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SHOUT mission-based traineeship

For those who develop, participate and coordinate meaningful traineeships

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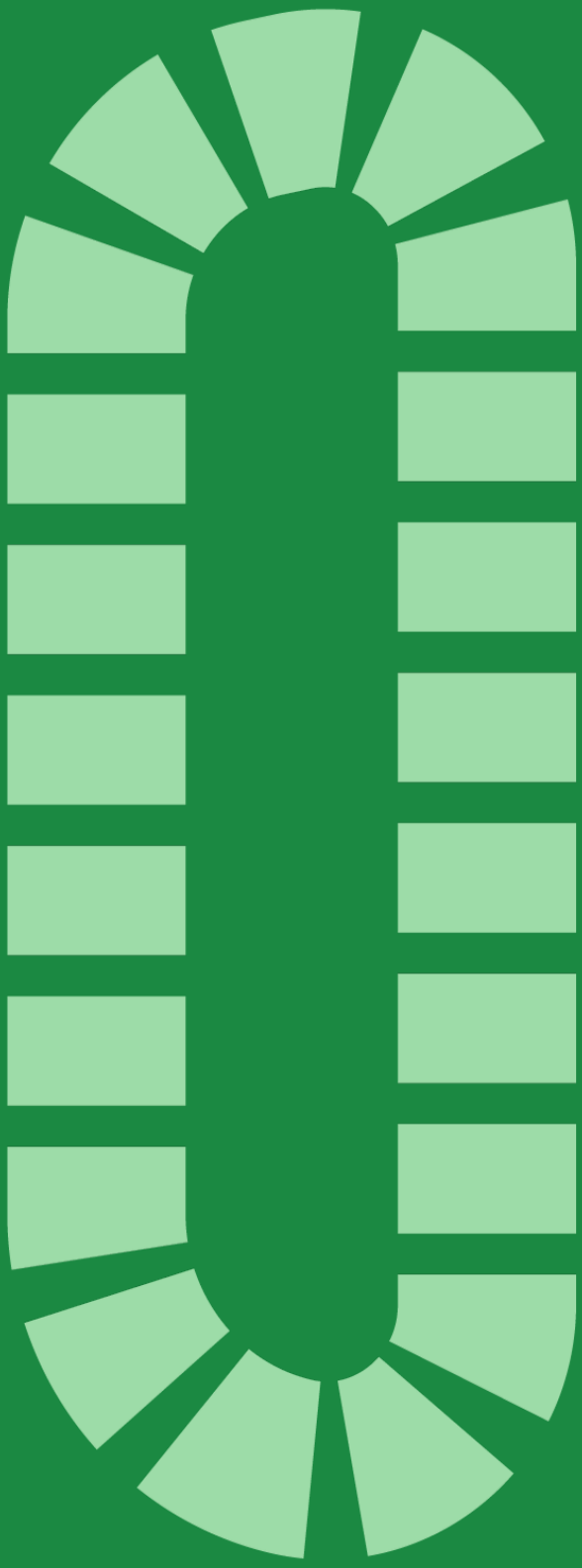
Social Sciences and Humanities for Sustainable Innovation



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SHOUT

SHOUT Traineeship

Welcome to the SHOUT traineeship manual. This document introduces you to the SHOUT traineeship idea and content, as well as provides useful information for six week duration placement. This document is meant to present the overall framework of the traineeship. It is open and could be changed and attuned to one's needs.

SHOUT strives to create new opportunities for Social Sciences and Humanities (SSH) where students, recently graduated young professionals and researchers work together with practitioners from SMEs and NGOs to develop solutions and generate value for civil society, public policy, business and service industries. In a broader socio-economic environment, there is a lack of understanding of the usefulness of SSH on different levels and among different actors. Companies and 3rd sector organisations often do not perceive the benefit of hiring SSH graduates or consulting with SSH researchers. The problem becomes even deeper when often graduates hardly know how to present themselves and the competencies they acquired. Nonetheless, SSH graduates are critical when building sustainable innovations and the skills they require are in the most demand. This paradox needs to be broken. *The complex global challenges that we are facing today cannot be explained by physical, environmental and biological causes alone; humans play a central role. Understanding the human factor is fundamental and can only be achieved by investigating the historical, cultural and communication processes in which human life is embedded.*

SHOUT traineeship is rooted in a research mission-based and problem-focused learning approach where students, professors, and practitioners work together on joint solutions in the challenges of the Sustainable Development Goals (SDGs) (i.e. through the professor-student-practitioner research traineeship schemes). Thus, Innovative Research Mission-Based Traineeship Methodology aims to strengthen the knowledge, skills and competences of SSH professionals and students and their collaborative approach to their activities and practises.

There are six weeks[1] for the traineeship to occur. The initially proposed content of each week is provided in this document, however, it is rather a suggestion than a must-follow action. It is very acceptable if changes happen in the structure or if some tasks take longer or are performed quicker. Thus, we suggest using your own judgement and applying the following material based on your unique context. The traineeships are encouraged to be performed at the place of an organisation, however, hybrid or online working mode could be used as well.

Before the team of professor-student-practitioners is formed, each of them should take a relative course (approx. 30 h.). They are accessed via SHOUT hub (https://shout-project.eu/):

- STUDENT: Kickstarting Sustainability: https://shout-hub.eu/courses/?cat=students
- PROFESSIONAL: Designing Sustainability: https://shout-hub.eu/courses/?cat=professionals
- TEACHER: Educating Sustainability: https://shout-hub.eu/courses/?cat=teachers

[1] In case of part-time involvement or any other unanticipated changes this period may differ to accommodate the needs of participants (student, professor and hosting organisation).

Useful vocabulary

- The trainee or trainee – SSH student, who is implementing SHOUT traineeship in an organisation.
- Tutor – academic personnel, i.e. professor, who is following a student's process during the traineeship.
- Supervisor – a person, who is dedicated to supervise the trainee during their time at the hosting organisation.
- Hosting organisation – an SME, NGO or any other non-academic organisation, which hosts a trainee.
- University – an academic institution, which sends a trainee to a hosting organisation.

Process week by week

Process week by week	
Week 1-2 Getting to know the context	In the first week, students get to know the organisation, its context, get to know their group/team, share responsibilities and roles. A challenge is also being identified.
Week 2-3 Getting to know the challenge	In this phase, a challenge is being researched. It is useful to perform a SWOT analysis of the challenge, as well as to perform a PESTEL analysis of the problem. PESTEL Analysis (political, economic, social and technological) is used to assess major external factors that influence its operation to become more competitive in the market.
Week 3-4 Thinking about possible solutions	In the ideation phase, students begin to synthesise the results of the first and second weeks into a viable solution to an identified problem using a variety of tools (Empathy Map Canvas, The Value Proposition Canvas, The Business Model Canvas, Design Ops Canvas).
Week 4-5 Building prototypes	This stage is designed to test the selected solutions in real conditions. Build prototypes for these potential solutions, go to the user, get feedback for the initial prototypes, and identify which prototype works best as a solution to the problem. Students, through a network of social partners, need to test the solution, get feedback from potential customers, and improve the solution. It is important to test solutions in real life, and test them in real-time. During this phase, students have a chance to see if they've framed the problem correctly and initiate changes and improvements.
Week 6 Making sense of findings	This is the final stage of the SHOUT traineeship, where students will be asked to evaluate the outcome of their learning experience in a reflexive way, by producing a certain product for evaluation by the tutor and supervisor. Such products could be a policy paper/recommendations, a thesis/report, an artwork or an educational activity on the SDG-challenge the student tried to solve.

Table 1. Process by week

TRAINEESHIP CONTENT

Introduction – Week I

Based theoretically on Sweitzer & King's (2013) research, the first week of the SHOUT traineeship will aim to introduce trainees to the practises they will be expected to perform and the context in which they will be working.

