space 4cocreate

TOOL BOX

Co-funded by the
Erasmus+ Programme
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Project Information

Project acronym:	SPACE 4 COCREATE
Project title:	Open and innovative SPACES for collaborative working between VET providers and business organisations
Agreement number:	2016-1-ES01-KA202-025093
Sub-programme or KA:	Key Action 2: Strategic Partnerships
Authoring partner:	Ikaslan Bizkaia Fondo Formación Euskadi S.L.L. Auxilium Eurotraining Chamber of Commerce and Industry of Slovenia
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Agreement Number: 2016-1-ES01-KA202-025093

TABLE OF CONTENTS

1. What is the Tool Box for?

The **SPACE 4 COCREATE Tool Box** is the second core output developed in the framework of the ERASMUS + Strategic Partnership project "Open and Innovative Spaces for Collaborative Working between VET Providers and Business Organisations" funded by the European Commission within the call of proposals 2016. This Tool Box provides the procedure to follow and the tools and templates for the implementation of Open Innovation projects, and it is a complementary document to **SPACE 4 COCREATE Model**, which describes the structure and stages of this process. Both documents are meant to be used together when implementing an OI project.

The direct users of the Tool Box will be the people who act as ***facilitators*** (facilitating organisations). They will know which tools must to be used in each stage and which organisation will use them. ***Facilitators or facilitating organisation*** are responsible of boosting the process and coordinating all the activities needed for the OI development. They link the students with the business organisation and act as supporting person during the process helping any of the involved parties in the different stages.

The final beneficiaries are of the SPACE 4 COCREATE Tool Box:

- ***Business Organisations***. There are at least two profiles involved: legal representative of the organisations (the decisions have to be supported by him/her); at least one person representing the company during the OI development.

- ***Vocational and Educational Training Centres***. Two profiles will be involved: students that will be working on the OI challenge and teachers/educators that will support educators during the process.

Figure 1. Participants in open and collaborative innovation project

2. How to use the Tool Box

This Tool Box is used as a handbook, together with the SPACE 4 COCREATE Model, by the **facilitating organisations** during the implementation of Open Innovation Projects.

In chapter 3, the Tool Box introduces the structure for the implementation of Open Innovation Projects, and in chapter 4, the different tools and templates per stage and step are described. This Tool Box includes a set of templates that **can** be used but it doesn't mean that all the tools need to be used in specific order or that all the Open Innovation challenges or groups are always required to use of the same tools. The facilitator needs to have the ability of choosing the most appropriate tool depending on the characteristics of the group, the aim to get,... She/He is the responsible person for selecting the appropriate tools and providing them to the parties involved during the specific step. Some of the tools are connected along the different stages of the OI implementation process. This connection is showed in the handbook.

It is recommendable that the facilitator has a permanent contact with the participants of the Open Innovation project and gives them clear instructions for the implementation and use of the tools. The facilitator will meet with the team (students, company or all together) as many time that is needed for the correct development of the project.

For each step one or more tool are included. All of them are described following the same structure:

- *What is it?* It includes a description of the tool, what is its aim and which are the expected results.

- *Who participates*? It describes the parties who will use the tool during the implementation of the OI projects.

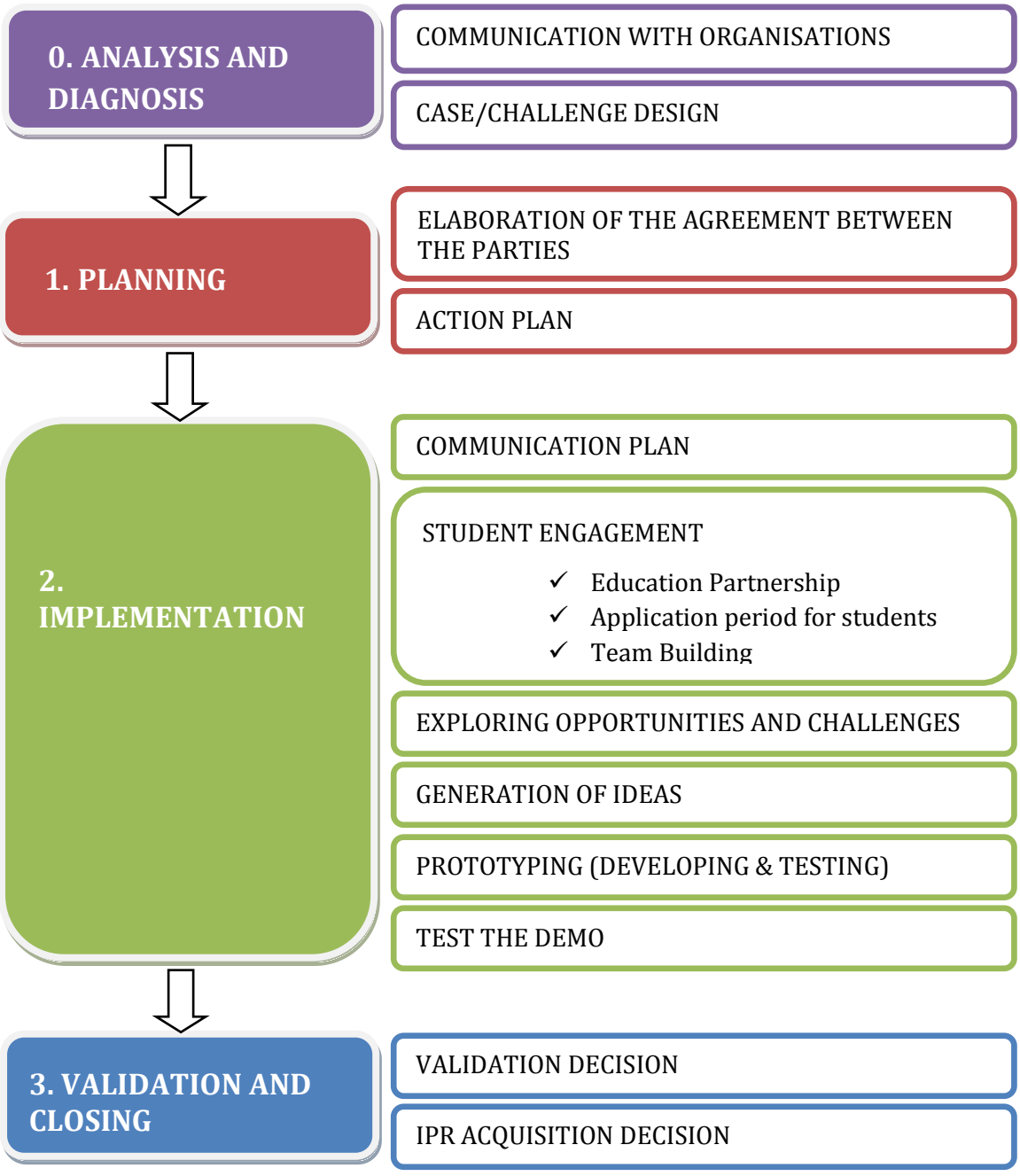
- *How to use*? It explains the best way of using the tool in order to get the best results.

- *When to use it?* It gives information about the period of time during the OI project implementation when the use of the tool is most appropriate.

At the end of each description, there will be a template that may be used by the Open Innovation Groups.

3. The Open Innovation Projects Implementation

As it is described in SPACE 4 COCREATE MODEL, the implementation of Open Innovation Projects has four stages; each of them is divided into different steps:

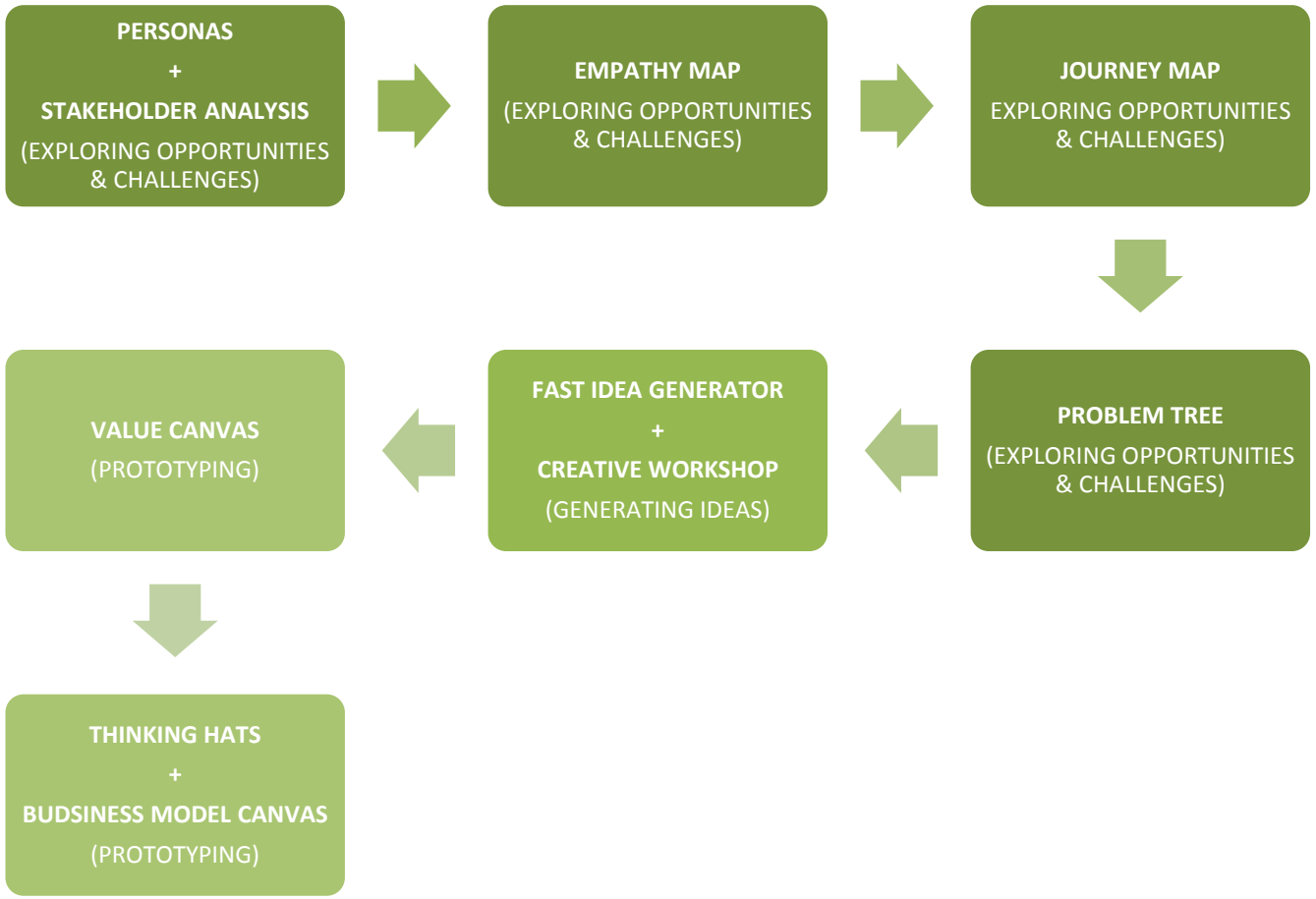


Each step includes at least one tool to use:

STAGES	STEPS	TOOLS
ANALYSIS AND DIAGNOSIS	Communication with Organisations	Digital and physical Communication tools: Discussion forums, open space Skype, Twitter, Facebook, website, newspaper….
	Case/Challenge Design	Template Challenge Design
PLANNING	Elaboration of the Agreement between the parties	Agreement Framework Individual Agreements
	Action Plan	Gantt Diagram
IMPLEMENTATION	Communication Plan	Digital and physical Communication tools: Discussion forums, open space Skype, Twitter, Facebook, website, newspaper…. Visits to Educational Centres
	Students Engagement	Marshmallow challenge, Appreciative Inquiry
	Exploring opportunities & Challenges	Personas Stakeholder analysis Empathy Map Problem Tree Experience Map

STAGES	STEPS	TOOLS
	Generating Ideas	Creative Workshop Fast Idea Generator Brainstorming
	Prototyping (Developing & testing)	Thinking Hats Prototype Testing Plan Improvement Triggers Business Model Canvas Value Proposition Canvas
	Test the Demo	Focus Group
VALIDATION AND CLOSING	Validation Decision	Critical Tasks List Learning Loop Target Group
	IPR Acquisition Decision	Intellectual Property Right Agreement Framework

Possible sequence of tools for the implementation:



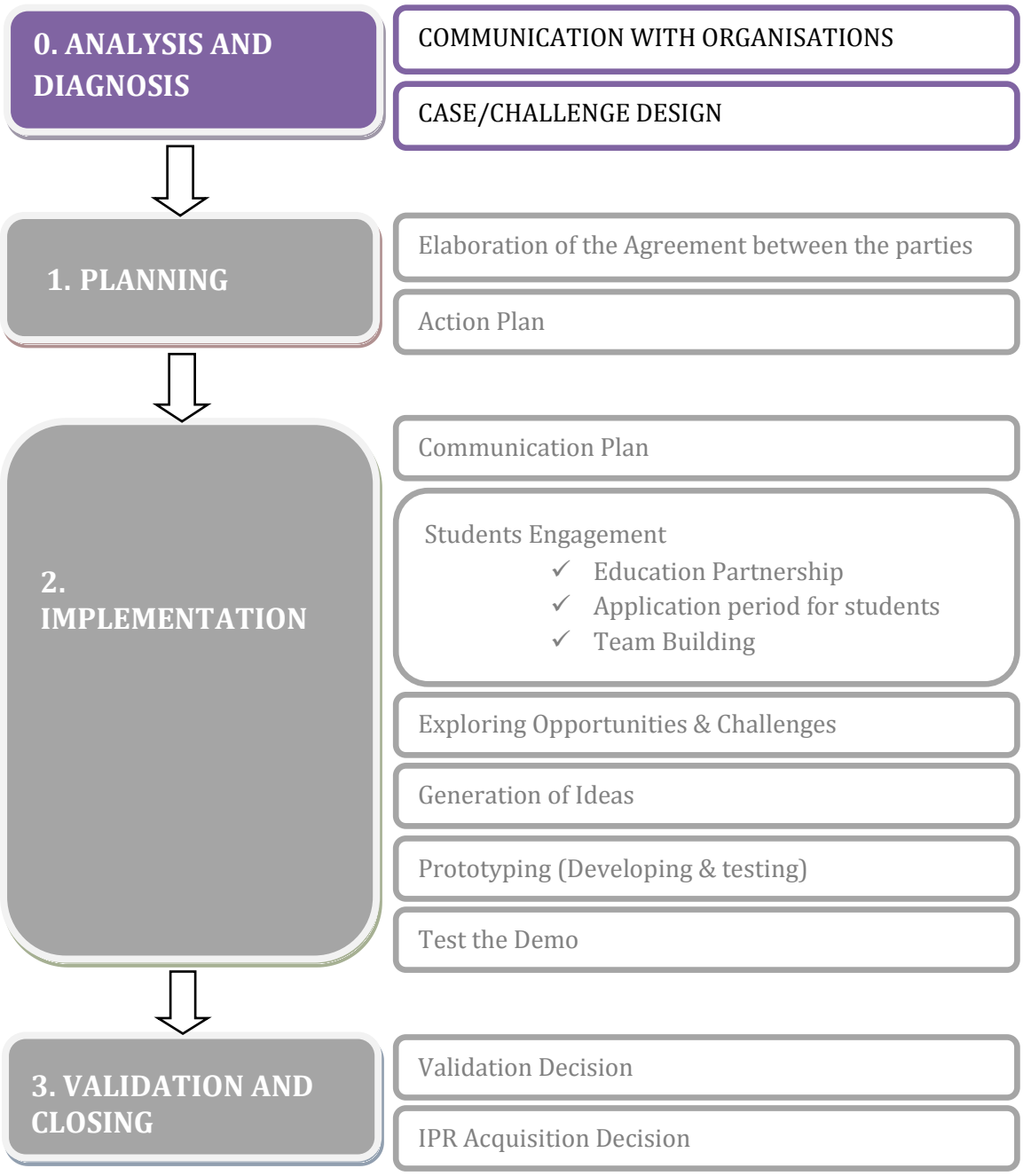
4. The implementation step by step

In the following chapter there are included the proposed tools per stage and step.

As it was explained before, the facilitator needs to have the ability of choosing the most appropriate tool depending on the characteristics of the group, the aim to get, the stage in which the group is,...

During the implementation stage, the facilitator will meet with the parties involved to guide or accompany them during the process and guarantee a successful implementation.

0. ANALYSIS AND DIAGNOSIS


0. ANALYSIS AND DIAGNOSIS
COMMUNICATION WITH ORGANISATIONS
CASE/CHALLENGE DESIGN
1. PLANNING
Elaboration of the Agreement between the parties
Action Plan
2. IMPLEMENTATION
Communication Plan
Students Engagement
✓ Education Partnership
✓ Application period for students
✓ Team Building
Exploring Opportunities & Challenges
Generation of Ideas
Prototyping (Developing & testing)
Test the Demo
3. VALIDATION AND CLOSING
Validation Decision
IPR Acquisition Decision

COMMUNICATION WITH ORGANISATIONS

DIGITAL AND PHYSICAL COMMUNICATION TOOLS: DISCUSSION FORUMS, OPEN SPACE SKYPE, TWITTER, FACEBOOK, WEBSITE, NEWSPAPER....

What is it?

It includes the communication tools that can be used for enhancing the **communication with the business organisations**: traditional and digital tools; face to face or virtual meetings; ...

The aim is to contact with different organisations that want to be involved in the implementation of the OI project. The objectives are:

- disseminate the possibilities of OI between the organisations.
- attract businesses interested in implementing OI project within its organisation.
- disseminate the development and implementation of the project.

It includes a list of benefits for attracting business organisations to participate in Open Innovation projects.

Who participates?

