



MANUAL FOR INNOVATION AND SUSTAINABILITY

AS

OUTCOME FROM
INTERNATIONAL STRATEGICAL PARTNERSHIP
PlaNET Social ENTERprise 2.0



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Introduction

This manual is one of the Intellectual outputs of the project PlaNET Social ENTERprise 2.0. Intellectual output is an innovative, tangible, deliverable and elaborated material related to the project which also contributes to the general objective of the project. It is compulsory within higher education and shows a potential impact within the organizations involved (NGOs, schools) and within other sectors and levels (local, regional, national, etc.) in order to exploit and to disseminate it to a wider public.

PlaNET Social ENTERprise 2.0 is an international strategic partnership among organizations of Slovakia, Poland, Slovenia and Portugal where the lead partner is Agency for Development of Gemer Region from Slovakia. The main aim of this project is to promote entrepreneurship education and social entrepreneurship among young people, putting entrepreneurship ideas into practice with a view to tackling challenges and problems identified within their communities. This project connects non-governmental organizations, schools and local businesses in regions of 4 EU countries facing the same problem - the gap in the area of good quality entrepreneurship education and social entrepreneurship education of youngsters with the connection to local labour market and support by local authorities which contributes to the increasing unemployment rate of young people.

The core of the project is based on non-formal education in students' project development, bringing methodology which helps to support entrepreneurial spirit among students of high schools by the development of an own project in their school. The platform for the development and implementation of these students projects is based on school participatory budget principles, where students firstly identify the needs of a school community, their personal strengths and weaknesses and create a project which combines all this aspects in order to bring positive change to their school and also to improve themselves in personal and professional way. Money for the projects is coming from a school budget, school community (students, teachers, staff, school management and in some cases also from municipalities) votes for the best ones in secret and transparent voting process.

School participatory budget is sort of a simulation for civic actions, community projects and socially oriented businesses development in the future. While implementing the student project (in community which they know well and can orientate in it better) youngsters will gain whole range of knowledge, skills and experience which they will easily transfer to a form of public actions or businesses in the future.

Manual for School participatory budget implementation in schools you can be found here: <https://soen.sk/downloads/?lang=en>

Thanks to mentoring and internship youngsters will gain important support which they need during the implementation of the students' projects and direct connection with the business. Mentors will be their personal guides, advisors and consultants in the process of implementation of their projects which ensures their further personal and professional development, local networking and help them to bring their projects to a professional action or event. Internship will connect them directly with local business and provide them the best

practical experience in the field of entrepreneurship.

Through international trainings, students, youth workers and teachers will be able to deep their knowledge, gained during School Participatory Budget, about fundamental topics related with starting a project and become an entrepreneur or social entrepreneur.

We developed this manual, to describe important aspects related to innovations. In the manual, we pay attention to the stages of creating innovation, sustainability and introducing innovations to activities, projects and business. Our goal is also to provide a guide to support student to deliver a Multiplier Event on the topic.

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Structure of the manual

This manual explains the innovation and sustainability topics and shows the importance of creativity. The handbook allows you to create innovative social projects based on simple steps and actions.

The first chapter is dedicated to creativity, the role of the brain in the innovative process and the need to stimulate its work.

The second chapter presents the definition of innovation and the third presents information on sustainability.

The fourth chapter allows a very close look at the user of a social project in order to adapt the project to his/her needs.

The next chapter deals with the next phase of creating innovation, which is identifying the problem in a social project, wondering why "something went wrong" or what can be done better.

Chapter six discusses techniques for generating ideas to find the best solution to our problem.

Chapter seven allows you to summarize the process of creating innovation by using a concept card and choosing the best solution that will be implemented in the project.

The last chapter deals with the organization of the Multiplier Event. This is a guide on how students can conduct workshops on innovation and sustainability for their peers. Teachers and youth workers can also find information on how to support students in their task.

At the end of the manual there are attachments where you can find examples of materials that can be used during the workshop as well as examples of energizers and name-games.

1 Creativity - it all starts with it

The human brain is a brilliant instrument that allows you to receive, process and generate incentives. It is a kind of command centre, it controls the processes taking place in the body. Although the brain mass makes up on average 2% of body weight, it uses up to 20% of oxygen passing through the body. The brain works constantly.¹

The brain is divided into two hemispheres, each of which is responsible for different skills. The right hemisphere is called the "warm" hemisphere and allows you to see the whole, is responsible for abstract thinking, orientation in space, is responsible for our creativity and imagination, artistic abilities.

The left hemisphere, called the "cold", allows you to pay attention to details, is responsible for speech, word resources, ordering, logic, reasoning and mathematical skills.

This means that the left hemisphere analyses the facts and the right provides creative solutions to problems.

To make the most of your potential, stimulate both hemispheres to work.

It is very important to exercise and stimulate the right hemisphere. We can do it through simple games and activities that allow you to "invent" new solutions in an unconventional way, e.g. in small groups (up to 5 people) in 3 minutes, find as many applications as possible for a paper clip, road roller, cup, etc. Giving examples of the use of items, as intended, is not allowed.

What is creativity? It is nothing more than a combination of creative thinking, skills, knowledge and motivation.

According to the Encyclopaedia of Management: Creativity comes from the Latin term *creare*, and its equivalents are words from the English language *creator* and *creative*. It's the ability to create new solutions. At the same time, it is a mental process that results in the creation of new concepts, ideas or new associations. Creativity refers to launching new perspectives and creating new opportunities. It is a process of developing and presenting innovative ideas to meet the needs or solve problems (J. Fazlagić 2015, p. 19).

Our creativity or creative thinking is often blocked by ourselves. Thinking and reproducing beaten and proven patterns results in a lack of search for new solutions. The unwillingness to "step out" means that what we know and act is duplicated, there is no fresh view and no space for creative thinking.

2 What are innovations?

Innovation is doing something new or doing something in a new way. It is important to remember that every innovation is a change, but not every change is an innovation. Innovative action should be:

- Targeted - have clearly defined effects that can be obtained with it.
- Planned - include a precise plan of activities to be carried out.
- Organized - you have to provide what human and financial resources will be needed.
- Controlled - summarized in a specific way.²

¹ <http://www.dlamozy.pl/mozg>, access on 21.11.2019

² <https://www.nowaera.pl/angielski/blog/innowacja-pedagogiczna-w-szkole>, access on: 21.11.2019

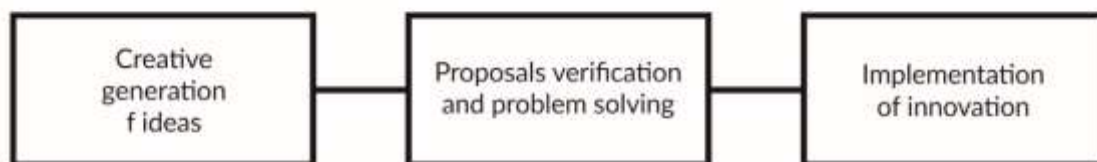
The subject of innovation can be both a product, a production process as well as a new technique or a new way of organization.

J. A. Schumpeter introduced the term of innovation to economics and pointed out 5 situations in which we deal with innovation: creating a new product, using of new technology, production method, creating a new sales market, obtaining previously unknown raw materials, reorganization of a specific branch of the economy.