Getting to know organisation and SDGs

On the first day of the first week, the groups of students get to know the hosting organisation, its context, get to know their tutor and, if applicable, their work group, and the expected responsibilities and shared responsibilities and roles. Specifically, during the kick-off meeting, the trainees' supervisor should clarify the following points:

- The trainee's role within the organisation.
- Workload definition, standards of behaviour, philosophy, and values of the organisation.
- Relationship with co-workers.
- Organisational structure.

In addition, the supervisor should provide the material, used as study material for the following day, that illustrates the organisational journey and gives preliminary concepts on SDGs (reading list of this week).

TASK for the trainee No. 1

Take a **BASIC: From ABC To SDG programme's SDGs course**. It can be found on the SHOUT Hub: https://shout-hub.eu/sfwd-courses/the-sdgs/

After studying the organisational structure and values of the company, the trainees, with the help of the supervisor, will have to develop the preliminary **SWOT analysis**, recognizing what are the strengths and weaknesses of the company. Content to be studied can be found in Attachment A1.

TASK for the trainee No. 2

Develop the preliminary SWOT analysis of the hosting organisation (Attachment A1).

Based on the results of the preliminary SWOT analysis, trainees will be expected to develop the preliminary **PESTEL analysis**. PESTEL analysis provides a vast study of both internal and external factors that pose a challenge to the strategy of an organisation. It works as a contingency plan, which an organisation can implement to successfully implement its strategies while entering a new market.

- Political - the political environment is related to the government laws in the country where the firm is established. Favourable and unfavourable conditions affect political matters and thereby healthy marketing

campaigns of business. Apart from this, there are some legal considerations as well, including taxes, labour laws and most importantly social obligations that define the success of a marketing campaign.

- Economic - unemployment rates and inflation are two of the primary factors that affect marketing as firms are not able to promote their products efficiently in the marketplace if the economic conditions are not in their favour. Also, other similar factors like exchange rate and rate of interest directly impact a company's marketing efforts.
- Sociocultural - changes in the trends of population, cultural trends, domestic markets and demographics all affect the marketing strategy. They decide how a firm develops and presents its products in the market.
- Technology - businesses have to keep pace with emerging technology to satisfy their customer base as most of them are tech-savvy.
- Environment - it is important to consider environmental factors, like waste management, as it affects the goodwill and reputation of the firm in the marketplace thereby influencing its marketing efforts.
- Legal - legal policies and rules regarding marketing are some of the barriers that largely affect how an organisation markets its products. Labour laws are also very important to keep a note of to market the products successfully.

TASK for the trainee No. 3

Develop the preliminary PESTEL analysis of the hosting organisation (Attachment A2).

Next, the trainee must identify a problem challenge, based on the analyses conducted so far. A well-formulated problem has four features (Uden, Beaumont, 2006):

1. Realistically complex. Solving such problems highlights the diverse experiences of students and provides a wide range of options for their solutions.
2. Solving the problem requires formulating hypotheses and testing them. Knowledge is constructed when it is used to interpret events or predict the future.
3. Relevant and interesting for the students themselves. Students work harder when they solve what they think are relevant issues.
4. The problem solution requires the cooperation of group members. The problem-solving process must create a dialogue between the members of the group and encourage the search for alternative solutions.

For this specific activity, the group must identify the problem, through the organisation's supervisor's support, through the 5 Whys tool (Attachment A3). The Five Whys is an iterative questioning technique used to explore the cause-and-effect relationships underlying a particular problem. The main objective of this technique is to determine the root cause of a problem by repeating the question "Why?" several times.

The technique was initially developed by Sakichi Toyota and was used within the Toyota Motor Corporation during the evolution of its manufacturing methodologies. It is a crucial component of problem-solving training, provided as part of induction into the Toyota Production System. Toyota Production System architect Taiichi Ohno described the five whys method as "the basis of Toyota's scientific approach. By asking why five times, the nature of the problem and its solution become clear."

To properly perform a *5 Whys analysis*, it is helpful to follow these tips:

1. Involve management in the *5 Whys* process within the company. Also, consider introducing a facilitator for more complex topics.
2. Use poster boards or a whiteboard instead of a computer.
3. Write down the problem and make sure everyone understands it.
4. Distinguish causes from consequences.
5. Pay attention to the logic of cause-and-effect relationships.
6. Make sure that the root causes lead to the error by reversing the sentences created due to the analysis using the phrase "and therefore."
7. Try to make the answers more precise.
8. Search for the cause step by step. Do not jump to conclusions.
9. Base statements on facts and knowledge, not assumptions.
10. Evaluate the process, not the people.
11. Never leave "human error", "worker inattention", etc., as the root cause.
12. Foster an atmosphere of trust and sincerity.
13. Ask "Why?" until the root cause is determined, i.e., the cause whose elimination prevents the error from occurring again.
14. When forming the answer to the "Why?" question, it should be from the client's perspective.

TASK for the trainee No. 4

Develop the *5 Whys analysis*. A practical example of developing the *5 Why model* has been included in the template in Attachment A3.

Reflection

Students are encouraged to have a reflection session at the end of each week. They could follow these questions below:

1. Reflect on your thinking, learning, and work this week. What did go well and what were you most proud of? Which of your (SMART) goals have you met this week?
2. Which of your (SMART) goals have you not met this week and where did you encounter struggles? What did you do to deal with them?
3. How will you use what you have learnt this week for the upcoming week(s)? What are your traineeship (SMART) goals and steps for next week?

Conclusions

At the end of week 1, the trainee will learn:

- One's role within the host organisation and the related tasks to be performed during the traineeship.
- The philosophy and structure of the host organisation.
- Fundamental concepts about SGDs and sustainable development.
- Strengths and weaknesses of the host organisation (Preliminary SWOT Analysis).
- External factors influencing the host organisation (Preliminary PESTEL Analysis).
- Definition of a problem and resolution methods (Model of the 5 Whys).

Preliminary work structure and process

Each case is unique, so it is ok if it takes a different time than anticipated below:

INTRODUCTION – WEEK I	
TRAINEE RESPONSIBILITIES	• Participate in the kick-off meeting. • In-depth study of organisational structure. • In-depth study of the SDGs. • Completion of The SDGs module (course on the SHOUT hub). • Preliminary SWOT analysis development of the hosting org. • Preliminary PESTEL analysis development of the hosting org. • Development of the problem-challenge through the 5 Whys tool. • Completion of Reflection. • One-to-one session with supervisor. • One-to-one session with a tutor.
SUPERVISOR RESPONSIBILITIES	Illustrate and describe: • The trainee's role within the organisation. • Workload definition, behaviour standards, philosophy, organisation values. • Relationship with co-workers. • Organisational structure. Preliminary SWOT analysis development support. Preliminary PESTEL analysis development support. Support trainees during model development *5 Whys*. Mediator Role. One-on-one sessions exploring the following questions: • Recognize the knowledge gap between expectations and reality. • Normalise feelings and behaviours. • Acknowledge and clarify specific issues. • Acknowledge and clarify feelings.
TUTOR RESPONSIBILITIES	Supervise the progress of the traineeship. Supervise over the following prohibitions: • Assign activities that do not respect the objectives of the training project. • Use the traineeship to replace staff on vacation, sick leave, maternity leave, to fill vacancies in the workforce. One-on-one meeting with the trainee to discuss the progress of the first week of the traineeship, e.g., identification of possible problems, workload, etc.

