

SYSCODE TOOLBOX FOR CO-CREATION JOURNEYS

Co-creation for society in innovation and science

Co-creation is a non-linear process that involves multiple actors and stakeholders in the ideation, implementation and assessment of product services, policies and systems. It aims to improve their efficiency and effectiveness, and the satisfaction of those who take part in the process.

The SISCODE Toolbox aims to facilitate the design and implementation of co-creation journeys for the SISCODE laboratories, focussing on better understanding and prioritisation of the particularities of each context. The selection of the existing tools and toolkits will support the development of the design-based process from the problem analysis to the ideation of a solution, the development of a prototype and its experimentation in a real-world context. The main goal of the SISCODE Toolbox is to provide support for the co-creation labs in making sense of existing data, tools and toolkits.

INDEX

The Toolbox	4
Defining the process	7
Synthesis Tools	12
Analyse the Context	15
Reframe the Problem	23
Envision Alternatives	31
Prototype and Experiment	37
Acknowledgements	48





THE TOOLBOX

AN ITERATIVE PROCESS IN 4 PHASES

The SISCODE Toolbox proposes 4 phases with different goals and results, as described below.

1

ANALYSE CONTEXT

To understand the context based on experience or by analysing the situation, or to re-interpret an existing (problem?). To identify how differences in circumstances of the environment are related to the project/challenge.

2

REFRAME PROBLEM

Create a structure, visualisation or framework to organise your learnings about the context and stakeholders, but also drawing from personal experiences to gain multiple perspectives about the problem.

3

ENVISION ALTERNATIVES

Elaboration of new ideas based on the previous reflection or conversations and insights into concepts. Clustering and synthesising concepts into coherent value proposition systems.

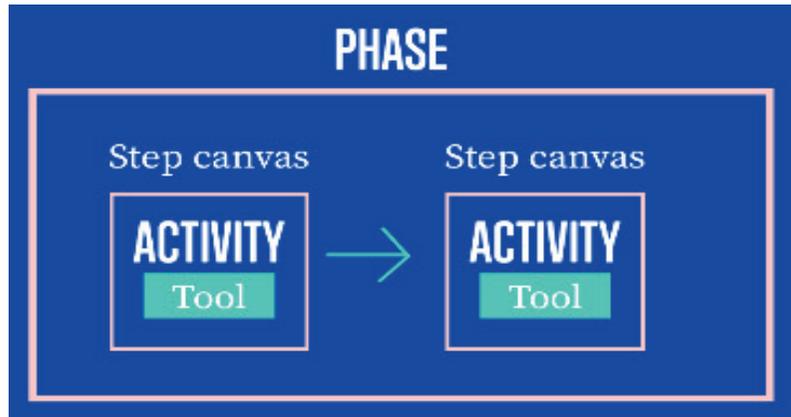
4

PROTOTYPE AND EXPERIMENT

Apply the new visions ensuring that the solutions are purposefully built around peoples' experiences and can provide real value.

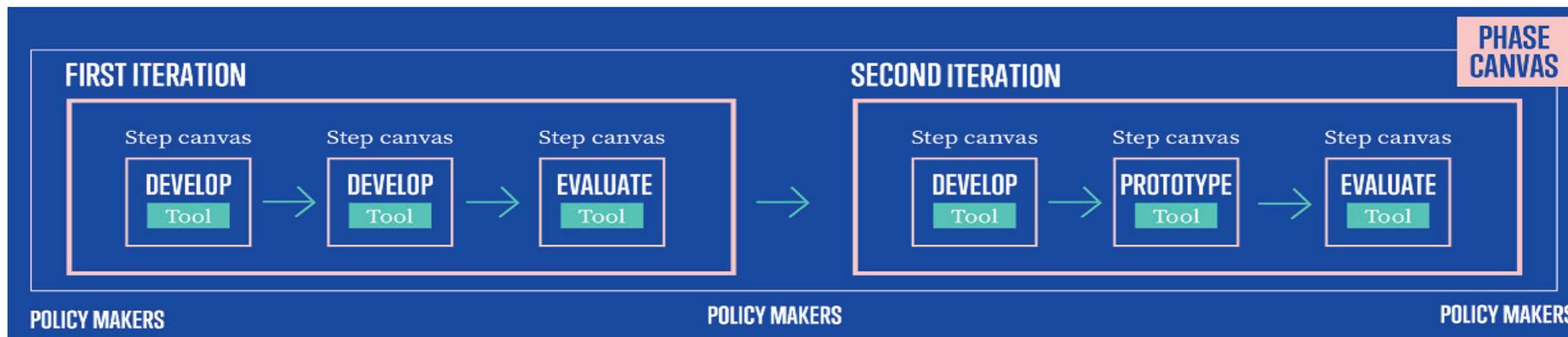


DEFINING THE CO-CREATION PROCESS



1. Each of the 4 phases will have their own **PHASE CANVAS** to help you to manage the stakeholders and define goals.
2. According to these goals, different activities will be carried out in each phase and can be defined thanks to the **ACTIVITY CANVAS**.
3. Once the phases and activities have been defined, **SYNTHESIS TOOLS** will support each Lab, before, during and after each phase of co-creation. These tools will illustrate the accomplishments and are considered as outputs of the process.

