't possible, go further into a sub level.

http://designmethodtoolkit.com/problem-tree/

Empathy map

An empathy map is a tool to help a design team to empathize with the people they are designin for. You can make an empathy map for a group of people or for a persona.

TASKS

1. Gather your team and draw a circle to represent your target persona. Brief the team on the persona.
2. Divide the circle into sections, representing that persona's sensory experience. Explain to the team what each of the circles mean.
3. Ask your team to describe their experience from the persona's point of view. Moderate the discussion and collect all relevant information on the map.

WHEN
After doing personas when more insights are needed.

WHY
Personas usually summarize lifestyle but not necesarily the (sensory) experience of the users.

NOTE!
Try to understand the persona's point of view as much as possible.

OUTPUT
Insight in the needs and desires of the persona.

NEXT
Collect insights and communicate them, this could be done using a moodboard.

http://designmethodtoolkit.com/empathy-map/

Cultural probes

Cultural probes, or design probes are a window into the life of the user. Probes or information gathering packages are handed out to participants and they are asked to track themselves for a certain period.

TASKS

1. Gather your team and decide on a specific target user you would like to understand better. Also decide what type of medium is necessary to uncover those insights.
2. Prepare the probe and if it includes different types of tools, divide preparation between team members. Also decide whether your probe is digital or physical, or a combination.
3. Hand out the probe to the targeted group of users. Make sure to give clear instructions on how to use it and when to hand it in.
4. Gather the probes and schedule a meeting with the team to go through them. Cluster insights and prepare a summary.
5. Write a short report (document) summarizing the main insights and share this with the team.

WHEN
When you need details about the user's life and context.

WHY
Unobtrusive manner to collect information for the design process.

NOTE!
Good for long distance research with low budget. The open character of the data may cause interpretation issues.

OUTPUT
Collection of data from the user's life and context.

NEXT
This method can't stand alone and goes well with context mapping or follow up interviews.

http://designmethodtoolkit.com/cultural-probes/

Lotus blossom

The lotus blossom method is a creativity exercise. It is a framework for idea generation, starting from one central theme.

Eight conceptual themes flow out from the main theme and each of them are used as central theme to generate 8 more themes. Explore!

TASKS

1. Draw a square in the middle of your paper and write down the central theme in it.
2. Think of 8 related ideas and write them around the square using a new square for each.
3. Take each of the 8 previous themes and create 8 new themes around it. Write them in new squares.
4. Blossom as far as you think is relevant.

WHEN
When there is a need to generate a big number of ideas quickly.

WHY
Using the first 8 ideas as basis can help to expand these ideas further.

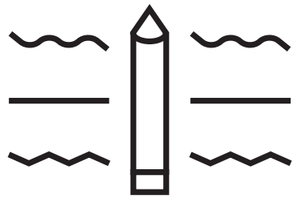
NOTE!
Be free in thinking, don't restrict yourself to anything.

OUTPUT
A map of different ways to explore an idea.

NEXT
Filter the ideas to see which ones are useful.

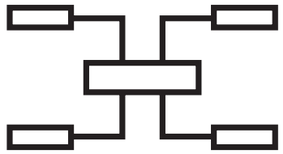
http://designmethodtoolkit.com/lotus-blossom/

Concept sketch



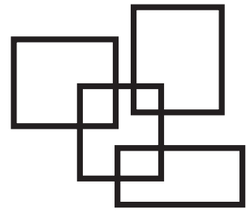
Frame Insights · 2 HOURS - 1 DAY · D · Create

Mind map



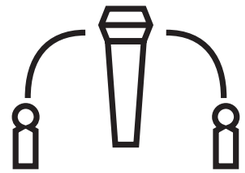
Ideation & Concepts · 2 HOURS - 4 HOURS · D · Create

Research collage



Know User · 4 HOURS - 1 DAY · D · Research

1 - on - 1 Interview



Know User · 4 HOURS - 1 DAY · D · Research

Paper prototyping

Test · 2 HOURS - 4 HOURS · D · Create

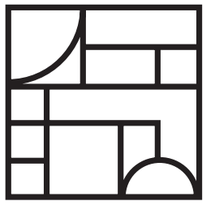
Backcasting

Define Intentions · 2 HOURS - 4 HOURS · D · Create

The AOKI method

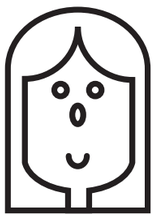
Ideation & Concepts · 2 HOURS - 4 HOURS · D · Create

Moodboard



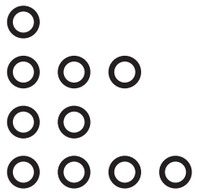
Frame Insights · 2 HOURS - 4 HOURS · D · Create

Persona



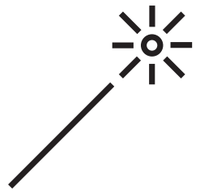
Know User · 4 HOURS - 1 DAY · D · Create

Dot voting



Frame Insights · 1 HOUR - 2 HOURS · D · Create

Wizard of Oz



Test · 1 DAY - 2 DAYS · D · Create

WWWWWH

Define Intentions · 1 HOUR - 4 HOURS · D · Research

1 - on - 1 Interview

A one-on-one interview is a conversation between a researcher and a participant in a face-to-face situation.

TASKS

1. Specify the goal of the interview and select questions and subjects around the topic carefully.
2. Define if there is a need for a structured interview or semi-structured interview. Structured interviews have a clear guide that needs to be followed, semi-structured interviews allow for flexibility within the interview.
3. Conduct a pre-interview during the recruitment phase, to refine the guide.
4. Talk, watch, listen and observe as you conduct the interview.
5. Document the interview by recording audio/ video (if possible) and take notes.
6. Analyze and compare the information gathered from the interview(s).

http://designmethodtoolkit.com/1-on-1-interview/

WHEN
When there is a need for information from users and/or experts.

WHY
One-on-one interviews are ways to understand viewpoints from different people.

NOTE!
For structured interviews, the interviewer should be consistent across interviews.

OUTPUT
Notes and recordings of the interviews.

NEXT
Analyse recordings to uncover insights and identify possible ways to incorporate them into a solution.

Research collage

A collage involves glueing images or words onto paper. It can be used to gain insights on how a group sees particular issues.

TASKS

1. Define the theme of the session.
2. Recruit participants for the session (5-8).
3. Print words and images onto sticker sheets/ paper.
4. Give participants the printed images, glue, markers.
5. Participants make their collages.
6. The participants explain their collages by using stories.
7. Collect the information of the session, this can be by done by video/audio recordings, or taking notes.
8. Analyze the results and identify the most meaningful insights.

http://designmethodtoolkit.com/research-collage/

WHEN
When insights are needed from a group of users

WHY
Get insights on how specific groups view specific topics.

NOTE!
Images and words should be abstract, so that they do not influence the participants too much.

OUTPUT
Collages and stories made by participants that help to understand their point of view on a specific topic.

NEXT
Collect insights and identify ways to incorporate them into a design.

Mind map

A mind map is a diagram used to represent a number of ideas or things. Mind maps are methods for analyzing information and relationships.

TASKS

1. Write the key word of the topic/concept you want to explore in the center of a piece of paper.
2. Start exploring related topics and ideas, write down or draw these ideas by creating branches and adding the new elements on nodes.
3. Arrange nodes around the main idea, and group related ideas by using colors.
4. Make the branches thicker to show the strength of relationships within the concepts.

http://designmethodtoolkit.com/mind-map/

WHEN
Whenever the project needs to organize information.

WHY
Organize information visually.

NOTE!
Discuss the different nodes and make sure there is a clear hierarchy of the items.