Table 2. Trainee, Supervisor, Tutor responsibilities

Reading list

- Study materials provided by the host organisation: mission/vision and company values, business model concept, etc.
- Department of Economic and Social Affairs Sustainable Development: https://sdgs.un.org/goals
- United Nations (2015). "Transforming our World: The 2030 Agenda for Sustainable Development". https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981

Attachment A1

- Rose, M., 2017. What is SWOT analysis (strengths, weaknesses, opportunities and threats analysis)? - Definition from WhatIs.com. [online] SearchCIO. Available at: <http://searchcio.techtarget.com/definition/SWOT-analysis-strengths-weaknesses-opportunities-and-threats-analysis> [Accessed 13 December 2017].
- HBR tool - SWOT analysis

References

- Sweitzer, H. F., & King, M. A. (2013). *The successful traineeship*. Cengage Learning.

EMPATHY AND RESEARCH – Week II - III

The main approaches used to foster entrepreneurship and innovation are based on problem-solving methodologies. These methodologies encourage the creative and results-oriented search for solutions. Hmelo-Silver (2004) described problem-based learning as a method when students, with the help of a teacher, learn by solving problems. The problem-based learning approach focuses on a complex problem that does not have a single correct answer.

The second week's aim is to define the problem by gathering information about the problem (challenge) and to study the needs of the target group or customer that is facing the problem.

Tasks for this week encompass two main stages of work:

- First and foremost, understanding and defining the problem (challenge),
- Secondly, understanding the needs of the target group (customer).

Practical assignments for this week include:

- Choosing a specific problem, completing the problem analysis table using the desk research method;
- Identifying target groups that are related to this problem or are experiencing its negative consequences. While using inclusive methods, completing the Persona Profile and Empathy Map of several members from this group;
- Making a list of stakeholders. Including at least two “unusual” stakeholders (for example, if the problem is youth employment, include a biker club).

Understanding the challenge

Understanding the problem is a very important step, as it is possible that the initially identified problem is too broad and covers too broad target groups (for example, high levels of plastic waste or air pollution). Detailing the challenge is crucial at this stage, in the case if there is a need that the solution would be effective and tailored to the customer’s needs. In other words, the problem has to be broken down into several elements and a challenge that is as specific as possible, or several separate challenges have to be chosen. A problem that is too broad and vague will limit the effectiveness of solutions and likely will bring less benefit to organisations. Traditionally, it has been thought that the most important thing when creating innovations is to design an idea. However, eventually, it was noticed that this approach is quite risky as a lot of such ideas fail in the long run. Extensive research had shown that reasons for these failures were simple: often proposed innovations did not address a specific problem. According to the recommendations of the Design Thinking methodology, the idea for innovation should be constructed out of collected data. The initial assumptions about the problem might be erroneous as causes or certain social-cultural circumstances of the problem are not known. Accordingly, at this stage, it is important to gather as much data about the problem as possible.

Example No. 1

The organisation wants to reduce the amount of plastic packaging, but the problem is that customers don't want to be charged extra for sustainable and decomposing packaging. The organisation is looking for cheaper alternatives and it sometimes happens that the transportation chain of those alternatives is unsustainable and leaves a significant trace of CO2 or infringes the principles of socially responsible employment practises. Extensive analysis of the problem and target group research revealed that some customers don't know about the damage of plastic to their country's ecosystem as they were linking it to distant lands, ocean pollution, etc. Other customers simply don't care – the price for sustainable packaging may be included in the price of the product.

So, packaging that is too expensive may not necessarily be the main problem.

Potential solutions:

- expand social marketing with educational information about the damage of plastic;
- socially responsible customers can be offered to pay extra for the CO2 footprint;
- offer to purchase items without any packaging, etc.

TASK for the trainee No. 5

Please complete the **Problem statement by answering questions Who, What, Why, Where** and use PESTEL (Political, Economic, Social, Technological, Environmental, Legal) Analysis. The PESTEL analysis is meant to describe the challenge (trainees already have a PESTEL analysis on the hosting organisation from the previous week). This will help one to clearly define and identify the problem.

For more information, please follow:

- https://readings.design/PDF/Tim%20Brown,%20Design%20Thinking.pdf
- https://www.business-to-you.com/scanning-the-environment-pestel-analysis/

TOOLS No. 1

Problem statement: Attachment B1.

Target group needs

Empathy is crucial to a human-centred design process because it allows one to set aside personal assumptions about the world and gain real insight into the perspective of a target group. In this stage one tries to get an as extensive understanding of the needs and situation of a target group as possible. Only then one can offer a solution that is very specifically tailored to the needs of the customers. The principle of tabula rasa is very important at this stage. Different facets of the problem need to be analysed with an open mind and without any preconditions. Target group(s) should be defined clearly and narrowly as different people have different needs and one solution will not apply to everyone.

Consequently, one should specify the target group(s) age groups, habits, attitudes, experience, income, opportunities and marital status.

TASK for the trainee No. 6

Please fill out a **Persona profile and Empathy Map**. This will help to understand the perspective of a target group. For more information, please see the chapter "How to conduct research?".

TOOLS No. 2

Persona profile Attachment B2, Empathy Map Attachment B3.

Example No. 2

The target group is a young large family living in a remote rural village. The father of the family works as a driver, he comes home late. The mother receives a social benefit, but these funds are not enough for the family. Low income limits the education of children, their state of health, the family cannot afford free time and holidays, and children do not have the opportunity to attend non-formal activities. The local social business "Pagalbos kalvė" helps such families by organising the day care centre activities and mediates in employment. The mother was invited to attend training, learning how to prepare a CV, and was invited to attend a psychologist's consultation. The company assumes that the young woman is not occupied because she has no skills or lacks motivation. However, a more detailed needs study has shown that employment is limited by a very complex connection with the city. The bus to the city leaves at 7 in the morning, and the kindergarten is not open at that time. Bus returns from the city at 18:30, the kindergarten again asks to pick children up until 6 p.m. Also, an intercity bus ticket is quite expensive. So, if one wants to help the family to solve a social problem, one needs to look for completely different solutions, e.g. offer employers to organise transport from rural areas, seek the help of the local community (who is already travelling to the city).

How to conduct research?

At this stage, it is very important to know the basic research methods that can be used to collect the data from a target group(s). Research ethics are very important in any research that involves other people. A classic definition of ethics is that ethics pertains to doing good and avoiding harm. In this context, ethics has largely been associated with the role of ethical principles and guidelines advancing the pursuit of knowledge (Aluwihare-Samaranayake, 2012).

Principles of research ethics: honesty, respect and risk management (both when collecting the data and when publishing or presenting data publicly), confidentiality (in qualitative research) and anonymity (in quantitative research), safe environment (both physically and in an emotional sense) and free will (research participant can join the research by one's own volition and also can leave at any point after the research had started without any negative repercussions).

- The research participant takes part in the study of their own volition with the possibility to leave at any time. Informed consent must be obtained – it may be verbal or written, but it must be recorded. If a research participant is a person under 16 or has an intellectual disability, informed consent should be taken not only from them but from their parents or legal guardians, too.
- The research participant is guaranteed privacy, anonymity and confidentiality. Their physical, psychological and legal well-being must be considered. Confidential information may be disclosed only where there is an obvious threat to the well-being of the research participant or other parties and it is impossible to stop it without disclosing this information.
- When collecting the data on sensitive topics (for example, abuse, suicides) or conducting the research with socially vulnerable groups (for example, disabled people, families experiencing social risk), it is important to consider the mental state of research participants, to formulate questions empathetically and, if needed, to provide an opportunity to consult professionals (for example, by referring to help-lines).
- The researcher may share their contact information if the research participant would like to know about the further course of the study or to access the summarised research data.
- It is not possible to conceal the aim or the consequences of the research from its participants (unless otherwise reliable results will not be obtained the research participant is not harmed and the research purpose is reported after the study).
- When collecting the research data and when publishing or presenting the results, principles of respect and equality must be carefully followed. Additionally, the researcher must acknowledge differences related to gender, sexual orientation, ethnic or national identity, age, religion, language, social status and the level of personal functioning.
- It is important to mind the political and social consequences of the research, especially concerning socially vulnerable groups. It is also crucial to adhere to the criterion of truth and not to distort the research results. The results of the research could also be made available to the target groups in a language they understand (easy-to-read language).

