

Design thinking

method of generating ideas



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INTRODUCTION

Entrepreneurial sprint" is an international youth exchange under the Erasmus+ programme organized by Ekonomska klinika in Zagreb, Croatia during the period from 14th to 21th October 2017. involving 25 participants from Croatia, Spain, Italy, Greece and Portugal. It combines theoretical workshops with practical sessions, all this through non- formal techniques. Some of these informal practices are: visiting existing social enterprises, sharing experiences, presenting examples and successful initiatives, focusing on the positive aspects, inviting mentors and speakers and the teamwork of participants. Formal practices consist of :theoretical inputs on social entrepreneurship, group brainstorming, design thinking workshops ,market research methods and pitching presentation. The youth exchange will have concrete impact on the participants. Participants will : become more confident in entrepreneurship and in the business field, become more relaxed to work with intercultural groups and business relations; they will get to know more about the Erasmus+ programme and project management; as well as create bonds with each other for further cooperation. The project will have a good local impact as the members returned from the youth exchange being empowered and possibly thinking about starting their own business and creating startups as a way to fight unemployment.

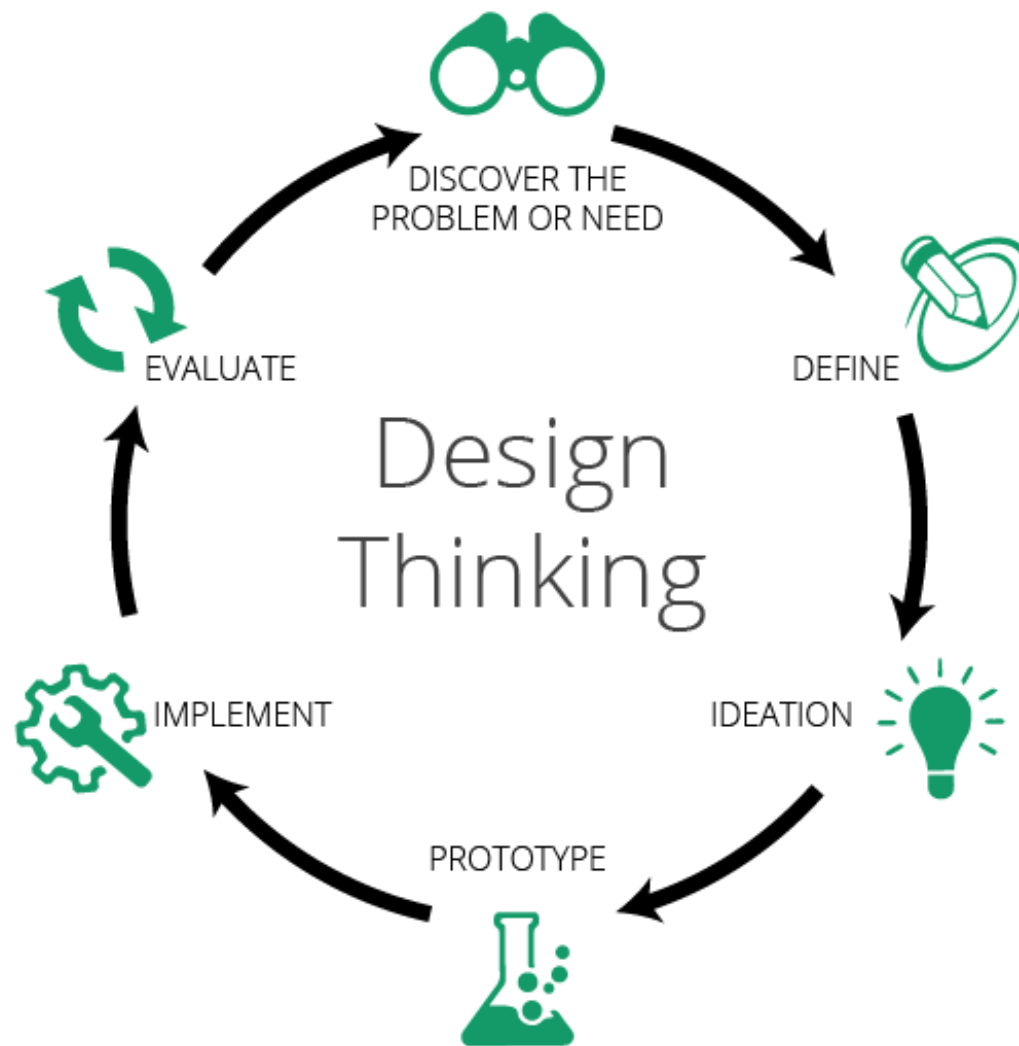
INTRODUCTION

During this project participants have learned about social entrepreneurship and ways of generating ideas. One of the best methods of generating ideas is design thinking. Design thinking has been implicated throughout the whole project in a different forms of workshops and activities. This course lasted 4 days but the idea can be implicated on different time variations. Main methods will be explained in this guide and it can serve as a manual for other workshops and projects which want to use the same method.

What is design thinking?

Design Thinking is a design methodology that provides a solution-based approach to solving problems. It's extremely useful in tackling complex problems that are ill-defined or unknown, by understanding the human needs involved, by re-framing the problem in human-centric ways, by creating many ideas in brainstorming sessions, and by adopting a hands-on approach in prototyping and testing. Understanding six stages of Design Thinking will empower anyone to apply the Design Thinking methods in order to solve complex problems that occur around us.

It is also an approach to resolve issues outside of professional design practice, such as in business and social contexts. Design thinking in business uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity.



What is design thinking?