The facilitating organisation is the responsible to reach business organisations for disseminating the Open Innovation and involving them in the implementation of these projects to solve specific cases or challenges.

How to use it?

Different tools can be used to reach the organisations:

- Traditional communication tools: newspaper, phone, face to face meetings,

- Digital communication tools as Facebook, email, Twitter, Skype, website, ...

When to use it?

The activities for the dissemination of OI projects among business organisations have to be done at the initial stage in order to contact and select the businesses.

TAKING PART IN OPEN INNOVATION PROJECTS: LIST OF BENEFITS

- It gives the possibility to work in projects that need time and resources that the company does not have.
- It gives new, fresh, different vision about the company from external participants.
- It is a way to get new talent for the company.
- The problem is seen from an outsider perspective.
- It generates a close relation with the Vocational and Educational Training System.
- It favors a co- creation space between students / companies.

CASE/CHALLENGE DESIGN

CHALLENGE DESIGN

What is it?

The CASE/CHALLENGE DESIGN is the first contact with the people of the Organisation-Company team, which will be involved in the OI project implementation.

It involves a process of inquiry characterized by systematic and in-depth examination of the processes of the organisation, identifying those PROBLEMS-NEEDS-CHALLENGES that are part of its day-to-day and which, for various reasons, are not being addressed.

Aims:

- Investigate phenomena within the organisation that have not been answered, do not work as they should and therefore seek to answer why and how they occur.

- Explore in deep a need and make it a challenge.

Who participates?

People from business organisation are responsible of defining the case/challenge to work on it through Open Innovation. It is important to select and involve people who know directly the situation and are able to describe the challenge in a simple, clear and understandable way. In next stages, students will work in the challenge starting from the description made by the business organisation.

How to use it?

It is based on inductive reasoning or non-deductive reasoning (obtaining general conclusions from premises-origin of the challenge) containing particular data to generate a hypothesis and discover relationships and concepts.

The methodology used is: Descriptive, illustrative, explanatory and it could be divided into six steps according to the characteristics/needs of the organisation:

Step 1: Approach to Case Study

Step 2: Working expectations and setting up the work team

Step3: State of the Art: Diagnostic Analysis

Step 4: Making the Studio: Visual Thinking

Step 5: Confection and design of the challenge.

Step 6: Decision to launch / not launch the challenge

Different techniques could be used: BRAINSTROMING; FAST IDEA GENERATOR;... A facilitator will accompany the process. At the end, the description of the challenge/case will include: the background of the challenge; the problem; expected aims; description of the case/challenge.

When to use it?

The CHALLENGE DESIGN has to be defined once the business organisation is selected and before selecting the students. The characteristics and nature of the case/challenge defines the most appropriate profile of the students that will participate.

Template for the definition of the challenge

During the definition of the case/challenge different techniques could be used: BRAINSTROMING; FAST IDEA GENERATOR. At the end, the following questions have to be answered:

What is the key issue and why is important?	Who is it a problem for?	What factors shape this problem?	Can you think of in the problem in a different way? Can you reframe it?

Template for the description of the case/challenge

1. DESCRIPTION OF THE ORGANISATION

Include the information about the organisation: Name of the organisation; legal representative; name of the contact person responsible of the OI project; contact email and phone; description of the organisation; ... and any other information that could be interesting.

2. BACKGROUND OF THE CHALLENGE/CASE

Include here:

- Key factors needed to understand the challenge.

- Agents involved (status, expectations, motivations ...).

- Context.

Include also the mission and vision of the organisation in order to take them into account when the team works in the challenge.

3. THE CHALLENGE/CASE

Describe the problem the organisation wants to face.

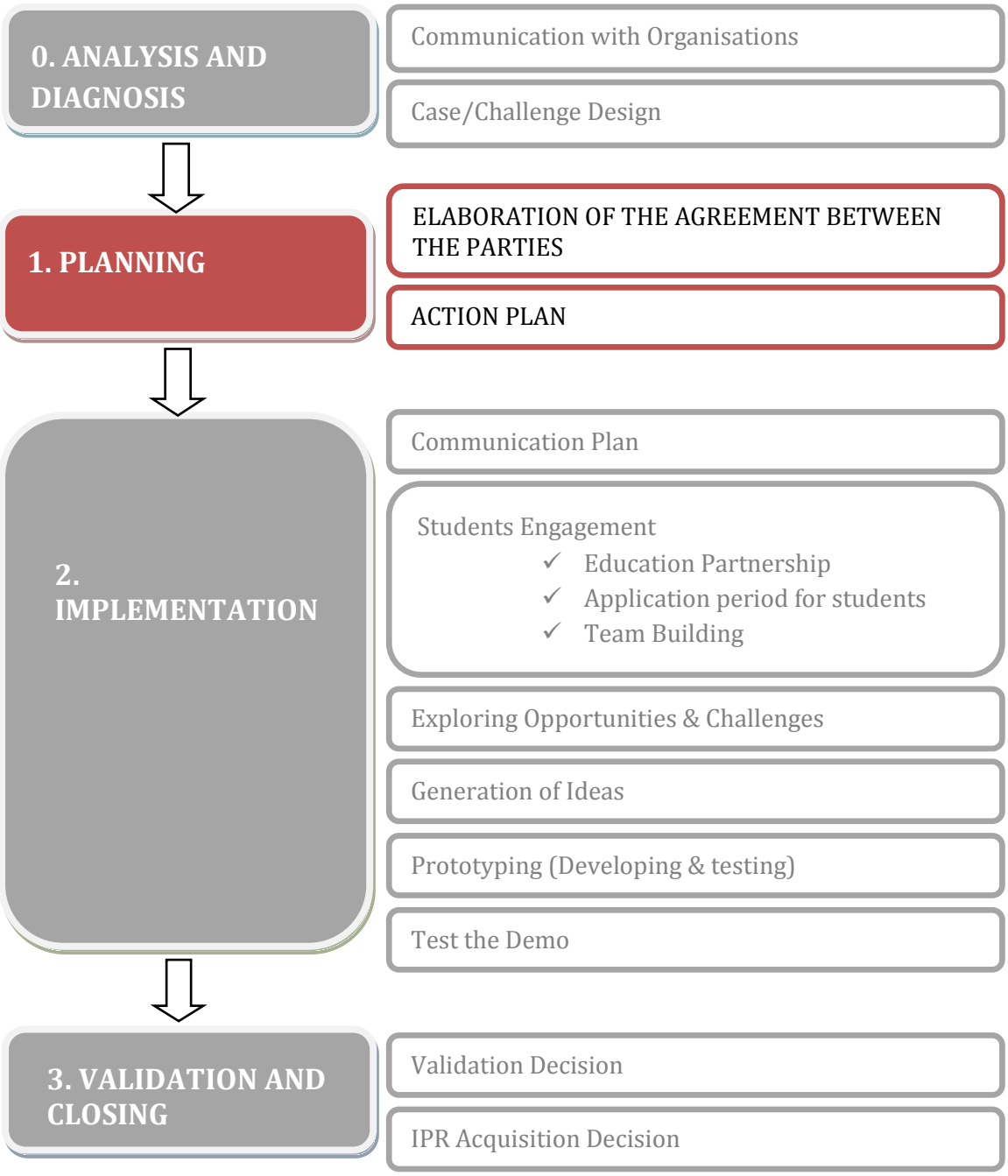
It is phrased in the form of one or several questions: HOW, HOW, WHICH WILL BE, WHAT ARE ... WHAT ...?

Ex: How can we improve our distribution channels .... for the distribution of our product ....?

4. EXPECTED AIMS

Include here the expectations which are the aims to get.

1. PLANNING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ELABORATION OF THE AGREEMENT BETWEEN THE PARTIES
ACTION PLAN
2. IMPLEMENTATION
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Students Engagement
✓ Education Partnership
✓ Application period for students
✓ Team Building
Exploring Opportunities & Challenges
Generation of Ideas
Prototyping (Developing & testing)
Test the Demo
3. VALIDATION AND CLOSING
Validation Decision
IPR Acquisition Decision

ELABORATION OF THE AGREEMENT BETWEEN THE PARTIES

AGREEMENT FRAMEWORK

What is it?

The AGREEMENT FRAMEWORK is a document signed by the organisations involved that defines the scope, conditions and specific aspects as IPR agreements, use of the results, confidential information, rewards,... that need to be considered and agreed by the different parts before starting the implementation of the Open Innovation project.

Who participates?

Two different options of agreements can be considered depending of the parties involved in the implementation of Open Innovation projects. According to the scenarios described in the Model, there can be different organisations involved in the OI projects: VET Centres, Business organisation, third parties as investors or as facilitators for the implementation.

Scenario I, public investment and scenario II, private investment: in both scenarios the parties involved are VET Centres and business organisations. The agreement will be signed between these two parties. In both cases, there will be needed a person from these organisations will be dedicated to managing and monitoring Open Innovation processes.

Scenario III, co-financed sponsoring: this scenario involves third parties to the OI project. The agreement will be signed between the business organisation and the third part. In this scenario, a facilitator is heavily needed. The facilitator promotes the project funds available, mediates the communication between VET centres and companies.

How to use it?

The parties involved (business organisations or VET Centres/third part) will define, agree and sign those aspects that need to be clarified and perfectly defined since the beginning of the project. The AGREEMENT FRAMEWORK needs to be understood by the parties and signed by the legal representative of the organisation. This document has to be signed in the beginning before starting with the implementation of the project and will establish the framework for the implementation.

When to use it?

The AGREEMENT FRAMEWORK is signed in the first stages before starting with the implementation. All the aspects need to be known, agreed and signed by the parties involved, in order to avoid misunderstandings and conflicts in the future.

Template for the agreement framework

AGREEMENT

1. Parties

Name of the VET Centre or third party

Organisation ID: XXXX

Address: XXXX

Contact person: name

and

Name of the business organisation

Business ID: XXXX

Address: XXXX

Contact person: name

Hereinafter jointly referred to as "Parties" or "Party", depending on the context.

2. Background and Purpose

With this Agreement ("Agreement"), the Parties agree to co-operate on the further development of the idea, concept, etc. defined in Section 3 (Scope of the Agreement). For this aim, a Project Group of Students will be defined by the VET centre to work on the project.

The students shall report on the progress to the facilitator (*VET Centre or third party*). The Partner shall not be a part of the Project Group.

3. Scope of Agreement

The Project that is the subject to the Agreement has Project title: Project XXX: Title, and it will be defined further in detail in annex 1

4. Project Schedule

The Project shall start on XX Month 201X and finish by XX Month 201X. The Project Students Group shall deliver a specific project plan to the Party.

5. Rights to Results and Background Material

5.1 Results

The Results of the Project shall include all material created by the Project Group in the Project (such as reports, inventions and software including source codes), as well as all rights related to such material (such as proprietary rights and intellectual property rights including but not limited to utility models, copyrights and patent rights).

5.2 License Granted to Results

In this section partners will include who will be the owner of the results obtained.

- Exclusive or non exclusive license or commercial activities of the Students group

- Exclusive or non exclusive license of the partners.

The exclusiveness could be linked to the payment of a specific fee or grant to the Students Group.

The License shall include the right to further develop, modify and complement the Results and to use the outcomes so achieved. The License shall also include the right to copy the Results and to manufacture, have manufactured, sell and otherwise distribute to third parties any products that utilize the Results or have been developed on the basis of the Results as well the right to license the License to third parties.

5.3 Use of Background Material

In this section partners will included all the aspects related to the background material provided by the different parties

Background material shall mean all kinds of material such as information, methods, solutions, devices, substances, inventions, software and the related intellectual property rights that are in the possession of the Party or the Students Project Group before signing this Agreement or that the Party or the Students Project Group has independently developed or acquired outside the Project during the validity of this Agreement ("Background Material").

5.4 Inventions

If a patentable invention is created during the Project and the Project Group does not intend to patent or otherwise (for example, by concealment) utilise the invention in question, the Party has a right of first refusal to the invention.

The right of first refusal of the Partner shall be valid for three (3) months after the termination of the Project. *It shall be agreed if the Partner has to pay obtains the rights to the invention.*

The Student Project Group must keep the created invention confidential until the patent application has been published.

7. Confidentiality

7.1 In this Agreement, trade secrets shall mean all technical, financial or commercial information that is related to or influences the Partner's operations, including computer files, passwords and IT system details, regardless of the manner or format in which the information is disclosed to the recipient, or that has been marked as trade secrets with "Confidential" or other similar markings ("Trade Secret").

Corresponding confidential information received from the Partner's affiliates shall be considered as the Partner's Trade Secrets in the scope of this Agreement.

Any participant agrees not to disclose the Partner's Trade Secrets to third parties as well as to take all necessary precautions to preserve the confidentiality of Trade Secrets and not to use Trade Secrets for any purposes other than fulfilling the obligations under this Agreement.

The Project Group is bound by corresponding confidentiality obligations before any confidential information of the Partner is disclosed to the Project Group.

7.2 The confidentiality obligations shall not apply to any information which

a) has been publicly available before the beginning of the negotiations or later becomes publicly available in manner other than due to negligence or neglect or other action in violation of this Agreement on the part of the receiving Party or its personnel; or
b) the receiving Party can demonstrate to have been in its possession before receiving such information from the disclosing Party; or
c) has been received from third parties who have had a right to disclose such information; or
d) the receiving Party has independently developed; or
e) the Party must make public on the grounds of an act, decree or other judicial or governmental order.

The information referred hereto in Section 7.2 does not include individual Trade Secrets solely on the grounds that they are embraced by general disclosures which are in the public domain or in the possession of the receiving Party, nor Trade Secrets describing a certain combination solely on the grounds that some parts of such combination are in the public domain or in the possession of the receiving Party.

8. Publication

After the Project has ended, the Project Group may publish the Results as they see fit after the Partner has reviewed all information related to the Project. However, all parts that are considered to be confidential or prevent the patenting of an invention created during the Project (novelty requirement) must be removed from all Results and other material intended for publication. For avoidance of doubt, it is stated that Project descriptions and team blogs that do not include confidential information shall be public for the entire duration of the Project. The Partner shall provide a written response within thirty (30) days from receiving the publication permission request that clearly states the changes that are necessary for granting the publication permission. The Partner may require a new review process before granting the final publication permission. The publication permission shall not be refused without an acceptable reason.

All theses made in connection with the Project shall be public. The Partner's Trade Secrets shall not be included in theses. The author of a thesis must get a permission from the Partner or the person(s) appointed by the Partner already at the beginning of his/her work to write the thesis on a topic related to the Project so that it can be ensured that the thesis in question will be made and published without revealing any Trade Secrets of the Partner. The above-mentioned review process shall be applied before publishing the thesis.

9. Responsibilities and Limitations of Liability

The Partner shall provide descriptions of all innovation topics and comments on the progress and the quality level of the Project.

Unless otherwise agreed by the Parties regarding certain material included in the Results, no trade secrets belonging to third parties or material protected by intellectual property rights, such as copyrighted material, belonging to third parties can be included in the Results, and the utilisation of the Results shall not require the use of material protected by intellectual property rights belonging to third parties.

The Parties shall not be liable for any possible indirect damages that it may cause to the other Party, such as loss of profit, benefit and/or revenue.

The limitations of liability agreed in this Section shall not apply to damages caused by breach of confidentiality, intentional misconduct or gross negligence.

10. Term

This Agreement shall enter into force when it has been duly signed by the Parties or, if the Parties have taken actions to implement the Project before signing the Agreement, on the starting date of such actions, and this Agreement shall remain in force in accordance with Section 4.

The Parties shall have the right to terminate the Agreement or the Project with immediate effect if the implementation of the Project has been interrupted otherwise than temporarily for at least fourteen (14) days or if the other Party commits a substantial breach of the terms and conditions of the Agreement or, where applicable, the confidentiality agreement, and fails to remedy such breach within thirty (30) days after receiving a written notice in respect of the matter.

The licenses granted to the Partner based on this Agreement will, however, remain in force even if the Partner decides not to continue in the Project.

Sections 5, 7, 8, 9 and 11.3 of the Agreement as well as any other Sections that by their nature should survive the termination or cancellation of the Agreement shall be deemed to survive.

11. Miscellaneous

11.1 The appendices to this Agreement shall form an integral part of this Agreement. In the event of any conflict between the Agreement and its appendices, the terms of this Agreement shall prevail.

11.2 Any changes to this Agreement shall be agreed in writing, and the Parties shall approve the changes with their signatures to become valid and binding on the Parties.

11.3 This Agreement is governed by and shall be construed in accordance with the laws of XXX excluding its choice of law provisions. Parties agree to adhere to all applicable legislation in all of its operations. Any possible disputes arising out of or relating to this Agreement shall be primarily settled by negotiations between the Parties.

12. Signatures

This Agreement has been made in two (2) original copies, one (1) for each Party.

Place, XX Month 20XX

VET Centre or third party

Name

Title

Business Organisation

Name

Title

APPENDICES: 1) Project description

INDIVIDUAL AGREEMENTS

What is it?

The INDIVIDUAL AGREEMENT or PROJECT GROUP AGREEMENT is a document defining the rights and duties of the Parties. All terms and definitions of the PROJECT AGREEMENT framework shall be applied to this PROJECT GROUP AGREEMENT when applicable.

Who participate?

The agreement shall be signed by all the student members of the Project Group and the facilitating organisation. The facilitating organisation will be different depending on the possible scenarios:

Scenario I, public investment and scenario II, private investment: in both scenarios the facilitating organisation will be the VET Centres where a person will manage and monitor Open Innovation processes, and will be the link between the students and the business organisation

Scenario III, co-financed sponsoring: the facilitating organisation will be a third party (Chamber of Commerce, innovation organisation,...). A person from this organisation will manage and monitor Open Innovation processes, acting as a link between the students and the business organisation.

How to use it?