For more information, please follow: https://www.sagepub.com/sites/default/files/upm-binaries/34088_Chapter4.pdf

Research methods

Research methods can be chosen based on these two approaches:

1. Methods that may require the involvement of research participants (requires action by research participants, for example, interviews, focus groups (group discussions) or quantitative surveys) or not (analysis of documents and secondary data);
2. Principles of quantitative analysis (broadly and superficially, numbers and generalisations) or principles of qualitative analysis (narrowly and in-depth, exhaustive understanding and revealing of diversity and nuance).

How to choose a research method?

The choice of research method depends on the topic and target group that is being studied, on experience, and on the resources and time available. A detailed comparison of the different research methods is presented in Table 3.

Interview	Focus groups	Surveys	Document analysis
- cares about a deeper understanding of the research participant perspective; - individual, authentic, subjective experiences, feelings and stories; - detailed and in-depth information provided by the expert (for example, by the relatives, family members); - sample of research participants is relatively small or specific; - research does not require broad, representative generalisations, there is an interest in knowing "How?", "Why?"; - there is no need for numbers or statistics.	- cares about a deeper understanding of the research participant perspective; - seeks to understand the interaction of discussion between research participants; - individual perception is not as important as consensus or disagreements of the group; - there is an interest in comparing perspectives of different groups; - the analysed topic is not very sensitive; - research does not require broad, representative generalisations, there is an interest in knowing "How?", "Why?"; - there is no need for numbers or statistics.	- cares about numbers and broad generalisations; - cares about planning and calculation; - sample of research participants is not relatively small or difficult to reach; - the problem is rather well defined, it is clearly known, what will be asked; - individual (group) stories or perspectives are not relevant for research; - it's not subjective opinion or experience that is important, but objective detailing of situation or attitudes.	- cares about information one can get from secondary data sources (there is no need to bother/ include human participants); - it is not possible to get information that is needed from people (for example, the person cannot answer one's questions due to severe disability); - secondary data sources are reliable (for example, individual help plans); - secondary data sources are more reliable than people; - research topic is about documents themselves.
Examples: *- research of the experiences of human trafficking victims to increase the availability of social services;* *- the attitude of the founder's representatives to the development of new social services;* *- challenges faced by families with multiple children in rural areas;* *- a change in the emotional well-being of service users.*	*Examples:* *- needs for leisure spaces of youth in rural areas;* *- improvement of day centre services from the perspective of young versus old visitors;* *- experiences of day care service users during the COVID-19 pandemic.*	*Examples:* *- planning the need for potential users of Women crisis centres;* *- relatives' satisfaction with care services in big nursing homes;* *- evaluation of study results of rural and city students experiencing social risk.*	*Examples:* *- analysis of social workers' diaries to understand changes in client's behaviour and wellbeing;* *- individual help plans where the level of dependency is monitored;* *- reflections of course participants.*

Table 3. Choosing a research method: what method and when should I choose? (prepared by A. Girkontaitė)

Among the methods mostly used in the search for innovative solutions **semi-structured interviews** and **focus groups** can be mentioned:

Semi-structured interview. The advantage of the interview as a data collection method lies in the possibility to obtain more detailed and nuanced answers to research questions than using a standardised questionnaire. This means that the research participant (also called an "informant" in qualitative research tradition) can answer and express attitudes and motives they would/ could not want to share otherwise, for example, in a group discussion or via phone survey. The semi-structured interview aims to get an idea of the causes of the problems, personal experiences and interpretations, and insights of the informants. Using this method, informants are interviewed individually, based on pre-prepared interview questions. However, the conversation between the researcher and the informant is not formalised, the participant is free to express their thoughts not only according to the given questions (Bitinas, Rupšienė and Žydžiūnaitė, 2008). During an interview, the researcher aims to establish a close relationship with the informant, to earn their trust, and to allow them to express their thoughts freely. Only one question is asked at a time, but it is not mandatory to follow the order of the questions – during different interviews questions may be asked in a different order depending on how they arise organically during the conversation. Also, the researcher can clarify questions or ask additional questions based on the responses of the interviewee.

Group discussion (focus group) is a qualitative research method for collecting in-depth information about the qualitative aspects of certain topics, analysing specific topics exhaustively, and discussing research participants' perceptions, interpretations, opinions, attitudes and experiences related to the analysed topic. This method gives depth and multidimensionality to the research and allows one to better understand the context of the studied situation or phenomenon. This context during the group discussion emerges not only through thoughts, insights and experiences shared by research participants, but also through a certain group dynamics observed by researchers. Additionally, context of the studied situation or phenomenon emerges through the researcher's own intersubjectivity and the group transference he or she experiences (for example, direct, nonverbal emotional communication) and researcher's own countertransference or researcher's response to the group.

Group discussion is an organised conversation of a small group of purposefully selected research participants and is focused on a specific topic. The aim of a group discussion is not a series of questions and answers and not a search for consensus among the group members, but an interaction between them and a discussion that results in a variety of experiences, opinions and concepts. This interaction reveals the relationship of the research participants with the topic, allows to grasp the diversity of perspectives, and to generate new ideas (Gaižauskaitė and Valavičienė, 2016). It is important to emphasise that group discussion is not a simple group interview organised as a series of researcher questions and answers from group members. The group discussion is led by the facilitator, and its goal is to foster a discussion between the participants of the research. Members of the group hear each other's answers and consequently instead of simply answering the question they can comment and react to each other's perspectives and opinions. It is this exact active interaction between the research participants that adds value to the group discussion method in comparison to the individual interview method.

When using the interview or group discussion method it is important to:

1. Rehearse the conversation, test questions with colleagues;
2. Record the conversation (with consent from research participants). Have two recording devices and try to find a calm and safe environment for conversation (not too windy, noisy, crowded);
3. Facilitate a safe and relaxed environment without any external interferences. When talking to research participants, avoid professional terminology, one's speech has to be kept simple and understandable for everyone. If one is personally acquainted with research participants, interview/ group discussion ideally should be facilitated by one's colleague in the organisation or volunteers, trainees. One's connection with research participants will hinder objectivity of the research;

4. Open a conversation by explaining the research goal and try to connect the first questions with the experiences of research participants;
5. Facilitate a sincere and empathetic relationship, be interested in the perspective of the interviewees, listen actively;
6. Avoid stating personal opinion or position on the research topic, do not interrupt or argue with research participants, do not suggest something that is expected to be heard;
7. If research participants only give short answers or are apparently unwilling to answer, be more encouraging: ask again (for example, "What do you mean by saying this?", "What does that mean to you", etc.), ask for concrete examples or stories, after hearing everyone's answers don't immediately rush to another question (wait for several seconds, say "Mmm", nod, ask "Is there anything else you would like to add?");
8. In group discussions: ensure that all members of the group participate in the conversation and discussion stays on topic, react in case of arising conflict or one (or several) group members becoming too dominant;
9. In group discussions: if possible, have a technical assistant to provide the process of monitoring the duration of discussion, following the research questions and checking on recording devices.

There are two possible problems when interviewing by oneself: lack of competencies (for example, the researcher is not experienced enough) and interest bias. The latter means that, for example, if research participants are emotionally attached to the trainee, they may try to show the situation more favourably than it is. Or, on the contrary, they may be intimidated by the trainee's authority and will not comment negatively when sharing their experiences. However, interviews are a very useful (and often rather cheap) method of collecting data, especially in research with the elderly or people with disabilities.

For more information, please follow: https://slinuacareers.com/8-major-types-interviews/

Sampling of research participants

In research, a sample that is representative or reflects diversity is rarely obtained. For example, research participants are included based on convenience, i.e. convenience sampling. Additionally, it's common that the proportion of surveys answered is only about 30-70 percent from the planned sample. Having this in mind, it's suggested to include more participants in the sample.