It is important to note that the six stages are not always sequential — they do not have to follow any specific order and they can often occur in parallel and be repeated iteratively. As such, the stages should be understood as different modes that contribute to a project, rather than sequential steps. However, the amazing thing about the six-stage Design Thinking model is that it systematises and identifies the 6 stages/modes you would expect to carry out in a design project – and in any innovative problem solving project. Every project will involve activities specific to the product under development, but the central idea behind each stage remains the same.

Design Thinking should not be seen as a concrete and inflexible approach to design; the component stages identified in the image above serve as a guide to the activities that you would typically find. In order to gain the purest and most informative insights for your particular project, these stages might be switched, conducted concurrently and repeated several times in order to expand the solution space, and narrow down on the best possible solutions.

What is design thinking?

As you will note from the image above, one of the main benefits of the six-stage model is the way in which knowledge acquired at the later stages can feedback to earlier stages. Information is continually used to both inform the understanding of the problem and solution spaces, and to redefine the problem(s). This creates a perpetual loop, in which the designers continue to gain new insights, develop new ways of viewing the product and its possible uses, and develop a greater understanding of the users and the problems they face.



1. DISCOVER THE PROBLEM

The first step of design thinking is problem detecting and discovering what is the problem which you are trying to solve. There are many different ways of doing this, but we are going to focus on few of them.

1) Problem detecting

Group brainstorming, discussion - to define actual social problems in societies and create mind map. Each of us have our of priorities and opinions but for the process of creating something the whole team should be on the same page (if this is a project which includes multiple people).

Duration 30 min- 1h

Post-it stickers, pen, board/wall/ B2 paper

Participants should think of the most important problems which they what to solve, what is in their opinion the main reason why they are doing this and problems of other people. One problem should be one post it paper. After everyone has finished participants need to explain why they chose this problem and they must post it on the board/ wall. If the next person has the same the problem they must put it on the top of the post it before. The problems which have the most post its are the ones you should focus on.

2) Examples of good practices

Theoretical input and plenary discussion - to get more information about the topic and good practices from more countries, to define difference between problems and examples of current solutions.