OUTPUT
Visual representation of ideas that clearly displays all information gathered and how it relates to each other.

NEXT
Analyse the relations between the items.

Define the direction(s) to explore.

Concept sketch

A Concept sketch is a fast freehand drawing.

TASKS

1. As a team: select a design problem to explore.
2. A team member works as moderator and briefs the design team.
3. Each individual designer generates 10 sketches in 30 minutes.
4. Each designer presents their ideas to the group.
5. As a group, vote on ideas that are the most promising: 2 votes per person.
6. Select the three ideas with the most votes.
7. Each designer explores these ideas by generating 10 sketches of developments of the existing ideas over 30 minutes.
8. The team votes, and selects the best idea.

http://designmethodtoolkit.com/concept-sketch/

WHEN
Ideation phase.

WHY
Quick way to iterate and refine concepts.

NOTE!
Good drawing skills will be needed, not everyone might have them.

OUTPUT
Sketch of numerous ideas and a selection of the best ones based on opinions of the design team.

NEXT
Build and test the selected concepts.

Refine concepts.

Moodboard

A Moodboard is a collage of images, words and/or even samples of materials. It helps you form an emotional image of the intended design. The overall 'feel'.

TASKS

1. Collect magazines, images, materials, websites, anything that can be used as inspiration.
2. Select the items that are meaningful for the intention within the project, pictures, fabric, colors, feelings, etc.
3. Arrange the different items on a board/paper. Try to organize and structure the items as much as possible in a way that is meaningful to the design.

http://designmethodtoolkit.com/moodboard/

WHEN
After having an understanding of your users.

WHY
Summarizes the intended style of the design and facilitates decission making.

NOTE!
Its about what YOU think is related to the subject at hand.

OUTPUT
Moodboard that conveys a feeling of your design (in terms of general emotion, aesthetics, experience, etc.)

NEXT
Validate the moodboard with stakeholders.

Use the moodboard as an input for your design.

The AOKI method

The Aoki Method or MBS method is a structured brainstorming method. It requires input from all team members.

TASKS

1. Assign a moderator and a group of participants. Max. 10 people.
2. Warm up: sprout ideas for 15 minutes and list them. Do this individually.
3. Each participant presents summaries of their own ideas to the rest of the group. The rest of participants keep sprouting ideas.
4. In the following hour, the moderator leads the discussion and maps out the ideas, clustering them into common topics.

http://designmethodtoolkit.com/the-aoki-method/

WHEN
In the initial stages of concept creation.

WHY
Quickly validate functions of a design with a low cost.

NOTE!
Use the individual presentations as inspiration.

OUTPUT
Collection of ideas that have been structured into an idea map.

NEXT
Select most promising ideas/clusters and proceed to design quick tests of the main concepts.

Backcasting

Backcasting is a method for planning the actions necessary to reach desired future goals. This method is often applied in a workshop format with stakeholders participating.

TASKS

1. List down your long term goals. Think of a time frame between 1 and 20 years.
2. Work backwards to figure out the necessary actions to achieve the long term goal. Step by step, don't ever skip one!
3. Collect insights over difficulties that might be encountered, steps that need to be taken and resources needed to achieve the goal.

http://designmethodtoolkit.com/backcasting/

WHEN
When a future goal (even if it is vague) has been identified.

WHY
To make a road map of clear milestones towards a future goal.

NOTE!
You can start with answering the question: 'Define your success in 2025'.

OUTPUT
Step by step guide to achieve the long term goals.

NEXT
Reflect and revise your long term goals if needed.

Carry out your plan.

Paper prototyping

Paper prototyping is a quick and cheap way of gaining insights without the need for costly investment. It simulates the function but not the aesthetic of a proposed design.

TASKS

1. Determine the aspects that will be tested. (content, form, structure, 'tone', key functionality, etc.).
2. Develop a paper version of the concept that allows to test the different aspects.
3. Recruit participants for the test.
4. Conduct the test, do not guide users too much and validate the concept.
5. Take notes of what works and what needs to be changed.

http://designmethodtoolkit.com/paper-prototyping/

WHEN
In the initial stages of a concept.

WHY
Quickly validate functions of a design with a low cost.

NOTE!
Paper prototyping does not have to validate aesthetics, it should focus on functionalities.

OUTPUT
Test results of the concept that can be revised and improved on to develop further.

NEXT
Identify what worked and what didn't.

Refine the concept based on the insights.

WWWWWH

'Who, What, Where, When, Why and How' is a method used to obtain a thorough understanding of a problem.

TASKS

1. Define the problem definition and the problem statement.
2. Ask yourself the WWWWWH questions, and write down the answers on post-its
   - Who is involved?
   - What occurred?
   - When did it happen?
   - Where did it happen?
   - Why did it occur?
   - How did it happen?
3. Review the answers to all the questions, identify where you might need extra information and adapt the answers as needed.
4. Collect insights into a document (can be photos, a video, a mindmap or a slideshow).

http://designmethodtoolkit.com/wwwwwh/

WHEN
When a problem is identified.

WHY
Allows to reflect on the problem and understand it better, it is then easier to aim for a solution.

NOTE!
Your story isn't complete if you can't answer these questions.Some questions might spark other questions, answer them too!

OUTPUT
Thorough understanding of the problem.

NEXT
Use the answers as input to create a presentation of your story.

Wizard of Oz

The Wizard of Oz is a research method where a participant interacts with an interface, system or physical object. This system, though, is operated by an unseen person.

TASKS

1. Select an idea/concept that will be tested. Create the necessary images, videos, animations and elements to do the test.
2. Recruit participants for the test and organize a location, make sure the prototype works. Assign a person as wizard.
3. The wizard hides from view, and observes the user's actions while making the sytem react to those actions by triggering the different responses the system should give at that moment in the interaction.
4. Take notes of what works and what does not work while doing the test.
5. Ask participants about their impression of the system and the design. Take notes.

http://designmethodtoolkit.com/wizard-of-oz/

WHEN
When the design has a complex system that needs to be tested quickly.

WHY
Wizard of Oz allows to test complex systems before programming them.

NOTE!
This method must be rehearsed extensively before testing it. If things don't work as expected, the user will realize that the prototype is fake.

OUTPUT
A test case for future prototypes, and a list of what works and what doesn't work.

NEXT
Modify the design according to the results and iterate.

Dot voting

Dot voting is a collective way of prioritizing and converging on a design solution that uses group voting.

TASKS

1. Select a group of people and invite them to a session. Arrange a location and materials for the session.
2. As moderator, list down the ideas you want to vote for, and explain them where needed.
3. Ask each participant to vote on their top 2 or 3 by using dots. Give them a limited number of dots, and they have to assign more to the idea they like the most.
4. Count votes and arrange them in popularity.
5. Discuss the reasons behind the hierarchy and see if the best idea(s) can be taken to the next level.

http://designmethodtoolkit.com/dot-voting/

WHEN
When there are more ideas than can be feasible to develop further.

WHY
Allows for a consensus on which ideas need to be developed futher and the reasons behind that.

NOTE!
The group should contain at least 4 people and no more than 20.

OUTPUT
A selection of the most popular ideas according to the group.

NEXT
Take the most promising ideas to the next level, kill your darlings.

Persona

A Persona is an archetypical character that is used to represent a group of possible users. They share common goals, attitudes and behaviours towards a particular product or service.