Method	Interview	Group discussion	Survey
Principle	Diversity of research participants (in age, gender, socio-economic status and other aspects important to research) and data saturation (it's reached when new interviews are no longer adding new data to one's research)	Diversity of research participants	Representativeness: research participants correspond to the proportions of the total population (in age, gender, socio-economic status and other aspects important to research) and were selected randomly

Number of research participants	Not many: - At least 10 from group; - At least 8, if groups are compared (for example, men and women); - At least 4-5, if participants are experts or difficult to reach.	Not many: - At least 2 group discussions; - At least 1 group discussion for every research group (for example, if one is comparing younger and older clients); - At least 5-8 participants in the group (this number is big enough to facilitate the discussion, but not big enough to make management and involvement of the group members impossible).	Many: - It's advised to use a sample size calculator and cover at least 10 percent of the sample with different characteristics (age, gender, socio-economic status and other aspects important to research); - Or to include as many members of the group one is researching as possible.

Table 4. Principles for sampling research participants (prepared by A. Girkontaitė)

For more information, please follow:

- https://www.questionpro.com/blog/types-of-sampling-for-social-research/
- https://www.scribbr.com/methodology/sampling-methods/

Reflection

Students are encouraged to have a reflection session at the end of each week. They could follow these questions below:

1. Reflect on your thinking, learning, and work this week. What did go well and were you most proud of? Which of your (SMART) goals have you met this week?
2. Which of your (SMART) goals have you not met this week and where did you encounter struggles? What did you do to deal with them?
3. How will you use what you have learnt this week for the upcoming week(s)? What are your traineeship (SMART) goals and steps for next week?

Conclusion

What are the outcomes of this phase?

At the end of this phase, the trainee will learn:

- The trainee will learn more about the challenge;
- The trainee will learn more about the target audience;
- The trainee will use various methods to gather information and new data on the challenge and on the target group.

Preliminary work structure and process

Each case is unique, so it is ok if it takes a different time than anticipated below:

EMPATHY AND RESEARCH – Week II - III	
TRAINEE RESPONSIBILITIES	• In-depth analysis of target group needs • Identify the main problem (challenge) using all available information resources • Prepare a research plan (identify the best research method and data collection technique, set criteria for sampling) • Research the main guidelines of research ethics • Participate in one-on-one sessions with the supervisor • Participate in one-on-one sessions with the tutor
SUPERVISOR RESPONSIBILITIES	• Provision of all materials, resources and templates needed for target groups needs and challenges analysis • Assistance with the research implementation (included but not limited to tips for researching within a specific target group, acting as a gatekeeper to the research sample, technical support when conducting the research, etc.) • One-on-one sessions with the student(s) to keep track of the progress (target group needs and problems analysis) and help with the research • Evaluation and the feedback on the student(s)' research work
TUTOR RESPONSIBILITIES	• Supervision of the traineeship process • Assistance with the research implementation (included but not limited to tips for researching within a specific target group, advising on the research method, sampling, data analysis, etc.) • One-on-one sessions with the students to keep track of the research progress (data collection, research ethics, data analysis, etc.). • Evaluation and feedback of the research conducted

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SOLUTION PLANNING – IDEATION – Week III (IV)

At this stage, students need to identify possible solutions based on the information gathered, taking into account the needs of the target group and the organisation they are working with. The **pain and gain method** can be used.

The aim of the third week is to come up with a viable solution to the identified problem by forming a hypothesis.

In the first week, a student got familiar with the organisation, conducted SWOT analysis of the organisation, got in touch with the organisational structure and values and gained a brief insight into operations.

In the second week, a student had to define a problem and had to identify the target group and its characteristics. When combining both variables together the outline of the viable solution starts to emerge.

Ideation process

Once we have identified a problem - or a challenge - and before we start creating a customer profile (target group), we take a moment to consider how we can validate a problem from three aspects. In this way, we avoid wasting the company's time and resources and learn how to propose a valuable and viable solution to an existing problem.

A validated problem has three aspects:

1. **It exists.** People have it and have talked about it.
2. **It is not being solved**, or it is being solved poorly or ineffectively,
3. A **reachable market** has the problem - people that are accessible (Spyzs 2017, 43)[2].

There is no point in addressing a non-existent or unattainable problem, once can certainly agree. And yet, the market produces many products and services that do not produce a profit or a change for the better because a problem was overestimated or misrepresented. Therefore, validating a problem must go through the above questions to clarify the rationale behind the idea.

TASK for the trainee No. 7

Use Value Proposition Canvas (Attachment C1).

The Customer Profile tool breaks down those problems into three categories:

1. **Customer jobs**: the things one's customer does regularly, whether at their actual jobs, in social situations or their personal life.
2. **Customer pains**: the things that hinder one's customers from doing their jobs or make their jobs harder.
3. **Customer gains**: the things, whether expected or unexpected, that benefit the customer or make their jobs easier (Spyzs 2017, 49).

[2] Spyzs, Anna, *Power Guide: A workbook for entrepreneurs*, InnoEnergy SE, 2017.

Here are some questions to help trainees think about customers' jobs, pains, and gains:

1. What tasks are one's customers trying to perform in their work or personal lives? What functional problems are one's customers trying to solve?
2. How does one's customer want to feel? What does one's customer need to do to feel this way?
3. What makes one's customer to feel bad? What are their frustrations, annoyances, or things that give them a headache?
4. What common mistakes do one's customers make? Are they using a solution the wrong way?
5. What would make one's customers' jobs easier or lives easier? Could there be a flatter learning curve, more services, or lower costs of ownership?
6. What are customers looking for most? Is searching for good design, guarantees, specific or more features?" (Spyzs 2017, 50)

Just as there are three categories of customer problems, there are categories of solutions:

1. **Product and services**: all of the physical, digital, or financial products or services your company offers to customers.
2. **Pain relievers**: how one's products or services solve specific pains that customers face.
3. **Gain creators:** how one's products or services create specific customer gains." (Spyzs 2017, 55)

Here are some questions, which could help to think about the solution's features:

1. In what ways can one's solution fix underperforming solutions? By introducing new features, better performance, or enhanced quality?
2. In what ways can one's solution eliminate barriers that are keeping one's customers from adopting similar ones?
3. Can one's solution put an end to the difficulties and challenges one's customers encounter?
4. Can one's solution produce outcomes that customers expect or that exceed their expectations?
5. In what ways can one's solution make customers' work or life easier? Via better usability, accessibility, more service, or lower cost of ownership?
6. Can one's solution fulfil a desire customers dream about?" (Spyzs 2017, 56)

The business model canvas is a visual tool used by the startup to map out the way to make money. It is made up of 9 parts. Put together, the Canvas illustrates how the 9 aspects of the business interact with each other – the startup's business model." (Spyzs 2017, 66)

TASK for the trainee No. 8

Use business model canvas (Attachment C2).

Creating a hypothesis

"This is the most basic format of a hypothesis:

I believe _____ [customer segment] **will** _____ [buy/use this solution] **for** _____ [this reason – why one's solution is better than existing solution/how it solve the customer's problem]

Make sure that the hypothesis meets the following criteria to be valid:

1. It has to be testable, which means it can be passed or failed (validated or invalidated) by an experiment.
2. It has to give a better understanding of the customer's problem or solution.
3. Each hypothesis should only test one thing at a time.

Don't start testing the hypothesis until it is known what is being measured and how it will be measured (one's metrics)! A metric should describe the #1 thing that will tell if the experiment has failed or succeeded." (Spyzs 2017, 81)

Since one is working in an established, well-defined organisation/company, the Business Model Canvas may provide some insight, but it is not the right tool to map all relevant categories and visualise all relevant elements.