Duration 30 min- 1h

Participants should research about existing solutions in the your own country/wold or the target market. If you find similar ideas or solutions you should mention them and say what will you try do to different, what are your strengths and weaknesses and what are theirs. Also focus on the advantages and opportunities. Everyone should try to find as many good examples as they can or at least 3. Then explain and discuss these examples and write the summary on paper so you can always look back on it.

2.DEFINE



During the Define stage, you put together the information you have created and gathered during the first stage. You will analyse your observations and synthesise them in order to define the core problems that you and your team have identified up to this point. You should seek to define the problem as a problem statement in a human-centred manner.

To illustrate, instead of defining the problem as your own wish or a need of the company such as, “We need to increase our food-product market share among young teenage girls by 5%,” a much better way to define the problem would be, “Teenage girls need to eat nutritious food in order to thrive, be healthy and grow.”

2.DEFINE



You should take 15 minutes to write down the answers to the the these questions:

WHO is our target group?

WHY do we want to help/ they need our solution?

WHAT are we going to do?

HOW are we going to that?

These are the main questions you should have answers to. If you want to form a project or a business you should also define you mission and vision.

3.IDEATION

During the third stage of the Design Thinking process, designers are ready to start generating ideas. You've grown to understand your users and their needs in the first stage, and you've analysed and synthesised your observations in the Define stage, and ended up with a human-centered problem statement. With this solid background yourself and your team members can start to 'think outside the box' to identify new solutions to the problem statement you've created, and you can start to look for alternative ways of viewing the problem.



3.IDEATION

There are hundreds of Ideation techniques such as Brainstorm, Brainwrite, Subtracting method, Morphological Analysis and Forced relationship. Brainstorm and Subtracting method sessions are typically used to stimulate free thinking and to expand the problem space. It is important to get as many ideas or problem solutions as possible at the beginning of the Ideation phase. You should pick some other Ideation techniques by the end of the Ideation phase to help you investigate and test your ideas to find the best way to either solve a problem, or provide the elements required to circumvent the problem. We are going to focus on some of them.



1) BRAINWRITING

6-3-5 Brainwriting is a particular form of brainstorming which involves driving inspiration from other members in a cyclical way

The technique requires 6 participants, but 4 can be enough. It is fundamental to assure that all participants share a deep background knowledge on the topic of the brainwriting session. Once the topic of the session is narrowed down to a problem statement, this is announced and written on top of the Idea Form. This is a worksheet that has to be handed out to each participant and consists of a grid where the heading of the columns are Idea 1, Idea 2 and Idea 3 and the rows identify the name of who has contributed to that particular suggestion.



1) BRAINWRITING

At this point, the session is ready to start and participants are given 5 minutes to complete the first row and write down the first ideas working in silence. These may be expressed in any graphical form: written, drawn, through a symbol or however the author prefers. The supervisor signals the end of time, and the sheet is passed on to the next participant on the right. Now the process is repeated and each participant is free to get inspired from the idea he reads on the sheet written by his neighbour and contribute to them by integrating or completing them, or decide to ignore them and start a new one from scratch. The process goes on until the worksheet is completely filled in or 30 min. Team then selects 1 to 3 ideas the group can focus on.