Innovations can be of different types. We can distinguish, among others:

- Product - a new product is being introduced or an existing product is being modernized.
- Technological - changes are made at the level of manufacturing processes.
- Organizational - new or modernized organizational systems.
- Social - modifications of motivational techniques.
- Marketing - changes in marketing systems.³

According to Webber, the innovation process can be divided into three phases:



Source: <https://www.parp.gov.pl/storage/publications/pdf/20506.pdf> (E-biznes - innowacje w usługach. Teoria, praktyka, przykłady, pod red. Olszański M., Piech K., Polska Agencja Rozwoju Przedsiębiorczości, Warszawa 2012, page 34

The implementation of innovation has many benefits. Project teams acquire new knowledge by implementing innovative ideas. The newly acquired information may contribute to the creation of further innovative ideas. This knowledge can be used to create new products as well as to create the product development process. Brands that have connections with innovation are more positively perceived by the society, which may translate into greater interest in the company, product or new products. Employees can also benefit from innovation. A person or a team that introduces innovations can believe in its capabilities and start various interesting projects because it is willing to take risks. As a result, the company opens up to new ideas of its employees, thanks to which they can freely express their opinion on the subject of company development. Such a friendly atmosphere attracts talented people with lots of innovative ideas. This helps to acquire and retain valuable employees.⁴

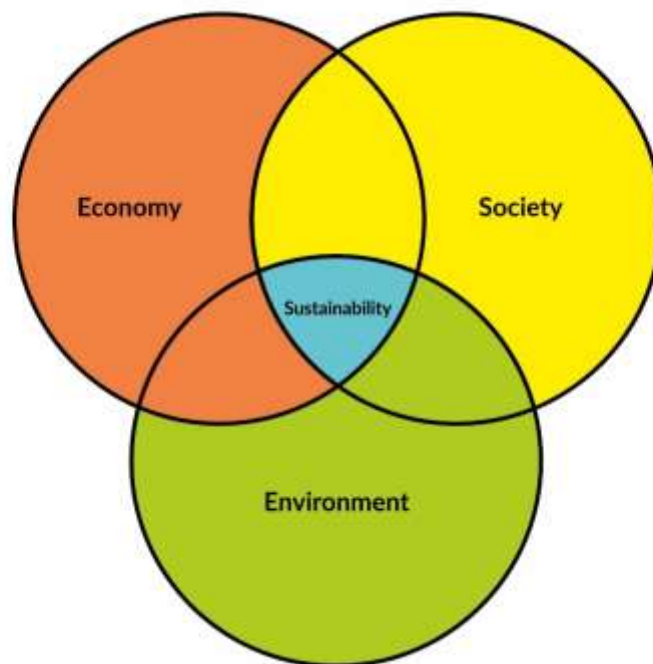
³ <https://mfiles.pl/pl/index.php/Innowacja>, access on 21.11.2019

⁴ <http://ideas2action.pl/2009/06/09/jakie-saposrednie-korzysty-z-innowacji/>, access on 21.11.2019

3 What is sustainability?

According to the PWN Encyclopedia, sustainable development is a term meaning the socio-economic development of modern societies, consisting in meeting their needs in such a way as not to reduce the possibility of meeting the needs of future generations.⁵

Primarily, the concept of sustainable development came from forestry and was created by Hans Carl von Carlowitz. Today it is described as a philosophy of socio-economic development harmonized with care for the state of the natural environment. The main goal is a balance between three main elements: economy, society and the environment.⁶



6 main goals that take into account the needs necessary to achieve the objectives of sustainable development:

1. Economic, political and social development implemented in accordance with the principles of environmental protection.
2. Ensuring the ability to meet the basic needs of individual citizens and communities - achieving prosperity, justice and security.
3. Maintaining basic biological processes.
4. Striving to maintain biodiversity.
5. Satisfying the physical and mental needs of people by correctly arranging their relationship to the natural environment.
6. Local activities in the field of economic, political and social development associated with care for environmental protection.⁷

⁵ <https://encyklopedia.pwn.pl/haslo/rozwoj-zrownowazony;3969442.html>, access on 21.11.2019

⁶ https://depot.ceon.pl/bitstream/handle/123456789/6227/Zrownowazony_tom_1.pdf?sequence=1&isAllowed=y, access on 21.11.2019

⁷ Terlecka M.K., Idea zrównoważonego rozwoju - o genezie, definicji, celach i zasadach słów kilka, w: A. Kleśta, M.K. Terlecka (red.), Zrównoważony rozwój. Idea czy konieczność, t. 1, Krosno 2014, pages 9-10

4 Profile of the recipient of the social project

a. Persona

"Personas are hypothetical archetypes of potential customers that aim at representing them throughout the design process and guide the development of a product or service."⁸

"Personas are more than just demographic information, a persona needs to capture the personas behaviour, belief and philosophy. More important their motivation or intentions."⁹

Persona is an archetype that accumulates the features, skills, needs and goals of individuals. Thanks to it, the team working on a social project always sees this one specific person, instead of analysing the needs of whole community at every step of the design process. This make it easy for you to refer possessed information and make consciously project decisions.¹⁰

First, you must create a detailed description of this person. To do this, you need to focus on a few basic issues:

1. Lifestyle. In this part, you have to ask some questions, e.g.:

- Where he/she lives?
- Family (Who? How many people? The names and gender?)
- Education?
- Job?
- What brands are cool for him/her?
- What media are interesting for him/her?

This allows appropriate profiling to give individuals and supports the later process of determining other characteristics.

2. What he/she says and how he/she behaves?

In this step you need to know about his/her behaviour in stressful situations, if he/she is authentic or poses, pretends to be someone else, how he/she communicates with other people (e.g. is he/she kind or not?)

3. What he/she thinks and feels?

This section is talking about his/her attitude to life, to other people, his/her dreams and inspirations, what is the most important thing in his/her life (Money? Popularity? Family?). You also need to know his/her feelings - what makes him/her happy, what does annoy him/her, what he/she likes and dislikes?

4. What he/she sees?

In part number four, you should focus on his/her problems (at home, work, school etc.), what trends he/she sees in near or distant surroundings, if aesthetics are important thing to him/her?

⁸ <https://miro.com/blog/templates-service-design-personas-service-blueprint/#.V3Or7DUqbR4>, access on 21.11.2019

⁹ <https://www.slideshare.net/Frankichamaki/design-thinking-with-persona>, access on 21.11.2019

¹⁰ <https://marketerplus.pl/teksty/artykuly/persony-czyli-wejsc-buty-klienta/> access on 21.11.2019

5. What he/she thinks of us (our projects, ideas)?

6. What he/she wants to achieve?

At this point you should think about his/her personal goals (business, work, education, emotional) associated with our brand, project, product.

7. What can affect the interest in our new service, new brand, new product?

8. New projects/ideas/products that will help in achieving his/her goals?

The more details you can define, that will be better. You will then be able to better match the production/project to the recipient.

Creating persona is important from the point of view of implementing new solutions because you can specify the target group of the project and better understand the needs of the future receiver. Whole project team can expand their knowledge, what translates into equalizing the level of skills in the group and building on it in the future.

b. Empathy map

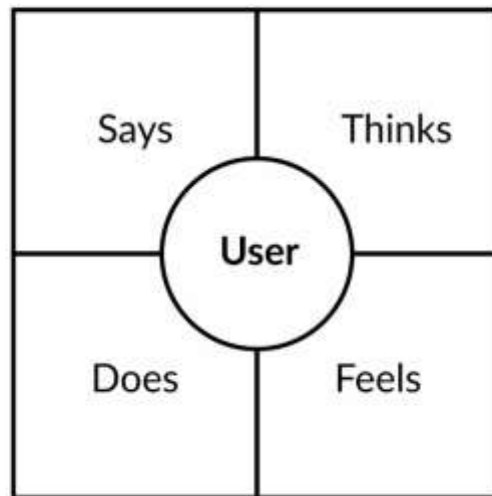
Empathy map is a simple and easy-to-learn visual representation of information about a person's behaviour and attitudes. It is a useful tool that helps project teams to better understand recipients. The empathy map is often used during workshops with stakeholders, marketing and sales people, or creative teams to build empathy for end users. For teams that deal with designing and creating new products or services, this is an extremely important tool, because thanks to it they can "get to the heads" of recipients.