4. The phase 4: “Prototype and Experiment” should be done at least in 2 different iterations. After the first 3 phases, a solution will be prototyped and tested. Policy Makers should be involved in the design of the prototypes as well as at the end of each iteration.





DEFINING THE CO-CREATION PROCESS

Imagine in advance your journey internally and then with a core group of stakeholders so to better plan the different activities following each phase.

Synthesis tools:

- Phase Canvas
- Activity Canvas

PHASES CANVAS

Complexity: Low

Time required: 2 hours

Material required: pen

WHAT'S FOR ?

The SISCODE Toolbox proposes 4 phases with different goals and results. The Phases Canvas will help you understand each phase, making sense of the necessary inputs and outputs, how to best define the necessary activities for the accomplishment of each phase, and how to manage them.

HOW TO USE IT ?

Phase by phase, this first canvas supports you to define the management of your co-creation journey. For each phase, you will be invited to discuss who is leading the phase, who are directly involved or are affected in the phase. It will help you to define the roles of each stakeholder in all phases.

At this stage, you can also take time to brainstorm about the different types of activities, inputs and outputs of each phase.



PHASE

- 1. Analyse Context
- 2. Reframe Problems

- 3. Envision Alternatives
- 4. Develop and Prototype



ACTIVITIES

What are the activities developed in this phase?



STAKEHOLDERS

Who is involved in each activity?



ROLES

What are the roles of the stakeholders during each activity?



OUTCOMES

What are the desired outcomes of this phase?

Four large, empty, rounded rectangular boxes with dashed borders, arranged horizontally, intended for user input.

Start Date: ___/___/___

End Date: ___/___/___

Comments:

A large, empty, rounded rectangular box with a dashed border, intended for user input.



ACTIVITIES CANVAS

Complexity: Low

Time required: 1 or 2 hours

Material required: pen

WHAT'S FOR ?

For each phase of your co-design journey, different activities could be realised according to your context. All along your journey, you will need to plan which activities you want to apply in your context and define what will be the processes you want to use for each of them.

The ACTIVITY CANVAS will help you to find the appropriate tools and discuss how to organise every activity.

HOW TO USE IT ?

First, you will have to choose an activity. Once you have defined it, the template will support you in defining the stakeholders that will work on it, which are the procedures and rules, the tools you will use and the different outputs you are expecting.

Do not hesitate to directly explore the [101 Design Methods Cards](#) to be inspired and to define what is the best way to customise your activity and the tools you will use according to your local context.



ACTIVITY

- 1. Analyse Context
- 2. Reframe Problems

- 3. Envision Alternatives
- 4. Develop and Prototype



OBJECTIVES

What are the objectives of this activity?

Start Date: ___/___/___



TOOLS

What are the tools/methods used to achieve the objectives and how?

List the tools and provide a short description.

Use 101 Design Methods for inspiration
<http://101designmethods.com>



OUTCOMES

What are the desired outcomes for each objective?



DURATION

What is the time needed for reaching each objective/ using each tool?

End Date: ___/___/___

Comments:



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Icons by Gregor Cresnar from the Noun Project



SYNTHESIS TOOLS

They support each Lab, before, during and after each phase of co-creation and are the main outputs of the process.

SYNTHESIS TOOLS

The Synthesis Tools can be used to guide the identification and representation of the outputs of each phase.

1

ANALYZE CONTEXT

Challenge, p.16
Lab, p.17
Policy, p.18

Stakeholders Engagement and
Dissemination Plan, p.20-21

2

REFRAME PROBLEM

Problem Definition Canvas, p.24-25
Frameboards, p.26-27

3

ENVISION ALTERNATIVES

Idea Cards, p.32-33
Selection Idea Matrix, p.34-35
Experimentation canvas, p.36-37

4

PROTOTYPE AND EXPERIMENT

Personas, p.38-39
Stakeholders Journey, p.40-41
Stakeholders Map, p.42-43
Business Model Canvas, p.44-45
Service Blueprint, p.46-47



PHASE 1 -ANALYZE THE CONTEXT

To understand the context based on experiences or by analysing the situation, or to re-interpret an existing problem. To identify how differences in circumstances of the environment are related to the project/ challenge.