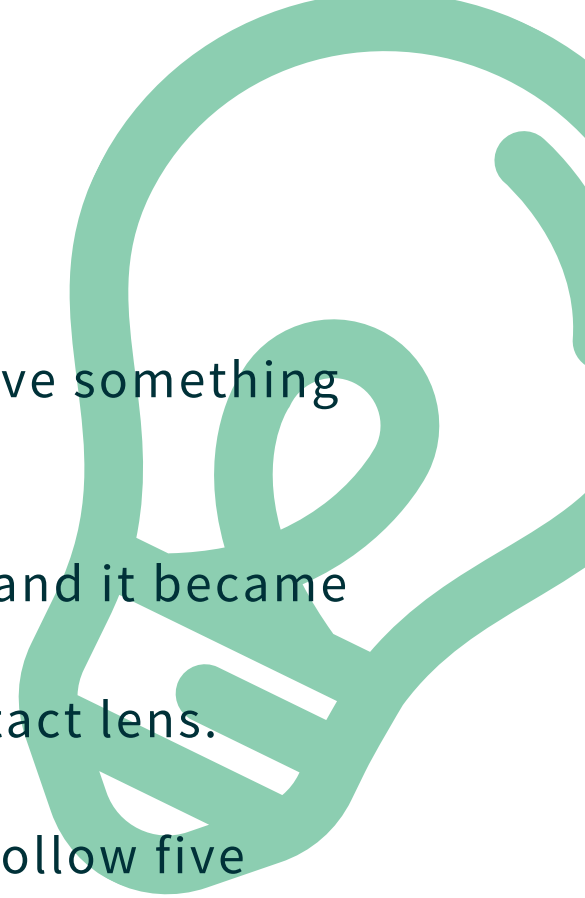


2) SUBTRACTION METHOD

Subtraction: Innovative products and services often have something removed, usually something previously thought to be essential. For example: The bike has had the rear wheel removed and it became exercise bike. Glasses had its frame removed and it became contact lens.

To get the most out of the Subtraction Technique, you follow five steps:

1. List the product's or service's internal components.
2. Select an essential component and imagine removing it. There are two ways:
 - a. Full Subtraction. The entire component is removed.
 - b. Partial Subtraction. Take one of the features or functions of the component away or diminish it in some way.



2) SUBTRACTION METHOD

3. Visualize the resulting concept (no matter how strange it seems).
4. What are the potential benefits, markets, and values? Who would want this new product or service, and why would they find it valuable? If you are trying to solve a specific problem, how can it help address that particular challenge? After you've considered the concept "as is" (without that essential component), try replacing the function with something from the Closed World (but not with the original component). You can replace the component with either an internal or external component. What are the potential benefits, markets, and values of the revised concept?
4. If you decide that this new product or service is valuable, then ask: Is it feasible? Can you actually create these new products? Perform these new services? Why or why not? Is there any way to refine or adapt the idea to make it more viable?

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3)FORCED RELATIONSHIP

The idea is to compare the problem with something else that has little or nothing in common and gaining new insights as a result. You can force a relationship between almost anything, and get new insights - companies and whales, management systems and telephone networks, or your relationship and a pencil.

Forcing relationships is one of the most powerful ways to develop ways to develop new insights and new solutions.

A useful way of developing the relationships is to have a selection of objects or cards with pictures to help you generate ideas.

Choose an object or card at random and see what relationships you can force.

Use mind-mapping or a matrix to record the attributes and then explore aspects of the problem at hand.



4.PROTOTYPE

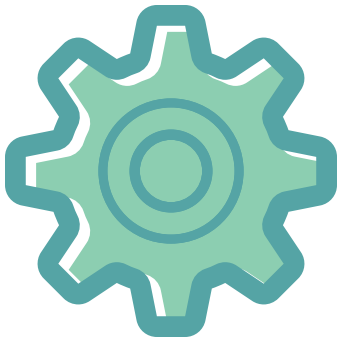
The design team will now produce a number of inexpensive, scaled down versions of the product or specific features found within the product, so they can investigate the problem solutions generated in the previous stage. Prototypes may be shared and tested within the team itself, in other departments, or on a small group of people outside the design team. This is an experimental phase, and the aim is to identify the best possible solution for each of the problems identified during the first three stages. The solutions are implemented within the prototypes and, one-by-one, they are investigated and either accepted, improved and re-examined, or rejected on the basis of the users' experiences. By the end of this stage, the design team will have a better idea of the constraints inherent within the product, the problems that are present, and have a better/more informed perspective of how real users would behave, think, and feel when interacting with the end product.