To create an effective solution, you need to precisely understand the problem, as well as the person who experiences it. This exercise helps originators look at ideas from the perspective of their potential recipients and incorporate into their skin to better identify with their goals and challenges.¹¹

Traditionally, the empathy map consists of 4 squares (Says, Thinks, Does, Feels) including the User analysed in the middle. The empathy map allows you to present the recipient's profile as a whole, it is neither chronological nor sequential.

¹¹ <https://www.uxbooth.com/articles/empathy-mapping-a-guide-to-getting-inside-a-users-head/> access on 21.11.2019

Empathy map



Source: <https://www.nngroup.com/articles/empathy-mapping/>

The process of creating an empathy map should begin by creating a template - drawing a table consisting of four fields. Then define who is the recipient. It is a person who we want to understand, empathize with his/her situation, see our idea through his/her eyes. Personalities are different, so we need to clearly specify who is the person (name, gender, age, place of residence, education, character) and this information can be noted in the middle of the scheme. The next step is to enter further information about the user in the appropriate fields:

- Says - What would the analysed person say about this idea/project? You can use both quotes and keywords here.
- Thinks - What is the most important for him/her, his/her needs, dreams, goals, aspirations, what moves him/her?
- Does - What are his/her habits, how does he/she behave?
- Feels - What emotions does he/she feel?¹²

When all fields have been completed, all information should be analysed. It is time to rethink this experience. You should think about, how it changed the perspective of the project team or created a new perspective. With this tool, you can determine whether an idea/project/product can be suitable for a group, what profits will benefit the recipient in this way, and how this idea stands out from the rest.

It is worth remembering that you don't have to keep the order of filling the map. Ideas can be born up-to-date and sometimes you need to go back to the previous point. Each of them is worth saving.

A look at the recipient from beyond your own beliefs gives a much wider perspective, and thus, more opportunities to reach recipient and create a project that will perfectly match his/her expectations.¹³

¹² <https://www.interaction-design.org/literature/article/empathy-map-why-and-how-to-use-it>, access on 23.11.2019

¹³ <https://rozwojaluzie.wordpress.com/2018/03/08/mapa-empatii-narysuj-swojego-rozmowce/>, access on 24.11.2019

5 Discovering a problem

a. Functional analysis

Functional analysis is a technique which is used to identify and understand the needs of a product, project or service (what it does, what it should do, what it needs). Functional analysis is a very important part of the value analysis process.

In functional analysis, functions are described in short definitions consisting of two words in form: verb-noun. These definitions describe the needs of the verified project, product and service. These two words include an active verb and a measurable noun. Noun defines something that can be measured and quantified. This way of definition favours the fact that each specific function can be identified in detail.

Functional analysis supports creative thinking and creative problem solving by focusing on expected results and concentrating on needs.

Verb noun definitions enable a clear understanding of current needs, project, product or service requirements, without resorting to specific solutions. The use of two words describing the functions allow the team to communicate in a simple language.

Example: Definition of a verb-noun of a pencil.

The pencil can be used to write a list, draw diagrams and charts or mark during workshops, as well as to indicate where the board should be cut. In each example, one product is used in a different way. So what is the key function of a pencil?

The verb-noun definition of the function of a pencil may be: “mark surface”. If the pencil does not “mark surface” it cannot achieve its primary purpose or function. The verb “mark” is an active verb and the noun “surface” is measurable and can be described.

Eraser: Remove marks

Barrel: Support lead, improves grip, transfer force

Paint: Protect wood, improve appearance

Lead: Mark surface

Functional analysis can be used to:

- Defining project requirements.
- Defining needs and goals.
- Problem solving.
- Defining and specifying service requirements.
- Project planning with stakeholders.
- Defining requirements for IT project.
- Develop performance-based specifications.
- Understanding how existing activities, processes and solutions meet the needs of a project, product or service.¹⁴

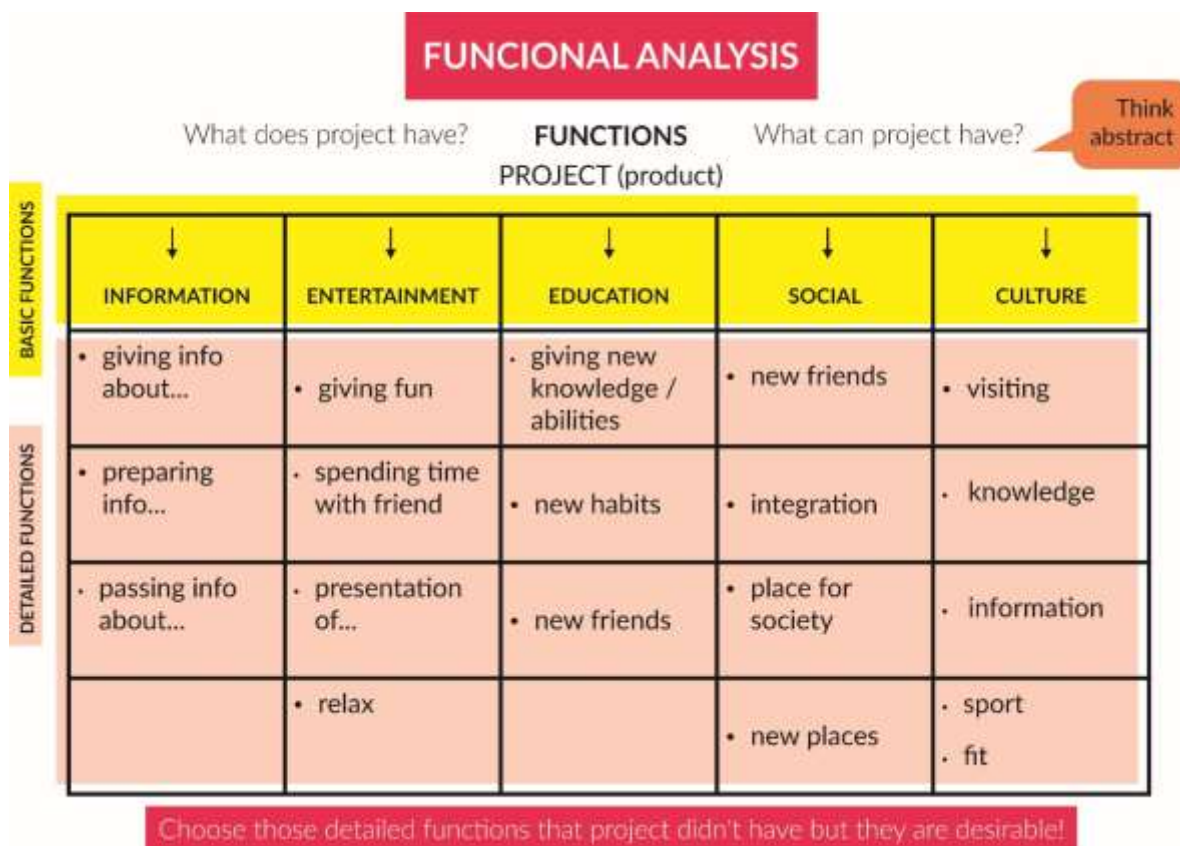
There are 7 stages in functional analysis:

1. Perception of need.
2. Study of the environment.
3. Designation of the function.
4. Searching for the idea of a solution.
5. Choosing a good idea.