Synthesis tools:

- Challenge canvases : Context - Lab - Policy
- Stakeholder engagement and dissemination plan

LOCAL CONTEXT CANVASES : CHALLENGE, LAB, POLICY

Complexity: Low

Time required: 1 hours each

Material required: pen

WHAT'S FOR ?

Analysing the Context is a preliminary step designed to understand the challenge, initial network of stakeholders, and the infrastructures of the SISCODE co-creation laboratories.

The Canvases 'Challenge', 'Lab' and 'Policy' were created based on the survey developed to better understand the labs and to update the challenges and policies from SISCODE

HOW TO USE IT ?

Each canvas will support you to create a rich picture of your challenge gaining knowledge on the local context. Use them individually or simultaneously and try to answer to the questions offered in each canvas. Do not hesitate to find new way to collect and gather data to provide relevant contents.

These canvases can be completed during the processes, gathering new elements from the contexts to co-create the solutions.



LOCAL CONTEXT : DEFINING THE CHALLENGE



NEEDS

What is the key social need that you are addressing?

Explain the reasons why the need is important and for who it is relevant.



CHALLENGE

What is the local challenge?

Describe the local challenge (problem) that the Lab will address, elaborate a question you would like to answer by working on this challenge.



FACTORS

What social & cultural factors shape / generate this challenge?

Sociocultural factors are customs, lifestyles and values that characterize a community. Think about esthetics, education, language, law and politics, religion, social organizations, technology and material culture, values and attitudes.



EVIDENCES

What evidences do you have that this is a significant challenge?

Describe what you know and your experience about the topic. Identify the possible effects of working on this challenge.



Comments:



LOCAL CONTEXT: DEFINING THE LAB CAPABILITIES



TECHNOLOGY & RESOURCES

What are the technologies and resources available?



Describe the different technologies and resources available in the Lab for addressing the challenge.



KNOWLEDGE & COMPETENCIES

What are the knowledge and competencies available?



Describe the knowledge, experience and competencies available in the Lab for addressing the challenge.



APPROACH

What is the co-creation approach adopted in the Co-creation Lab?



Describe and illustrate the approach that the Lab has on co-creating initiatives with different stakeholders.



Comments:

LOCAL CONTEXT: DEFINING THE POLICY ENVIRONMENT



EXISTING POLICIES

What are the existing policies related to the challenge?



List the policies that already address tematics related to the challenge. Describe how existing policies could limit/block or support/encourage the development of the challenge.



INFLUENCING POLICIES

What are the threats on addressing existing policies?



Describe the ease and difficulties about influencing policies in the local context.



FUTURE POLICIES

Pitch your idea about how the challenge could influence future policies



Describe how addressing this challenge could inspire policy making and discussion.



Comments:



DEFINING THE STAKEHOLDER ENGAGEMENT AND DISSEMINATION PLAN

Complexity: Low

Time required: 1-2 hours

Material required: pen

WHAT'S FOR ?

The stakeholders engagement and dissemination plan will help you to define your strategy to engage and communicate with your stakeholders. It is part of the WP3.6 actions.

HOW TO USE IT ?

The template will support you to clearly plan, for each phase, which stakeholders you will interact with and how. For each stakeholder, you will need to explain what is your objective in terms of communications, what are the key messages you have to communicate with him/her, what actions you will put in place and by which channel (web, Facebook, Twitter, Instagram, other...)

Do not hesitate to think also about the different barriers you may face so you can anticipate actions and other forms of communications.





PHASE 2 - REFRAME THE PROBLEM

Create a structure (visualisation or framework) to organise your learnings about the context and stakeholders, but also drawing from personal experiences to gain multiple perspectives about the problem.

Synthesis tools:

- Problem Definition Canvas, p.24-25
- Frameboards, p.26-27

PROBLEM DEFINITION

Complexity: Medium

Time required: 1-2 hours

Material required: pen, post-its

WHAT'S FOR ?

Defining a problem is an important step to creating an effective and efficient solution, as what may have appeared at first the problem may just be the result of an underlying larger issue. This tool allows groups to understand what these underlying factors may be, and to contextualize the problem as to re-frame it in a more specific and direct manner.

HOW TO USE IT ?