Mapping Design Operation might provide a different mind map or alternative visualisation for a solution idea for a problem that was identified.

TASK for the trainee No. 9

Design Ops Canvas (Attachment C3).

Reflection

Students are encouraged to have a reflection session at the end of each week. They could follow these questions below:

1. Reflect on your thinking, learning, and work this week. What did go well and were you most proud of? Which of your (SMART) goals have you met this week?
2. Which of your (SMART) goals have you not met this week and where did you encounter struggles? What did you do to deal with them?
3. How will you use what you have learnt this week for the upcoming week(s)? What are your traineeship (SMART) goals and steps for next week?

Conclusion

In this phase of the traineeship, a student can identify the industry with its strengths and weaknesses. At the same time, he/she can identify a challenge facing the hosting organisation, prepare a general profile of the typical customer, and prepare a workable solution to address the problem within available resources (ideation for a solution to the problem).

Preliminary work structure and process

Each case is unique, so it is ok if it takes a different time than anticipated below:

SOLUTION PLANNING – IDEATION – Week III - IV	

TRAINEE RESPONSIBILITIES	• Student traineeship at:
	  ○ SME: Business Model Canvas (hosting company's main product/service)
	  ○ NGO: Mapping Design Operation
	• Identified problem/challenge ahead
	• Solution ideation
	• Participate in one-on-one sessions with the supervisor
	• Participate in one-on-one sessions with the tutor

SUPERVISOR RESPONSIBILITIES	• Support in creating Business Model Canvas / Mapping Design Operation • Presenting the challenges ahead of industry and company • Support in solution ideation (setting the boundaries of possibilities)
TUTOR RESPONSIBILITIES	• Registration of the process • Collecting the documents (online storage) • Constructive feedback

References

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TESTING THE SOLUTIONS – Week IV - (V)

Prototyping

During this stage of the traineeship, students should test their selected solutions in real conditions. To do this, students should build prototypes for these potential solutions, go to their hosts, get feedback for the initial prototypes, change and improve the solution if necessary to identify which prototype works best as a problem solution.

In week IV/V students will have identified possible solutions based on the information gathered, taking into account the needs of the target group and the organisation. They will now prototype their solutions, discuss this testing and focus on new ways to innovate to provide better solutions to address the chosen issues.

In order to have immediate feedback and client-tailored solutions, we recommend prototypes to be visual and easy to understand.

What exactly is prototyping?

Prototyping relates to innovation. In week IV/V students will test and discuss their solutions, enabling the sharing of knowledge and experiences towards the identification of potential solutions for a challenge, generating social innovation. In this context, innovation can be thought of as “problem-solving” or a response to the question "what has to be done, made, and created to solve the challenge?".

Gathering feedback and discussion is a process of talking about something to reach a decision or to exchange ideas by putting upfront all points of view and opinions, making clear what the options can be. Testing something concrete and discussing the reaction can generate potential ideas for solutions. The practice of prototyping is an essential part of the traineeship allowing students to test concepts and potential solutions on a small scale, with the hosts and get feedback that can enrich the original concept and prototype towards a more robust final solution. The process of coming up with a solution, testing it, getting feedback, discussing and adjusting the prototype can continue in the form of a loop: inputs from users are integrated into the concept and prototype, which can be tested again.

The prototype approach to challenges is a creative exercise enabling students to identify a suitable way of giving a tangible format to a concept. Turning a concept tangible can result in an object, an app, a game, an artwork, a role-play scenario, a script, an interactive board, a document or any other suitable form according to the circumstances. Here are a few examples:

- Lego models (constructing a solution with Lego bricks).
- Artworks such as a collage to visualise the solution.
- Schemes with Canva (for process changes).
- A storyboard – showing one’s concept overtime visually through a series of images, sketches, cartoons or just text blocks. One doesn’t need to be an artist and, for example, can use a scissor to cut images from old magazines.
- A diagram – a map to structure a network, a journey or a process of one’s concept.
- A story – telling the story of one’s concept by describing what the experience would be.
- An ad – creating a fake advertisement to promote the best of one’s concept.
- A mock-up – of digital tools and websites using simple sketches of screens on paper.
- A model – putting together a three-dimensional representation of the concept.
- A role-play – acting out the concept can be a good idea as one will be able to try the users’ roles and uncover relevant questions.

Testing Solutions

Whereas 'Prototyping' offers students the opportunity to tailor alternative solutions according to a specific challenge/problem, this step foresees testing their practicability and investigating what are the most successful solutions for achieving an expected result. It is a non-linear, iterative process that contributes to understanding target needs, challenging assumptions, creating innovative solutions and redefining problems through a prototyping and testing loop.

Instead of the traditional strategic planning approach, which associates an identified-single solution to a given challenge, with a prototyping-testing solutions methodology there will not be a given response identified to a problem but a portfolio of responses. These responses will be generated by the students and the hosts exploring a given challenge much deeper and learning also from what doesn't work.

Implementing the successful solution is part of an attempt process in which students together with their hosts can enhance their understanding of a given issue and its features to better face similar challenging situations. It is a continuous evaluation process in which results obtained are inputs that are included in the design thinking chain. This is also because the process is not always sequential, it can be repeated iteratively as many times as solutions need to be tested to obtain a convincing result.

How to organise testing solutions session

Once students have identified possible solutions to a challenge based on the information gathered during the traineeship, they will create the visual prototype to share with their hosts.

When carrying out tests on prototypes, it helps to adopt a flexible mindset. For instance, if it was realised that certain components of one's prototype are drawing attention away from the core functions of the prototype, they can be removed and changed to bring the focus back to the key elements of one's idea. In addition, if one thinks that one's planned script for the testing session does not work well, he or she can feel free to deviate from it and improvise during the testing session to get the best feedback from one's hosts.

During the testing, students should allow their hosts to contribute to the ideas that build on the prototypes suggested. This can be encouraged by asking questions such as how the product or service could be improved, for instance. Doing so may encourage hosts to provide useful critique, as well as help improve possible solutions. The feedback collected after the solutions had been tested is crucial.

Here are three tools to help students work with their hosts to test the solutions. The first activity will help the students to **define a set of criteria that evaluates a successful solution** that guides the development of the prototype as one scales and builds on one's idea. The activity also allows the students and hosts to think about how they will want to measure the impact of the solution.

TASK for the trainee No. 10

Evaluating solutions, please use Criteria to evaluate solutions(Attachment D1).

The second activity is a **mind map**, which aims to explore the different aspects and realities of the prototype as it may become a solution and to exchange information from different perspectives of those involved in the discussions. A Mind map is a graphical representation of ideas and concepts. It is a creative and logical way of advanced note-taking using

symbols, colours, mind shapes, words, lines, and images. Not only does it help to structure information better and understand the requirements more deeply, but it also assists in analysing data comprehensively and it's fun! Mind mapping is a technique which:

- Increases creativity (including alternative structural representations).
- Facilitates problem solving and teamwork.
- Is simple to implement and maintain.
- Is flexible.
- Provides broader coverage.
- Allows one to position all the data in one place.
- Can mark different areas in different ways to be more efficient and attractive.

TASK for the trainee No. 11

Use a mind map canvas to explore different aspects and realities of the prototype (Attachment D2).

The third and last activity proposed is a **SWOT analysis** to allow students and hosts to assess a given solution in more depth and more broadly. The SWOT analysis will help students to identify the positives and negatives in the found solution. Developing a full awareness of the solution can help with further strategic thinking, planning and decision-making amongst those involved. A SWOT analysis will be useful to students and hosts so that they can focus on the solutions' strengths, creating or recognizing opportunities and using them. It will, at the same time, enable students and hosts to foresee possible threats and to take measures to prevent or diminish their impact. It is a simple and flexible model that has no rigid structure and therefore can be easily adapted.