BUSSINES CANVAS MODEL

Business Model Canvas is a strategic management and lean startup template for developing new or documenting existing business models. It is a visual chart with elements describing a firm's or product's value proposition, infrastructure, customers, and finances. It assists firms in aligning their activities by illustrating potential trade-offs. If your ideas is a startup or a project with business characteristics you should make a canvas model.

You will need a big paper which you have to divide into 9 blocks.



30 minutes

Each block is a key component of your firm and you have to answer the specific questions about it.

BUSSINES CANVAS MODEL

Customer Segments: Who are the customers? What do they think? See? Feel? Do?

Value Propositions: What's compelling about the proposition? Why do customers buy, use?

Channels: How are these propositions promoted, sold and delivered? Why? Is it working?



Customer Relationships: How do you interact with the customer through their 'journey'?

Revenue Streams: How does the business earn revenue from the value propositions?

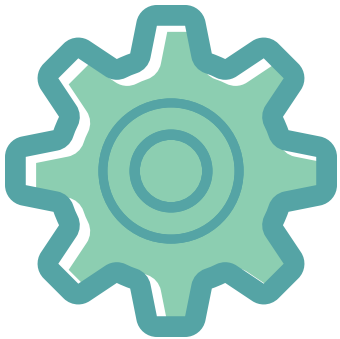
BUSSINES CANVAS MODEL

Key Activities: What uniquely strategic things does the business do to deliver its proposition?

Key Resources: What unique strategic assets must the business have to compete?

Key Partnerships: What can the company not do so it can focus on its Key Activities?

Cost Structure: What are the business' major cost drivers? How are they linked to revenue?





5. IMPLEMENT

Designers or evaluators rigorously test the complete product using the best solutions identified during the prototyping phase. This is the late stage of the model, but in an iterative process, the results generated during the testing phase are often used to redefine one or more problems and inform the understanding of the users, the conditions of use, how people think, behave, and feel, and to empathise. Even during this phase, alterations and refinements are made in order to rule out problem solutions and derive as deep an understanding of the product and its users as possible.

MARKET RESEARCH



The best way to test your product or solutions is to try it on as many options as you can.

Market research will give you an adequate opinion and response to your idea.

Professional market research is complex and expensive but even a non-professional market survey will give you a information about who the target market responded. We suggest you go outside and ask strangers (it is important you stick to your target group) about your ideas, explain briefly and you can use some of the generic questions like these:

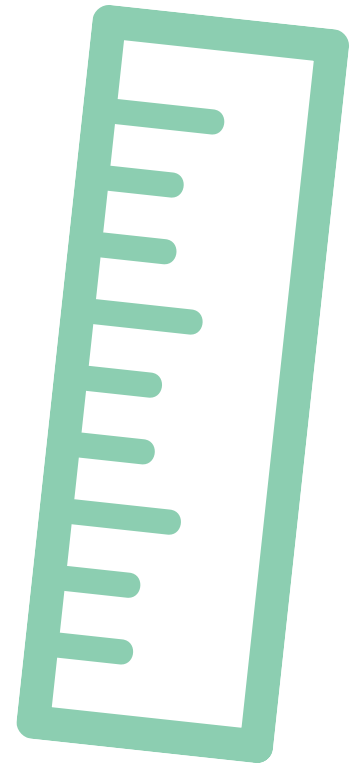
MARKET RESEARCH



- 1) Gender
- 2) Age
- 3) Household income
- 4) Education
- 5) Work status
- 6) Family status
- 7) Living location
- 8) Psychographic questions
- 9) Opinion about your problem
- 10) Opinion about your solution/idea
- 11) How much would you pay for our service?
- 12) If this was available today, would you use it?
- 13) Would you recommend it to someone?
- 14) Do you think this will make your life better?

6) EVALUATE

The final stage is evaluating your market research results and implicating them to your idea. You should see what people find good and what they didn't like. A SWOT analyze is a good way to evaluate your final product. The beauty of design thinking is that after this final stage you can start again and improve your idea with the same steps.



GOOD LUCK