The tool can be filled in individually or in groups. Working on the task in groups is preferable as the objective of the exercise is to approach the problem from different viewpoints in order to better understand and define the problem. Including stakeholders in the process is another useful idea. The worksheet should be filled out from left to right.

Reference: <https://www.silearning.eu/tools-archive/problem-definition/>



PROBLEM DEFINITION



NEEDS

What is the key social need / problem that you are addressing?

 Explain the reasons why the problem / need is important and for who it is relevant.



FACTORS

What social & cultural factors shape this problem?

 Sociocultural factors are customs, lifestyles and values that characterize a community. Think about esthetics, education, language, law and politics, religion, social organizations, technology and material culture, values and attitudes.



EVIDENCES

What evidences do you have that this is a significant problem?

 Explore the stakeholders and what are their opinion about the problem.



STATEMENT

Reframe the problem

 Think about the problem in different ways and try to rewrite your problem statement.



Comments:



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FRAMEBOARD

Complexity: Medium

Time required: 2-3 hours

Material required: pen, post-its

WHAT'S FOR?

The Frameboard canvas is a tool developed by Guido Stomff (2018) and used by Cube as a main tool in their design approach. A frameboard is a canvas/template to visualize and communicate the results of the exploration of one frame. A frame in this sense is a certain perspective on the problem/challenge.

HOW TO USE IT?

In this design methodology, the exploration of at least 6 – 10 different frames is recommended to visualise and understand the problem. The template is used to then visualise these frames. These frameboards then help you discuss the different frames, different views on the problem and different types of solutions. The frameboard is also relevant for describing the idea in a slightly different way than the idea cards. It gives more space to the sketch and visual drawing.

Reference: Stomppf, G. (2018). Design Thinking. Radicaal veranderen in kleine stappen. Amsterdam: Boom uitgevers.



FRAMEBOARD



DRAWING / SKETCH

NAME
TAGLINE

 **DESCRIPTION**

 **VALUE PROPOSITION**

 **TARGET - USERS**

 **KEY PROBLEM (s)**

 **SOLUTION APPROACH**

 **ALTERNATIVE IDEAS**

IDEA CARD

Complexity: Medium

Time required: 2-3 hours

Material required: pen, post-its

WHAT'S FOR?

The Idea Card tool organises in one page your idea: the challenge and needs you are addressing, the solution, what it might achieve and how you will accomplish this.

It is an excellent tool to use when presenting your initial idea to stakeholders or future beneficiaries/customers to get a feel of what you're doing right and what you could improve on.

HOW TO USE IT?

The tool can be filled in individually or in groups. Start the activity by defining your challenge and the specific needs that you are addressing.

Then think about what it would look like if the challenge was solved. Now that your challenge is framed, clarify your own idea, what it could achieve and how it could be accomplished.

Reference: <https://www.silearning.eu/tools-archive/idea-card/>



IDEA CARD



CHALLENGE

What challenge are you addressing?

NEEDS

What are the needs?

SOLUTION

If the problem was solved, what would it look like?

IDEA

ACHIEVEMENTS

HOW





PHASE 3 - ENVISION ALTERNATIVES

Elaboration of new ideas based on the previous reflection or conversations and insights into concepts. Clustering and synthesising concepts into coherent value proposition systems.

Synthesis tools:

- Idea Cards, p.32-33
- Selection Idea Matrix, p.34-35
- Experimentation canvas, p.36-37

IDEA SELECTION TABLE

Complexity: Low

Time required: 2 hours

Material required: pen

WHAT'S FOR?

This table is used for listing and categorising the ideas and thus support the converging phase of the design process. It is useful to go further in each idea questioning who is the main target and interested stakeholders and the type of innovation. Assess in a qualitative way, coherence, feasibility, originality of the concept as well as the engagement of the stakeholder and the potential shared value of the ecosystem.

HOW TO USE IT?

The table can be used for synthesising other tools that help you sort out the different ideas and identify the threats and opportunities raised by your emerging concepts.

Idea by idea, complete each line to create a table of your most relevant ideas.

Reference: Template used for the deliverable 3.2 of the SISCODE project-



IDEA SELECTION MATRIX

IDEAS	SPECIFIC TARGET INTEREST	TYPE OF INNOVATION	QUALITATIVE ASSESSMENT Coherence, feasibility, originality, engagement, shared value	OPPORTUNITIES



EXPERIMENTATION CANVAS

Complexity: Medium

Time required: 2 hours

Material required: pen

WHAT'S FOR?