TASKS

1. Collect user data through interviews, observations, ethnography and other methods.
2. Within the team go through the data and identify key aspects by clustering information into groups. Pick meaningful quotes that give insights on the users.
3. Use the information clusters to make personas, make sure that the diversity of interest is included in the personas that are created.
4. Give life goals to the personas, personal aspirations, pain points and possible behaviours.
5. Name the personas and include a 'personal' picture conveying what they look like.

http://designmethodtoolkit.com/persona/

WHEN
After doing research on the user and when a summary of insights is needed.

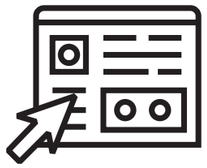
WHY
Personas allow for the team to speak about the needs of users and not about opinions on how users might behave.

NOTE!
Personas are created with data from real users, avoid stereotypes.

OUTPUT
Summary of insights on user types and represented by fictional people.

NEXT
Introduce the persona to the team and use them to validate your ideas.

Clickable prototype



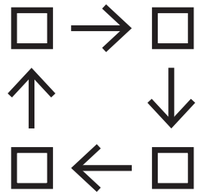
Test

1 DAY - 2 DAYS

D

Create

Customer experience map



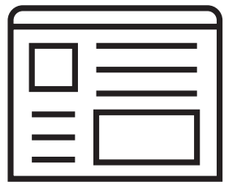
Ideation & Concepts

4 HOURS - 1 DAY

D

Research

Wireframes



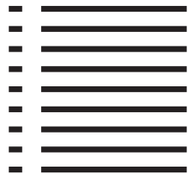
Define Intentions

2 HOURS - 1 DAY

D

Create

Nine dimensions



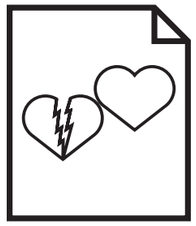
Frame Insights

4 HOURS - 1 DAY

D

Create

Break up/Love letter



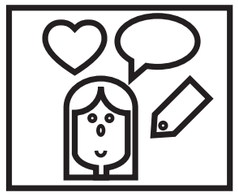
Know User

1 HOUR - 2 HOURS

D

Create

Design persona



Frame Insights

1 HOUR - 2 HOURS

D

Create

Mobile diary study

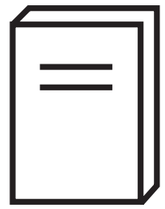
Know User

1 WEEK - 2 WEEKS

D

Research

Literature review



Define Intentions

1 DAY - 1 WEEK

D

Research

The KJ method

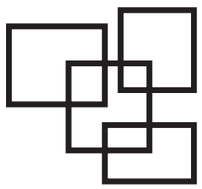
Ideation & Concepts

2 HOURS - 4 HOURS

D

Create

Collage



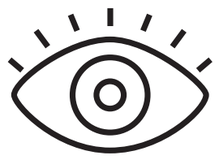
Know User

2 HOURS - 1 DAY

D

Create

Through other eyes



Test

2 HOURS - 1 DAY

D

Research

Infographic

Frame Insights

2 HOURS - 1 DAY

D

Create

Nine dimensions

An ethnographic framework to give structure to observations and to ensure the researcher doesn't miss any important data.

TASKS

1. Gather all the information that has been collected so far, and use all insights to do the following steps.

   A. Write down what's the physical space of the field of research.

   B. Write down who the actors are.

   C. Write down all the activities performed by the actors.

   D. Write down the objects that are relevant and present, or used by the actors.

   E. Write down the specific individual actions carried out by the actors.

   F. Write down particular occasions that surface from the research.

   G. Write down the sequence of events.

   H. Write down what the actors' goals are, what are they trying to accomplish?

   I. Write down how the actors feel in given contexts.

http://designmethodtoolkit.com/nine-dimension/

WHEN
At any moment when ethnographic research is required.

WHY
To make sure that the research is structured and considers all aspects.

NOTE!
Try to list all the possible answers as completely as possible.

OUTPUT
A comprehensive understanding of the research problem and everything that affects it.

NEXT
Conduct the research making sure the insights gathered are not overlooked.

Wireframes

Wireframes are simplified outlines of all the different elements on a web page. They are used to get feedback on the layout, interface, navigation and functionality of a website.

TASKS

1. Plan out the screens for the intended design. Write them down on a list.
2. Design layouts of ways to display the different elements for each screen.
3. Go through the wireframes and check that things are clear and have a clear flow.
4. Review the proposed design and adjust where needed.

http://designmethodtoolkit.com/wireframes/

WHEN
Once a rough draft of an idea has been developed and before moving to details.

WHY
To validate an initial (screen) design idea.

NOTE!
You can make boxes or outlines by hand drawing or using software for it.

Try different layouts and review your top 3.

OUTPUT
A preview of a proposed design.

NEXT
Make a clickable prototype of the wireframe.

Test and review the design and prototype

Customer experience map

Customer experience mapping is a method of documenting and visualizing the experience a customer has as they use the product or service. It also maps out their responses to their experiences.

TASKS

1. Identify the different aspects of the process a customer goes through. Write them down.
2. Place the facets on a timeline, in chronological order.
3. Add post-its on the aspects marking whether it is a positive or negative experience.
4. Sort the aspects from the most positive to most negative.
5. Collect the results.

http://designmethodtoolkit.com/customer-experience-map/

WHEN
When there is a solution (even in a conceptual stage) that can be analyzed.

WHY
To identify what is hampering the experience.

NOTE!
Use clear words such as engagement, exit, anticipation, etc.

The most negative facets are design opportunities.

OUTPUT
Insight in which facets make an experience negative and which make it positive.

NEXT
Improve negative facets and enhance positive aspects of an experience.

Clickable prototype

A clickable prototype is a prototype that looks like and may work just like the finished product. It simulates the aesthetics of a proposed design.

TASKS

1. Create a design, based on a concept that has been deemed promising.
2. Map out the navigation and behavior that is wanted from the users, define the look and feel of buttons, screens and animations.
3. Build the prototype, this can be done by programming or using special software that is designed for it.
4. Recruit participants and ask them to test your prototype, give them tasks and ask them to complete them.
5. Do a recording of the test, ask participants to think out loud as they do the actions. If possible record both the participant and the screen.
6. Collect the results and analyze them.

http://designmethodtoolkit.com/clickable-prototype/

WHEN
Once an idea has been developed enough and needs input on user behavior with it.

WHY
To check if the design behaves as intended.

NOTE!
There are a lot of prototype building apps out there on the internet.

Test the prototype with as many people as possible.

OUTPUT
An overview of which problems are at the core of a project, and which are concrete.

NEXT
Evaluate, process, adjust, iterate.

Develop final version.

Literature review

A detailed review of books, articles, dissertations, conference proceedings, and other written material relevant to the subject at hand.

TASKS

1. As a team, make sure to know beforehand what is the specific thesis, problem, or research question that a literature review may help to define.
2. Organize yourself and others around specific tasks that relate to the specified questions from step (1). Each individual takes on one subject or direction.
3. Each individual identifies the scope of their literature review. What types of publications can you use (e.g., journals, books, government documents, popular media) and what area or discipline should you look into?
4. Each individual summarises their findings in a document, with reference to each source.
5. Organise a team meeting and discuss main findings. Make sure to develop a general summary of this discussion. The other information is not discarded, but archived elsewhere (for possible later reference).

http://designmethodtoolkit.com/literature-review/

WHEN
Throughout the whole project, but mostly at the beginning of the project.

WHY
It is a solid way to back up assumptions around your concept, building on academic work by others.

NOTE!
Make sure to follow through a set of concepts and questions, comparing items.

OUTPUT
A research document which holds relevant and in-depth information about the problem at hand.

NEXT
Test literature findings in your project context if necessary.