¹⁴ <https://www.valueanalysis.ca/functionanalysis.php>, access on 21.11.2019

6. Refining the solution.
7. Implementation of the solution.

According to social project problems we can use version of Functional analysis presented below.



b. Ishikawa diagram

The Ishikawa diagram is a technique created by Kaoru Ishikawa in the 1960s. It shows how to present, using a chart (called the fish bone chart), the impact of specific factors on achieving good or bad factors. Otherwise, this scheme is also called the cause and effect graph and also - the Ishikawa graph.¹⁵

The diagram structure resembles a fish bone or fir tree (after rotating the diagram 90 degrees). The head of a fish is a defect, a problem which has e.g. a social project. The spine will present categories of causes affecting a particular problem, and the bones, that depart from it, show the reasons that caused or could cause the problem.¹⁶

According to Anna Mazur and Hanna Gołaś, the main features of the Ishikawa diagram are:

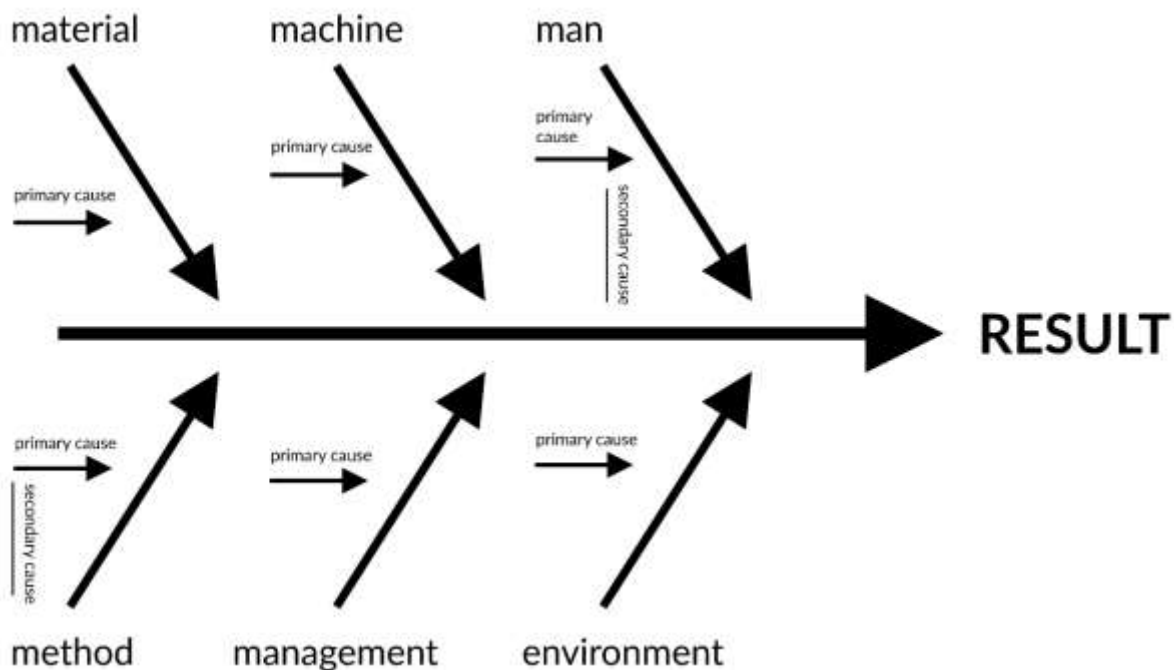
- orderly transfer of information,
- analysis accuracy,
- a comprehensive approach to the issue under consideration,
- information hierarchy,
- transparency and communication of information,
- focus on location and elimination causes of the problem.¹⁷

¹⁵ Akademia rozwoju kompetencji trenerów wewnętrznych, Szkoła trenerów Training Partners. Materiały szkoleniowe, access on 21.11.2019

¹⁶ <https://www.system-kanban.pl/definicja/diagram-ishikawy/>, access on 21.11.2019

¹⁷ Gołaś H., Mazur A. (2010). Zasady, metody i techniki wykorzystywane w zarządzaniu jakością, Wydawnictwo Politechniki Poznańskiej, s. 90

The main assumption of the diagram is that the first step to solve the problem is to determine its symptoms. The shape of this chart is very important because the head motivates us to consider only one problem at a time, while the bones encourage us not to be satisfied with just one reason, but rather to look for another.¹⁸



The structure of the Ishikawa chart is presented in the picture above.¹⁹ The categories of causes presented are selected in the range in accordance with the 5M + E rule:

- Man - includes qualifications, habits, job satisfaction, internship, well-being.
- Machine - includes licenses, durability, modernity, efficiency, precision, safety, working conditions.
- Material - contains input materials, semi-finished products, elements, substitutes.
- Methods - contains procedures, instructions, responsibilities, specifications, norms, laws, rules, know-how, technology.
- Management - covers the organizational structure, work organization, shift work, working conditions.
- Environment - contains elements of the work environment.²⁰

You can also use other categories such as: procedures, materials, people, information, depending on what field we use the Ishikawa diagram. Each category can also be assigned additional specific categories, there is also the possibility of sub-reasons. Diagram creation can be considered complete when the situation is fully identified.²¹

When creating the Ishikawa chart, we can distinguish 4 steps:

1. Problem identification

The first step in the analysis is to diagnose in detail the problem that needs to be solved. This problem is selected by e.g. brainstorming, Pareto analysis, quality cost analysis. The analysis

¹⁸ <https://www.system-kanban.pl/definicja/diagram-ishikawy/>, access on 21.11.2019

¹⁹ https://mfiles.pl/pl/index.php/Wykres_Ishikawy#cite_note-2, access on 19.11.2019

²⁰ Kolman R., Kwalitologia. Wiedza o różnych dziedzinach jakości. Wydawnictwo Placet, Warszawa 2009

²¹ <https://www.jakosc.biz/diagram-ishikawy/>, access on 21.11.2019

goal is recorded at the end of the arrow.

2. Identifying the main groups of causes.

At this part, the main categories of causes that affect the problem should be identified. The 5M + E concept or the cause groups that they have developed can be used here.