The parties involved (students and the facilitating organisation) will agree and sign the rights and duties of the parties. The INDIVIDUAL AGREEMENT needs to be understood by the parties and signed by the legal representative of the facilitating organisation and each of the students.

When to use it?

INDIVIDUAL AGREEMENT will be signed by all the parties involved during the Open Innovation Project. To avoid conflicts this document has to be signed before the presentation of the final result to the business organisation.

Template for INDIVIDUAL AGREEMENT or PROJECT GROUP AGREEMENT

PROJECT GROUP AGREEMENT (Individual Agreement)

1. Parties

1.1 [name] (Date of birth: [xxx]), Address: [xxx], Tel.: [xxx], Email: [xxx];

1.2 [name] (Date of birth: [xxx]), Address: [xxx], Tel.: [xxx], Email: [xxx];

1.3 [name] (Date of birth: [xxx]), Address: [xxx], Tel.: [xxx], Email: [xxx];

1.4 [name] (Date of birth: [xxx]), Address: [xxx], Tel.: [xxx], Email: [xxx];

1.5 [name] (Date of birth: [xxx]), Address: [xxx], Tel.: [xxx], Email: [xxx];

1.6 [name] (Date of birth: [xxx]), Address: [xxx], Tel.: [xxx], Email: [xxx]

and

1.7 **VET Centre or Thid part** (Business ID: XXXX), Address: XXXX Tel.: [xxx], Email: [xxx] (hereinafter "facilitator")

Parties 1.1-1.6 shall be referred to hereinafter together as "Project Group" or "Members of the Project Group" and individually as "Member of the Project Group," depending on the context; the above parties also together as "Parties" and individually as "Party", depending on the context.

2. Backround, Purpose and Scope of Agreement and Project Schedule

This Project Group Agreement ("Project Group Agreement") relates to the Agreement Framework ("Project Agreement") made between Bussiness organisation and VET Centre or Facilitating Organisation ("Partner"). The purpose of this Project Group Agreement is primarily to define the rights and duties of the Parties. The terms and definitions of the Project Agreement framework shall be applied to this Project Group Agreement when applicable.

The Project that is the subject to the Agreement is defined in more detail in Appendix 1 to the Agreement.

Project title: Project XXX: title

Project schedule: [XX.XX.20XX]–[XX.XX.20XX]. Project Group delivers a more specific project plan ("Project Plan") to the Partner.

3. Project Group Operation

The members of the Project Group agree to operate according to this Project Group Agreement, the Project plan, code of conduct as well as a commercialisation plan to be possibly drafted during the Project. The Project Group shall present the Project plan to the facilitator and the Partner as soon as possible after the commencement of the Project. All Members of the Project Group agree to contribute in all possible ways to ensure that the results of the Project ("Results") can be exploited as agreed upon by the Parties in this Project Group Agreement.

The Project Group shall appoint a contact person and provide up-to-date information on the progress of the Project to the Partner. The Partner shall provide comments on the progress and quality of the Project.

4. Decision Making in the Project Group

The Project Group shall primarily attempt to resolve all matters connected to the Project (including, but not limited to, the utilization of the Results) in their mutual negotiations.

If the Project Group is unable to reach a mutual understanding on the abovementioned matters through negotiations, the opinion of the majority of the Project Group shall prevail. The majority shall be determined according to Section 6.

5. Rights to Results and Background Material

5.1 Results and License Granted to Results

The results of the Project shall include any and all material created by the Project Group during the Project, such as reports, inventions and software including their source codes, as well as all rights to the material (such as proprietary and intellectual property rights including but not limited to copyrights, utility models, trademarks, design patent rights).

In this section partners will included who is the owner of the results obtained.

- Exclusive or non exclusive license or commercial activities of the Students Group

- Exclusive or non exclusive license or of the Partners.

The exclusiveness could be linked to the payment of a specific fee or grant to the Students Group.

The License shall include the right to further develop, modify and complement the Results and to use the outcomes so achieved. The License shall also include the right to copy the Results and to manufacture, have manufactured, sell and otherwise distribute to third parties any products that utilize the Results or have been developed on the basis of the Results as well the right to license the License to third parties.

5.2. Use of Background Material

In this section partners will included all the aspects related to the background material provided by the different Parties

Background material shall mean all kinds of material such as information, methods, solutions, devices, substances, inventions, software and the related intellectual property rights that are in the possession of the Party or the Students Project Group before signing this Agreement or that the Party or the Students Project Group has independently developed or acquired outside the Project during the validity of this Agreement ("Background Material").

5.3. Inventions

If a patentable invention is created during the Project and the Project Group does not intend to patent or otherwise (for example, by concealment) utilise the invention in question, the Party has a right of first refusal to the invention.

The right of first refusal of the Partner shall be valid for three (3) months after the termination of the Project. *It shall be agreed if the Partner has to pay obtains the rights to the invention.*

The Student Project Group must keep the created invention confidential until the patent application has been published.

6. Distribution of the Project Fee and other Profits

The Members of the Project Group agree that the percentage of participation have been the following one, so any compensation or other profit received from the use of the Results shall be distributed according to the agreed percentajes:

[name], share [xx]% of Project profit;

[name], share [xx]% of Project profit;

[name], share [xx]% of Project profit;

[name], share [xx]% of Project profit;

[name], share [xx]% of Project profit; and

[name], share [xx]% of Project profit;

The fees paid for the License, as described in Section 5, is defined in Appendix 2 and shall also be shared according the shares in this Section 6.

7. Withdrawal from the Project Group during the Project

Where a Member of the Project Group resigns from the Project Group before the end of the Project, each Member of the Project group agrees in such case to transfer all the rights generated by the Member producing and/or delivering the materials protected by any intellectual property rights and/or other proprietary rights (hereinafter "Materials") and included in the Results, in their entirety or in part, to the Project Group.

For avoidance of doubt, the Members of the Project Group acknowledge and agree that under the abovementioned circumstances the Project Group shall have the right to make copies of the Materials by any means, exploit it in connection with the Project [in accordance with the terms and conditions of the Project Agreement], and modify, adapt, transfer, assign, sublicense and share the Materials with third parties (the list is not exhaustive).

8. Infringements of Intellectual Property Rights

The Members of the Project Group warrant and shall be responsible that they have all necessary ownership- and copyrights and other proprietary and intellectual property rights to fulfil the duties and obligations under this Project Group Agreement and/or that the Member of the Project Group has acquired all the necessary copyrights, permits, and consents from third parties to fulfil the duties and obligations under the Project Group Agreement.

9. Confidentiality

7.1 In this Agreement, trade secrets shall mean all technical, financial or commercial information that is related to or influences the Partner's operations, including computer files, passwords and IT system details, regardless of the manner or format in which the

information is disclosed to the recipient, or that has been marked as trade secrets with "Confidential" or other similar markings ("Trade Secret").

Corresponding confidential information received from the Partner's affiliates shall be considered as the Partner's Trade Secrets in the scope of this Agreement.

Any participant agrees not to disclose the Partner's Trade Secrets to third parties as well as to take all necessary precautions to preserve the confidentiality of Trade Secrets and not to use Trade Secrets for any purposes other than fulfilling the obligations under this Agreement.

Project Group is bound by corresponding confidentiality obligations before any confidential information of the Partner is disclosed to the Project Group.

7.2 The confidentiality obligations shall not apply to any information which

a) has been publicly available before the beginning of the negotiations or later becomes publicly available in manner other than due to negligence or neglect or other action in violation of this Agreement on the part of the receiving Party or its personnel; or
b) the receiving Party can demonstrate to have been in its possession before receiving such information from the disclosing Party; or
c) has been received from third parties who have had a right to disclose such information; or
d) the receiving Party has independently developed; or
e) the Party must make public on the grounds of an act, decree or other judicial or governmental order.

The information referred hereto in Section 7.2 does not include individual Trade Secrets solely on the grounds that they are embraced by general disclosures which are in the public domain or in the possession of the receiving Party, nor Trade Secrets describing a certain combination solely on the grounds that some parts of such combination are in the public domain or in the possession of the receiving Party.

10. Publishing

After the Project has ended, the Project Group may publish the Results as they see fit after the Partner has reviewed all information related to the Partner. However, all parts that are considered to be confidential or prevent the patenting of an invention created during the Project (novelty requirement) must be removed from all Results and other material

intended for publication. For avoidance of doubt, it is stated that Project descriptions and team blogs that do not include confidential information shall be public for the entire duration of the Project. The Partner shall provide a written response within thirty (30) days from receiving the publication permission request that clearly states the changes that are necessary for granting the publication permission. The Partner may require a new review process before granting the final publication permission. The publication permission shall not be refused without an acceptable reason.

All theses made in connection with the Project shall be public. The Partner's Trade Secrets shall not be included in theses. The author of a thesis must get a permission from the Partner or the person(s) appointed by the Partner already at the beginning of his/her work to write the thesis on a topic related to the Project so that it can be ensured that the thesis in question will be made and published without revealing any Trade Secrets of the Partner. The above-mentioned review process shall be applied before publishing the thesis.

11. Liability

The Parties shall be liable for any loss or damages resulting from a breach of this Project Group Agreement. However, the Parties shall not be liable for any indirect or consequential loss or damages suffered by the other Party resulting from breach of this Agreement, excluding loss or damages caused intentionally or with gross negligence, or which results from breach of Sections 8. and 9.

12. Changes

Any and all changes to this Project Group Agreement shall be made in writing and the Parties shall accept the changes with their signatures for the changes to be valid and binding.

13. Dispute Resolution

This Agreement is governed by and shall be construed in accordance with the laws of XXXX excluding its choice of law provisions. Any and all disputes that may arise between the Parties under or in connection with this Agreement shall be finally settled in the District Court of XXXX in accordance with XXXX legislation.

14. Term

This Agreement shall enter into force when it has been duly signed by the Parties or, if the Parties have taken actions to implement the Project before signing the Agreement, on the starting date of such actions, and this Agreement shall remain in force in accordance with Section 2.

The Parties shall have the right to terminate the Agreement or the Project with immediate effect if the implementation of the Project has been interrupted otherwise than temporarily for at least fourteen (14) days or if the other Party commits a substantial breach of the terms and conditions of the Agreement or, where applicable, the confidentiality agreement, and fails to remedy such breach within thirty (30) days after receiving a written notice in respect of the matter.

11. Miscellaneous

11.1 The appendices to this Agreement shall form an integral part of this Agreement. In the event of any conflict between the Agreement and its appendices, the terms of this Agreement shall prevail.

11.2 Any changes to this Agreement shall be agreed in writing, and the Parties shall approve the changes with their signatures to become valid and binding on the Parties.

15. Signatures

This Agreement has been made in (number of copies=number of participants) (X) original copies, one (1) for each Party.

Place, on XX Month 20XX

VET Centre or Thid part

_____

[name]

Parties

_____ _____

[name] [name]

_____ _____

[name] [name]

_____ _____

[name] [name]

APPENDICES:

1. Project description

2. Any other appendice required: ex. criteria and fees for the validation of the project

THE GANTT CHART

What is it?

The GANTT CHART or GANTT DIAGRAM is a handy project management tool that allows a quick and easy overview of the schedule of a project. Each task, its start & end date, and its duration are illustrated as staggered horizontal bars in a diagram following a timeline. It is also possible to add milestones and further, in which way tasks may relate to each other, who is responsible, how far the tasks have progressed, and even if and which resources are needed. It is possible to draw a GANTT CHART by hand just like it was invented, but it is much easier and practicable when used digitally. There are many professional software programs which are available for free or for purchase, but it is also possible to draft a GANTT CHART using MS Excel.

Who participates?

The GANTT CHART can be used:

- by professionals in the field of project management as well as by amateurs, meaning that all participants of the Open Innovation project can be involved in the use of this method.
- by individuals and groups. For the purpose of Open Innovation projects with students it is advised to have only a few persons authorised to apply changes to the chart.
- for small to large scale projects. Depending on the scale of the project the GANTT CHART will be more or less sophisticated and detailed.

How to use it?

To draft a basic GANTT CHART, firstly make a list of the task and the according start and end dates that should be included in the diagram. It is possible to use specific software for the next steps. If so, it is advised to follow the instructions of the software. If using MS Excel, the list of tasks and dates needs to be transferred to the document and completed with the duration of each task.

For the next step, generate a sideways stacked bar diagram using the according option of Excel and choosing the starting dates as data. Right click on the diagram, and add the data

of the duration. Next, right click on the bars that appeared first and make them invisible by choosing the colour white. Now you have a very basic Gantt chart that will look more professional if a little time is invested in formatting. It is advised to adjust the x-axis where the dates are located and choose more proper intervals as well as a more suitable minimum. This will change the look of the diagram dramatically for the better, allowing a more detailed overview of a projects schedule. It is very easy to adapt along the course of the project, e.g. if a deadline is delayed and changed. It is possible to change the colours of the bars separately, e.g. so a delayed task could be marked yellow, a task that is on time green, a finished task grey and so on. There are no limits to the creativity and it is very easy to adjust this tool to individual needs. Since this is a widely used instrument and MS Excel is also used all around the world, there are many tutorials available online that illustrate the creation of a GANTT DIAGRAM for every possible setting in Excel.

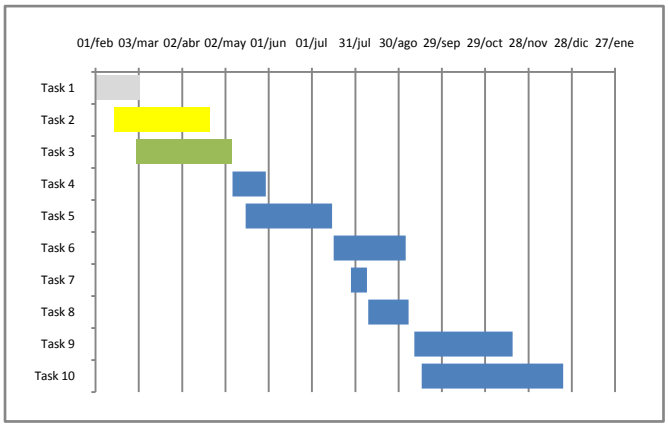


Figure.2: Basic Gantt Chart (MS Excel)

Nevertheless, there are many free software options available; some don't even require a download. It is advised to use professional software for projects of larger scale, just because there are more options available which corresponds with the larger amount of tasks and persons involved.

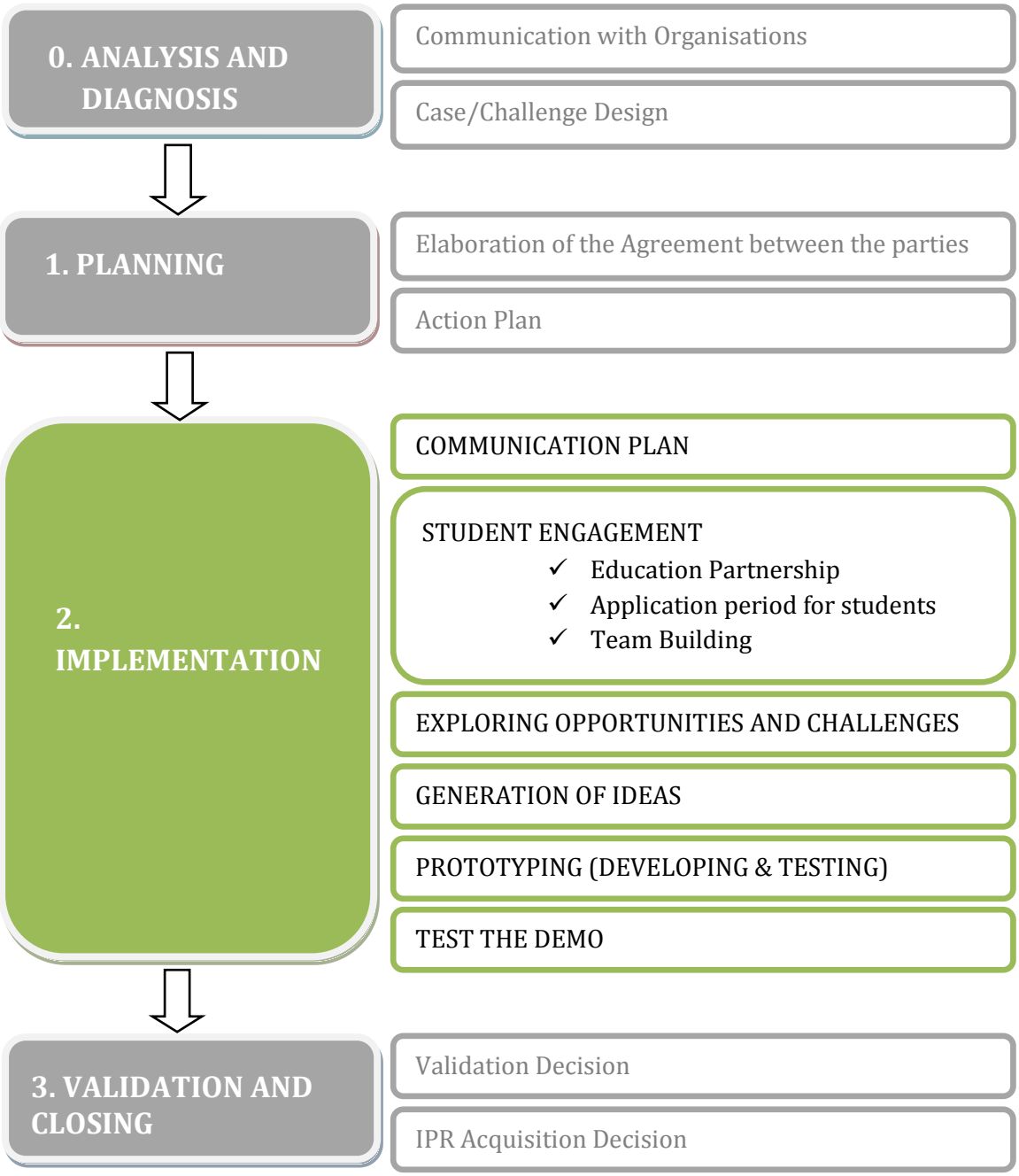
Helpful advice: If you are searching for instructions for Gantt charts on Google or Youtube, be sure to include the version of your MS Excel (2007, 2010, 2013, ...) to ensure finding a helpful step-by-step guideline that corresponds with the programme in front of you. Here are a few examples of tutorials for creating a Gantt chart in MS Excel:

- Project Management Videos (2015): How to use Gantt Charts. https://youtu.be/LrtLig0yYrs
- Advanced Planning Analytics (2016): Creating a Gantt in Excel – Basic. https://youtu.be/CzLC7yNSks4 (Part 1)
- Advanced Planning Analytics (2016): Create an Excel Gantt Basic with Progress % Complete. https://youtu.be/NVRp_28LQgM (Part 2)

When to use it?