Mobile diary study

A mobile diary study uses a portable device to capture a person's experience. Participants create their entries in the context of their location, on their mobile device, capturing the 'moment of truth'.

TASKS

1. Gather your team and define the purpose of your study within the larger research question.
2. Decide on a group of individuals (between 5-10) you would like to study.
3. Make a plan of the type of data you want to collect, taking into account the moment that participants are more likely to submit it with the device.
4. Choose the most suitable platform and write out the automated messages to participants.
5. Make sure your participants are set up to make the entries, provide them with brief and clear instructions.
6. Follow the incoming data during the set period and fix hiccups or technical problems in time.
7. Digest the data and set up a new team meeting in which you go through the most interesting data together.

http://designmethodtoolkit.com/mobile-diary-study/

WHEN
This method is typically used at the beginning of the research process.

WHY
Capture data and insights from an individual or group to assess actions, activities, timing of events, habits, behaviours and emotions.

NOTE!
Make sure the technology works well and is easy to use.

OUTPUT
People's real-life experiences, in diary form.

NEXT
Use the insights to identify interesting insights and adopt them in your project.

Design persona

Following a similar structure of the Persona method, give your design personality by creating a design persona. This can be through visual design, copy, and interactions.

TASKS

1. Organise a session for the complete team, find a quiet room, take care of markers and paper, sticky notes, etc.
2. In preparation, download the Design Persona template at the creator's website: http://aarronwalter.com/ and print a copy for each team member.
3. During the session, go through the template step by step, fill it in individually.
4. Discuss the different personalities in the group and try to find common ground in how you think (as a team) what personality the design should have.
5. Work out the final design persona, give it a name, visualise it on a large piece of paper, hang it up on the wall as a reminder to take the personality into account when you make new design choices.

http://designmethodtoolkit.com/design-persona/

WHEN
When it is time to focus on product experience.

WHY
A Design Persona helps you target the personality the user will experience in your design.

NOTE!
Take it seriously, since the method is as powerful as it is simple when applied well.

OUTPUT
A large poster with your design's personality sketched out, and a document with examples of how your design 'talks, behaves and feels'.

NEXT
Role playing is a fun way to test your design's personality.

Break up/Love letter

Instead of directly asking people what they like or don't like about a particular brand, product or service, this method gives insight into their perceptions by eliciting feelings based on real-life experiences and interactions through writing a love or breakup letter.

TASKS

1. Decide how many letters you would like to have and what the character is of the insights you are gathering. Organise either a group meeting or a way to receive individual letters.
2. Ask participants to write a break-up letter for the brand or product they are saying or said goodbye to.
3. Ask participants to write a love letter for the brand or product they are currently in love with.
4. Gather your team and go through all letters. Try and find commonalities between them and see what elements influence the relationships the most. List those and give them a rating in terms of importance for your design.

http://designmethodtoolkit.com/break-uplove-letter/

WHEN
In the ideation and user exploration phase.

WHY
Using brand-consumer relationships, perception and loyalty can help you create a better design.

NOTE!
Focus on the moments that matter the most (i.e., the moments that cause someone to stay or leave a relationship).

OUTPUT
A hierarchical overview of brand- or product relationship influencers.

NEXT
Use the input from the letters to decide on next steps to take.

Infographic

An infographic visualizes information. The aim is to represent complex information in a clear way. It can also be used to raise new questions.

TASKS

1. Collect and structure your information
2. After looking at the character of the data, chose a way to display information that relates to the theme and allows a clear portrayal of the information.
3. Do quick sketches of possible ways to display the information, select the best one.
4. Polish the infographic, this can be done by arranging physical elements and taking a photo, doing a polished drawing by hand or using computer programs like Illustrator to have a finished product.

http://designmethodtoolkit.com/infographic/

WHEN
After collecting big amounts of complex information.

WHY
Using a clear design allows to gather quick insights on complex information.

NOTE!
The aim is not to be arty, the aim is to clarify. An ideal infographic should give you more information by visualizing.

OUTPUT
A visual representation of your data, giving you extra insights to extract.

NEXT
Use the infograph as a presentation tool and to gain insights.

Through other eyes

Designing can take a lot of time. Sometimes, if you look at something too much, you become too fixated. At several moments in the process it might be useful to have a review from someone outside of the group. A fresh approach to the design.

TASKS

1. Define your design problem clearly for the layman.
2. Select and recruit a group of outsiders who represent the end user of the product or service.
3. Organize a space to have a session and make sure you have all the materials you might need (presentation, questionnaires, etc.)
4. Set up a presentation for your design concept.
5. List down useful questions to ask your reviewers.
6. Have a moderator that presents the design concept(s), asks questions and reviews the design(s) with the outsiders.
7. Collect notes and record the session.
8. Analyze results of the session.

http://designmethodtoolkit.com/through-other-eyes/

WHEN
When design concept(s) have been selected and before working out too many details.

WHY
This method allows to get feedback on concepts by the target audience, allowing to modify the concept if needed.

NOTE!
Imagine presenting the concept to a kid. It should be easily understood by anyone.

OUTPUT
Insights on how the design concept is perceived by the target audience.

NEXT
Process feedback and see on which points you can improve your design.

Collage

A collage involves sticking images or words on to a large piece of paper, in order to group ideas, personal experiences, feelings and associations around a specific theme or topic.

TASKS

1. Set up a group session and a room.
2. Define the theme of the session and invite participants (minimum of 6-8).
3. Prepare the session, take care of magazines or other sources for images, scissors, markers, etc. Write down instructions for participants: what are they collaging and why?
4. Moderate the session, clearly communicating its purpose to participants. Create groups and start collaging.
5. Make sure explanations of why images and combinations are chosen are carefully documented. What is the story each collage is telling?
6. Collect and analyse the stories.
7. Create a summary with the most important findings. Include photos of the collages.

http://designmethodtoolkit.com/collage/

WHEN
Collages are generally focused on uncovering emotional/experience aspects of design.

WHY
This method uncovers connections and visual stories regarding a theme.

NOTE!
Have a selection of images that can be interpreted in different ways, among the materials.

OUTPUT
A collection of collages, that give insights on perception and emotional journeys.

NEXT
Try to sort the different collages and use them as input to gain insights.

The KJ method

A brainstorming and prioritizing method that places emphasis on the most important ideas and actions.

TASKS

1. Set up a group meeting and a room. You need at least 5 participants to generate a sufficient amount of ideas.
2. Select a moderator. This moderator frames the design challenge.
3. Participants generate many ideas and write them on post-its
4. Collect the idea post-its, shuffle them, and hand them out. No one should get one of their own ideas.
5. Ideas are read out as the moderator transcribes them on flipchart pages. During this phase, anyone can ask for clarification of any idea brought up and recorded. Ideas are categorized in groups (post the post-its on a wall or whiteboard). No more than 10 groups!
6. Best ideas are voted up, so that each group has clear winners. Discuss the insights.
7. Individuals take ownership of ideas and take responsibility for implementing or further developing each on a deadline.

http://designmethodtoolkit.com/the-kj-method/

WHEN
The method can be used throughout the complete design process.

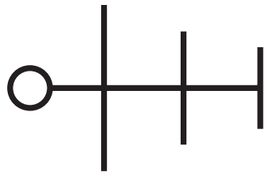
WHY
How do you assess what is most important? This method allows to prioritize your efforts.

NOTE!
Although all items may be discussed, debate or criticisms of ideas is not allowed.

OUTPUT
A starting point for a design solution and a priority list for actions and directions.

NEXT
Combine the KJ Method with practical concepting and prototyping methods to work out your ideas.