The objective of this canvas is to describe the key aspects of how the solutions will be implemented in phase 4 of the SISCODE pilots entitled “prototype and experiment. It needs to be adapted to each solution retained and integrated into all key project management dimensions. The proposed canvas is a combination of the social innovation business model canvas (from SI-toolbox) and the canvas “design the experiment” from [Peloton Camp](#). It was re-designed for the purpose of the project as a transition between phase 3 and phase 4.

HOW TO USE IT?

The canvas permits to understand (1) the goals of the experiment, (2) the target group that will be involved, (3) the territory of application, (4) what prototype and materials will be produced, (5) key activities and responsibilities for each actor and what they need to agree upon (6) the cost structure, (7) timeline and a short-term plan of action and finally, (8) the assessment framework.

Reference:
<https://www.demoshelsinki.fi/wp-content/uploads/2018/06/designing-the-experiment-canvas.pdf>



EXPERIMENTATION CANVAS

 GOALS FOR THE EXPERIMENT		 MATERIAL / PROTOTYPES	 WHERE AND TO WHICH SCALE
 TARGET GROUP	 WHAT YOU NEED TO AGREE ON		 WHEN IS THE EXPERIMENT A SUCCESS ?
 KEY ACTIVITIES AND RESPONSIBILITIES		 COSTS STRUCTURE	 HOW TO COLLECT DATA DURING THE EXPERIMENT ?
TIMELINE / MILESTONES		 TO DO LIST / NEXT STEPS	
Comments			





PHASE 4 - PROTOTYPE AND EXPERIMENT

Apply the new visions ensuring that the solutions are purposefully built around peoples' experiences and can provide real value.

Synthesis tools:

- Personas, p.38-39
- Stakeholders Journey, p.40-41
- Stakeholders Map, p.42-43
- Business Model Canvas, p.44-45
- Service Blueprint, p.46-47

PERSONA

Complexity: Low

Time required: 2 hours

Material required: pen

WHAT'S FOR?

Personas are fictional characters who embody the archetype of your stakeholders (civil society, researchers and consultants, policy makers, economic actors). They are created through exhaustive observation of the stakeholder segment and the drawing together of their shared characteristics, behaviors, motivations, interests, etc. It is a useful tool to really focus on getting to know who you are designing for.

HOW TO USE IT?

The goal of the activity is to make the persona as accurate as possible and hence as detailed and nuanced as can be. Start by giving your persona a name and identifying from which stakeholder's segment s/he comes from. Then move on to describe who s/he is: age, personal background, education level, profession, etc. Now, make a sketch of your persona (remember you can always take a picture and use photos to sketch if you can't draw). Move on to the other sections in any order you would like and feel free to add more details.

Reference: <https://www.silearning.eu/tools-archive/personas/>



STAKEHOLDER PERSONA

Name:

Type of Stakeholder:

- Civil Society
- Researchers & Consultants
- Policy Makers
- Economy Actors

Who am I?

3 reasons for me to engage with the co-creation Lab

3 reasons for me NOT to engage with the co-creation Lab

My interests

My personality

My skills

My dreams

My social environment

STAKEHOLDER JOURNEY

Complexity: Medium

Time required: 2 hours

Material required: pen

WHAT'S FOR?

The Stakeholder Journey map is an adapted version of the Customer Journey tool. It is a visual interpretation of the stakeholder's relationship with the organisation, service or product. While the story is told from the stakeholder's point of view, it also highlights important moments where stakeholder's expectations intersect with the organisation's offer. It is a useful, strategic tool that keeps the stakeholders at the center of design decisions, highlighting difficulties (the pain points) and opportunities for the organisation to create a better stakeholder experience and an effective service.

HOW TO USE IT?

First, individualise the stakeholder you will be designing for and map out the main phases of their journey throughout the service. Then draw sketches of the phases in the boxes or take pictures and use drawing technology to convert them into sketches. Afterwards, provide explanations of the phases to create a story of the stakeholder's journey. At each step along the way, identify the stakeholders needs at that moment and the channel or touchpoint through which this is met. Touchpoints pinpoint the intersection between stakeholders and the co-creation lab and thus how the stakeholder interacts with the lab itself. [...]

Reference: <https://www.silearning.eu/tools-archive/customer-journey/>



STAKEHOLDER JOURNEY



STAKEHOLDER STORYBOARD

Draw the key steps from the stakeholder's perspective.

Explain the key steps to create a story.

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NEEDS

At each key step, define the main need of the stakeholder.

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TOUCHPOINTS

Identify or design the touchpoints according to the need.

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STAKEHOLDERS MAP

Complexity: Medium

Time required: 3 hours

Material required: pen, post-its

WHAT'S FOR ?