The GANTT CHART can be used over the whole course of a project, from the very beginning of planning to monitoring and controlling the progress during the implementation. It is created in the planning phase along with the schedule of the project. It is advised to set dates for regular check-ups by asking the responsible partners to give an update on their progress and furthermore, to communicate the overall state of the project to other partners. If handled properly, the Gantt chart is a helpful accompanying instrument from the start to the end of a project.

2. IMPLEMENTATION


0. ANALYSIS AND DIAGNOSIS
Communication with Organisations
Case/Challenge Design
1. PLANNING
Elaboration of the Agreement between the parties
Action Plan
2. IMPLEMENTATION
COMMUNICATION PLAN
STUDENT ENGAGEMENT
✓ Education Partnership
✓ Application period for students
✓ Team Building
EXPLORING OPPORTUNITIES AND CHALLENGES
GENERATION OF IDEAS
PROTOTYPING (DEVELOPING & TESTING)
TEST THE DEMO
3. VALIDATION AND CLOSING
Validation Decision
IPR Acquisition Decision

COMMUNICATION PLAN

DIGITAL AND PHYSICAL COMMUNICATION TOOLS: DISCUSSION FORUMS, OPEN SPACE SKYPE, TWITTER, FACEBOOK, WEBSITE, NEWSPAPER....

What is it?

It includes the communication tools that can be used for enhancing the **communication with VET Centres and students**: traditional and digital tools; face to face or virtual meetings; ..

The aim is to disseminate the OI project. The objectives of the wider dissemination are:

- attract students for taking part during the implementation.
- make the OI project known though the media.

Who participates?

The facilitating organisation is the responsible to reach VET Centre and students for disseminating the Open Innovation projects and involving them in the implementation of them to solve specific cases or challenges.

How to use it?

Different tools can be used:

- Traditional communication tools: newspaper, phone, face to face meetings,

- Digital communication tools as Facebook, email, Twitter, Skype, website,..

When to use it?

The activities for the dissemination of OI projects among VET Centre and students have to be done once the challenge / case is defined by the business organisation, in order to redirect the communication to those fields more connected to the challenge / case.

VISITS TO EDUCATIONAL CENTRES

What is it?

The VISITS TO EDUCATIONAL CENTRES are meetings between the facilitating organisation and VET Centre in order to attract and involve them for the implementation of Open Innovation Projects.

Who participates?

Facilitating organisation is the responsible to contact and visit the VET Centre in the fields of the challenge / case defined by the business organisation.

How to use it?

The facilitating organisation will contact in advance with the VET centre in order to identify its interest. First meeting will be with the management body and teaching team, being possible to organize other meetings with the students. The students will be the active part in the implementation of the project so it will be important to inform them about the characteristics and specifications of Open Innovation projects.

When to use it?

VISITS TO EDUCATIONAL CENTRES have to be done once the challenge / case is defined by the business organisation, in order to redirect the communication to those fields more connected to the challenge / case.

TAKING PART IN OPEN INNOVATION PROJECTS: LIST OF BENEFITS FOR VET CENTRES

- VET Centres will strength the collaboration with the business sector.
- The academic world will be more connected with the labour market.
- The Centre will get a better status among target groups and stakeholders: companies, students, educational departments, ...

TAKING PART IN OPEN INNOVATION PROJECTS: LIST OF BENEFITS FOR STUDENTS

- They will have the possibility to work in real context.
- OI projects give them an approach to the labor market.
- They work for them during this period of time. Students are the owners of the challenge (responsible).
- They acquire technical plus soft skills (work in team, conflict management, communication,..).
- It is a way to understand that the “failure is also a success”.

THE MARSHMALLOW CHALLENGE

What is it?

The MARSHMALLOW CHALLENGE is a group exercise that emphasises the importance of innovation, creativity, and collaboration between the members of a team. It engages participants in the Open Innovation process, enhances team building and friendly rivalry, and illustrates the process of almost any project: as it is tackled most of the time in reality and as it should be tackled if aiming at a resilient project management. Therefore, the exercise is fun, educating, and definitely a learning experience that can be transferred to multiple settings in real life.

In a nutshell, participants are divided into teams of 2-5 persons and are given 18 minutes to complete the challenge to build the highest possible structure out of uncooked Spaghetti, string and tape that is able to balance a single marshmallow on top.

Who participates?

The MARSHMALLOW CHALLENGE is not depending on any specific issue or sector; it can be used for the starting phase of any Open Innovation project in any face-to-face setting. For the purpose of an Open Innovation project, it is recommended to conduct this exercise with the group of people that will be directly involved in the OI process, e.g. group of VET students. The facilitator should be involved in the OI process as well but not as part of the teams. It could be either a VET teacher or a representative of the company/the organisation that is the beneficiary of the OI project. It is also possible to ask an external expert to moderate the challenge.

How to use it?

It is advised to conduct this exercise in the beginning of an OI project, more precisely when trying to engage students in the process. For preparations, organise a room that is big enough to provide enough space for the group of students you are going to invite. In this room there should be a table for each team of 2-5 persons. Then prepare a kit of supplies that will be used by each team and place it in a non-transparent package such as a paper bag: 20 sticks of uncooked Spaghetti, one yard/meter of masking tape, one yard/meter of string, one pair of scissors if necessary, and one standard-sized marshmallow fresh out of

the bag. Also prepare a measuring tape and a stopwatch for monitoring the challenge and naming a winner in the end.

When the students arrive, be sure to give clear instructions on the challenge. The winner will be the team that builds the tallest structure balancing a marshmallow on the top in 18 minutes. It is not allowed to support or hold on to the structure in any way when the time is up and it is also not allowed to cut or eat parts of the marshmallow to make it lighter. Take a look at the overview on the following page and the additional resources for more detailed rules. Ensure that participants have understood the rules, give out the kits of supplies and announce the start of the countdown. Give regular updates on how much time the teams have left and loudly count the last 10 seconds. Then ask participants to sit down and start measuring the structures that are still standing (from shortest to tallest). Declare the winner and debrief the participants using the TEDTalk video or the presentation provided in the table on the next page.

The MARSHMALLOW CHALLENGE serves many purposes, from teambuilding to engaging persons in the process of Open Innovation to enhancing creative thinking and problem solving. But the most outstanding message is that constant prototyping is often a better indicator for success than detailed planning. People have assumptions during the work on a project (e.g. the marshmallow is light and squishy, therefore it will be supported by the structure easily) and if these assumptions are not tested during the working phase, the whole project (structure) may collapse in the end.

When to use it?

It is recommended to implement the MARSHMALLOW CHALLENGE during the start of an OI project, for example when the group of participants is meeting for a first brain storming. The exercise illustrates common assumptions of projects and at the same time a proposal for a more resilient management. Most of the participants of the challenge spend a majority of the time planning and constructing, thereby waiting to place the marshmallow on the top until the end. They are often surprised that the marshmallow, which they assumed has almost no weight due to its squishy and soft texture, will collapse their structure or makes it shaky at least. And as Tom Wujec, the most popular representative of the marshmallow challenge puts it: “Every project has its own marshmallow.” (Tom Wujec, TEDTalk 2010, [5:45]) In conclusion, participants of the challenge will be more aware of the importance of prototypes over the whole process of the project, meaning that the result of the project is well-tested before it enters the market

for example. The challenge helps to identify the assumptions in regards of the project and to test continuously if they are true.

The MARSHMALLOW CHALLENGE (Overview template)	
Planning	**Time**: ~60 minutes (10 minutes instructions, 18 minutes challenge, 10 minutes measuring, 20 minutes reflection) **Participants**: divide in teams of 2-5 persons **Location**: big enough to have room for one table per team
Preparation	Prepare a kit for each team that consists of: • 20 uncooked Spaghetti (be sure to avoid Spaghettini and Fettucini, as they are either too thin or too thick) • one yard of masking tape • one yard of string that is ripable (or include a pair of scissors) • one fresh marshmallow (standard sized) • provide these kits in paper lunch bags (or in a similar non-transparent package), to make participants curious and avoid that they start planning before the time starts Prepare a measuring tape and a stopwatch for monitoring the challenge and naming a winner in the end. You could also prepare a prize for the winner or give them the bag of marshmallows for example.
Instructions	Be sure to state the rules of the challenge clearly. Use visual presentations of the rules and place them visible until the end of the challenge. • The main goal is to build the tallest freestanding structure (measured from the surface of the table to the top of the marshmallow) • The whole marshmallow must be on the top of the structure • Each team may use as much of the supplies in their kit as they want. The package of the kit must not be used (paper bag or similar). • When 18 minutes are over, each team must have finished the structure and placed the marshmallow on top. Participants are asked to sit down and are not allowed to hold on to the structure or

	support it in any other way. Ensure that all participants have understood the rules and repeat them if necessary. Ask if they have any questions left.
Start of the Challenge	When each team is placed at a table and they received their kit, announce that you are starting the countdown. • Walk around and be available if participants have questions (but do not help them, just clarify if necessary!) • Give regular updates on the time they have left, especially when nearing the end • Let all groups know if one team has achieved to build a standing structure to encourage friendly rivalry. • Remind the teams that they are not allowed to hold on to the structure or support it in the end.
End of the Challenge	• For the last 10 seconds, call out the countdown. • Ask all participants to sit down so they can see each others structures • Measure the structures that are standing (from shortest to tallest) • Call out the winning group and give them a reward
Reflection	• Describe the key lessons that can be learned of the marshmallow challenge • Engage the teams in a discussion about the challenge, their personal experience, and the lessons learnt for your Open Innovation project.
Resources for reflection and further reading	Please watch the following video by the most popular representative of the marshmallow challenge, Tom Wujec: TEDTalks (2010): Build a tower, build a team | Tom Wujec (https://youtu.be/H0_yKBitO8M). You can use his presentation for the discussion with your group separately. It is available for download here: http://marshmallowchallenge.com/Instructions_files/TED2010_Tom_Wujec_Marshmallow_Challenge_Web_Version.pdf For more information visit www.tomwujec.com/design-projects/marshmallow-challenge and www.marshmallowchallenge.com/Welcome

THE APPRECIATIVE INQUIRY

What is it?

The APPRECIATIVE INQUIRY (AI) is an instrument that guides organisations to change by engaging the directly involved actors personally using a positive approach. While a process of change is often started by asking "What is wrong?" or "What is the problem?", the focus is laid on negative aspects of the project. The Appreciative Inquiry uses a complete different approach by asking about the aspects that are positive and thereby guiding the process in a new, more optimistic direction. The belief behind this instrument is that social systems (e.g. groups, project teams, organisations) change in the direction of their daily dialogues, of the questions that are asked repeatedly and passionately, and of the thoughts and attitudes of the actors. Instead of a problem-solving approach, the AI focuses on what aspects are working great in relations to a selected topic (e.g. customer satisfaction), thereby creating a more effective, sustainable and successful organisation in the process.

Who participates?

For conducting an APPRECIATIVE INQUIRY in an Open Innovation project, at least one initiator or moderator is needed who is well informed about the implementation process of the instrument. The participants are VET students or other stakeholders that are affected by the project.

How to use it?

There are many different versions of the APPRECIATIVE INQUIRY, since its creator, David Cooperrider[1], encouraged the innovation and further development of his idea. Nevertheless, he postulated 5 principles that are used by a majority of the models that are in practice today:

- **Constructionist Principle**: What we believe to be true determines what we do. People co-construct their social environment.
- **Principle of Simultaneity**: When investigating social systems they are simultaneously changed in the process. Questions are never neutral and push the whole system and its actors in the direction of the question.

[1] http://www.davidcooperrider.com/ai-process/

- **Poetic Principle**: The fate of projects is mirrored in the stories that people share with each other, therefore the story of the project is always written by all people involved. Frequently used words and phrases have a real impact on social systems, shaping them in different directions.
- **Anticipatory Principle**: Our actions of today are heavily influenced by our vision of the future. AI uses this by creating a positive imagination and guiding our subconscious in this direction.
- **Positive Principle**: Sustainable change is dependent on positive imagery and bonds between the persons involved. Positive emotions such as hope, inspiration, motivation and excitement encourage a creative and mental flexibility and thereby lead to the creation of innovative ideas.

The process of AI can be described by 4 Stages, often referred to as the "4D Model":

- **Pre-stage: Define**

  Choose an affirmative topic for the APPRECIATIVE INQUIRY (e.g. improve health and safety) and phrase it in a stimulating, inspiring maybe even humorous language (e.g. "Let's live forever!").
- **Stage 1: Discovery**

  Reflect on and discuss the positive aspects that are already present in your project or that participants have encountered somewhere else. Ask them to share "best of"-stories (e.g. "When do you feel most healthy?") and turn the affirmative topic in a questions (e.g. "How will we ensure to live forever?"). Make sure that all participants engage in the process and that the stories shared have personal impact.
- **Stage 2: Dream**

  Encourage participants to dream about the best, maybe even utopian, version of the project that they can imagine, in relations to the affirmative topic.
- **Stage 3: Design**

  Ask participants to share more detailed proposals for achieving the goal that is set by the affirmative topic and by the results of the previous stage. These are often called possibility/design statements.
- **Stage 4: Destiny**

  Schedule an event where the team can share the design statements and ask relevant stakeholders like VET teachers and/or representatives of the company for approval. During this event, it is clarified that all persons involved are encouraged to take the necessary actions and participants can commit to as

many tasks as they want. The role of the leader of the project is to support and monitor the actions.

When to use it?

The APPRECIATIVE INQUIRY is used when searching for new ideas, improvements, concepts or designs. The duration of the phases could vary from a one or multiple day event to a week or month or even a whole year, depending on the scale that it is set on and the purpose that it serves.

EXPLORING OPPORTUNITIES AND CHALLENGES

PERSONAS

What is it?

PERSONAS are portraits of fictional but realistic individuals that are used as a common reference point to communicate particular groups in the intended audience. PERSONAS are created by drawing together the characteristics of similar people - their behaviours, motivations and the like - into one 'archetype' through which the group can be understood. PERSONAS help ensure that work stays focused on people, rather than an abstract description of the group they are said to represent.

Benefits of PERSONAS:

- Stakeholders and leaders evaluate new site feature ideas
- Information architects develop informed wireframes, interface behaviours, and labelling
- Designers create the overall look and feel of the website
- System engineers/developers decide which approaches to take based on user behaviours
- Copy writers ensure site content is written to the appropriate audiences

Who participates?

The participants are business organisation representatives by providing valuable data for students regarding the challenge, VET students and/or other stakeholders that are affected by the project.

How to use it?

PERSONAS represent different target subgroups that an organisation wants to reach out for. Being aware of the different preferences, routines and motivations that these different people have can help to customise the products and services to these specific subgroups. A template worksheet can be used to compile a portrait of a typical person that could represent one of the target subgroups the organisation is targeting. Participants can try to

make the PERSONA as close to a typical person as possible by adding a name and a picture and descriptions of interests, skills and motivations. Students have to feel free to add any other details that are relevant to your situation and in relation to this Persona.

Elements of PERSONA

Personas generally include the following key pieces of information:

- Persona Group (i.e. web manager)
- Fictional name
- Job titles and major responsibilities
- Demographics such as age, education, ethnicity, and family status
- The goals and tasks they are trying to complete using the site
- Their physical, social, and technological environment
- A quote that sums up what matters most to the persona as it relates to your site
- Casual pictures representing that user group

When to use it?

The PERSONAS development belongs at the beginning of the project, as personas can inform product/service functionality, help uncover gaps, or highlight new opportunities. The PERSONAS can also be used in the implementation phase when EXPLORING OPPORTUNITIES AND CHALLENGES regarding the stakeholders or specifically targeted group in order to depict that group to ease the communication.

Template PERSONAS:

Source: http://diytoolkit.org/media/Personas-Size-A4.pdf

Template for PERSONAS (source: http://diytoolkit.org/media/Personas-Size-A4.pdf)

Add a pisture or drawing	WHO I AM?	3 REASONS FOR ME TO ENGAGE WITH YOU 1. _____ 2. _____ 3. _____	3 REASONS FOR ME TO NOT ENGAGE WITH YOU 1. _____ 2. _____ 3. _____

PERSONA NAME

_____

MY INTEREST	MY PERSONALITY	MY SKILLS	MY DREAMS	MY SOCIAL ENVIRONMENT

STAKEHOLDER ANALYSIS

What is it?

STAKEHOLDER ANALYSIS is the technique used to identify the key people who have to be won over. The STAKEHOLDER ANALYSIS is then used to build the support that helps you succeed.

The benefits of using it are as following:

- The opinions of the most powerful stakeholders can be used to shape projects at an early stage. Not only does this make it more likely that they will support it, their input can also improve the quality of the project.
- Gaining support from powerful stakeholders can help to win more resources.
- Communicating with stakeholders early and frequently can ensure that they fully understand what is doing and understand the benefits of the project – this means they can support actively when necessary.
- People's reaction is anticipated what the project may be, and build into your plan the actions that will win people's support.