Fishbone diagram



Frame Insights · 2 HOURS - 4 HOURS · D · Create

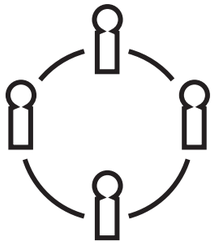
Brain writing

Ideation & Concepts · 2 HOURS - 4 HOURS · D · Create

Sensorial

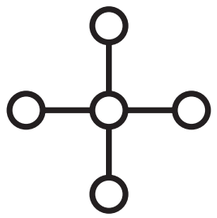
Ideation & Concepts · 2 HOURS - 4 HOURS · D · Create

Actors map



Define Intentions · 2 HOURS - 4 HOURS · D · Research

Stakeholders map

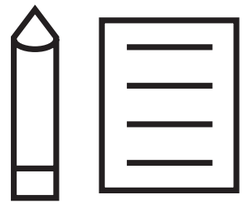


Define Intentions · 2 HOURS - 4 HOURS · D · Research

Co-discovery

Test · 2 HOURS - 1 DAY · D · Research

Written scenario



Frame Insights · 4 HOURS - 1 DAY · D · Create

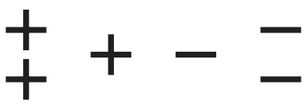
Cognitive map

Know User · 1 DAY - 2 DAYS · D · Research

Emotional journey

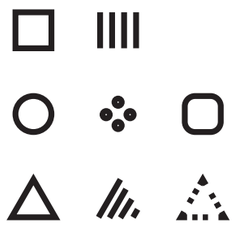
Frame Insights · 2 DAYS - 1 WEEK · D · Create

Harris profile



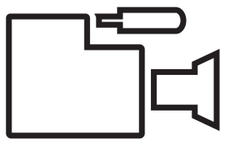
Test · 2 HOURS - 4 HOURS · D · Create

Morphological chart



Ideation & Concepts · 4 HOURS - 1 DAY · D · Create

Video prototyping



Test · 1 DAY - 2 WEEKS · D · Create

Actors map

The Actors map represents the relationship between stakeholders. It's a view of the service/ system and its context.

TASKS

1. Arrange a room where you can focus and work for a couple of hours.
2. List down the core stakeholders on a big sheet of paper.
3. List down the sub groups of stakeholders.
4. Connect the stakeholders to each other and describe how they relate to each other.
5. Write down the specifics of the relationships between the stakeholders, how, where and why do they communicate?
6. Document the end result.

WHEN
At the beginning of a project to understand relationships between the different parties.

WHY
Understanding relationships is an important aspect of (service) design.

NOTE!
Stakeholders aren't only employees or companies, a family member can also be a stakeholder.

OUTPUT
A map of all the stakeholders and their relationship with each other.

NEXT
Analyze the map and identify areas where there is room for improvement.

http://designmethodtoolkit.com/actors-map/

Sensorial

This brainstorming method uses our senses to generate ideas.

TASKS

1. Recruit a team of participants for the session.
2. Arrange a space and materials needed for the session.
3. Select a moderator. This person frames the design challenge.
4. Make teams and distribute post-it notes.
5. Each team generates ideas for each sense: vision, scent, feeling, hearing, and tasting; 20 minutes for each sense. Take 3 minutes break after each session.
6. Organize and cluster the post-its through discussion. Each team should have 5 concepts, 1 for each sense.
7. Collect the post-its and summarize them into a document/photos.

WHEN
To generate inovative ideas that are out of the team's comfort zone.

WHY
Sometimes ideas tend to focus on visual, auditory and tactile solutions, thinking of all the senses can trigger innovative solutions.

NOTE!
Teams have to come up with 6 to 10 ideas for each sense. Don't worry if ideas are impractical.

OUTPUT
A new wave of various ideas, focussed on different senses.

NEXT
Extract the most interesting ideas and take them to the next level.

http://designmethodtoolkit.com/sensorial/

Brain writing

Brainwriting is essentially the same as brainstorming. Ideas are generated by asking people to write them down instead of verbally presenting them.

TASKS

1. Recruit a team that will be part of the brainwriting session.
2. Arrange a space and materials needed for the session.
3. As a moderator, organize the participants and define the problem.
4. Each participant brainstorms 3 solutions in 2 minutes in written form.
5. After 2 minutes, ask participants to pass the sheet to the left, the sheets circulate.
6. The participants build upon the existing suggestions writing their own idea underneath the previous one.
7. Repeat as many times as there are people.

WHEN
When there is a need to develop ideas with a team that doesn't feel comfortable with either drawing or presenting.

WHY
Some people don't feel comfortable with drawing or presenting, this might hinder their idea generation.

NOTE!
In each new round allow one extra minute.
Good for group interaction.

OUTPUT
Many solutions to the problem, co-produced by a team.

NEXT
Filter the ideas with the most potential and develop them.

http://designmethodtoolkit.com/brain-writing/

Fishbone diagram

Fishbone diagrams show the causes of a specific event

TASKS

1. Organize a space, materials and participants for the session.
2. Draw the six arms of the diagram on a big sheet of paper or whiteboard.
3. Define the problem clearly, as a short statement at the head of the diagram.
4. Describe the causes of each bone and write them down at the end of each branch.
5. Use the 4 M's as categories: Machine, Man, Methods, Materials.
6. Minor causes are listed around the major causes.
7. Interpret the diagram once it is finished.

WHEN
To analyze possible problems that can help make design decissions.

WHY
This method allows to get a clear overview of causes and effects.

NOTE!
If there are branches that are too crowded, split them into different branches.

OUTPUT
A diagram showing causes and effects.

NEXT
Identify possibilities and opportunities for your design.

http://designmethodtoolkit.com/fishbone-diagram/

Cognitive map

A cognitive map is a mental map of an environment. Participants map a physical or virtual environment by what they remember based on their knowledge of a space.

TASKS

1. Recruit participants and organize materials and a space for a creative session.
2. As a moderator ask a participant to create a map showing how they navigate in a real or virtual space. This can be done several times. Keep in mind that maps can be created in collaboration by a group of people to incorporate different viewpoints.
3. Ask other participants to navigate through the map, how they perform a task or how they "read" the space.
4. Take notes of what participants describe, take special note of moments where the participants backtrack or change their primary goal.
5. Analize the different maps and the flow each of them has.

WHEN
when you need to gain understanding of the way users navigate through a design solution.

WHY
Most solutions are developed by people that are not the end users, this allows to test of the users understand the design.

NOTE!
Space doesn't necessarily have to be physical, a website or an app also require navigation skills.

OUTPUT
List of what works and what doesn't work in the design.

NEXT
Refine the design based on the insights that have been gained.

http://designmethodtoolkit.com/cognitive-map/

Written scenario

Scenarios are stories that describe possible future events. They are used to understand and explore different possible ways in which the future can unfold.

TASKS

1. Decide on the key question(s) to be analyzed.
2. Determine what is necessary to make a believable scenario, such as stakeholders, goals, and the scope of the scenario.
3. Map basic trends and driving forces that will/ can affect the future.
4. Consider key uncertainties and unknowns.
5. Determine a starting point for the scenario.
6. Produce 7-9 mini-scenarios and then reduce the number to 3.
7. In a simple language, describe the interactions and how they would behave within the proposed context.

WHEN
Once some research has been done and there is a need for solutions that are set in possible future(s).

WHY
Developing scenarios for the future helps to design solutions which can be simplified to fit in the present.

NOTE!
Write in simple, easy readable language and in the third person. Keep in mind that written scenarios are purely hypothetical.

OUTPUT
Analysis of possible futures that allow to test concepts.