The stakeholders map is a great tool for understanding who your partners are or might be and what role they play or could play in your ecosystem. It also allows you to visualise who you are targeting with your solution, what role each stakeholder could play in your strategy and how you will work directly together to reach them and by what means.

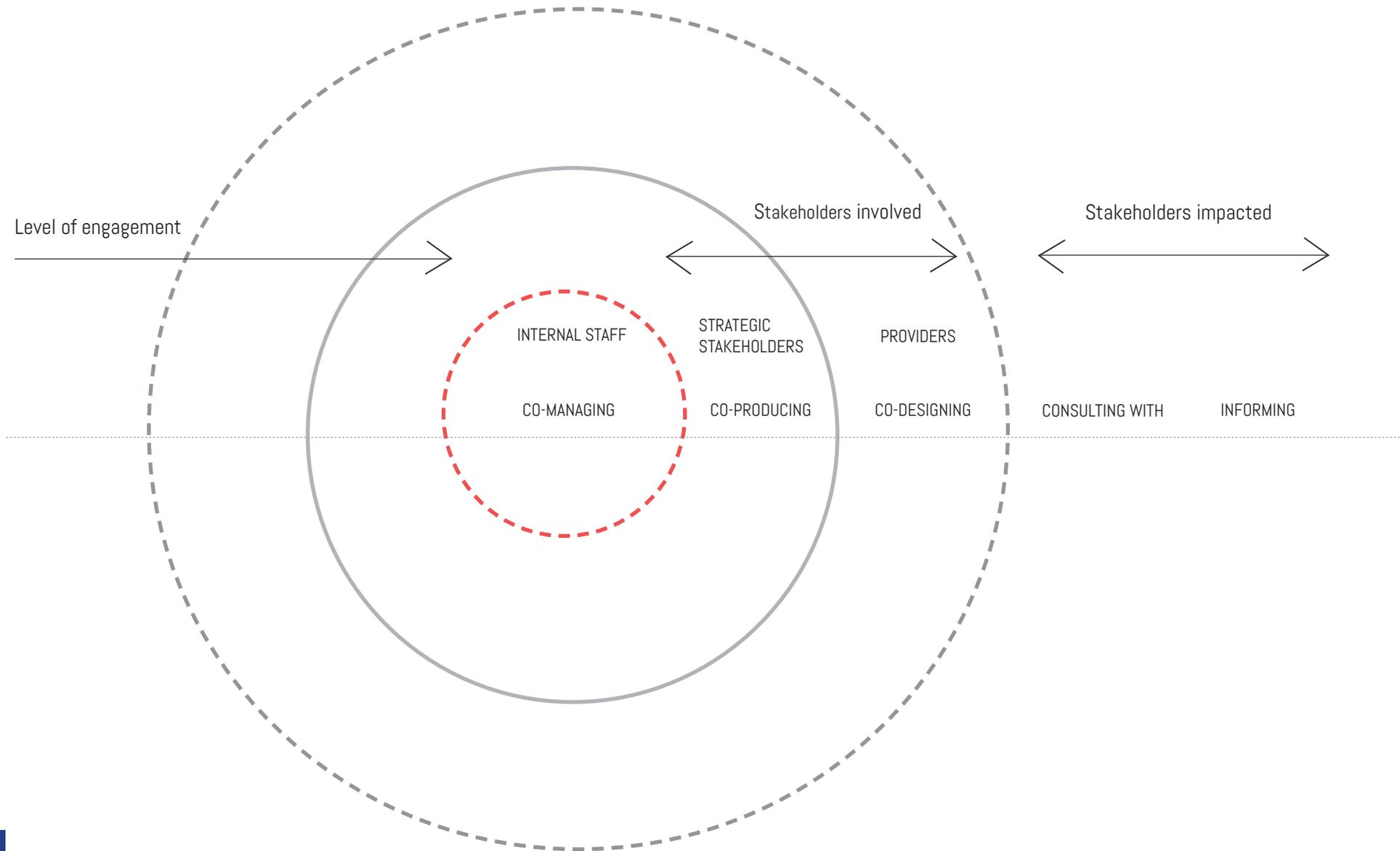
HOW TO USE IT ?

Start by jotting down who is involved in co-managing the solution: internal personnel, proactive stakeholders and beneficiaries. Then move outwards and list your strategic stakeholders and technical providers who might co-design and co-produce the solution with you. Conclude by noting down the stakeholders who are impacted by the solution and dividing them into groups: those with whom you may have consulted for advice and insight when designing the solution and those who are merely informed of the solution.