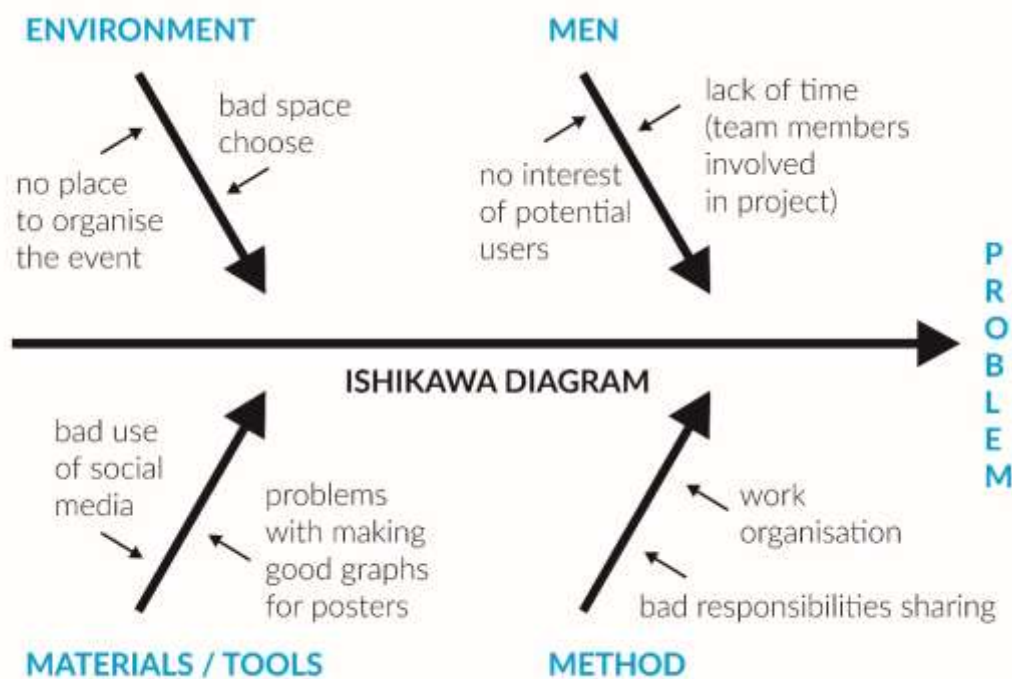
3. Specifying the reasons

Look for the causes for each defined group with a brainstorm or other technique. In the next stage, you can look for a specific reason for each group and then - the causes.

4. Analysis of results

When you finish creating a chart, you need to analyse it in detail to identify reasons with a greater impact and those with less impact. You should also formulate final conclusions that will help you make corrections to the diagram.²²

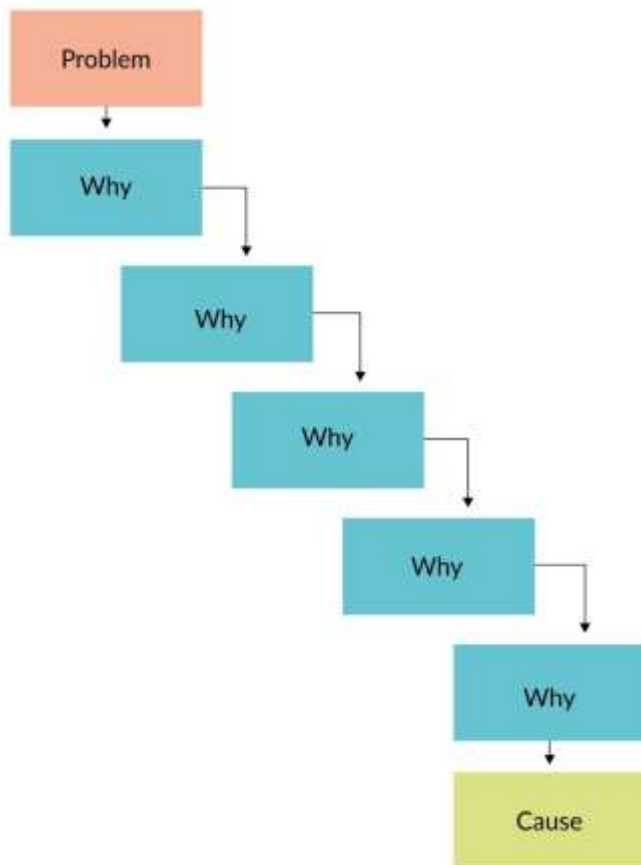
According to social project problems we can use version of Ishikawa diagram presented below.



c. 5xWHY

The 5 x why technique is a problem solving method which is based on asking a series of questions. These questions form kind of chain, which makes it possible to investigate cause-and-effect relationships related to a specific problem.

²² Gołaś H., Mazur A. (2010). Zasady, metody i techniki wykorzystywane w zarządzaniu jakością, Wydawnictwo Politechniki Poznańskiej, page 93 (<http://fem.put.poznan.pl/poli-admin/didactics/36112287ZASADY%20METODY%20TECHNIKI%20WYKORZYSTYWANE%20W%20ZARZ%C4%84DZANIU%20JAKO%C5%9ACI%C4%84%20%20do%20druku.pdf>, access on 21.11.2019)



Source: <https://www.system-kanban.pl/definicja/metoda-5-why/>

The 5 x why analysis must contain two key issues: Why did the problem appear? and Why was it not detected?

A properly implemented 5 x why method must be based on several principles. Thanks to this, the cause determination will be more precise, which will result in a better final result.

First, you need to get as much information as possible about the problem. Then you need to appoint people who will be delegated to do this analysis. It is important that these are the people who deal with this problem, know a lot about it, and meet with it every day. The next step is to define the problem itself, define it clearly and precisely and save it in a form that will be understood by the whole team. This is a very important part, because the total 5 x why analysis is based on the issue defined at this step. Only after this part can you move on to the part related to asking questions. Each answer should be recorded (preferably in the form of a diagram). Usually, such a chain consists of five questions (including answers), but this is not an inflexible rule. The most important thing about this method is that you should ask questions until you get to the root of the problem. After determining the main cause of our problem, we must solve it. The problem shouldn't only be eliminated, but also a solution should be found so that it doesn't appear again in the future. The effectiveness of this method largely depends on the knowledge and experience of the team, but also on their commitment.²³

Example of a problem: The production line was suspended during production of the product.

Why? : There aren't enough elements in the factory.

Why? : Parts weren't delivered on time.

²³ <http://www.hrtrendy.pl/2018/05/17/technika-5-x-dlaczego-w-zarzadzaniu-jak-ja-stosowac/>, access on 24.11.2019

Why? : Employee ordered elements too late.

Why? : Employee placing the order was informed too late about the demand for lots.

Why? : There is no material needs planning system.

It should be noted that in the above example it could be determined that the situation was the fault of the employee placing the order or the employee who informed about the demand. This method should focus not on human error, but rather look for the reason somewhere in the system, organization or work method.²⁴

The simple question "why?" brings endless possibilities to explore problems. This method can be extremely useful, however, it needs practice. Therefore, it is worth using it often to diagnose existing problems. Thanks to the experience gained, it is possible in the future to solve more problems more efficiently and quickly, as well as to find new better solutions.

6 Generating ideas

a. Mind maps

Mind mapping is a technique of Tony Buzan that puts an emphasis on imaging thoughts, used to search for new solutions to existing problems, makes it easier to remember content. To think creatively, all brain centres are activated using e.g. words, symbols, colours, rhythm.²⁵ The right hemisphere is responsible for: the sense of space, imagination, perception of colours and sizes. Under the control of the left hemisphere are: words, numbers, analytical thoughts. It requires identifying the elements of the problem and connecting them together. Instead of taking notes, we use drawings, symbols, arrows, using different colours.²⁶ By creating visual notes, we remember faster.

The method doesn't require graphic skills, just a piece of paper and something to write, you can also use the board.

Mind map - process²⁷

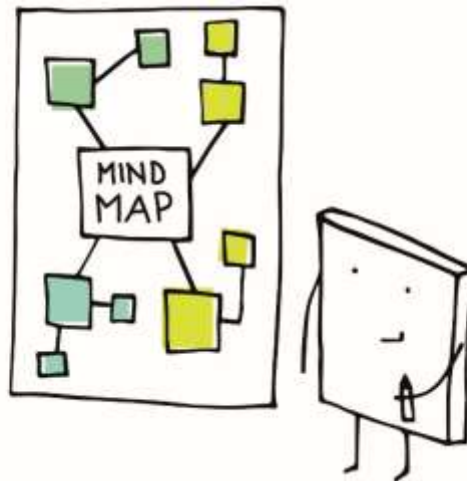
- In the centre of the mind map we place a drawing, an inscription, an issue (the area is e.g. a person, colour, feature or the name of the project being created).
- We are looking for main associations, we save them in the form of keywords, subsequent shorter, thinner lines are less important information. While creating mind maps, it is important that the notes are clear and legible. You should add connectors between branches (also crosswise) in order to indicate particular connections.