NEXT
Visualize the scenarios, drawing and video work very well.

http://designmethodtoolkit.com/written-scenario/

Co-discovery

Two participants perform an activity and help each other as they would naturally. They are encouraged to explain what they are thinking about while working on the tasks.

TASKS

1. Select and recruit participants that are representative of the end user.
2. Prepare the testing session, schedule tests so participants are in pairs, prepare prototype and test materials, set up and test video/audio recording, design the scenario and tasks for the user test.
3. As a moderator, explain to users that the idea is to test the system. Ask them to perform the tasks and mention that the thought process is important and that they should talk aloud explaining what they are doing and why.
4. As notetaker, make sure you take notes and facilitate setting up/updating the test when needed.
5. Analyze the video recordings.

WHEN
In the testing phases of a project, this can be done with sketchy designs and/or high fidelity prototypes.

WHY
Having two participants that test the system, allows to gain different viewpoints on the same design.

NOTE!
If the participants have trouble with a specific task, avoid helping them, let them figure it out themselves.

OUTPUT
An overview of what works and what doesn't in the design.

NEXT
Improve the design where it had problems during the test.

http://designmethodtoolkit.com/co-discovery/

Stakeholders map

A stakeholders map is used to document key stakeholders. The map is a brief summary of the relationships and can therefore be used as reference for the design team.

TASKS

1. Arrange a room where you can focus and work for a couple of hours.
2. Make a list of members of the stakeholder community and categorize them.
3. Based on the current knowledge, prioritize the stakeholders. Define key stakeholders in different aspects of the project for example, requirements, cost, aesthetics, etc.
4. Summarize your findings in a finished version of the map.
5. Make the map visible to the design team.

WHEN
At the beginning of a project to understand relationships between the different parties.

WHY
Understanding relationships is an important aspect of (service) design.

NOTE!
Stakeholders aren't only employees or companies, a family member can also be a stakeholder.

OUTPUT
A summarized map of all the stakeholders and their relationship with each other.

NEXT
Use the map to validate decissions that might affect different stakeholders.

http://designmethodtoolkit.com/stakeholders-map/

Video prototyping

Video prototyping is a simple way to show new and speculative designs, ideas, scenarios, futures or products. Showing a video gives you a clear idea of how users might perceive a concept that might be difficult to prototype otherwise.

TASKS

1. Select a concept to prototype, Split the concept into steps that need to be shown and explained.
2. Write a script that clearly explains all the steps of the solution and how they work within the desired context.
3. Create a storyboard based on the script.
4. Organize everything that is needed to proceed for filming (actors, cameras, permits, etc.)
5. Film according to your plan and schedule.
6. Develop special graphics and/or special effects if needed.
7. Edit all the clips into a consistent story and render it.
8. Recruit and gather potential users of the design, show them the video.
9. Collect notes and feedback on the user's reaction to the prototype.

WHEN
When a complex idea needs to be quickly tested.

WHY
To test a promising idea that is complicated or time consuming to prototype.

NOTE!
Make sure that the prototype is clear and easy to follow by different users and/or stakeholders. Usually high production yields better results.

OUTPUT
A video prototype of an idea and feedback on what works and what doesn't.

NEXT
Consider if the idea works, if it needs to be polished or if it needs to be trashed.

http://designmethodtoolkit.com/video-prototyping/

Morphological chart

A Morphological chart is a method that splits a product/solution into smaller chunks that can then be analyzed and ideated for independently. Afterwards those ideas can be mixed and matched to develop different solutions.

TASKS

1. Define the design problem, this has to be defined as clearly as possible.
2. Identify all the possible tasks and subtasks that are needed to tackle the design problem.
3. Write down all the tasks and subtasks within a matrix.
4. Go through all the different tasks/subtasks draw diagrams/sketches of ways that they could be solved. Draw as many ways to accomplish each of them as you can think of.
5. Generate design concepts by combining solutions from each row. Don't only go for "safe" options, make weird combinations too!
6. Filter the ideas into the most promising ones (at least three).
7. Sketch/draw the top three solutions.

WHEN
After having a clear overview of the design problem and at the beginning of the ideation phase.

WHY
This method allows for a structured way to develop ideas systematically.

NOTE!
Try to have as many subtasks as needed, for example you might want to subdivide a notification into "surprise", "inform", "gain user's attention".

OUTPUT
Concepts developed by using a systematic method.

NEXT
Select the most interesting ideas to develop further.

http://designmethodtoolkit.com/morphological-chart/

Harris profile

A Harris Profile is a way to visualize the strengths and weaknesses of different design concepts.

TASKS

1. Define and list the requirements that are important for the design concept to be successful.
2. Next to the list of requirements write a 4 point matrix for each concept you want to test. The scale of the matrix is -2, -1, +1, +2.
3. Go through the different concepts and rate each of them based on the requirements. How well do they solve each of the requirements? if they do it very well, mark them as +2, if they are very bad at it mark it as -2.
4. After rating all the concepts, step back and get an overview of the concepts. You can now proceed to filter them based on how well they fit within the different requirements. Make a selection of the most promising ones.

WHEN
After an initial filtering of design concepts and before moving to prototyping a few of them.

WHY
You will need to rate your concepts to decide which ones to develop further.

NOTE!
Use different colors for the positive and negative columns, this helps to quickly visualize the information.

OUTPUT
A short list of concepts to develop and a clear overview on which concepts fit the requirements.

NEXT
Refine and prototype your most promising solutions.

http://designmethodtoolkit.com/harris-profile/

Emotional journey

An emotional journey is a visualization that maps and illustrates a user's emotional experience through the experience of interacting with an organization, product or brand.

TASKS

1. Organize a space, materials and participants for the session.
2. Define the activity for which you want to map out the emotional journey. For example, it could be a person's ride on the subway while heading home.
3. Collect the internal insights of the team, based on previous research and experiences.
4. Map out the journey and mark the different touchpoints where the user comes in contact with the product/service/brand/organization.
5. If you have developed various personas, make sure that you develop a journey for each of them. Each experience will be different.
6. Use a line graph to mark underneath the jouney the moments in which users feel excited and moments where they feel frustrated.
7. Analyze the results of mapping the journey.

WHEN
When you need to identify how people feel during the experience of using your services.

WHY
Allows the design team to understand where to improve the experience.

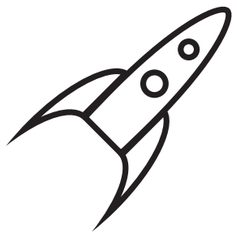
NOTE!
Emotional journeys depend on good research.

OUTPUT
A mapped out overview of how someone feels while doing something. A look inside the 'emotional rollercoaster'.