Reference: <https://www.silearning.eu/tools-archive/stakeholders-map/>



STAKEHOLDERS MAP



BUSINESS MODEL

Complexity: Medium

Time required: 2 hours

Material required: pen

WHAT'S FOR ?

Fleshing out the business model of your idea in a canvas is a key aspect in furthering the design of the concept by providing the big picture on the processes that go on to ensure that value is created, delivered and captured. The tool is a precursor to drawing up a complete business plan and is useful for formulating in a more rapid and cost-efficient manner the business model behind the idea for the initial phases.

HOW TO USE IT ?

The social innovation business model canvas is made up of 15 blocks. Unlike other similar business model canvases, this one has been modified to better suit social innovations, including among others the following changes: a specific social value proposition, a separation between beneficiaries and financing supporters, and boxes dedicated to surplus designation and social impact measurement. The canvas can be completed in any order.

Reference: <https://www.silearning.eu/tools-archive/business-model/>



BUSINESS MODEL CANVAS

PARTNERS

Are there any supporters providing key resources or services?

ACTIVITIES

What kind of activities are required to the implementation of the plan?

SOCIAL PROBLEM / NEED

Describe the social problem that will be addressed.

SOLUTION

Describe the proposed solution.

SOCIAL VALUE PROPOSITION

Describe the values that will be delivered to the beneficiaries and stakeholders?

RELATIONSHIPS

Describe the different kind of relationships with the different stakeholders.

BENEFICIARIES

Who will benefit from the solution proposed?

RESOURCES

What kind of key resources are required for the plan implementation?

EXISTING ALTERNATIVES

Are there any existing solutions? How does this one differ from the others?

SOCIAL IMPACTS MEASURE

How the social impact will be measured?

COMMERCIAL VALUE

What is the value delivered to financial supporters?

CHANNELS

How to reach the beneficiaries?

FINANCE SUPPORTERS

Who are the financial supporters?

COSTS

Describe the cost structure (e.g. the costs of different activities, fixed costs, and variable costs).

SURPLUS

Where any eventual surplus will be invested?

REVENUES

Describe the revenue streams. How much does each revenue stream contribute to overall revenues?

SERVICE BLUPRINT

Complexity: Medium

Time required 4/5 hours

Material required: pen

WHAT'S FOR ?

The Service Blueprint is an operational tool that gives an overview of the organisation's operations: key activities, products, services and points of interaction with the intended audience, stakeholders and beneficiaries. The tool is quite useful for planning or improving a service as it demonstrates what is happening along the service line and who is doing what through what means.

HOW TO USE IT ?

The Service Blueprint should involve a representative from each area of the service. The first step is to identify which user you're planning for: customer or beneficiary if you have more than one. Then plot out the different steps that are taken before, during and after using the service.

How do you engage the users and notify them of your service? What happens when they decide to use it? How do you stimulate re-use of the service or properly end the use of the service? These are all questions that must be considered when constructing the blueprint of the service.

After mapping out the steps of the user (See Customer Journey tool), the rest of the worksheet can be filled out line by line according to the steps individuated. At the end of the activity, a line of interaction is created between what happens out front and what needs to happen in the back.

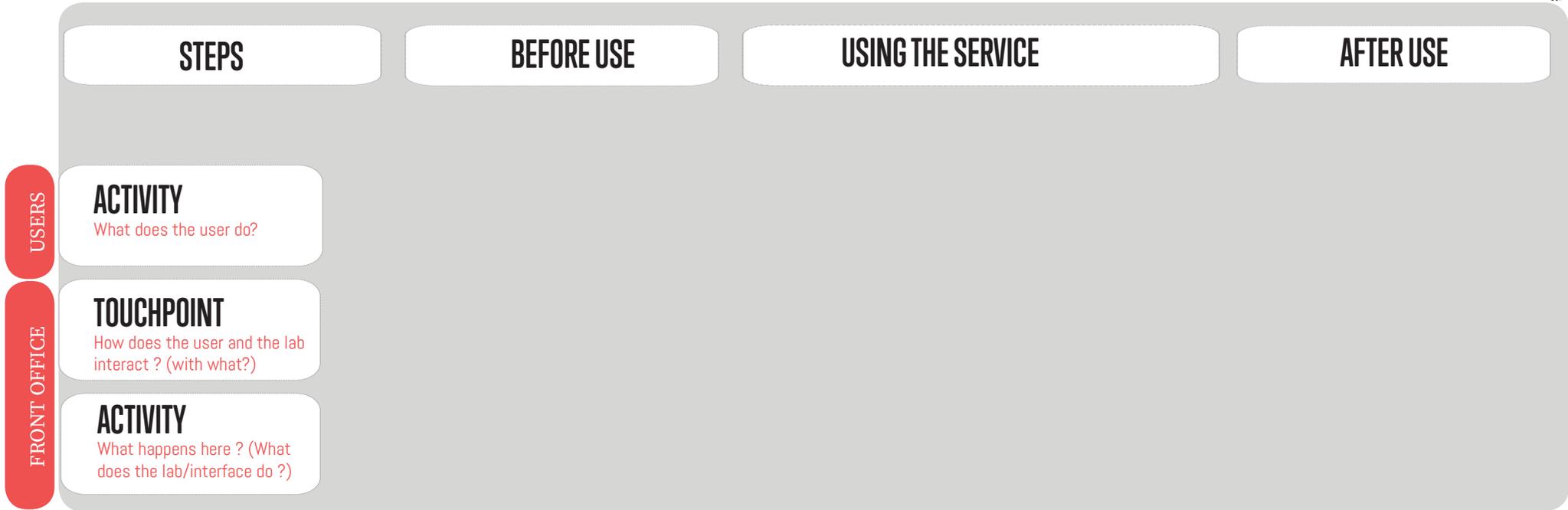
Reference: Flanders Service Design Toolkit www.servicedesigntoolkit.org, sillearning.eu/