Who participates?

The participants are VET students, business organisation representatives, and/or other stakeholders that are affected by the project.

How to use it?

3 Steps of the STAKEHOLDER ANALYSIS

1. Identify the Stakeholders

The first step in the STAKEHOLDER ANALYSIS is to *brainstorm* who the stakeholders are. As part of this, think of all the people who are affected by the work, who have influence or power over it, or have an interest in its successful or unsuccessful conclusion.

2. Prioritize the Stakeholders

There is a long list of people and organisations that are affected by the work. Some of these may have the power either to block or advance.

Map out the stakeholders classify them by their power over the work and by their interest in the work.

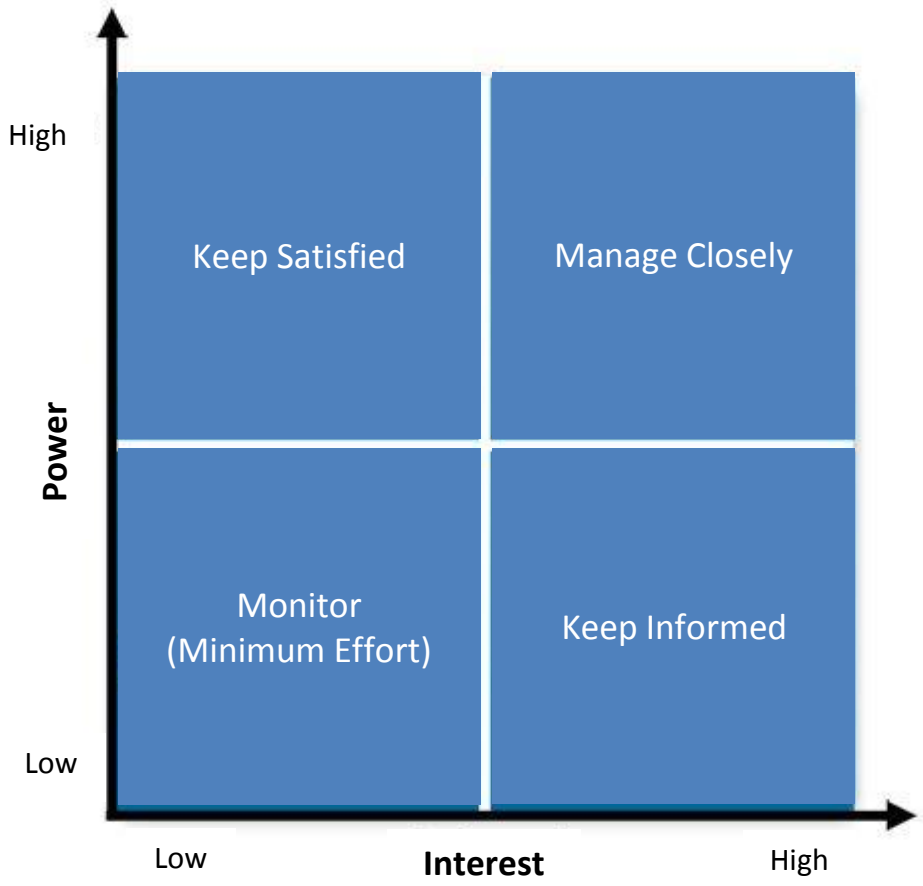


Figure 3: Power/Interest Grid for Stakeholder Prioritization

Someone's position on the grid shows the actions to take with them:

- *High power, interested people:* these are the people to must fully engage and make the greatest efforts to satisfy.
- *High power, less interested people:* put enough work in with these people to keep them satisfied, but not so much that they become bored with your message.
- *Low power, interested people:* keep these people adequately informed, and talk to them to ensure that no major issues are arising. These people can often be very helpful with the detail of the project.
- *Low power, less interested people:* again, monitor these people, but do not bore them with excessive communication.

3. Understand the Key Stakeholders

It is needed to know more about the key stakeholders. It is needed to know how they are likely to feel about and react to the project. It is also needed to know how best to engage them in your project and how best to communicate with them.

Key questions that can help to understand who the stakeholders are:

- What financial or emotional interest do they have in the outcome of your work? Is it positive or negative?
- What motivates them most of all?
- What information do they want from the project?
- How do they want to receive information? What is the best way of communicating the message to them?
- What is their current opinion of the work? Is it based on good information?
- Who influences their opinions generally, and who influences their opinion of the work? Do some of these influencers therefore become important stakeholders in their own right?
- If they are not likely to be positive, what will win them around to support the project?
- Who else might be influenced by their opinions? Do these people become stakeholders in their own right?

When to use it?

Within the Open Innovation Implementation stage, the STAKEHOLDER ANALYSIS is used by the group of students for identifying and better understanding of the stakeholder.

Template for the STAKEHOLDER ANALYSIS Matrix

Stakeholder Name	**Contact Person** *Phone, Email, Website, Address*	**Impact** *How much does the project impact them? (Low, Medium, High)*	**Influence** *How much influence do they have over the project? (Low, Medium, High)*	**What is important to the stakeholder?**	**How could the stakeholder contribute to the project?**	**How could the stakeholder block the project?**	**Strategy for engaging the stakeholder**
EXAMPLE ***Nurses & Midwives Union***	*Victor Davies* *davies@nu.org* *0993 651 106*	*High*	*High*	*Maintaining working conditions for nurses*	*Agree for union members to implement the new reforms*	*Going on strike*	*Monthly round-table discussions*

Source: http://www.tools4dev.org/resources/stakeholder-analysis-matrix-template/

EMPHATY MAP

What is it?

An EMPATHY MAP is a collaborative tool teams can use to gain a deeper insight into their customers. Much like a user persona, an empathy map can represent a group of users, such as a customer segment. The EMPATHY MAP is both a framework and a technique, and it's typically developed collaboratively by a diverse team by placing sticky notes on a wall.

Developing a deeper understanding of your customers by understanding:

- Who they are in their world;
- Where they spend their time;
- Who their friends are;
- Whose opinions influence them;
- What they SAY their deepest aspirations and beliefs are;
- What feelings and beliefs ACTUALLY guide their behaviours.

The EMPATHY MAP was created as a tool to help you gain understanding for a targeted persona. Thus you can use it when you want to deliver a better user experience of your product/service. In the process, the exercise can also help you identify the things you don't know about your users yet so you can carry out new research to fill in those gaps.

Who participates?

The people you're trying to reach, the partners you're working with, experts brought in from similar fields, or any combination of these (and other) groups who would benefit from talking to each other.

How to use it?

An EMPHATY MAP consists of four quadrants. The four quadrants reflect four key traits, which the user demonstrated/possessed during the observation/research stage. The four quadrants refer to what the user *Said, Did, Thought, And Felt.*

It is fairly easy to determine what the user said and did. However, determining what they thought and felt should be based on careful observations and analysis as to how they behaved and responded to certain activities, suggestions, conversations, etc.

1. Fill out the EMPATHY MAP

   - ***Lay the four quadrants out*** on a table, draw them on paper or on a whiteboard.
   - ***Review your notes,*** pictures, audio, and video from your research/fieldwork and fill out each of the four quadrants while defining and synthesising:
   - ***What did the user SAY?*** Write down significant quotes and key words that the user said.
   - ***What did the user DO?*** Describe which actions and behaviours you notice, insert pictures or drawings.
   - ***What did the user THINK?*** What do you think that your user might be thinking? What are their motivations, their goals, their needs, their desires? What does this tell you about his or her beliefs?
   - ***How did the user FEEL?*** What emotions might your user be feeling? Imagine their emotions, what moves them? Take subtle cues like body language and their choice of words and tone of voice into account.

2. Synthesise NEEDS
   - ***Synthesise the user's needs*** based on your EMPATHY MAP. This will help you to define your design challenge.
   - Needs are *verbs*, i.e. activities and desires *not* nouns, which will instead lead you to ***define solutions***.
   - ***Identify needs*** directly from the user traits you noted. Identify needs based on contradictions between two traits, such as a disconnection between what a user says and what the user does.
   - Try to ***connect their needs to values*** based on *Abraham Maslow´s Hierarchy of needs*[2] to help you understand and define which underlying needs your user has.
   - ***Start reflecting*** on how your product or service can help fulfil some of those needs.
   - ***Write down*** your user's needs.
3. Synthesise INSIGHTS
   - ***An "Insight"*** is your remarkable realization that can help you to solve the current challenge you're facing.

[2] http://www.simplypsychology.org/maslow.html

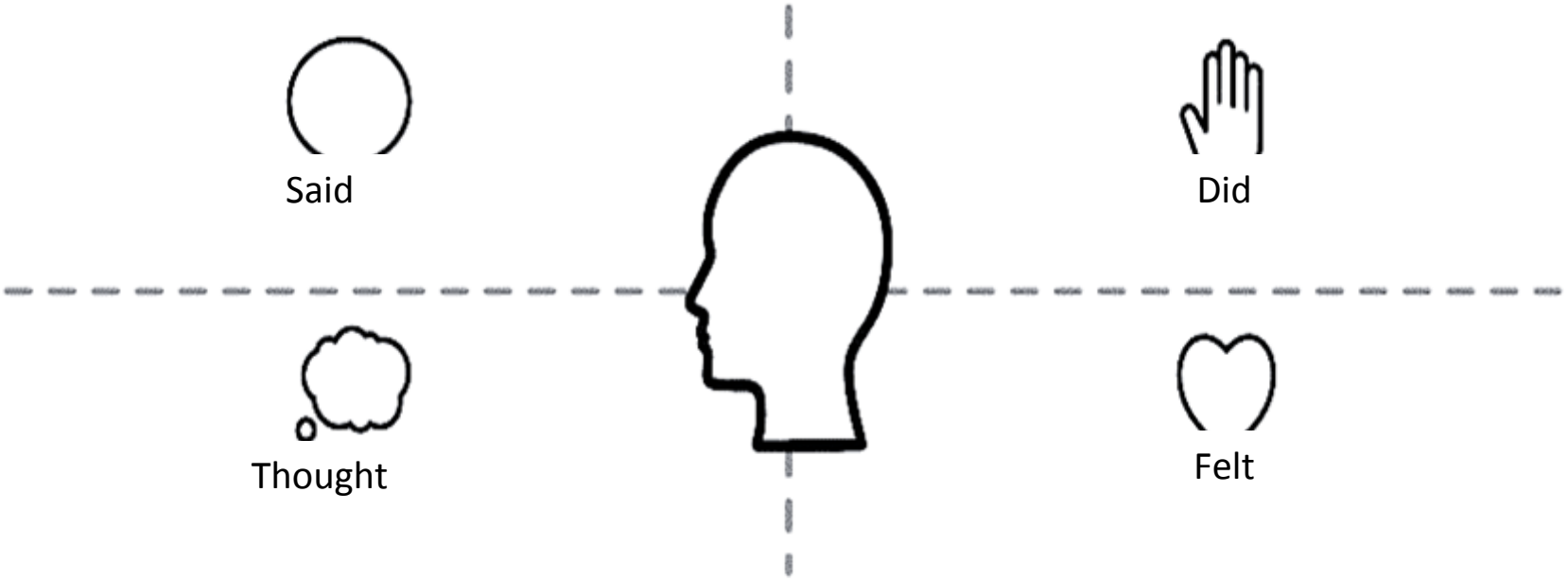
- Look to ***synthesise major insights***. These realisations may come up due to contradictions between attributes or within conversations among members while completing the map. If you notice a strange behaviour, something that stands out, ask "why" so that any member can come up with remarkable realisations.
- ***Write down*** your insights.

When to use it?

The EMPATHY MAP can be used in the implementation phase to get deeper insight of the stakeholders. It is used when the STAKEHOLDER ANALYSIS is defined and it can be most beneficial in a way of trying to understand users from their frame of mind. Collaboration and communication could be improved because of that new understanding of users/stakeholders.

Template for the EMPATHY MAP

Empathy Mapping



Source: https://public-media.interaction-design.org/images/ux-daily/582dab8d5a4e7.jpg

PROBLEM TREE

What is it?

The *PROBLEM TREE analysis* is one participatory tool of mapping out main problems, along with their causes and effects, supporting project planners to identify clear and *manageable goals* and the *strategy* of how to achieve them.

A PROBLEM TREE provides an overview of all the known causes and effects to an identified problem. Understanding the context helps revealing the complexity of life and this is essential in planning a successful project.

There are three stages in this analytic process:

1. the **identification of** the negative aspects of an existing situation/**problem** with their "causes and effects" in a problem tree,
2. the **inversion of the problems** into **objectives** leading into an *objective tree*, and
3. the decision of the scope of the project in an **analysis of strategies**. The value of this type of assessment is greatest if it is carried out in a workshop with the *stakeholders*, giving the opportunity to establish a shared view of the situation.

Benefits of a PROBLEM TREE analysis:

- Helps the planning of a project
- Provides a guide as to the complexity of a problem by identifying the multiple causes
- Identifies particular lines of intervention and other factors that may need to be tackled with complementary projects
- Provides an outline of the project plan, including the activities that need to be undertaken, the goal and the outcomes of the project.

Who participates?

The participants are VET students and/or other stakeholders that are affected by the project. It can be used by individuals or groups.

How to use it?

To develop a PROBLEM TREE analysis, one should follow 4 steps described below.

1. *Settle on the core problem*

The first step in developing the PROBLEM TREE is to identify the problem that the project seeks to overcome. It may be worth debating what the core problem is with stakeholder representatives. Ideally projects/challenge should have a specific problem that you seek to overcome if change is to occur. A vague or broad problem will have too many causes for an effective and meaningful project to be developed.

The core problem is written down in the middle of the paper, or on a sticky-note that is placed in the middle of a wall. If there seems to be more than one core problem, it may be best to develop a problem tree for each one.

2. *Identify the causes and effects*

Once the core problem has been identified, participants should consider what the direct causes and effects of the problem are. Each cause statement needs to be written in negative terms. There are a couple of ways to undertake this. Participants can either collectively *brainstorm* all the negative statements about the problem at hand, and a facilitator writes each negative statement down on a piece of paper. The statements would then be placed on a wall, for the participants to analyse and reorder. Alternatively, participants could work through the cause and effect on a sequential basis, starting from the core problem. The immediate causes to the problem are placed in a line below that of the core problem. The immediate effect is placed above the problem. Any further or subsequent effects are placed above the line of immediate effects.

Developing the linear cause-effect relationship for a PROBLEM TREE

Participants need to continue to repeat the process on further horizontal lines until they are no longer able to identify any further underlying causes.

It is important to review the sequence of cause and effects to make sure that they are clear and make logical sense (eg. does this lead to that, or is there a missing step, and is this the effect of that happening). It is important to ensure that there is agreement among the participants. If there is more than one cause to an effect, you can place these side by side.

Once the order or placement of all the cause and effect relationships is agreed, they can be linked with vertical lines. Horizontal lines can be used to join related causes or effects. The result is a problem tree which outlines the cause and effect relationship between the different levels.

3. *Develop a solution tree*

A solution (also called objectives) tree is developed by reversing the negative statements that form the problem tree into positive ones. For example, a cause (PROBLEM TREE) such as “lack of knowledge” would become a means such as “increased knowledge”. The objectives tree demonstrates the means-end relationship between objectives.

It is advisable to go through the solution tree and check to see if all the statements are clear, and if there are any missing steps between a means and an end. If so, both the problem and solution trees should be revised by adding more statements.

4. *Select the preferred intervention*

The final step is to select a preferred strategy for the intervention. This step is designed to allow the project design team to select and focus an intervention on a preferred strategy. The solution tree may present a number of separate or linked interventions to solve a problem. Depending on project funding, time, and relevance, a planned intervention may not be able to tackle all the causes. However, if all the causes cannot be overcome by a project, or complementary projects, it is important to identify if any of the branches are more influential than others in solving a problem. For example, if existing regulations are found to be a dominant factor, but this is not tackled by the project, this would need to be taken into account in the evaluation of the intervention.

Once you have selected your preferred line of intervention, the core problem/solution is your immediate objective or outcome. The branches below are the activities that you need to undertake, and the branches above become the longer term outcomes.

When to use it?

PROBLEM TREE Analysis can be used in the beginning of the project or in the Implementation phase to identify problems and their causes and effect in order to define strategy.

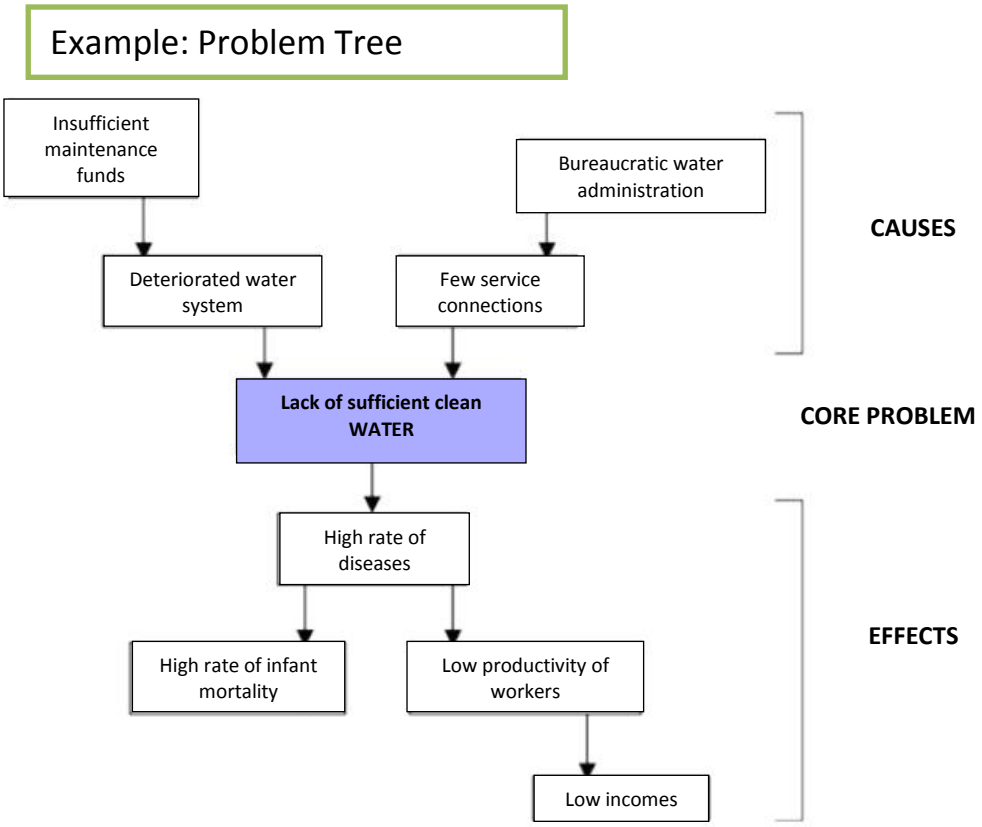


Figure 4: Example of Problem Tree

*Source: h*ttp://evaluationtoolbox.net.au/index.php?option=com_content&view=article&id=28&Itemid=134

EXPERIENCE MAP

What is it?