TASK for the trainee No. 12

SWOT analysis for the selected solution (Attachment A1).

Here's a summary of the three activities:

Overcoming challenges when testing	
Activity	Challenge/objectives
Defining criteria	Defining a set of criteria will enable students and hosts to evaluate a successful solution and to measure its impact.
Mind mapping	A mind map is a diagram used to visually organise information. A mind map is hierarchical and shows relationships among pieces of the whole. It is often created around a single concept, drawn as an image in the centre of a blank page, to which associated representations of ideas such as images, words and parts of words are added. Major ideas can be connected directly to the central concept, and other ideas branch out from those major ideas.

Swot analysis	SWOT Analysis is a widely popular technique to examine strengths, weaknesses, opportunities, and threats. It could be used to evaluate a solution.

Table 5. Summary of overcoming challenges when testing

Reflection

Students are encouraged to have a reflection session at the end of each week. They could follow these questions below:

1. Reflect on your thinking, learning, and work this week. What did go well and were you most proud of? Which of your (SMART) goals have you met this week?
2. Which of your (SMART) goals have you not met this week and where did you encounter struggles? What did you do to deal with them?
3. How will you use what you have learnt this week for the upcoming week(s)? What are your traineeship (SMART) goals and steps for next week?

Conclusion

What are the outcomes of this phase?

In week IV/V students will have identified possible solutions based on the information gathered, taking into account the needs of the target group and the host organisation. They will have prototyped their solutions and carried out feedback sessions to show and discuss this testing, focusing on new ways to innovate to provide better solutions to address the chosen issues.

Preliminary work structure and process

Each case is unique, so it is ok if it takes a different time than anticipated below:

TESTING THE SOLUTIONS – Week IV - V	
TRAINEE RESPONSIBILITIES	• A one-to-one session with the supervisor. • A one-to-one session with the tutor. • Create a prototype and share it with the host. • Organise and run a 1-hour meeting with the host to define a set of criteria that evaluates the solution. • Organise and run a 1-hour meeting with the host to explore a mind map of the solution (embracing additional questions/challenges etc). • Organise and run a 1-hour meeting with the host to carry out a SWOT analysis of the solution.

SUPERVISOR RESPONSIBILITIES	• Participate and provide feedback inputs during the three one hour meetings. • One-on-one sessions with the student(s) to keep track of the progress (how to elaborate feedback gathered regards the solution). • Endorse the importance of inviting different members of the host organisation to take part in feedback meetings.
TUTOR RESPONSIBILITIES	• Supervise the traineeship process. • Assist with advice and support in developing the prototypes. • Provide feedback and facilitate the participation of other members of the host organisation in feedback sessions. • One-on-one sessions with the students to keep track of the research progress (collecting and analysing feedback).

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4. Design Thinking for Strategic Innovation: What They Can't Teach You at Business or Design School (ebook) by Idris Mootee, published 2013
5. Frame Innovation: Create New Thinking by Design (Hardcover) by Kees Dorst, published 2015

Reflexive analysis – Week VI

According to Sweitzer and King (2013), reflection is fundamental in experiential education and could be a hallmark of professional development. In other words, "reflection is the connection that one makes between an experience and all of one's feelings that surround it", thus by doing a reflexive analysis, the trainee turns his/her traineeship experience into a learning experience.

Finalising the traineeship

This week's objective is to therefore mark the end of the SHOUT traineeship, where students will be asked to reflect on their learning experience and deliver the final tangible outcome of their intervention. This reflexive outcome will be evaluated by their tutor/professor when back at their university and if possible to be of an advantage to the host organisation. This process will be quite flexible as the outcome depends on the SDG - challenge the student is trying to solve as well as the national context of the traineeship and the needs/services of the host organisation.

This document explains what a reflexive analysis is and it consists of ideas, examples and recommendations of reflexive analysis that students can choose to deliver at the end of their SHOUT traineeship.

What is a reflexive analysis?

This week is what Sweitzer and King (2013) describe as the 'culmination stage' - the final stage of a traineeship. A reflexive analysis is a method of locating one's position and it is based on the learning to learn competences, where the researcher and in this case the student, understands his/her mental processes while learning. Markham (2017) described it as a "method of gaining greater sensitivity to the local and global contexts, of identifying one's own location, and of establishing a sense of rigour in one's research."

To evaluate the effect (outcome) of an intervention, students need to measure two aspects: meeting customer needs (of the Host Organisation and its customers) and the social impact of their solution to the SDG they tried to solve. For the first aspect, it could be useful to create a (customer) feedback survey or organise independent evaluation with experts, for instance, through interviews. For the social impact, one could use the SDG Impact Assessment Tool - a free online learning tool that visualises the results from a self-assessment on how an activity, organisation or innovation affects the SDGs. It aims to stimulate the user to get a better understanding of the complexity of sustainable development and the different aspects that should be considered for the realisation of the SDGs.

Note: For a reflexive analysis to be impactful, it needs to be an ongoing process and an integral part of the traineeship. The student will need to devote some time to reflect throughout the six week duration placement. There are a lot of reflection/reflexive techniques (e.g. keeping a journal, transcripts of interviews, etc) that will not be discussed here, however, the students need to research and find the ones that are more beneficial for them and their context. If they can record their reflections, it can be beneficial for them to use them for the outcome of this traineeship. Do not forget that the primary purpose of the reflexive analysis is to promote the student's growth and learning, and both tutor and supervisor play an essential role in encouraging this habit to the student and guide them to use reflexive analysis to their advantage.

Why is it important for the SHOUT traineeship?

- For the student:

- It contributes to the student's reflection of traineeship experience and his/her innovation capacity as an SSH student to deal with the challenges presented in the SDGs.
- It helps to reflect and improve one's self as an SSH researcher (provide more effective and impartial analysis). It includes the student, as the researcher, as part of the construction of meaning to the research problem.
- It contributes to the student's personal and professional development as it enhances skills and competencies needed for the labour market.

- For the tutor/professor:
  - It helps to identify the skills of the student and contribute to their academic development.
- For the supervisor and Host Organisation:
  - The product delivered by the student can contribute to the services/culture of the organisation.

How to conduct a reflexive analysis?

Students can start immersing themselves in the process of reflexivity, asking themselves: "What do I know? How do I know what I know? What shapes and has shaped my perspective? With what voice do I share my perspective? What do I do with what I have found?" (Patton 2014, as cited in Marshall & Rossman, 2016, p. 118).

Eyler and Giles' (1999) theory on the "Five Cs" is one of the reflection techniques that the student can use to reflect on his/her research methodology and data. "Five Cs" represent: connection, continuity, context, challenge and coaching. To keep these principles the student will need to structure their reflection and connect it with the learning goals that they have set at the beginning of their traineeship.

- *Connection* highlights the importance of making a connection between one's experience and analysis of it, the challenge and outcome and the community, the present and the future.
- *Continuity* stresses that learning is a lifelong competence and the importance of making reflection a habit for both one's academic and professional life.
- *Context* refers to the thinking and learning the student will be doing on their SDG challenge and in the field, with the tools they are given, the facts of a given SDG in a given environment.
- *Challenge* is about the new situation and information one is facing and gaining, for instance in the SHOUT traineeship, that creates an ambiguous situation that requires students to develop "more complex and adequate ways of viewing the world…" (ibid, pp. 184-185).
- *Coaching* refers to the emotional and intellectual support a student will need in the traineeship, which will come from both the tutor and supervisor in this case. Emotional support is about creating a safe space for students to express their feelings and thoughts, criticism, etc. Intellectual support is about the opportunity for students to ask questions, think in new and different ways, advance their knowledge, skills and competencies and question in retrospect how they think about challenging situations and how they can contribute to creating a sustainable change.