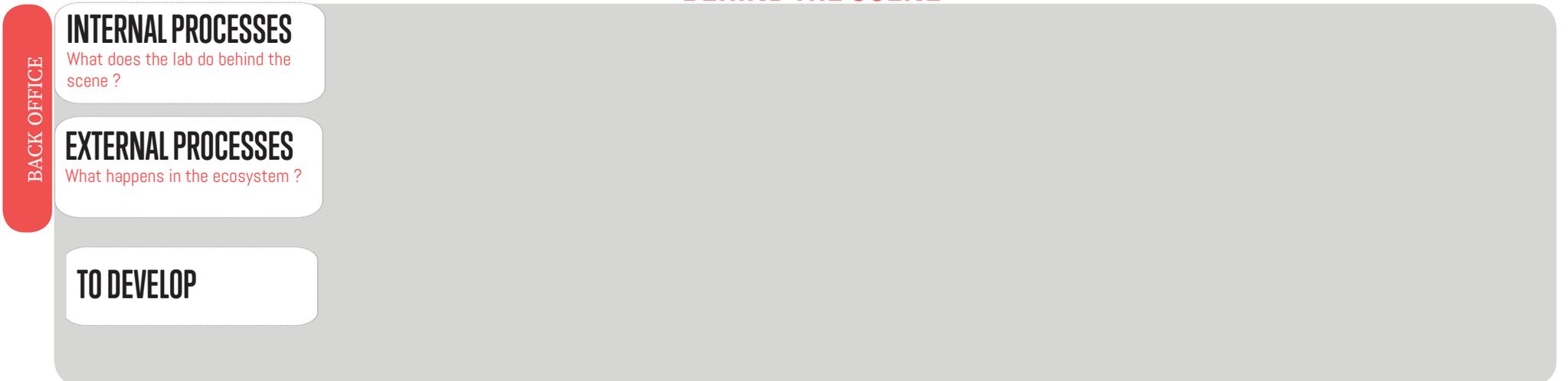
Icons by Gregor Cresnar from the Noun Project



SERVICE BLUEPRINT



BEHIND THE SCENE



ACKNOWLEDGEMENTS

Designed by Massimo Menichinelli, Priscilla Ferronato , Pamela Villa and Marion Real.

Icons by Gregor Cresnar from the Noun Project.

Web References

Kumar, V. (2012). 101 design methods: A structured approach for driving innovation in your organization.

John Wiley & Sons. <http://www.101designmethods.com/>

SIC project learning repository. <https://www.silearning.eu/>

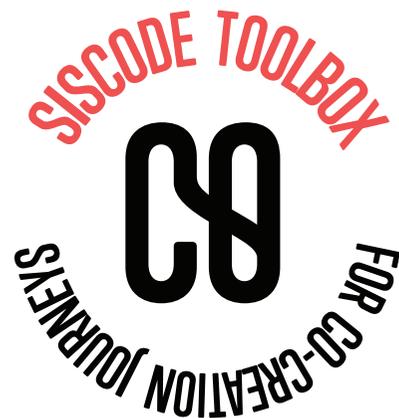
SISCODE Deliverables

Deliverable 1.1: Rri Research Landscape

Deliverable 1.2: Co-Creation In Rri Practices And Sti Policies

Deliverable 1.3: Theoretical Framework And Tools For Understanding Co-Creation In Contexts





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