The EXPERIENCE MAP, also known as CUSTOMER JOURNEY MAP, is used to get information from the customers, users,... regarding to the service or product.

This tool is very effective to get a solution or to identify conflictive/risk points of the product or service the student has designed to face the case/challenge proposed by the company.

Who participates?

EXPERIENCE MAP or CUSTOMER JOURNEY MAP is used by the group of students during the development of the prototype to face the challenge / case proposed by the business company.

How to use it?

This tool is a diagram which includes the interaction of the possible customers, users,... with the product/service generated. It is necessary to use this tool with the results obtained through the tool PERSONAS, in which the different users/clients have been defined.

For each one of the users/clients types created with the Tool "Personas" is defined an Experience. At the end, the students will have as many Maps as number of clients/users identified. The steps to follow are:

1. Use the template EXPERIENCE MAP and include the different phases of the product generated.
2. Identify a customer profile from the tool "Personas" and include in the template the interaction, expectations (positive or negative) of this profile for each of the stages.
3. The Risk or improvement points that need to be faced by the team of students will be obtained from the negative areas of the template Experience Map.

When to use it?

This tool has to be used during the testing stage after identifying the users/clients with the PERSONAS tool and having defined the idea/solution to face the challenge proposed by the Business Organisation

Template for EXPERIENCE MAP

PERSONA Name:
Short description of the profile

EXPECTATIONS

Phases	*(Phase 1)*	*(Phase 2)*	*(Phase 3)*	*(Phase 4)*	*(Phase 5)*	*(Phase 6)*
+						
-						

GENERATION OF IDEAS

CREATIVE WORKSHOOP

What is it?

A CREATIVE WORKSHOP is an opportunity to bring together and collaborate with a number of different people involved with or affected by your work. It is a good way to both, collect and share different experiences, as well as co-create potential solutions. CREATIVE WORKSHOPS can provide invaluable insights into people's perspectives on particular issues. And they offer a setting where this knowledge is shared as soon as it's gathered. Structuring sessions that involve different people from several different backgrounds however, is something that needs careful planning.

Who participates?

The participants are business organisation representatives, VET students and/or other stakeholders that are affected by the project.

How to use it?

CREATIVE WORKSHOPS can have different purposes:

- *Generating and exploring* a range of ideas,
- *Selecting and building upon* the best ideas,
- *Creating a clear a vision* for the how the ideas can be made real at a later stage.

A clear step-by-step schedule of activities and timings for each activity will help to make the workshop a success. It is important to plan your workshop well.

CREATIVE WORKSHOP planning refers to the following steps:

1. Introduce the working plan (5 minutes)
2. Define who the session is focused on (20 minutes)
3. Put these up on the wall where everyone can see them (15 minutes)
4. Define how the target user will make use of your offering (30 minutes)
5. Share the outcomes of the map with the rest of the teams (15 minutes)
6. Further build on the opportunities identified by tools you used (30 minutes)

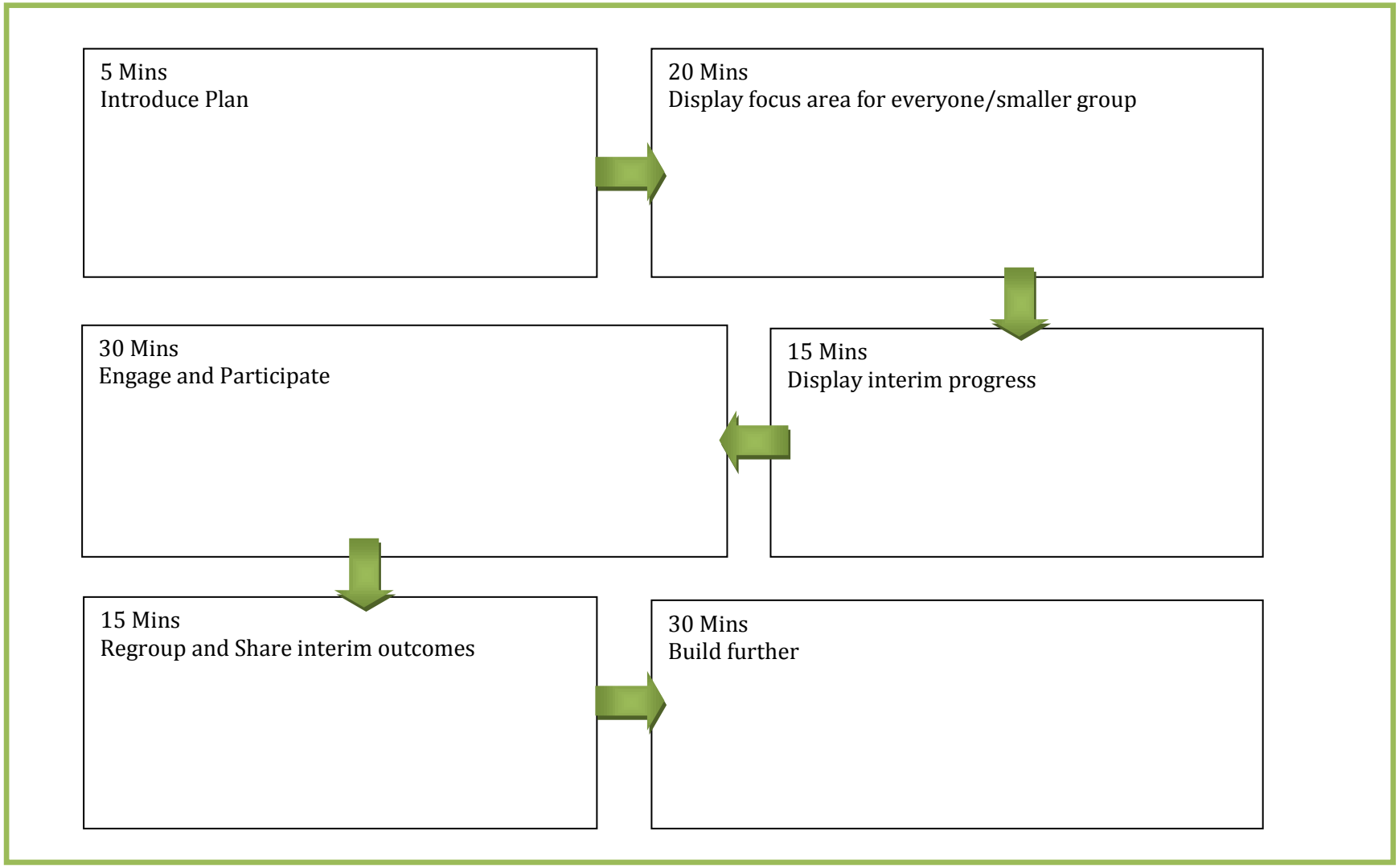
CREATIVE WORKSHOP is not only the tool for generating ideas but can also be conducted in another way, specifically oriented to encourage creative thinking in the specified field of work.

When to use it?

The CREATIVITY WORKSHOP is best used in the beginning of the designing of a new idea, solving a problem or just finding a way to improve the case presented. The characteristic and nature of the CREATIVITY WORKSHOP will encourage participants for generating ideas and thinking out of the box. It is used in the implementation phase for generating ideas

This tool provides a checklist for planning your session effectively, helping you to make the most of the group dynamics.

Template for CREATIVE WORKSHOP (http://diytoolkit.org/tools/creative-workshop/ (accessed on 2th of November 2017)



FAST IDEA GENERATOR

What is it?

This tool allows a team to generate ideas by looking at a problem or opportunity from a range of perspectives. This helps not only to come up with new ideas for potential solutions, but also to strengthen a current proposition of offering, as it challenges it from different approaches. The FAST IDEA GENERATOR helps to frame ideas, problems or opportunities in relation to different scenarios. It stretches the thinking around a concept in different directions, providing a stimulating discussion that will further strengthen the concept.

Who participates?

The participants are business organisation representatives, VET students and/or other stakeholders that are affected by the project.

How to use it?

Comprised of 9 approaches, or challenges, you can choose the ones that seem most applicable to take the topic at hand further, thus using the tool as a stimulating start to a discussion. To use the tool effectively, the starting point (problem, opportunity, concept idea or existing proposition) should be clearly laid out.

2 steps of using the FAST IDEA GENERATOR tool:

1. Start from an existing concept, problem or opportunity and then apply the 9 challenges suggested in the worksheet. These are simple steps to help come up with alternatives that bend, break and stretch the 'normal rules' in such a way that you can generate many surprising ideas in a short period of time.
2. Review the ideas and select the best ones to further flesh them out into workable innovations.

When to use it?

The FAST IDEA GENERATOR is a technique used when there is a need for thinking differently about the problem, for generating new ideas and to think out of the box or out of the conventional way of thinking. It is used in the Implementation phase for evaluating generated ideas.

Template FAST IDEA GENERATOR

THE APPROACH		THE NORMAL RULE	BENDING, BREAKING & RULE
Inversion	Turn common practice upside down		
Integration	Integrate the offer with the others		
Extension	Extend the offer		
Differentiation	Segment the offer		
Addition	Add a new element		
Subtraction	Take something away		
Translation	Translate a practice associated with another field		
Grafting	Graft on an element of practice from another field		
Exaggeration	Push something to its most extreme expression		

BRAINSTROMING

What is it?

BRAINSTORMING is an approach or technique for generating many ideas on a specific issue which can be filtered, assessed to determine which idea or approach is the most appropriate for the issue or problem proposed. The technique was first documented in the late 1950s by Alex F. Osborn in his book called *Applied Imagination*[3], in which he proposed that groups could double their creative output with BRAINSTORMING. Purpose of BRAINSTORMING is that as creative group facilitation technique encourages participation from all group members.

Who participates?

It can be used in group, by VET students collaborating with business organisations. Facilitator is guiding the session, another nominated person is writing ideas down.

How to use it?

Requirements for conducting a BRAINSTORMING session.

For a BRAINSTORMING session a group will require a facilitator to guide the session, encourage participants and also another nominated person for capturing (in writing) the ideas. BRAINSTORMING should be held in a suitable space – light, plenty of space and preferably with natural daylight equipped with a white board or flip chart where ideas should be recorded.

Basic rules for effective BRAINSTORMING

Rules are designed to reduce social inhibitions among group members, stimulate idea generation, and increase overall creativity in the group:

1. ***Focus on quantity*:** It is not the quality or practicality that is important – just sheer number of ideas. It is believed that quantity breeds quality. The greater the chance of producing an effective solution.
2. ***Withhold criticism*:** Any judging at this stage inhibits lateral thinking and may inhibit some group members from participation.

[3] Applied Imagination: principles and procedures of creative thinking. Alex F. Osborn, Ph. M. 1953

3. ***Welcome unusual ideas:*** New perspectives are welcomes and assumptions suspended.

4. ***Combine and improve ideas:*** This also encourages building on the ideas previously generated. In this case "1+1=3".

The process of the conducting a BRAINSTORMING session.

The steps in a typical session are:

1. A warm-up session, to expose novice participants to the criticism-free environment. A simple problem is brainstormed.

2. The facilitator presents the problem and gives a further explanation if needed.

3. The facilitator asks the brainstorming group for their ideas.

   If no ideas are forthcoming, the facilitator suggests a lead to encourage creativity.

4. One or more nominated persons capture the ideas in real time – using the words of the person presenting the idea (to avoid filtering).

5. All participants present their ideas, and the idea collector(s) records them.

6. To ensure clarity, participants may elaborate on their ideas.

7. When time is up, everyone takes a break (of at least 15 minutes).

8. The facilitator organizes the ideas based on the topic goal and encourages discussion.

9. Ideas are grouped and categorized.

10. The whole list is reviewed to ensure that everyone understands the ideas.

11. Duplicate ideas and obviously infeasible solutions are removed (or parked for use in another session).

12. The remaining ideas are considered and where possible built upon.

13. The group work through the remaining ideas and prioritize possible solutions for implementation.

14. The facilitator thanks all participants and gives each a token of appreciation.

There are many different variations of BRAINSTORMING techniques – for the purposes of the SPACE 4 COCREATE project we selected those that better correspond to project needs.

When to use it?

The BRAINSTORMING technique is used in the beginning of the project and also in the Implementation phase to generate as many ideas as possible. Basically, the Brainstorming can be used in every technique described in the "EXPLORING OPPORTUNITIES AND CHALLENGES" phase.

THINKING HATS

What is it?

SIX THINKING HATS is a proven technique from Edward de Bono[4]. Sometimes referred to as '**6 Hats'** or **'the Six Hats of Thinking'**, these techniques focus on enhancing the structure of thinking so that ***group decision making and idea evaluation*** can be dramatically improved.

There are six different coloured hats that can be put on or taken off to indicate a mode or strand of thinking. Only one hat is worn at any one time by the individual or group (in parallel) allowing more thorough, expansive thinking, increased creativity, and decision-making.

SIX THINKING HATS is a time-tested, proven, and practical thinking tool. Each hat is a different colour which signals the mode of thinking. In a group setting each member thinks using the same thinking hat, at the same time, on the same thinking challenge—it is called focused parallel thinking.

Who participates?

It can be used by individuals, however it is more common to use it in group. Participants can be VET students, business organisation and all the relevant stakeholders.

How to use it?

When we are thinking about the problem, when we want to improve something, when we are looking for a solution, it is better that our thinking is separated, directed, and finally reconciled at the end. In order to make it easier to remember the whole concept, De Bono symbolically called the 'hats' as something that we put on the head in which we are thinking, and then we take it off again. He named the hats by the colours that remind us of the direction.

We think separately in one direction at a time:

- Planning *the whole process of thinking* initially, in the middle of it we *supervise* and finally *summarize* it in the conclusion (blue hat),

[4] Six Thinking Hats. Edward de Bono. 1985

- *Emotions and intuition* - expressively subjective (red hat),
- *Facts and facts* - completely neutral (white hat),
- Benefits and optimism – it is about the benefits that can be extracted from the subject (yellow hat),
- *Caution and critical thinking* – it is about risks and threats, which is unfortunately the most common way of thinking about novelties (**black** hat),
- *Creativity and new ideas* - it is about new ideas, concepts and alternatives that can be actively triggered by lateral thinking techniques (green hat).

Below are described the ways of thinking depending on the colour of the hat used.

DE BONO´S 6 THINKING HATS		
THE WHITE HAT 	The white hat calls for **information known or needed**. Gathering just the facts, figures, data and information. It allows presenting facts in a neutral and objective way. Proposals, opinions, beliefs and arguments should be put aside.	Questions: - What information do we have here? - What information is missing? - What information would we like to have? - How are we going to get the information?
THE BLUE HAT 	The blue hat is used to **manage the thinking process** so that it becomes more productive and is concerned about meta-cognition. It focuses on: ▪ Look not at the subject itself but at the 'thinking' about the subject. ▪ Set the agenda for thinking ▪ Suggest the next step in the thinking, ▪ Ask for a summary, conclusion, or decision.	Questions: - " I suggest we try some green hat thinking to get some new ideas" - "Could we have a summary of your views?
THE RED HAT 	The Red Hat signifies **feelings, hunches and intuition**. Allows to put forward your feelings and intuitions without the need for justification, explanation or apology.	Examples: - My gut-feeling is that this will not work. - I don't like the way this is being done. - This proposal is terrible. - My intuition tells me that prices will fall soon.
THE YELLOW HAT	The Yellow Hat symbolizes	Questions:

	**brightness and optimism**. You can explore the positives and probe for value and benefit. Allows to look for benefits, feasibility and how something can be done.	- What are the benefits of this option? - Why is this proposal preferable? - What are the positive assets of this design? - How can we make this work?
THE BLACK HAT 	The Black Hat signifies **caution and critical thinking.** Highlights why something may not work. Be cautious to not overuse it, used too early in the problem-solving process, can easily kill creative ideas with early negativity. Allows to consider your proposals critically and logically. The black hat is used to reflect on why a suggestion does not fit the facts, the available experience, or the system in use.	Questions: - Costs. (This proposal would be too expensive.) - Regulations. (I don't think that the regulations would allow, …) - Design. (This design might look nice, but it is not practical.) - Materials. (This material would mean high maintenance.) - Safety issues. (What about handrails?)
THE GREEN HAT 	The Green Hat focuses on **creativity, possibilities, alternatives and new ideas**. It is an opportunity to express new concepts and new perceptions – lateral thinking could be used here. It is focused on creating new ideas: ▪ creative thinking ▪ additional alternatives ▪ putting forward possibilities and hypotheses ▪ interesting proposals ▪ new approaches ▪ provocations and changes	Questions: - Are there any other ideas here? - Are there any additional alternatives? - Could we do this in a different way? Could there be another explanation?