²⁴ <http://quality-management.pl/5why/>, access on 21.11.2019

²⁵ <https://www.katarzynapluska.pl/jak-przeprowadzic-burze-mozgow-plus-techniki-mapa-mysli-5xwhy/>, access on 21.11.2019

²⁶ Szkoła Trenerów Training Partners „Materiały szkoleniowe Wykorzystanie w trakcie szkoleń metod kreatywnego myślenia do rozwiązywania realnych problemów w firmie”, Training Partners Sp. z o.o., page. 24

²⁷ <https://positivemind.pl/mind-mapping-czyli-jak-stworzyc-mapy-mysli/>, access on 21.11.19



Mind map - directions²⁸

- Use single words or simple phrases, excess words will make the mind map less readable.
- Printed words will be easier to read, especially from a distance.
- The creator of the method emphasizes the importance of using coloured pens, markers (min. 3 colours) while creating the map, the alternative is to underline or bold the most important issues at the end of work with the mind map.
- Use images, icons, symbols, allow you to associate stored content more easily.
- Ideally, the mind map should be created by the person(s) who will use it.

b.Brainstorming

One of the tools supporting the process of working with young people is brainstorming, which is used to create and invent solutions to the problems raised. The postulation of the Alex Osborn method is that each participant could present an idea, even if it is unusual. Brainstorming is used to solve open ideas and can help generate ideas (new options - what ...? Or solutions - how ...?) which belong to a clearly defined category.²⁹ The tool allows you to use the potential of its participants, often the idea of one person can generate another by the other ("chain reaction"). An extremely important issue of brainstorming is the appropriate preparation of the team.³⁰ Make sure you have the right atmosphere in the team and understand the purpose of the exercise. The problem should be explained in an suitable way so that all participants understand the essence of the problem. The brainstorming priority is the number of ideas, not their quality.³¹

Brainstorming - the rules:

Basic rules for brainstorming (print the rules for brainstorming and use during the exercise, Annex number 2):³²

- Generating as many ideas as possible, developing ideas that have already been given.
- Unlimited imagination, extravagant, non-stereotypical, innovative and crazy ideas are welcome.

²⁸ <https://lingwistyka.edu.pl/blog/mapy-mysli-poteczne-narzedzie-do-robiania-notatek/>, access on 21.11.19

²⁹ Biela A. „Trening Kreatywności Jak Pobudzić Twórcze Myślenie”, Wydawnictwo Samo Sedno, Warszawa 2015, page 134

³⁰ Biela A. „Trening Kreatywności Jak Pobudzić Twórcze Myślenie”, Wydawnictwo Samo Sedno, Warszawa 2015, page 134

³¹ <https://www.katarzynapluska.pl/jak-przeprowadzic-burze-mozgow-plus-techniki-mapa-mysli-5xwhy>, access on 20.11.19

³² https://mfiles.pl/pl/index.php/Burza_m%C3%B3zg%C3%B3w/, access on 20.11.2019

- No criticism of ideas submitted.

Brainstorming requires a group and a leader (moderator), who shouldn't present her/his own ideas. The facilitator's role is to explain the principles of the brainstorming process, present the problem/function of the project, ensure compliance with the accepted rules, encourage participants to be active and watch the appointed working time.

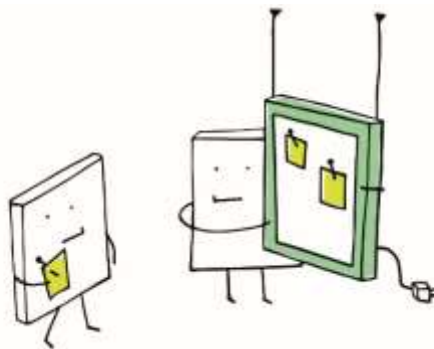
To brainstorm you need colourful sticky notes, pens (or markers) and a blackboard (or wall) on which ideas will be glued. It is also possible to write on the board "thrown" ideas, no less their later analysis and selection of the final solution, the idea requires analysing collected thoughts, combining them, it's easier to stick notes than working on a full board.

Before starting a brainstorming, it is extremely important to warm up the mind, all so that the ideas generated are as accurate as possible. One of the most popular mental warm-ups is 1000 uses³³, ways to use a paper clip, ruler, pencil, etc.

Brainstorming - process³⁴

Duration of the entire process: about 40 minutes (+ time for a break).

- Beginning: the moderator presents the principles of work to the group, discusses the essence of the problem, answers questions about the analysed issues, distributes materials (coloured cards and pens, possibly markers). [5 minutes]
- Collecting ideas: participants have about 5 minutes to write on sticky notes their thoughts and ideas (each on a separate sheet). Then the participants present ideas and stick them on the board or wall. [10 minutes]



- Searching for further solutions: the moderator asks, if participants have new ideas to add, the moderator can ask questions that will activate participants to generate ideas. Participants stick additional notes with ideas. [5 minutes]
- Break (optional): break, after the break the moderator asks participants if they have any additional ideas [the duration of the break adapted to the group's expectations].
- Sorting ideas: ideas were probably stuck in random places, so it's worth sorting them out, eliminating duplicates, assigning them to the appropriate category (the group can suggest categories names) [10 minutes]
- Evaluation and choice of idea(s): choosing the best one is often not easy, brainstorming often ends with many relevant concepts, so it's important to prioritize and choose the right idea. The final choice can be made by voting. [10 minutes]

After choosing the final solution to the problem, an idea should be discussed to implement it.

³³ <https://www.agnieszkakaim.eu/2019/02/rozgrzewki-kreatywne/>, access on 21.11.2019

³⁴ <https://www.mytoolkit.pl/design-thinking/burza-mozgow-zasady/>, access on 21.11.2019