Therefore, the student can choose one of the following ways of reflecting on their SDG challenge. We encourage students to advise their professor and tutor on which method is the most suitable to evaluate the effect of their intervention and we encourage professors and tutors to support and guide the student throughout this process:

Suggestions for reflexive methods

Activity[3]	Tips/Advice
Thesis / State-of-the-art report on the SDG challenge	**Thesis** A thesis should mirror an academic essay in the sense of having an introduction, main body and conclusion and use formal language. Hereby below are some recommendations and tips on how to create such a thesis, but it is also recommended to advise your professor/tutor on what is expected from you. According to the University of Edinburgh (2020), in academic reflective writing, a student must be critical and analytical and should have a clear line of argument/reasoning - for which he or she can use the research data he or she has collected from SHOUT traineeship during weeks 3-5. Ideas for structure (ibid): 1. Intro identifies and introduces one's experience or learning, highlights why it was important, outlines key themes that will appear in the reflection. 2. Main body explores experiences, analyses and synthesises. 3. Conclusion restates one's learning, explains how one's learning will be used in the future. *Before starting a reflexive thesis, one should consult with a tutor/professor about the structure.* Reading Material: ● Reflective Practice Toolkit by the University of Cambridge https://libguides.cam.ac.uk/reflectivepracticetoolkit/writingexercise. **State-of-the-art** A national/European report, state-of-the-art, could consist of both qualitative and quantitative methods, derived from the student's previous traineeship weeks: ● Introduction of the SDG-challenge studied. ● Methodology of research. ● Literature review (including legal framework, policies and best practises). ● Analysis of data (questionnaires, interviews, focus groups). ● Conclusion and recommendations. *For templates and further material, the cooperation between the trainer and hosting organisation is important, as it has to do with the methodology the trainee will choose to do based on your SDG challenge.*

[3] These are possible ways to finish the traineeship. Please choose one that is most suitable in your case or think of another (not listed below).

Develop a policy recommendation paper on the SDG challenge	It can be either a national policy recommendation paper on the country of the student's Host Organisation (HO), and/or a European one, always depending on the context the students studied during their research phase in the previous weeks and communication with their tutor/supervisor. According to Stanford, this is a suggested structure to follow when drafting a policy recommendation paper (see link below): ● Executive Summary ● Introduction and Background ● Methodology ● Literature Review ● Policy options or policy context ● Analysis of findings or evidence ● Case Studies and best practises ● Policy Options and Recommendations ● Implementation and next steps ● Conclusion ● Appendices ● Bibliography Reading Material: ● https://www-cdn.law.stanford.edu/wp-content/uploads/2015/04/White-Papers-Guidelines.pdf ● https://politicalscienceguide.com/home/policy-paper/ ● https://sustainabledevelopment.un.org/content/documents/18041SDG7_Policy_Brief.pdf (examples)

Delivery of a workshop and/or any educational product (seminar, lecture, training, etc) on the SDG challenge	To create a workshop the trainee need to have in mind the following aspects: ● Topic (SDG-challenge). ● Aim and objective of the workshop. ● Outcomes/impact of the workshop for participants (knowledge, skills and competencies) and the wider context (community). ● Target groups (to whom is this educational activity addressed to). ● Necessary material (venue, items that will be used for the activities, catering if needed). ● Agenda (the content of the workshop should be designed in high quality to respond to the issue at stake, the aim and outcomes of the objective as well as the needs of the target group and the general context). Before the workshop, we advise the trainee to know a respective audience as much as possible for a more targeted impact. The trainee can do that by sending a pre-survey to them with specific questions for his/her workshop. After the workshop, we advise the trainee to have an evaluation form to give it to participants so the trainee can collect their feedback to measure the workshop's impact and dedicate some time for reflections and follow-up discussions. *The supervisor and tutor can help the trainee with templates and ideas following their experience, expertise and services of the Host Organisation.*
Create an artwork (verbal and/or non-verbal) and/or an activist intervention on the SDG challenge	The artwork could be poetry, prose, painting, photography, video, theatre, dance and/or music performance, etc. Since this is a very creative method, each person will decide what, why and how on their own, following a discussion with their tutor and supervisor. An abstract to explain the rationale behind will be needed with evidence of the artwork, for the evaluation by the tutor. If it is a community intervention (e.g. performance in public spaces, human library, installation in public spaces, etc) the trainee needs to write again an abstract explaining what the intervention is, why the trainee has chosen this approach and the gap the trainee has found and what it symbolises. Again, evidence and testimonials might be important for the evaluation of this intervention. Further Material: ● McCaffrey, T., & Edwards, J. (2015). Meeting art with art: Arts-based methods enhance researcher reflexivity in research with mental health service users. Journal of Music Therapy, 52(4), 515–532: https://doi.org/10.1093/jmt/thv016.
Portfolios	The trainee can use a portfolio as a personal record. A portfolio is often used to document and reflect on one's entire academic journey. There are many types of portfolios that the trainee can read more about through the material below: https://www.ivoryresearch.com/library/other-articles/reflective-portfolio-how-to-write-1st-class-reflective-portfolio/

	Portfolios can also be professionally valuable as they can be used in future professional endeavours. The trainee will need to discuss with the tutor and supervisor what items to include and/or exclude from his/her portfolio.

Preliminary work structure and process

Each case is unique, so it is ok if it takes a different time than anticipated below:

Reflexive analysis – Week VI	
TRAINEE RESPONSIBILITIES	• Select the most appropriate action for the reflexive analysis, according to the SDG - challenge studied, the context (country of traineeship) and the host organisation's services/activities and mission. • Create a draft structure of your reflexive method, following the guidelines offered above and after a discussion with your tutor & professor. • A one-to-one session with the supervisor. • A one-to-one session with the tutor. • Development of reflexive analysis. • Write a testimonial for the learning experience.
SUPERVISOR RESPONSIBILITIES	• Advise and guide student(s) on the best reflexive action according to their SGD challenge and the organisation's approach in such instances. • Offer student(s) practical tips/suggestions and material (templates) to deliver the action. • A one-to-one session with the student(s) for reflection and evaluation of the outcome of the intervention. • Offer support in the implementation phase (if it is an activity that could be used for the organisation's benefit). • Promotion of the SHOUT Traineeship and student(s) learning experience *(recommended)*. • Write an article/newsletter to promote to relevant stakeholders/members of the organisation the benefits and outcomes of the SHOUT traineeship*(recommended)*.

TUTOR RESPONSIBILITIES	• Advise and guide student(s) on the best reflexive action according to their SGD challenge and academic development. • Offer student(s) support during the preparation phase with further material to study and suggestions to deliver this reflexive action. • Evaluation of the outcome and feedback on the skills developed. • One-to-one reflection session with student(s).

Further Material

- Cunliffe, A. L. (2004). On Becoming a Critically Reflexive Practitioner. Journal of Management Education, 28(4), 407–426. https://doi.org/10.1177/1052562904264440.
- Reflexivity in Qualitative Research: https://qualpage.com/2021/04/29/reflexivity-in-qualitative-research/.
- To improve research technique - reflexive thinking, 5 practical tips: https://www.cxpartners.co.uk/our-thinking/improve-your-research-technique-reflexive-thinking-5-practical-tips/.

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- Eyler, J., & Giles, D. E. (1999). *Where's the Learning in Service-Learning?* San Francisco: Jossey-Bass.
- Markham, A. (2017). Reflexivity: Some techniques for interpretive researchers. Available online at: https://annettemarkham.com/2017/02/reflexivity-for-interpretive-researchers/ [Accessed on 13/01/2022].
- Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research* (6th ed.). SAGE.
- Sweitzer, H. F., & King, M. A. (2013). *The successful internship*. Cengage Learning.
- University of Edinburgh. (2020). *General tips for academic reflections*. Available online at: https://www.ed.ac.uk/reflection/reflectors-toolkit/producing-reflections/academic-reflections/general-tips [Accessed on 13/01/2022]

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