When to use it?

Use the SIX THINKING HATS to assess exiting problems, innovative ideas, work processed, study topics, possible decisions, solve disputes and more. It is used in the Implementation phase for evaluating generated ideas.

Template for SIX THINKING HATS

MANAGEMENT

OPTIMISTIC

EMOTIONAL

FACTUAL

CAUTIOUS

CREATIVE

PROTOTYPE TESTING PLAN

What is it?

The PROTOTYPE TESTING PLAN is a tool that helps students to get information about the different forms to test the products or services.

The aim of the PROTOTYPE TESTING PLAN is to guide the students during the testing process in order to analyze the prototype and get useful feedback to improve the prototype. The tool includes some structured steps and questions that guide the team of students during the testing process.

Who participate?

The team of students, as the designer of the prototype, will be the users of this tool.

How to use it?

The team of students needs to create a prototype in order to test it and know if it works or not, how make it better,... This testing of the prototype needs to be done before finishing the work.

The PROTOTYPE TESTING PLAN offers the possibility of, after selecting the main idea, testing it. It is recommendable to test it in two periods: in the early stage of development and in the later stage after the full implementation. The idea has to be included in the sheet and the students will follow the indications, but it is important to write everything in the sheet.

When to use it?

PROTOTYPE TESTING PLAN will be used in the process of idea development, after getting the idea and before getting the final prototype.

Template for PROTOTYPE TESTING PLAN

Idea

Include here the idea that you want to test.

Test the initial prototype

Build a first draft of the "model" / "prototype" to test with the customers, clients,. Imagine that your model is in the market, how do you react? You can use the Experience Map as guide.

Write down all the feedback and try to extract any learning experiences/outcomes.

Test the prototype after developing it a bit more

Build a first draft of the "model" / "prototype" with the learning experiences /outcomes obtained in the previous step. Present it to the customers, clients,.

Write down the results of the experience.

Make a list about the things that you need to create the demo

IMPROVEMENT TRIGGERS

What is it?

IMPROVEMENT TRIGGERS is a tool developed by Nesta[5] within *Development, Impact & You Toolkit*[6]. Based on SCAMPER tool[7] – Substitute, Combine, Adapt, Modify, Put to other purposes, Eliminate, Reverse. IMPROVEMENT TRIGGERS is aimed to help you to think in a different ways.

This tool includes a set of questions that can help you to see things with another perspective. These questions make you to see other angles of the proposed solution, so the final result will been obtained after analyzing or considering other possibilities.

Who participates?

IMPROVEMENT TRIGGERS is used by the group of students during the development of the prototype.

How to use it?

The tool presents some questions for each of the items of the SCAMPER tool, Substitute – Combine – Adapt – Modify - Put to other purposes – Eliminate – Reverse, that need to be answered in order to show different perspectives of the solution.

The team of students has to answer the questions included in the template and write them in the sheet. At the end of the exercise, there will be an overview of the work done and the improvement possibilities. Please note that the questions included in the sheet provided are some examples that can be adapted or modified according to the relevance for the team.

When to use it?

This tool can be used during the testing phase; that is once the idea solution is created but need to be checked and improved before presenting it to the business organisation, the owner of the case/challenge.

[5] http://www.nesta.org.uk/
[6] http://es.diytoolkit.org/
[7] Scamper On: More Creative Games and Activities for Imagination Development. Bob Eberly. 1997

Template for the IMPROVEMENT TRIGGERS

SUBSTITUTE	COMBINE	ADAPT	MODIFY	PUT TO OTHER PURPOSES	ELIMINATE	REVERSE
Can a component be replaced? *Can a person be replaced?* *Can the rules be changed?* *Can the processes or procedures change?* *Can the idea be used in a different place?*	*What can be combined to get new uses?* *Which materials can be combined?* *Which other services can be combined with our product?*	*What could be copied?* *Which idea could be included?* *Which process can be adapted?* *What else can be adapted?*	*Something can be modified? Time? Materials?* *Which can give more added value?* *Changing the color, movement, sound, shape,...?*	*Which other uses does it have?* *Which other uses can we get to modify it?* *Other markets?* *Other prices?*	*What would happen if it were smaller?* *Which should be omitted?* *Could something be eliminated or reduced?* *Is there something that is no needed?*	*Which other organisations can be better?* *A different distribution?* *Change the plan?*

BUSINESS MODEL CANVAS

What is it?

A BUSINESS MODEL CANVAS illustrates the business model of a company/organisation of any size visually in a diagram. A BUSINESS MODEL CANVAS consists of 9 blocks that describe how a company/organisation or even a project creates value for itself and intends to make profit. It can be used for Open Innovation projects as well when searching for sustainable ways to make the results of the project last.

It could be interesting to introduce this tool in an early step of the implementation stage in order to know and have in mind all the aspects that need to be developed once the prototype is elaborated by the group of students.

Who participates?

This tool is used by the group of students that have been working in the Open Innovation project.

How to use it?

Firstly, draft a diagram with 9 boxes. Secondly, fill in the headlines according to the 9 building blocks of a business model. Thirdly, fill in the information and ideas. These are the 9 blocks:

1. **Value Proposition**
   It is about solving an existing problem or need for the customers, not primarily about the idea or product itself.
2. **Segment of customers**
   Who are they and why should they buy the product/service? Include demographic, geographic & social information.
3. **Communication & distribution channel**
   How to get the product to the customer? Physical or digital (web/mobile) channels?
4. **Customer Relationship**
   How do I get, keep and acquire customers?
5. **Revenue streams**
   How does the company make profit from each customer segment? What is the strategy?
6. **Key resources**
   What are the most important assets required for success?

Include financial, physical, intellectual, and human resources.

7. **Key activities**

   What are the most important tasks/ the expertise of the company to make the business model work? E.g. production of goods, service, managing, problem solving.

8. **Key partner**

   What is the company acquiring from partners? What key activities do they perform?

9. **Cost structure**

   What are the entire costs and expenses to operate the business model? Most important costs? Fix/variable costs? Most expensive resources?

When to use it?

The BUSINESS MODEL CANVAS is used during the planning phase when starting a business or project. It could also be used as an evaluation tool, when a company is trying to change in a new direction or thinking about conquering a new market. Another field of application is while reframing and rethinking the business processes in the framework of change management.

In Open Innovation project can be also use for testing the demo developed by the students.

Template for the BUSINESS MODEL CANVAS

<table>
<tr><td rowspan="2">7. Key activities</td><td>8. Key partners</td><td rowspan="2">1. Value Proposition</td><td>4. Customer Relationships</td><td rowspan="2">2. Segment of Customers</td></tr>
<tr><td>6. Key resources</td><td>3. Communication and Distribution Channels</td></tr>
<tr><td colspan="3">9. Costs Structure</td><td colspan="2">5. Revenue Stream</td></tr>
</table>

Source: https://www.youtube.com/watch?v=IP0cUBWTgpY

VALUE PROPOSITION CANVAS

What is it?

It is advised to use this tool in combination with the BUSINESS MODEL CANVAS, because it is closely related. The VALUE PROPOSITION CANVAS generates more detailed information on 2 elements of the BUSINESS MODEL CANVAS: *value proposition* (corresponds with the Value Map) and *segment of customers* (information can be collected from PERSONAS & EMPHATY MAP) (corresponds with the profile of customers). By using this tool, it is ensured that the product/service that is developed fits the need/demand of the customers and creates value for the project.

Who participates?

This method is used by the group of students during the prototyping phase to make a fist evaluation test to the elaborated materials.

How to use it?

The VALUE PROPOSITION CANVAS consists of two elements that are based on fragments of the BUSINESS MODEL CANVAS, but give more detailed information. When working with this tool, be sure to always keep the purpose of your project in mind and fill in information according to your perspective. Also, be aware that this tool is only a complementary instrument to the BUSINESS MODEL CANVAS. Cuando se utilizan correctamente, ambos instrumentos ayudarán a crear una idea que se adapte a las necesidades de los clientes de forma adecuada y cree valor para los clientes y para los inversores.

The VALUE PROPOSITION CANVAS is constituted as follows:

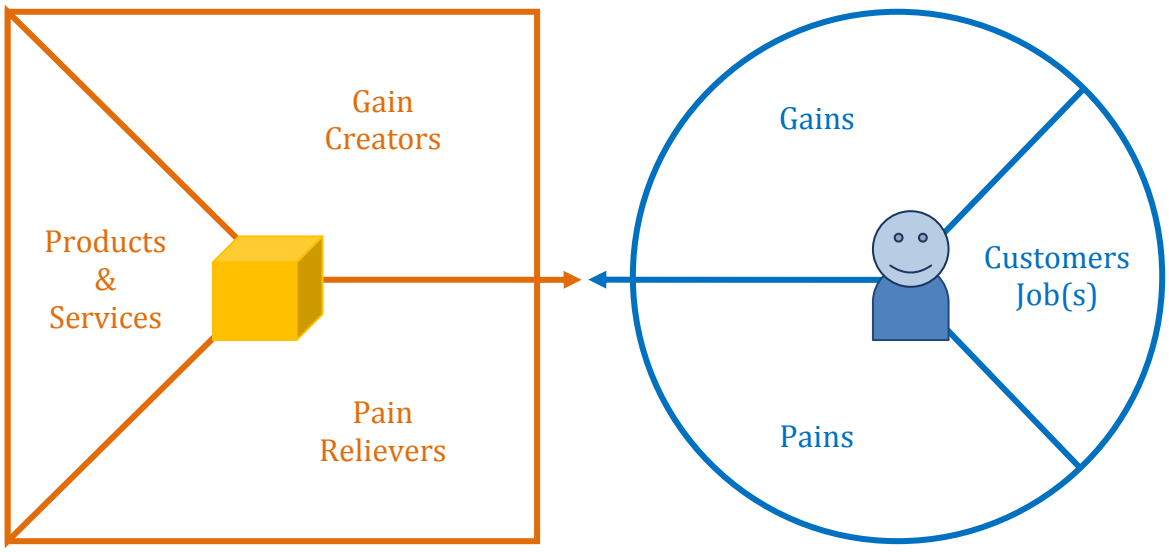
CUSTOMER PROFILE	VALUE MAP
‣ *Jobs*: The jobs of the potential customers could be characterized as functional (e.g. organizing e-mails), social (e.g. finding a partner) or emotional (e.g. relaxing).	‣ *Products & Services*: Craft a list of the products and services that your value proposition is based on.
‣ *Pains*: What obstacles, risks or negative outcomes do customers encounter when getting the jobs done?	‣ *Pain relievers*: Describe how the product/service functions ease the pains that the customers are faced with.

- *Gains*: What positive outcomes, benefits and concrete results do customers hope to achieve? How do customers measure if the finished job was successful?
- *Gain creators*: How does the product/service increase or even maximize the gains of the customers?

When to use it?

The VALUE PROPOSITION CANVAS is used in combination with the BUSINESS MODEL CANVAS during the implementation phase when a prototype is elaborated. It could also be used as an evaluation tool to check if t fits the requirements defined by the business organisation.

Template for the VALUE CREATION PROPOSITION



VALUE MAP **CUSTOMER PROFILE**

Source: Strategyzer's Value Proposition Canvas Explained https://youtu.be/ReM1uqmVfP0
https://strategyzer.com/canvas

TEST THE DEMO

FOCUS GROUP

What is it?

A FOCUS GROUP is perfect for gathering multilayered feedback on a topic or a product of choice. This method provides more detailed feedback than a survey or an interview and, compared to its qualitative output, it is even more efficient. During a FOCUS GROUP, group interactions and non-verbal signals could be documented additionally to the issues that are being discussed. It is possible to conduct focus groups on different scales; for a scientific study as well as in marketing or in the development of a new product. Generally, there are five stages when implementing a focus group:

- Purpose of the study
- Methodology
- Facilitation
- Analysis
- Reporting

Who participates?

When organizing a FOCUS GROUP, at least two persons are needed for facilitating and documenting. While one person is moderating the FOCUS GROUP, the other person will take notes.

There should be 7-12 participants invited, which are not involved in the OI project and neither chosen by random nor by probability, but as representatives of the overall target group.

It is very important to keep in mind the assumed group dynamics, e.g. never place an authority person of the group with the group because they may hold back their true opinions due to fear of judgment.

It is also possible for businesses to use a group of students who participate in the OI project as FOCUS GROUP, but it is recommended to use this tool with external persons who have no relations to the project.

How to use it?

As mentioned above, there are 5 stages proposed for the implementation of a FOCUS GROUP:

1) Purpose of the Study:

- Choose a purpose that you would like to gather feedback on. (E.g.: You have developed a new product during the OI project and would like to evaluate the feedback of your possible customers.)

2) Methodology:

- Create a concept by choosing the population (how many persons will participate) and the sample (characteristics of the participants, best if representatives of the overall target group) of the FOCUS GROUP.
- Think of the relevant questions directly linked to the topic of the focus group. It is advised to prepare approximately 5 open-ended questions (meaning they cannot be answered by Yes/No).
- Craft a schedule of the FOCUS GROUP where you consider the timeframe for preparation, implementation, analysis and reporting.
- Choose a facilitator. This could be project member as well as an external expert as long as this person has experience in facilitating and moderating groups.
- Draft a script that will be used by the facilitator. A script includes all necessary information for conducting the FOCUS GROUP (rules, information about confidentiality, questions…).

3) Facilitation

- Prepare by briefing the focus group team (facilitator & note taker), preparing the room and the necessary materials (pen, paper, flipchart, markers, etc.) and ask the facilitator to rephrase the questions by memory, so that the flow of the conversation can be ensured.
- The facilitator should engage with the participants shortly before the FOCUS GROUP starts. Getting to know the participants and observing the group dynamics is very important for the success of the method.
- The facilitator starts the FOCUS GROUP by introducing himself, the purpose and the topic of the session. He/she sets rules for the conversation (e.g. no mobile phones, only one person speaking at a time) and asks participants to introduce themselves

as well (avoid sequential introductions). Start asking the questions, but give participants enough time to collect their thoughts and to share their opinions. Ensure that everybody is engaging in the conversation by asking guiding questions. Avoid positive or negative reinforcements (like nodding/shaking of the head, "Yes/No", etc.), because participants learn quickly what opinions are "allowed" and which are not. But the point is to gather all the feedback, not just the flattering aspects.

4) Analysis

- Start the analysis directly after the focus group session. Summarize the big themes of each question and gather the important comments or tendencies of the participants.

5) Reporting

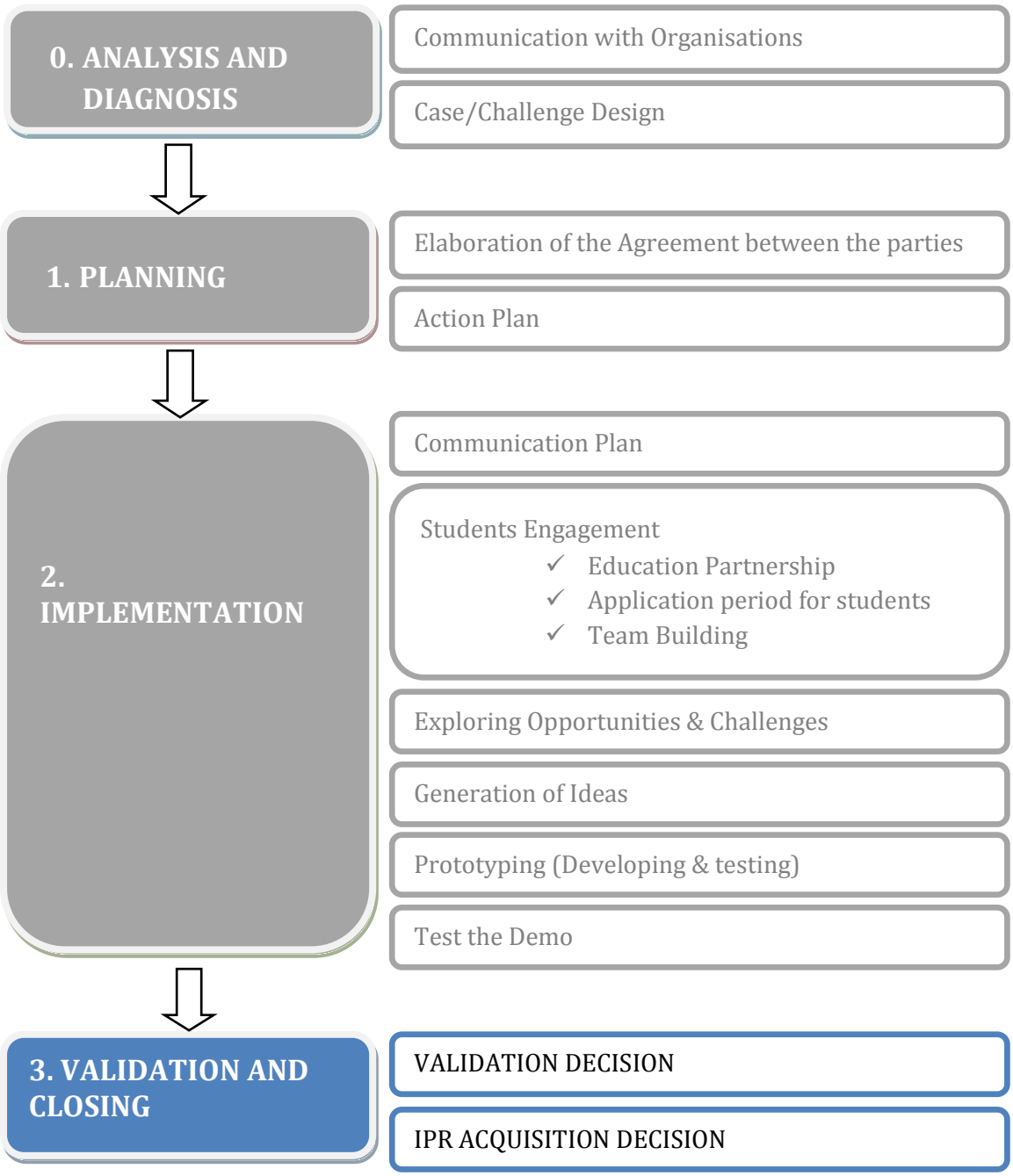
- Craft a report including all steps above and concluding with the results of the focus group. The report could be written as a narrative or using bulletin points, according to the target group of the report (ask yourself: who will read the report?). Include information on the participants (just generally, no names or any other clues that allow identification!). Finish with a summary of the results and align them with the purpose of the FOCUS GROUP.