NEXT
Analyse the peaks and lows, improve where needed.

http://designmethodtoolkit.com/emotional-journey/

Future workshop



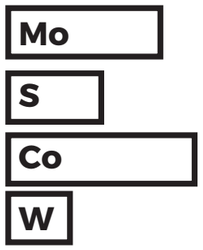
Ideation & Concepts

1 DAY - 1 WEEK

D

Research

MoSCoW



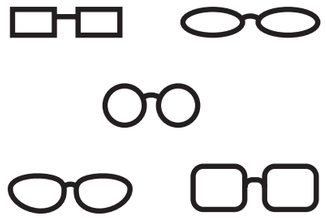
Define Intentions

2 HOUR - 4 HOURS

D

Create

Behavioral lenses



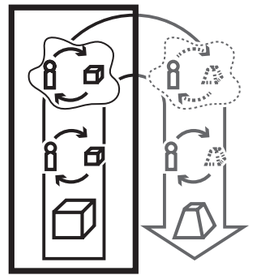
Know User

4 HOURS - 1 DAY

D

Create

ViP (Deconstruct)



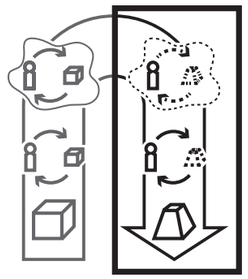
Know User

1 DAY - 1 WEEK

D

Research

ViP (Design)



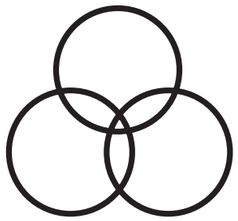
Ideation & Concepts

1 DAY - 1 WEEK

D

Create

Venn diagram



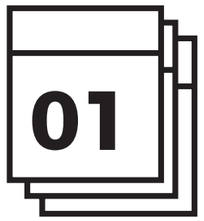
Frame Insights

2 HOURS - 4 HOURS

D

Create

Day in the life



Know User

1 DAY - 1 WEEK

D

Research

Empathy in action

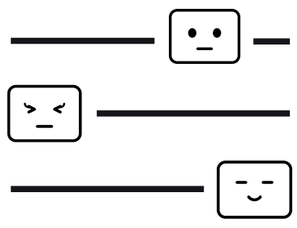
Frame Insights

4 HOURS - 1 DAY

D

Create

Emoji story



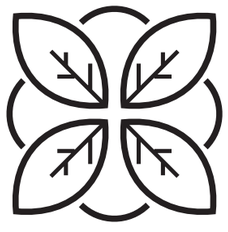
Frame Insights

30 MINUTES - 2 HOURS

D

Create

People Planet Profit



Test

1 HOUR - 2 HOURS

D

Research

Dark side

Ideation & Concepts

1 HOUR - 4 HOURS

D

Create

Mash-up

Ideation & Concepts

1 HOUR - 4 HOURS

D

Create

ViP (Deconstruct)

Vision in Product Design aims to design products towards a desired future. As a first step, you have to deconstruct a current product/service that fits within the context of your project.

TASKS

1. Organize a team, and a room with materials, such as markers and flipboard sheets.
2. Deconstruct the product, think of the reasons why the product has its current form. Make a very clear description making sure you can identify the product on the description alone.
3. Deconstruct the interaction and describe it. Make sure you describe the interaction itself and not the product/user. An interaction could be warm, friendly, blobby, etc.
4. Deconstruct the context, think about the way the context has defined the product, and categorize these into principles, states, developments and trends.
5. Make a selection and cluster the aspects you have uncovered that might affect your design, categorize them into principles, states, developments and trends.
7. Combine the elements into one (or many) coherent story(ies), these will be your context(s).

http://designmethodtoolkit.com/vip-deconstruct/

WHEN
When you need to design for a future and not just a product.

WHY
As a designer you can think of a vision you want to accomplish and design for.

NOTE!
In the deconstruct phase the idea is to understand a product/service as much as possible, save ideation for the second part of the ViP Method.

OUTPUT
A list of principles, states, developments and trends.
A series of contexts that are contained in stories.

NEXT
Move to ViP (Design) Method card

Behavioral lenses

Behavioral Lenses focus on understanding the behavior of your target group and creating strategies to design for behavior change.

TASKS

1. Decide what the targeted behavior you want to aim for is, make a clear description of it.
2. Decide which lense is related to the targeted behavior you are researching. The lenses are:
   A. Habits and impulses.
   B. Knowing and finding.
   C. Seeing and realizing.
   D. To want and to be able.
   E. To do and to keep doing.
3. Define the influence of time, context and impact of the described behavioral aspects on your users. Draw conclusions.
4. Read the lense(s) you are using.
5. List the elements that influence the current behavior and how it relates to the one described in the lense(s). Include triggers and effects of the behavior.
6. Use the intervention strategies on the lense(s) to ideate on ways that you can change the current behavior into the targeted behavior you are aiming for.

http://designmethodtoolkit.com/behavioral-lenses/

WHEN
When you need to understand the user and context.

WHY
Design for behavior change is tricky, you will need a deep understanding of your users' behaviors.

NOTE!
Be sure to see the lenses as an aid for focus, you will need to use other methods to understand your users better.

OUTPUT
A concrete representation of the relationship between current and targeted behaviors.

NEXT
Use the knowledge you gained to enrich your project's Persona(s).

MosCoW

MoSCoW is a method that allows the team to prioritize the different features that they will work on. Features are then categorized into "Must have", "Should have", "Could have", or "Would like but won't get".

TASKS

1. List all the features that you want to develop within a specific time frame (for example a Sprint).
2. Make a diagram that has the four different categories "Must have", "Should have", "Could have", or "Would like but won't get". Classify the features within the four categories.
3. "Must have" are features that are critical and need to be implemented to have a successful product.
4. "Should have" are features that are important but are not critical, they can be done in a different way.
5. "Could have" are features that would be nice to have, but won't make a significant change in the user experience.
6. "Would like but won't get" are features that are too difficult to implement.
7. Once the different features have been rated, plan accordingly by defining tasks.

http://designmethodtoolkit.com/moscow/

WHEN
At the beginning of a timeslot (for example during Sprint planning) and when planning is needed.

WHY
Allows to make a clear hierarchy of what needs to be implemented, and what is not feasible to include within the current constraints.

NOTE!
Be realistic about what is actually needed and what is feasible to do.

OUTPUT
A work plan that can be distributed among the design team.

NEXT
Follow and track the plan, make sure to communicate it clearly to the team.

Future workshop

Future workshop is a method that aims to have stakeholders design their desired future, avoiding constraints imposed by experts or organizations.

TASKS

1. Define the concept that will be the main objective of the workshop.
2. Recruit participants for the session and make sure everything has been arranged, (paper, pens, markers, meeting room, etc.)
3. Select a moderator to introduce the topic of the session and explain the objectives.
4. Ask participants to reflect on the present day situation and write down all their negative experiences.
5. Participants fantasize about the desired future situation. How would the ideal situation be for them? For this stage there are no limitations, everything is possible.
6. The ideas that were generated are tested for feasibility. It is important to note what barriers the ideas face and what could be done to overcome these barriers.
7. Develop an implementation plan.
8. Check if the implementation is coming along as planned.

http://designmethodtoolkit.com/future-workshop/

WHEN
When ideas need to be developed outside of the design team.

WHY
This method allows discovering what an ideal future looks like, this can be very useful with children and teenagers.

NOTE!
This method requires a lot of preparation by the facilitators and moderator.

OUTPUT
Ideas generated by users that show what their ideal solution would look like.

NEXT
Follow the development of the implementation plan.

Empathy in action

Empathy in action is a way to help people empathize with, and understand a specific situation that is foreign to them.

TASKS

1. Analyze data that the team has gathered.
2. Do a brainstorm on how to make people that are completely unfamiliar with the topic, quickly understand and empathize with the problem.
3. Develop a quick prototype of a physical experience and test it within your own team.
4. Collect feedback, and use what you have learned to refine the prototype you have created. Does it make people empathize with the problem?
5. Iterate on the prototype until it achieves your goal.
6. Present the prototype to your audience.
7. Record videos, take photos and analyze the data to gather insights.

http://designmethodtoolkit.com/empathy-in-action/

WHEN
When you have collected enough data to understand a problem and need to let people unfamiliar with the problem empathize with it.

WHY
Sometimes stakeholders need to see the situation differently.

NOTE!
Make sure the message is clear and that the experience is not offensive.

OUTPUT
A prototype that can be used to let people understand the problem.

NEXT
Collect insights and design opportunities.