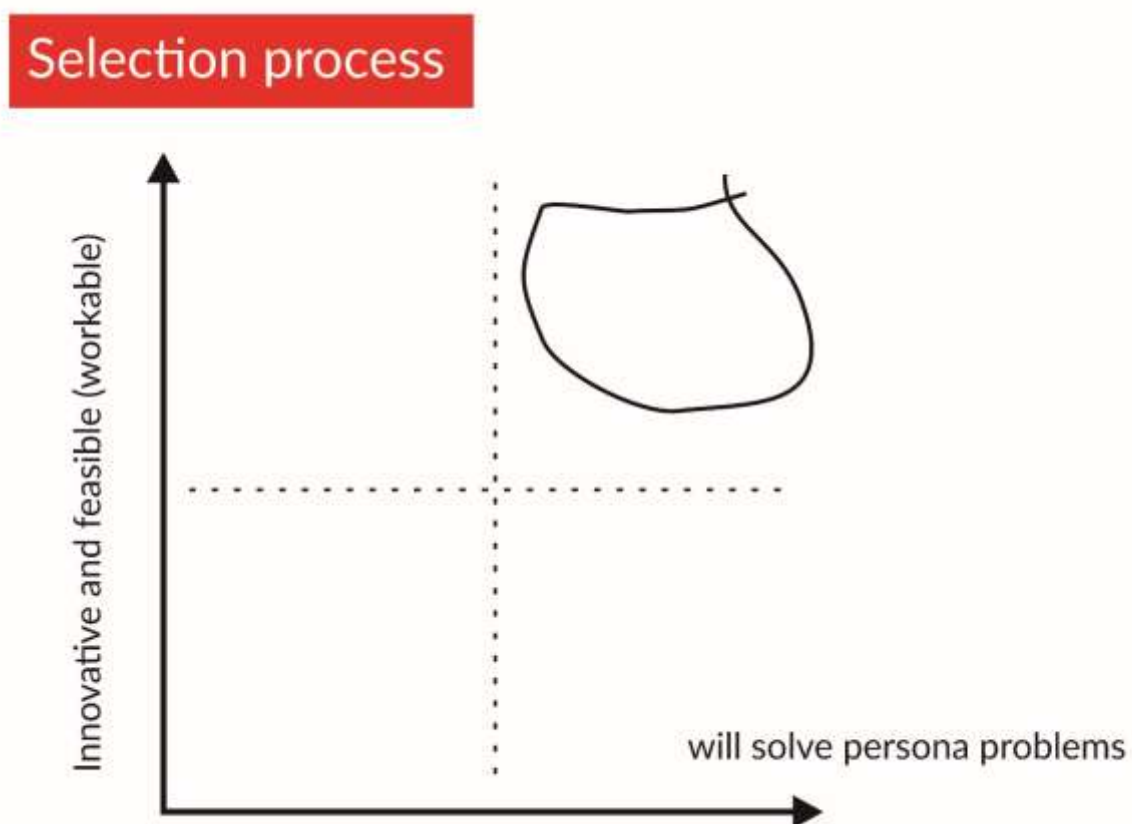
7 Presentation of innovations

a. Ideas selection

Using mind map and brainstorming methods you can generate many ideas that can solve your project's problem. In order to choose the best solution to the problem we need to divide ideas into sections using a graph.

Write your ideas on sticker cards. One idea on one card.

The task for the group is to evaluate how innovative the solution is and how big influence the solution has to solve persona problems. More innovative solutions we mark on the graph higher according to the arrow direction. Those "better" solutions that influence persona we mark further with the arrow direction on the graph. We can make a visualisation of four squares that can give you fast answer what is the best idea.



The best solution is the idea that is showed on the graph – as far as it can be from the beginning.

b. Concept card

Concept cards can be used at the second phase of making project. The priority of this phase is to work out as many solutions as possible. At the beginning, they can be e.g. a set of sticky notes stuck to the board. The goal is to filter ideas and choose the best one, which need to be developed, because they best express the benefit to the client and the organization. At the same time, they are the most innovative and interesting. Thanks to the concept card, you can

describe team ideas, compare and effectively compare them with each other.³⁵

You should to start by preparing the template for completion by the team. This template should include issues such as:

- Concept name.
- What problem will be solved thanks to it?
- Whose problem is this?
- Description of the problem.
- Unique features of the idea.
- Who will be interested in this?
- What will happen if the idea is not implemented?
- Problem solution and its effects.³⁶

Completing the template you should start with determining the name and a short description of the concept. It will be helpful to make a drawing or diagram with a description. Then you need to focus on what is unique in the idea and why and who it will concern. The last issue is the answer to the question: What will happen if the idea is not implemented? and describing the solution to the problem and its effects.

Everyone can briefly present their ideas in the team. However, you need to choose the best ideas, e.g. by voting. The label can also include a space for comments. Some ideas, despite apparent barriers, can be developed on condition that they retain business sense and have interesting and valuable consequences.³⁷

The concept card can help you in:

- Summarize your concept by answering critical questions, e.g. Who is your potential recipient? What problems do you need to solve? What is the solution?
- Make the first idea more mature. A concept card is a great way to ensure that important aspects of an idea are respected.³⁸

Thanks to the concept card, individual elements of an idea can be brought together. This tool can be adapted to the needs of specific projects and challenges posed to projects. Concept cards may also require participants to submit deadlines, a timetable for implementing individual elements, information on communication between team members and project promotion, as well as the channel on which the solution will work (e.g. If this is a digital idea).³⁹

This tool largely allows you to learn strategic thinking, moving from ideas to a structured concept in a short time. It also helps to practice cooperation in a group, teaches creative thinking and cause and effect thinking.

³⁵ <http://service-design.pl/toolbox/>, access on 24.11.2019

³⁶ <http://service-design.pl/wp-content/uploads/2015/05/SDP-karta-konceptu.pdf>, access on 24.11.2019

³⁷ <http://service-design.pl/toolbox/>, access on 24.11.2019

³⁸ <https://www.boardofinnovation.com/tools/concept-card/>, access on 21.11.2019 r.

³⁹ <https://education.gov.scot/improvement/documents/dyw37-concept-cards.pdf>, access on 21.11.2019

8 Interactive workshop in topic innovation and sustainability

After participating in international training on innovation and sustainability topic, now is your turn to pass your knowledge to your peers. Through non-formal methods this manual will give you all the support you need to promote a 4-hour workshop on the theme.

First of all, you should promote and advertise your workshops among peers, motivating them to learn the simple steps to introduce innovation in your social project.

To deliver your workshop you will have to have a room with the necessary conditions and materials to receive your participants and promote the activities you've prepared.

Be sure that you asked all the necessary authorizations and that your schedule is the most adequate according to your group.

In the following scheme you can find a proposal of how to deliver your workshop having always present that you should adapt it to your own reality!

| | |
|------------------------------------|---|
| Time | (4 hours, according to your school schedule and availability) |
| Main objectives | <ul style="list-style-type: none"> :: Define what are innovation and sustainability. :: Identify why creativity is so important. :: Identify the recipient/user of a social project. :: Identify the problem in a social project. :: Discover the causes of the problem. :: Develop a sustainable and innovative idea to solve the problem. |
| Equipment/ materials needed | <ul style="list-style-type: none"> :: Program and the objectives of ME (written/printed). :: Flipchart/print of definitions: Innovation, Sustainability (diagram). :: Paper tape. :: Markers. :: Pens. :: Computer. :: Projector. :: Speakers. :: Internet (or download the YouTube videos). :: Coloured post-its. :: Flipchart and markers for flipchart. :: Papers. |
| Step by step description | <p>09.00h Presentation of the context of the Multiplier Event, Objectives and Program of the workshop. Talk a little bit of PlaNET Social ENTERprise 2.0 project and its international trainings. A flipchart with the objectives, that should be achieved in the end of the ME, should be fixed in the wall, to be visible for everyone during the workshop. The same should be done with the program (activities, schedule and breaks) - 15min Video 1 on You Tube channel: https://bit.ly/37JzHFr</p> <p>09.15h Energizer/name-game. If the participants already know each other (e.g. from the previous training) use energizer, if it is their first meeting use name-game – 10 - 40 minutes (games suggestions in Annex 1)</p> <p>09.25h Definition of innovations. Write the word "Innovations" in the centre of the board/flipchart and circle it. Divide the youth into teams of three and ask them to write as many words as</p> |

possible associated with innovation. Each word on a separate note. The cards should make the rays of the sun - ask the representative of each group to read and stick the cards to the board / flipchart. If any word repeats, extend the "ray" of the sun.

Together, make the definition of innovation starting from the most common answers. Then read the book definition of innovation. - **10 minutes.**

09.35h | Definition of sustainability.