When to use it?

A FOCUS GROUP could be implemented for various purposes: e.g. exploitation of important issues of a target group, development of new products, evaluation of a model, a product or a theory.

This tool can be used in different stages and more than one time during the process, after generating the idea, prototyping,.. to get information from external people.

3. VALIDATION AND CLOSING


0. ANALYSIS AND DIAGNOSIS
Communication with Organisations
Case/Challenge Design
1. PLANNING
Elaboration of the Agreement between the parties
Action Plan
2. IMPLEMENTATION
Communication Plan
Students Engagement
✓ Education Partnership
✓ Application period for students
✓ Team Building
Exploring Opportunities & Challenges
Generation of Ideas
Prototyping (Developing & testing)
Test the Demo
3. VALIDATION AND CLOSING
VALIDATION DECISION
IPR ACQUISITION DECISION

VALIDATION DECISION

THE CRITICAL TASKS LIST

What is it?

The CRITICAL TASKS LIST is a way to ensure that what we set out to do is actually possible with the time-frame and budget we have available. Implementing an idea can seem overwhelming, so it's important to break it down into these small steps to make it more manageable. Every idea or project needs a clear plan about how it can become a reality. The CRITICAL TASKS LIST is a simple structured process that helps us be clear about the steps we need to take to move our idea forward.

Who participates?

Business organisations in collaboration with students.

How to use it?

List all the activities to be carried out, together with who they are assigned to, the budget available, the deadline for completion and the process for final sign off. Deliberate the activity with the people assigned to it, and add in as much detail as possible. We can also break up specific roles people play to perform a specific activity.

When to use it?

This tool can be categorized into the concurrent type of validation.

Figure 5: Critical Task Diagram

THE LEARNING LOOP

What is it?

The LEARNING LOOP is a tool that helps to define how the work done gives information about what you do next. It provides a high-level perspective on how implementing social change can be broken down into a gradual process of iterative cycles.

The LEARNING LOOP describes four different stages that the OI product might pass for its continuous improvement. This tool helps to understand the different phases during the implementation of the ideas.

Who participates?

This tool is used by business organisations in collaboration with students.

How to use it?

This tool offers a framework to plan with and work in. It is a way to check the integration of the result obtained within the activity of the organisation, learn from the experiences (both success and failure) and improve continuously, using the four components approach.

That's why it's important to create feedback cycles and learn from the input got along the way. The feedback collected helps to explore the next steps to iterate the design and continue to add value to your business and the system as a whole.

The steps to follow are:

1. Review the progress against the feedback you set out.
2. Start by asking whether you have achieved what you set out to do. Have you been able to find answers to the questions?
3. Synthesise this feedback by looking for patterns and insights about what you are learning. How has what you are learning shifted your thinking?
4. Use this flowchart to answer these types of questions:
    - Do you need to change the feedback mechanism?
    - Is it giving you data that is of value or are you wasting time collecting some of that information?
    - What do you need to do to alter your product or service to ensure it's bringing business value to you, and adding value to the system as a whole?

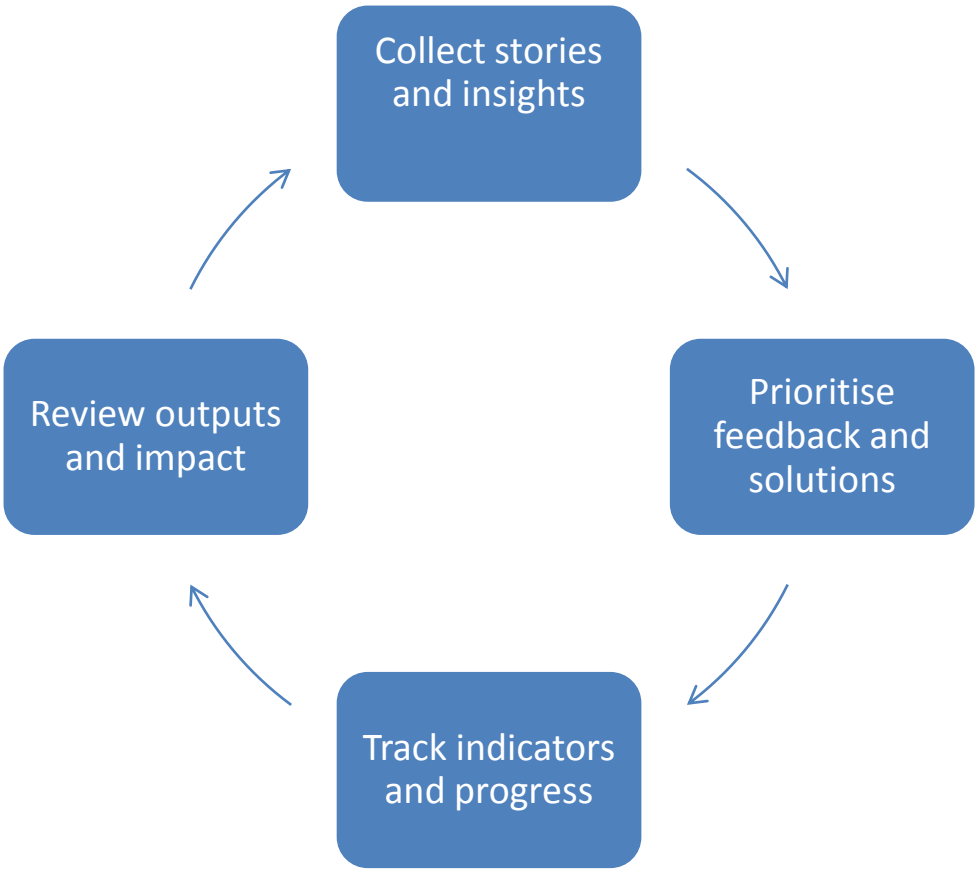
- Is your product or service breaking down from a usability or technical standpoint? Does anything need to be adapted for it to work better?
- What will your next intervention be? Will you be scaling the same model or looking to increase your influence by expanding to different loops in the system?

5. Return to methods in the Define section and develop an action plan for scaling.

When to use it?

Within the Open Innovation Project implementation, this tool is used for the final validation of the prototype developed. This validation is made according to the criteria defined in the design of the challenge and the requirements or need established by the business organisation.

Template for the LEARNING LOOP:



TARGET GROUP

What is it?

The TARGET GROUP tool is a quick and easy way to work out an overview and develop an understanding of the different people the solution/product might reach and the resources you need to do so. This tool is a nice and effective way to share the developed prototype with the direct target group.

People for participating in the target group can be obtained from the tools: PERSONAS, EMPHATY MAP and VALUE PROPOSITION CANVAS.

Who participates?

This tool is used by business organisations in collaboration with students.

How to use it?

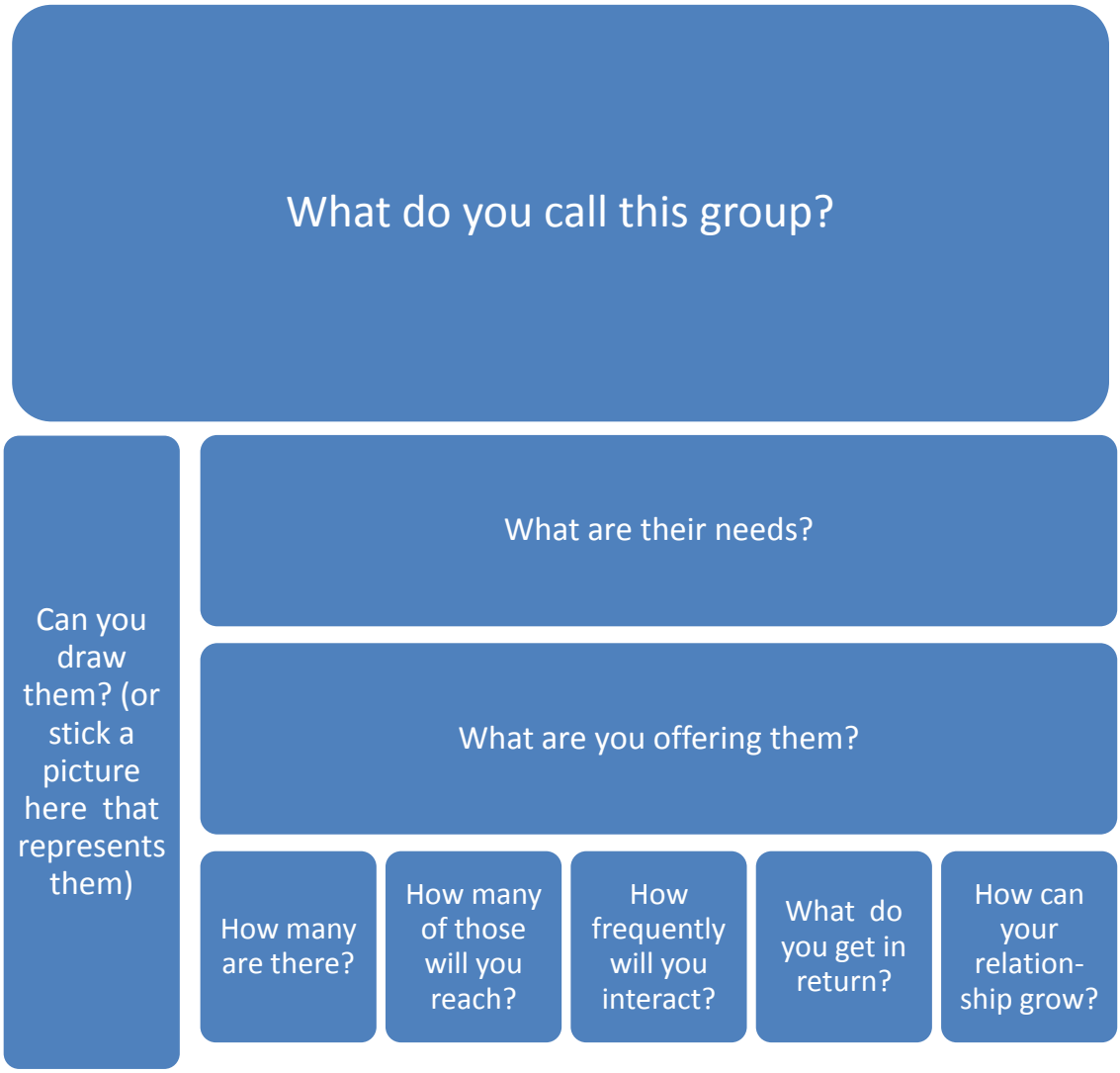
Fill out the worksheet that it is included further below, by considering which are the needs of the people or organisations the project is working for. Continue with adding notes to describe the potential groups that may be interested in the work, or who may benefit from it. Also try to think about other people or organisations who might also benefit from, or have interests/needs that can be connected to the work. These could be different from the customers. It is possible to fill out different worksheets for different groups.

By using this worksheet a picture of the potential groups of beneficiaries can be got. Do try to also fill out the more exact fields at the bottom. This will help to get a more concrete sense of the figures involved. It is useful to add names or brief descriptors for each of the beneficiary groups. Naming these groups makes it easier to discuss with the team or other stakeholders. This can be done informally, for instance with friends or colleagues, or more formally, as part of a meeting with partners or investors. Ideally it could be interesting to talk to customers and other beneficiaries who are in contact with the work, in order to check the assumptions.

When to use it?

After elaborating the prototype and before starting to set out the business strategy in order to know the next steps.

Template for the TARGET GROUP



IPR ACQUISITION DECISION

INTELLECTUAL PROPERTY RIGHT AGREEMENT

What is it?

INTELLECTUAL PROPERTY RIGHT (IPR) agreement means a contract executed between or among collaborating parties for the purchase and sale of the prototype property. It also discusses on the rights associated with intellectual property that is created jointly by the collaborating parties as well as intellectual property created independently by each. It is also called IPR AGREEMENT, intellectual property transfer agreement or intellectual property assignment agreement.

Common issues to consider when drafting an intellectual property agreement are:

- the definition of the Intellectual Property that is being licensed or assigned;
- warranties and indemnities given by the licensor or assignor in relation to the IPR;
- the circumstances, if any, in which a license may be cancelled or the rights assigned revert; and
- the treatment of related moral rights.

A template is included below that can be used either in its entirety or some parts of it, depending on the organisations and the agreement they want to achieve.

Who participate?

The parties involved in the elaboration of the IO prototype: students and the organisation will be those responsible of signing the agreement.

How to use it?

An IPR AGREEMENT is elaborated to define all the aspects related to the ownership of the prototype. Parties have to understand and agree with the document that will be signed. It is recommended that a third party take part in the process for the elaboration of the agreement and ensure a transparent and clear process.

When to use it?

Once the prototype is finished, all parties will agree on the ownership and will elaborate and sign an IPR AGREEMENT.

Template for the INTELLECTUAL PROPERTY RIGHT AGREEMENT

IPR AGREEMENT

License agreement between

…… ("Licensor") and …… ("Licensee").

The License Agreement is made effective by the signature of both parties by ……date)

The content of the agreement as followed.

1) Subject Matter

The content of this License Agreement is ……[product or processes etc.] ("Licensed Good") which is under the property right of ……

[name and number of the respective IPR(s)] of the Licensor].

The Licensee is permitted by the Licensor to use the Licensed Good in order to [please specify - produce, practice or sell the Licensed Good]. To enable the use of the Licensed Good the Licensor will support the Licensee with necessary consulting and training fractions ……[please specify].

The Licensee and its authorised users commit the confidential agreements:

(a) ……

(b) ……

2) Extent of License

Please chose the appropriate options in the boxes

2.1 Exclusive or Non-Exclusive

The Licensee has an exclusive right in terms of conditions of this License Agreement to [produce, practice or sell] the Licensed Good [worldwide/in a specific territory].

The Licensee accepts a non-exclusive right in terms of conditions of this License Agreement to [produce, practice or sell] the Licensed Good [worldwide/in a specific territory].

If the Licensor agrees with a third party about the respective Licensed Good to provide more favourable conditions, the Licensor obligates to renew the present License Agreement and to give the Licensee the same favourable conditions as to the third party.

2.2 Territory

The licensed territory is ..... The Licensee is not permitted to make, use or sell the Licensed Good outside this territory.

2.3 Sub-License

The Licensee has the right to grant sub-license in its territory. Revenues from the sub-license have to be shared with the Licensor to..... percent [%]. The sub-license will end with termination of the head-license. Any sub-license agreement needs the prior permission of the Licensor.

2.4 Improvements

Changes and Improvements by the Licensee

All improvements to the Licensed Good have to be reported by the Licensee to the Licensor. Improvements in this sense include any advances which can be directly used or applied by the Licensed Good and which are patentable. If the Licensor participated in this development he/she possess the right to be considered as part of a joint venture as well as the right to be licensed to the new technology. Both parties agree to undertake further negotiation processes in good faith.

Improvements by the Licensor

The Licensors agrees to inform the Licensee about all improvements to the Licensed Good. The Licensee has the right to be licensed to the respective new technology by the conditions of this License Agreement.

2.5 Term

The License Agreement ends at the.....[date].

3) Fees

Please chose the appropriate options

3.1 Lump Sums

The Licensor and the Licensee agree about a lump sum in the amount of .....[amount and currency]. The lump sum has to be paid within the first .....weeks after signing this License

Agreement. Therewith the license is fully-paid-up and no further financial requirements will emerge.

3.2 Royalties

The Licensor and the Licensee agree about regular payments in the form of license royalties.

[License royalties can refer to the Licensees sales, gross sales or net sales. The conditions need to be further negotiated and specified.]

4) Infringement

In case of financial disadvantages following an infringement due to a third party producing, practicing or selling the Licensed Good without permission by the Licensor, the parties shall meet for agreement over appropriate actions. Licensee and Licensor will share the costs of eventually necessary legal effects by 25% and 75% respectively.

5.1 Representations and Warranties

The Licensor represents and warrants the Licensee:

a) Licensor owns the Licensed Good and its legal property rights, which gives the right to grant the respective license. The Licensor possess the contractual right to grant the License in case of improvements of the Licensed Good.

b) The Licensed Good and its property rights are valid accordingly to the knowledge of the Licensor at the date of signature.

c) The use of the Licensed Good is to be implemented pursuant to the knowledge of Licensor without any exceptions.

d) The Licensee will have no liabilities or obligations to the Licensor's IPR-portfolio or License improvements.

On the request from the licensee, the Licensor will provide the Licensee access to the Licensed Good and facilities and trainings agreed upon in the contract without further consideration.

e) The Licensor will inform the Licensee immediately in case legal changes affecting the Licensed Good emerge.

5.2 Licensor and Licensee Obligations

Licensor Obligations

a) The Licensor provides the relevant technology required for the use of the Licensed Good

b) The Licensor maintains the power of the license in the territory.

Licensee Obligations

a) The Licensee will undertake all necessary steps to successfully manufacture and market the Licensed Good in the present territory.

b) The Licensee takes properly care of the entrusted Licensed Good and other properties of the Licensee.

This Agreement will be interpreted and construed according to, and governed by, the laws of.....Any dispute regarding this agreement shall be examined under jurisdiction of these laws.

Licensor Name	**Licensee Name**
[City and date]	[City and date]
_____	_____

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