Day in the life

A study in which the designer observes the participant in the location and context of their usual activities, observing and recording events to understand the activities from the participant's point of view.

TASKS

1. Based on your design question, define the activities that you want to understand better.
2. Find participants that are willing to be followed for some hours (or even an entire day).
3. Arrange/schedule to follow participants throughout their day/activities.
4. Make sure you have materials to capture the data that the participants feel comfortable with (audio/video recordings, note taking, etc.)
5. Follow participants and capture the information. Sometimes it help to ask participants to explain the reasoning they have for doing things in a certain way.
6. Go over the information that has been captured. Make storyboards that include a timeline of actions and explanatory text
7. Analyse the data to gather insights.

http://designmethodtoolkit.com/day-in-the-life/

WHEN
When you need to understand how users go about their day and how your design could fit with their routines.

WHY
Following a user allows you to see how they behave in the real world, which can be different from how they say they behave.

NOTE!
Make sure to have a balance between asking questions to understand and just observing the actions.

OUTPUT
Storyboard(s) of users' routines that allow you to understand how your design can fit in them.

NEXT
Collect insights and design opportunities.

Venn diagram

A Venn diagram or set diagram is a diagram that shows all possible logical relations between a finite collection of sets.

TASKS

1. Arrange a sheet of paper (or a digital artboard) and gather all the information you have at the moment.
2. Start clustering information and arrange it in groups.
3. Organize the information by drawing a circle and placing the clustered information in the circle.
4. Repeat the previous step for each of the information clusters.
5. Some information will overlap across different clusters, make sure you place the information in the intersection between the different circles.
6. Review if all the information has been placed, some information might have to be placed in a different cluster or a cluster will have to be divided in sub-clusters.
7. Analyze the diagram and polish the way it is displayed, this could be done quickly on paper or on a graphic design computer program.

http://designmethodtoolkit.com/venn-diagram/

WHEN
When the information gathered needs to be analyzed.

WHY
Allows to cluster information and understand commonalities across them. Can help to gather insights and quickly communicate them.

NOTE!
You might have to develop different versions to be able to arrange all the information.

OUTPUT
A venn diagram that can display complex information so that it is easy to understand.

NEXT
Take the insights and convert them into design criteria.

ViP (Design)

Vision in Product Design aims to design towards a desired future in which a product fits. As a second step, you start designing for a future context, interaction and product.

TASKS
Continued from ViP (Deconstruct)

1. Analyze your stories. Make sure you understand how the principles, states, trends, developments and trends have shaped the product/service and how it fits in a context.
2. Write down your statement, this is what you aim to achieve with your design, for example I want people to feel happier during their daily commute.
3. Define the interactions that can promote, facilitate and enhance your statement, make and prioritize a list with them. Select the top 5 and explain why they are important.
4. Gather large sheets of paper, pencils and markers. Distribute among the participants.
5. Start sketching ideas based on your statement, and your desired interaction qualities. Keep in mind that there are many ways to achieve this, try different ways (lo-tech, high-tech, service, product, etc.)

http://designmethodtoolkit.com/vip-design/

WHEN
After deconstructing a product/service using the ViP (deconstruct) method card.

WHY
ViP allows to design for your vision as a designer.

NOTE!
Make sure you understand the principles, states, developments and trends, before you start designing.

OUTPUT
Ideas and sketches for a possible future.

NEXT
Make a selection and develop your ideas further. Build simple prototypes of the most promising ones.

Mash-up

The Mash-up brainstorm technique randomly combines different categories into one concept providing you with a range of unexpected ideas.

TASKS

1. Divide the wall in four sections: human needs, global goals challenges, technology and mash-up.
2. Starting with human needs, write down as many ideas that you have, one per post it (for example, love, waking up, sporting, eating. Use max five minutes per section.
3. Move on to the global goals challenges. Depending on the goal(s) you are working on, list as many issues related to the goal.
4. Move on to technology. List as many technological innovations or existing technologies you can think of.
5. Randomly pick one post it from each category and combine them into one idea. Write your idea on a post-it and attach it to the rest. Post all four post-its on the wall.
6. Discuss all ideas with your group.
7. Cluster your ideas into themes and select the best ones.

http://designmethodtoolkit.com/mash-up/

WHEN
When you need to spark up your creativity with a little bit of craziness.

WHY
Random combinations can sometimes lead to better innovation.

NOTE!
Go crazy! The final idea does not need to be something you can create right away, but it might have an element that you can use for the rest of your process. Realistically look at what could be useful and inspiring for the future.

OUTPUT
New combinations of existing services and ideas.

NEXT
Cluster and select ideas, by using dot voting for example.

Dark side

The dark side turns your challenge into a negative one, forcing you to look at it from a refreshing angle.

TASKS

1. Arrange a room where you can focus and work for a couple of hours.
2. Write down your design challenge and reframe it in the most negative way possible. For example, "How can we make our city more sustainable" becomes "How can we make our city the most polluted city of the world?"
3. On the left side of your challenge, list down as manysolutions as possible that solve your new design challenge. Write down each idea on a post it.
4. Randomly take a post it from the left side, and add another idea that transforms the first solution into a positive one.
5. Discuss all ideas with your group.
6. If you want you can cluster and select final ideas.

http://designmethodtoolkit.com/dark-side/

WHEN
When you need a lot of ideas that bring a refreshing perspective on your design challenges.

WHY
Reframing your design challenge negatively forces you to look at your problem from another angle.

NOTE!
Be sure that your positive idea really adds something new, eg. "Dog poo everywhere" becomes "Every first Sunday of the month is Puppy in the park day" instead of "No more dog poo everywhere".

OUTPUT
A collection of new, creative ideas.

NEXT
Pick the best ideas and develop them further.

People Planet Profit

People Planet Profit is a way to analyze the potential impact that your idea will have from a sustainability perspective.

TASKS

1. Print out the People Planet Profit template.
2. Write down a short description of your idea.
3. Describe how your idea facilitates well being for all the different stakeholders. Rate your idea on the right hand column based on the concepts described there.
4. Describe how your concept aims to benefit the natural order or at least minimize as much as possible any negative impact on the environment. Rate your idea on the right hand column based on the concepts described there.
5. Describe how your concept takes into account the real economic impact it will have on its economic environment. Rate your idea on the right hand column based on the concepts described there.
6. Analyze your results and consider if you can improve your idea on any of the criteria. Compare this idea to others to see which one works better.

http://designmethodtoolkit.com/people-planet-profit/

WHEN
After having a few feasible ideas that could be developed further.

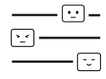
WHY
Helps to identify the sustainable and societal impact the ideas can have.

NOTE!
Make sure to think about the impact for all stakeholders and be aware that there might be some aspects that might not have been taken into account.

OUTPUT
Ideas and concepts that are rated based on their impact.

NEXT
Pick the best ideas and develop them further.

Emoji story



An Emoji story is a method to interpret collected data by translating it into a story. In the story, you leave out specific words that describe important and emotional concepts and change them for Emoji's.

TASKS

1. Go through the collected data on context, the user and possible problems, etc.
2. Pick one specific scene that you feel is relevant and depicts an opportunity and design challenge.
3. Write a short story, first only with words.
4. Choose which elements and feelings should be highlighted and change them with Emoji's.

http://designmethodtoolkit.com/emoji-story/

WHEN
After having collected data of user behaviour, context and emotions.

WHY
Helps to filter out the most important elements that influence a user's experience.

NOTE!
Make sure the story describes a user, context, event and the impact!

OUTPUT
A short story with visualised emotions and concepts with Emoji's.

NEXT
Use the emotions and main elements to inspire your design direction.