Draw 3 circles in the centre of the board or flipchart according to the diagram described in the section "What is sustainability?" And mark only the centre as "sustainability". Guide the youth to what should be in each of the three circles with the poster that is in Annex no. 2. A movie can be useful. - **5 minutes.**

Video 2 on You Tube channel: <https://bit.ly/2T4isKY>

09.40h | How to stimulate creativity?

Present a drawing or printout of the brain and tell what each hemisphere is responsible for.

The process of creating innovation is a creative process, so invite young people to divide into groups of 3 (they may be different groups than at the beginning) and ask each group to come up with as many uses of a paper clip or any other thing as you can indicate. The task should be performed within a specified time - e.g. 3 minutes. Reward the team that generates the most ideas with applause. - **10 minutes.**

09.50h | Innovative social projects in school/city.

Divide participants into groups of 3-5 people. Each group should choose one of the school or city projects, e.g. projects implemented within the school participatory budget.

Considering the selected social project, follow these steps:

1. Specify the recipient/user of the project using PERSONA as described in this guide and video. - **45 minutes.**

Video 3 on You Tube channel: <https://bit.ly/2urknyZ>

You can also use Empathy Map to get to know your User. It is faster tool than persona is.

2. Diagnose the problem - what did not work out in the project or what could be better using the 5x Why method. - **15 minutes.**
3. Generate as many solutions to the problem as possible using a mind map and brainstorming. Prepare the brainstorming rules that will be printed or flipchart. Prepare a graph to choose the best solution. - **30 minutes.**

Video 4 on You Tube channel: <https://bit.ly/301WPwr>

11.20h | Projects presentation.

Each group should summarize the process they carried out of their project. - **20 minutes.**

11.40h | Space for questions and summary.

Ask all groups if they have any questions / concerns. Make short evaluation about the training with hand method. Draw big hand on the board/paper and ask participants to fill it in starting from a thumb:

- the best part of the training,
- what I will tell my friends about,
- the worst part of the training,
- something to change,
- what I have learnt.

20 minutes

12.00 | Thank you and Goodbye!

Annexes

Annex 1

Energizer: Back to back:

It is a fun energetic activity with a strong and simple message about collaborative work.

Running the activity:

1. Instruct the participants to find a pair of similar size and weight
 2. Ask everyone to sit on the floor, back to back with their pair
 3. Ask the pairs to hold their arms while keeping their backs together
 4. Tell everyone their goal is to stand up, while keeping the arms and backs together
- This activity is really fun. People will laugh. Typically a few pairs will be able to stand up fast while others have a hard time. Consider not running this activity if you feel some participant is not capable of standing up, or they will feel bad by sitting on the floor.

Name-game: Punctual Paulo:

This is a quick activity to help team members remember each other's names.

Running the activity:

1. Ask the participants to think about an adjective that begins with the same letter as their name.
2. Form a circle and ask each participant to say their name with the adjective, in turns
3. After all the participants speak, ask them to go clock-wise telling the name and adjective for the person at their side.
4. After a few turns, ask the participants to repeat step 3 going anti clock-wise.

Ice Breaker: Magic Wall:

Divide participants into two groups. Raise a tarp or blanket of some sort between the two groups (the point is that neither team can see each other). Each team sends one of its members up to the edge of the tarp or blanket. The people holding the tarp or blanket count to three and the tarp or blanket is dropped. This leaves two participants staring at each other. Whichever can yell out the other's name first 'wins'. The 'loser' then joins the 'winners' team and the game begins again until all the participants are on one side.

Duration: 20 minutes.

Team building: The Marshmallow challenge:

Objective: To construct a tower as high as possible using only spaghetti (25) and masking tape (1 m), string (1m) and 1 marshmallow.

The marshmallow must be placed on the top of the tower. The tallest tower still standing unassisted wins.

Opening Instructions:

Divide participants into groups of 4-5. Two groups can share a table.

"One of the keys to starting a successful business is teamwork and problem solving. This requires creativity, innovation and thinking outside the box, but also being able to develop a plan and execute it as a team.

In the Marshmallow Challenge your team is going to have 20 minutes to work together to construct a spaghetti tower that has a marshmallow on the top. The winning team will have the tallest tower standing unassisted.

Here are the rules:

1. Your team may only use the materials provided. This includes one yard of masking tape, 25 sticks of spaghetti, and your marshmallow.
2. You may not use any other materials to assist in the support of your tower.
3. You will have only 20 minutes. Marshmallow must be on the top of the tower when
1. time is called and your tower must be standing unassisted.
4. Measurement is a vertical measurement from the table top up.
5. You may stick masking tape to the table top.
6. Spaghetti may be broken into smaller pieces. However, once broken, pieces may not be replaced.

Ok, remember 20 minutes, tallest tower wins, marshmallow must be on top, and no cheating!
You may begin"

During team activity: Monitor team progress and remind tables of the rules if necessary.

Completion of team activity: When two minutes remain, give an announcement that there are two minutes remaining. Then also at one minute. When time is called, measure the height of each teams' tower. Declare a winning team.

Summary: You may want to ask a couple of teams that were successful, what was their secret? Discuss challenges and things they would do differently next time.

Close with this wrap up.

Duration: 45minutes.

Source: <http://www.leadershipchallenge.com/resource/challenging-the-process-with-the-marshmallow-challenge.aspx>

Team Building: Skiers:

Aim: To get people working and talking together, sharing a common goal, experiencing group work

Steps:

1. The group should consist of 5 people. You must prepare the right amount of sets of required materials per group: 4-6 posters/flipcharts, 2 m of string, 1,5 m of tape.
2. Inform the participant about their goal and rules:
 - The task of every group is to prepare two skis on which 4 people move together. Skis cannot be attached to the shoe or foot "permanently".
 - 4 people from each group moving on skis, 1 person is technical support.
 - Time for groups to prepare skis: 20 minutes.
 - Participants can decorate their skis.
3. Keep the track of time, while the groups work.
4. Determine the starting line and finish line (route of approx. 15-20 meters).
5. The teams should race on the track, at the same time.
6. Prize: the winning group can receive a gift - e.g. chocolate, you can prepare sashes or simply reward the winners with a big round of applause from other groups.
7. The game gives insight for the teacher/trainer about: group work competences of students/participants, potential leaders of groups. The game also starts a process of making a team out of the individual participants.

Energizer: Rock, Paper, Scissors:

Instructions

1. Find a partner
2. Play "Rock, Paper, Scissors" against each other until the first win.

3. The winner has to find a new opponent. The losing player becomes a fan of the winner.
4. The winner plays against the new opponent, while their fan cheers for them.
5. The winner of the second game searches for a new opponent, while the losing team joins their fan base.
6. Repeat until there are only two opponents with a huge fan base cheering for them. The last two have to play until one player has won 3 times.

"Rock" - the fist

"Paper" - the straight hand

"Scissors" - index and middle-finger pointing out

Each symbol wins and losses against one other symbol:

"Rock" brakes the "Scissors".

"Scissors" cuts the "Paper".

"Paper" wraps the "Rock"

Annex 2



Generate as many as possible ideas, developing ideas that have already come up.

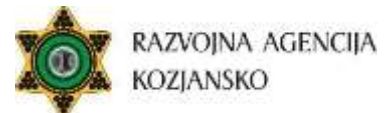
Uninhibited imagination, desirable extravagant, stereotypical, innovative or crazy ideas.

No criticism of submitted ideas.

Lead partner of the project:



Project partners - Non-formal organizations:



Project partners - schools:

