

SYSCODE CO-DESIGN FOR SOCIETY IN INNOVATION AND SCIENCE

DELIVERABLE 5.2

INTERACTIVE GUIDEBOOK

This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under grant agreement No. 788217.



Work Package	5
Task	5.2
Due Date	30/04/2021
Submission Date	30/04/2021
Deliverable Lead	POLIMI
Dissemination Level	public
Document Nature	<input checked="" type="checkbox"/> R-Report <input type="checkbox"/> O-Other
Authors	Felicitas Schmittinger, Ilaria Mariani, Alessandro Deserti, Francesca Rizzo
Reviewers	Matteo Merzagora, Aude Ghilbert
Status	<input type="checkbox"/> Plan <input type="checkbox"/> Draft <input type="checkbox"/> Working <input checked="" type="checkbox"/> Final <input type="checkbox"/> Submitted <input type="checkbox"/> Approved

Revision History

Revision	Date	Author	Organization	Description
0.1	23.04.2021	Felicitas Schmittinger, Ilaria Mariani, Alessandro Deserti, Francesca Rizzo	POLIMI	Draft, Insertion of contents
0.2	27.04.2021	Matteo Merzagora Aude Ghilbert	TRACES	Review
0.3	30.04.2021	Felicitas Schmittinger	POLIMI	Final check

The information, documentation and figures in this deliverable are written by the SISCODE project consortium under EC grant agreement 788217 and do not necessarily reflect the views of the European Commission. The European Commission is not liable for any use that may be made of the information contained herein.

TABLE OF CONTENTS

Executive summary	6
1. Co-creation for implementable RRI - Making sense of co-creation approaches	8
1.1. Objectives of the Interactive Guidebook	8
1.1.1. Purpose within the project	8
1.1.2. Objectives beyond SISCODE	9
1.2. Target users	9
1.3. Relation with other tasks and deliverables	10
2. Development of the Interactive Guidebook	13
2.1. Allocating the development process within SISCODE's framework	13
2.2. Development process	14
2.2.1 Task set-up and initial research	15
2.2.2 Research and concept development	15
2.2.3 Definition and design of the structure	18
2.3. Content selection, adaptation and production	23
2.4. Technological development	25
3. The Interactive Guidebook	26
3.1. Structure and information architecture	26
3.3 Contents	27
3.3.1. Introduction and theoretical background	27
3.3.2. Process of co-creation and phases	28
3.3.3. Cards	30
4. Expected impact, potential and future steps	31
4.1 Current status and use	33
4.2 Exploitation and future opportunities of application	34
4.2.1 Potential for exploitation	34
4.2.2 Plans for future development	35
References	36
Annexes	37

LIST OF ABBREVIATIONS

ABBREVIATIONS	EXPLANATION
WP	Work package
RRI	Responsible Research and Innovation
SwafS	Science with and for Society
MOOC	Massive Open Online Course
IAAC	Institute for Advanced Architecture of Catalonia - SISCODE partner
TRACES	Association Traces Théories et Réflexions sur L'Apprendre la Communication et L'Education Scientifiques - SISCODE partner
SPI	Sociedade Portuguesa de Inovação - SISCODE partner
APRE	Agenzia per la Promozione della Ricerca Europea - SISCODE partner
DDC	Danish Design Center - SISCODE partner
COVID-19	Coronavirus disease

LIST OF FIGURES

FIG 01 - RELATIONS WITH OTHER TASKS AND DELIVERABLES.....	12
FIG 02 - SISCODE DESIGN-BASED LEARNING FRAMEWORK.....	13
FIG 03 - RESOURCES OF THE GUIDEBOOK.....	14
FIG 04 - GANTT CHART FOR THE DEVELOPMENT OF THE GUIDEBOOK.....	14
FIG 05 - MURAL BOARD DEVELOPED DURING THE GROUP DISCUSSION.....	17
FIG 06 - PHASES AND DIMENSIONS DEFINING THE STRUCTURE OF THE INTERACTIVE GUIDEBOOK...	19
FIG 07 - INITIAL DRAFT FOR THE STRUCTURE OF THE GUIDEBOOK.....	20
FIG 08 - PHASES OF THE CO-CREATION PROCESS PROPOSED.....	21
FIG 09 - INITIAL MOCK-UP OF THE WEBSITE.....	22
FIG 10 - MAP OF TOOLKITS, HANDBOOKS AND GUIDES TO BE INTEGRATED.....	23
FIG 11 - DATA COLLECTION AND CONTENT CREATION FOR THE CARDS.....	25
FIG 12 - OVERALL STRUCTURE OF THE INTERACTIVE GUIDEBOOK.....	27
FIG 13 - INTRODUCTION AND THEORETICAL BACKGROUND.....	28
FIG 14 - PHASES AND CARDS.....	29
FIG 15 - CARD DETAILS.....	30

LIST OF TABLES

TABLE 1 - ISSUES IDENTIFIED AND RESULTING DIRECTIONS AND FEATURES FOR THE GUIDEBOOK...	18
--	----

ANNEXES

ANNEX 1 - ANALYSIS GRID FOR CASE STUDIES AND BIOGRAPHIES.....	37
ANNEX 2 - SISCODE TOOLBOX.....	43

Executive Summary

The SISCODE (Society in Innovation and Science through CO-Design - siscodeproject.eu) project aims to explore the application of co-creation for the operationalization of Responsible Research and Innovation (RRI). It relies on the knowledge gathered from the investigation of the theoretical background, the analysis of existing cases of applied co-creation across Europe and beyond, and the conduction of 10 real-life experimentations in 10 different European countries and contexts. The Interactive Guidebook (referred to as the *Interactive Guidebook* or the *Guidebook* in the following) is part of the WP5 *Co-creation for implementable RRI* that interconnects the different lines of research investigated throughout the project by analysing a model of a co-creation ecosystem and its variations reasoning on a balance between universally applicable co-creation and the need to adapt approaches and tools to contextual factors, regulations and constraints.

A specific task within this work package (T5.4) *Making sense of co-creation approaches and tools* that feeds directly into the Interactive Guidebook described in this document takes a specific focus on the selection, systematisation, adaptation and provisioning of the approaches, methods and tools resulting from this research. The aim is to translate the findings described in this work package into an interactive tool for the design of co-creation strategies.

With the SISCODE project aiming for a user-centric process in policy making, the guidebook has followed a user-centric approach as well in its development. The structure and contents were collaboratively developed with partners from the consortium with the occasional involvement of externals. It is meant to be an open source for researchers and practitioners communicating the aim, principles and results of the SISCODE project.

This document reports the overall theoretical background of the SISCODE Interactive Guidebook, its development process and its final structure and contents.

The first chapter reports on the theoretical background of the task, its purpose and goals within and beyond the project and its target users. It is grounded in the research on co-creation processes and ecosystems conducted in SISCODE and the application of specific methods and tools through these processes. The Guidebook addresses the difficulties and barriers identified in relation to the set up and conduction of co-creation processes. It aims to reach practitioners and organisers of initiatives as two specific profiles that frequently

are challenged with the organisation of co-creation projects and activities. Moreover, the relation of the Interactive Guidebook to other tasks, contents and activities within SISCODE is described.

In the second chapter, the development of the Interactive Guidebook is illustrated starting from its allocation in the overall timeline of SISCODE, up to the research and co-creation of the purpose, structure and contents of the Guidebook itself. The entire development process has been carried out with a collaborative approach, and a series of project partners and external resources from other projects in the field of RRI were involved in collaborative work sessions, and group discussions. The section concludes with the process of collaboratively analysing, selecting and producing the content for the Interactive Guidebook together with the technical aspects of the development.

The third chapter reports the SISCODE Interactive Guidebook as an output describing its accessibility, core structure, information architecture and graphic style as well its final functions and contents aligned with the other outputs and results of SISCODE.

Finally, the concluding section describes the dissemination and the role of the Interactive Guidebook in the activities from its completion until the conclusion of SISCODE and beyond taking the necessity for maintenance and updates into consideration together with the possibility to integrate entirely new sections or modify the current structure depending on the development of the landscapes of RRI and co-creation in the near future.

1. Co-creation for implementable RRI - Making sense of co-creation approaches and tools

The Interactive Guidebook is part of SISCODE's WP5 *Co-creation for implementable RRI* that analyses a model of co-creation ecosystems and its variations given by the diversity of contextual factors and policy environments that constitute the ecosystem in which co-creation initiatives take place. The work package interconnects the previous research on the theoretical background of RRI and co-creation with the existing cases across Europe and the pilot experimentations conducted within SISCODE.

It aims specifically to:

- Identify, analyse and understand drivers and barriers for the implementation of a co-creation ecosystem in different contexts together with indications on how to fully exploit the drivers and overcome barriers;
- Investigate and define the preconditions in terms of organisational structures, administration, resources and procedures and therefore the changes and transformations that the effective building of a co-creation ecosystem requires;
- Produce a dynamic model of co-creation ecosystems that varies according to the surrounding cultural, organisational and regulatory aspects under which co-creation develops; and
- Analyse, systematise and make sense of existing and published approaches, methods and tools for co-creation.

The Interactive Guidebook described in this document is the result of the last-mentioned point in the final phases of the project. It gathers theoretical knowledge and combines them with the empirical findings and results of SISCODE to translate it into concrete directions and elements as a support for the set-up of co-creation strategies and a heritage of SISCODE.

1.1. Objectives of the Interactive Guidebook

1.1.1. Purpose within the project

A series of approaches, methods and tools has been analysed, adapted and applied throughout SISCODE experimenting with a variety of methodologies and tools from different fields and their integration in co-creation and RRI. The results and findings from

these experimentations were elaborated and reflected on to address three different issues in relation to methods and tools:

1. The plethora of tools available from different fields and gathered in interactive websites, toolkits, scientific publications and others that are missing connections among them and raise difficulties in choosing the right and appropriate tools;
2. The selection and adoption of the single instruments that without adaptation and guidance for application are risking to be entirely de-contextualised decreasing their efficacy and potential to obtain the desired results;
3. The imbalance in instructions, methods and tools available for the different phases of a co-creation process. A strong focus on the phase of ideation was identified leading to difficulties to develop implementable concepts by not taking contextual constraints into consideration.

The SISCODE Interactive Guidebook aims to transform the potential solutions and best practices in relation to these main problems into an interactive instrument for the design of co-creation processes by providing general guidance and instructions together with direct access to existing tools and toolboxes.

1.1.2. Objectives beyond SISCODE

The guidebook is meant to be a part of the heritage of the SISCODE project. As the empirical synthesis of the WP5 *Co-creation for implementable RRI*, it connects the findings and insights on co-creation ecosystems with the findings of WP3 *Experimentation in co-creation labs*. All the insights and pathways to overcome the identified barriers in planning and conducting co-creation initiatives in an RRI context are translated in the structure and functioning of this guidebook. Moreover, the existing plethora of tools and toolboxes was analysed, selecting the most relevant elements according to the SISCODE approach to facilitate access by integrating them in the guidebook.

The SISCODE Interactive Guidebook aims to provide concrete support to those who wish to apply co-creation supporting them with an interactive tool to set up co-creation strategies, plan entire projects and single activities exploring and receiving support in studying and choosing methods and tools as a support for the conduction of these activities.

1.2. Target users

The target users of the guidebook have been chosen during the development process investigating the various potential target groups that have been addressed and analysed

during the SISCODE project as developers of co-creation strategies. Following initial considerations on policy makers as the main target group for SISCODE results, it has been decided to adopt a more inclusive approach. On one hand, policymakers are already directly reached with both the Learning Repository¹ and the Massive Open Online Course (MOOC)² as funnels for SISCODE specific results addressed to policy makers. On the other hand, it has been found that often the initiators of co-creation initiatives are not policymakers themselves, but other entities like labs, industrial organisations, (European) projects or similar that may profit from support on how to design co-creation strategies that involve policymakers as stakeholders.

Based on this reasoning, the overall target has been divided in two main target groups with divergent needs to be addressed specifically in the Interactive Guidebook:

- **Practitioners**

As initiators or members of an initiative or project that are then directly involved in its progress. This profile may apply for members of labs or organisations involved in co-creation initiatives.

- **Organisers**

As initiators and planners of co-creation initiatives, opposed to practitioners, organisers are not directly involved in the unfolding of the process, but are rather responsible to set up and plan the process as well as monitoring and adjusting it from behind the scenes

The concrete way of how these two profiles are addressed in the Guidebook is described in chapter 2.2 of this deliverable.

1.3. Relation with other tasks and deliverables

As part of *WP5 Co-creation for implementable RRI* the Interactive Guidebook, builds on the previous results and findings by interconnecting them to draw concrete and practical conclusions. The theoretical base emerged from *WP1 RRI approaches and methodologies* is vicariously included as the basis of the entire (theoretical) analysis influencing the other WP's as well.

¹ <http://www.siscodeproject.eu/repository/>

² available at https://www.pok.polimi.it/courses/course-v1:Polimi+CCP101+2021_M3/about

The case studies and biographies from *WP2 Benchmark and compare co-creation cases across Europe* directly influenced the analysis of how co-creation has been practiced in different contexts identifying drivers and barriers. The insights from these reports were directly considered for the development of the guidebook. For example, the different roles in the co-creation process have been identified as the ones of the initiator, the funder/investor, the facilitator or the one of the participants that may overlap and not be clearly defined³. This distinction of passive and active, organising and executing roles have been considered and supported when developing both the target group and the different profiles for the Guidebook.

WP3 Experimentation in co-creation labs had a major influence on the development process. The empirical findings from the practicing labs were highly valuable when developing a guide for effective application of co-creation. The insights from both the biographies from WP2 and the cases of the SISCODE pilots from WP3 have been extracted by means of an analysis grid developed within task *T5.2 Dynamics of co-creation ecosystems* based on the main dimensions of stakeholder engagement, co-creation and dissemination (see Annex 1). With all three dimensions being interconnected and transversal, not only the data related to the dimension of co-creation was utilized, but also the other two dimensions led to the understanding of how co-creation has been planned, applied, adapted and evaluated resulting in an improved comprehension of the applied co-creation process and the identification of best practices. A strong connection point with WP3 is the integration of the single tools of SISCODE's co-creation toolbox⁴ into the Guidebook aiming to make them more accessible and further disseminate this result of the SISCODE project.

WP4 Playground for policymaking provided a series of insights that fed the reasoning at the basis of the Interactive Guidebook. A series of recommendations on how to stimulate co-creation in the operative playground connecting top-down and bottom-up approaches⁵ raised some key points to be addressed like the necessity to reduce power imbalances or find and communicate evidence for the benefits of co-creation. These issues led to the selection of specific approaches, methods and tools to be included in the Guidebook that could function as a support in overcoming the identified barriers.

³ See SISCODE D2.3 Comparative Analysis

⁴ See SISCODE D3.1 Co-creation journeys, chapter 1

⁵ See SISCODE D4.1 Design for policy making, chapter 7

WP5 Co-creation for implementable RRI foresees two deliverables: The Interactive Guidebook and a theory-based report, *D5.1 Models of co-creation ecosystems*. The parallel development of the tasks allowed a cross-pollination with the Guidebook functioning as a translation into practice of the first findings identified. D5.1 triangulates the results from the case studies and biographies from WP2 with the ones of the pilot experimentation conducted in WP3 to analyse the dynamics of co-creation ecosystems. The preliminary results and considerations that were made while the Guidebook was being developed fed into the overall direction and design of the Interactive Guidebook that aims to support the activation and activity of such ecosystems.

WP6 Exploitation strategy and *WP7 Engagement and dissemination* have been involved in the task development as considerations on how this Guidebook could become a means of sharing the SISCODE, how it may be exploited and disseminated and considered as a heritage of the project. These reflections strongly influenced the choice of the target group and the overall structure of the guidebook.

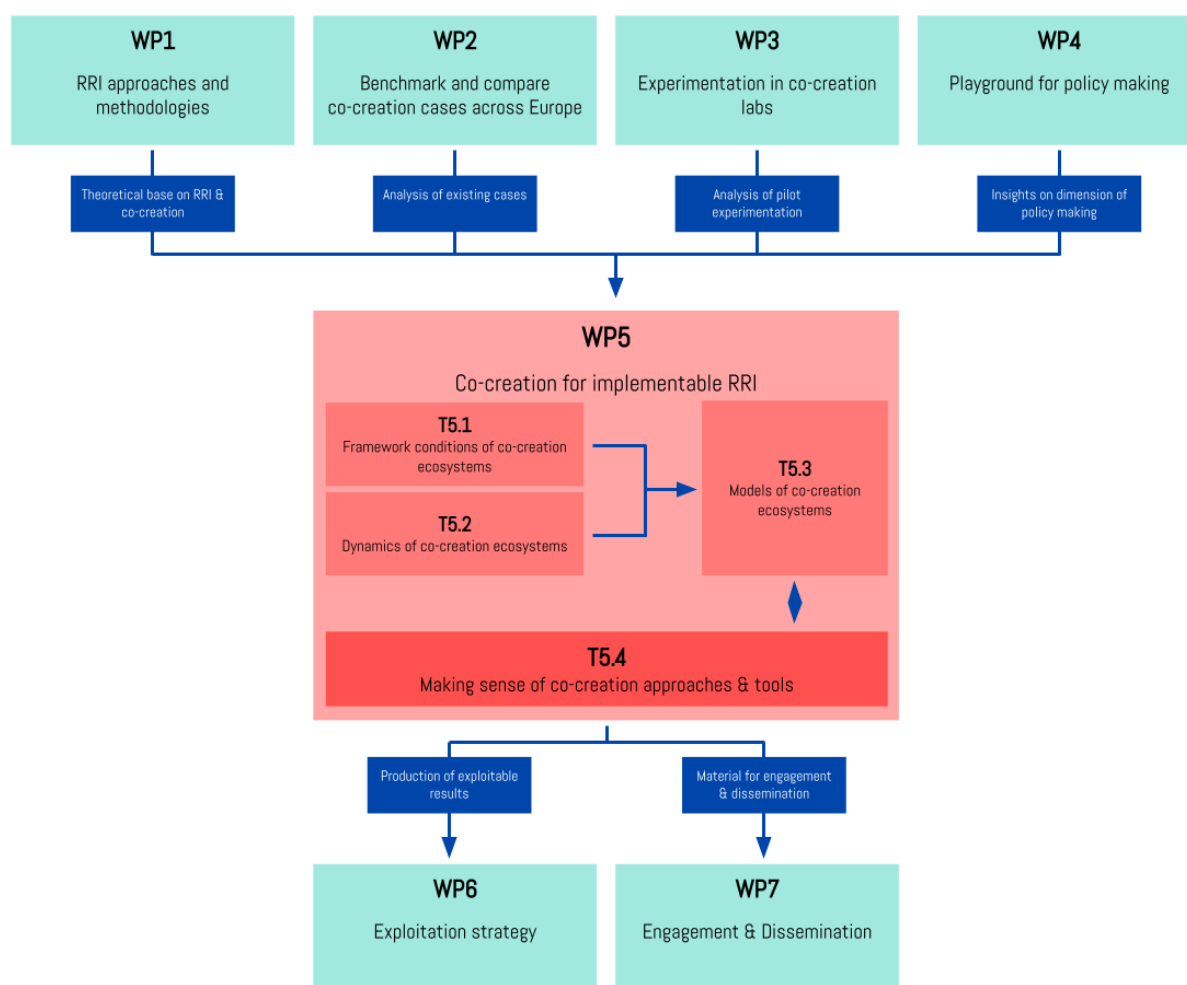


FIG 1 - RELATION WITH OTHER TASKS AND DELIVERABLES

2. Development of the interactive guidebook

2.1. Allocating the development process within SISCODE's framework

The development process of the Interactive Guidebook has been carried out according to the overall principles of the SISCODE project. Involving a variety of partners from the consortium and beyond in its development, it has unfolded following a similar process as the one that the pilots experimentations in WP3 underwent⁶ (Fig 2).

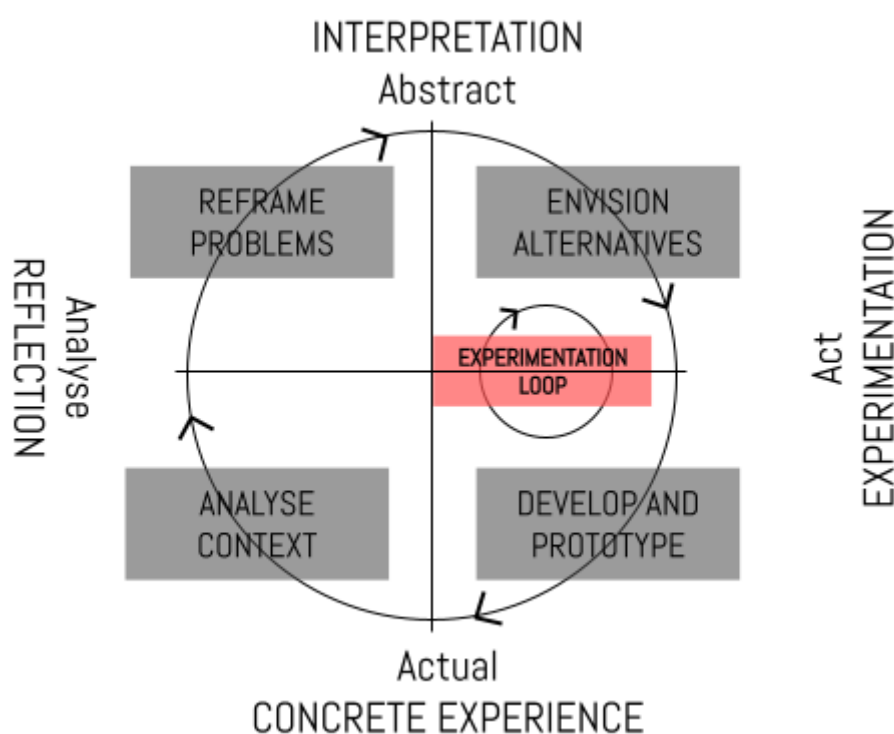


FIG 2 - SISCODE DESIGN-BASED LEARNING FRAMEWORK

In the beginning, the current landscape of supporting tools and guidebooks has been analysed to define the precise problems and lacks in the existing material and the resulting gap (Fig.3). Envisioning alternatives and potential solutions led to the collaborative development of ideas and preliminary concepts that have then been prototyped and reflected on within the consortium and external professionals.

⁶ see SISCODE D3.1 Co-creation Journeys

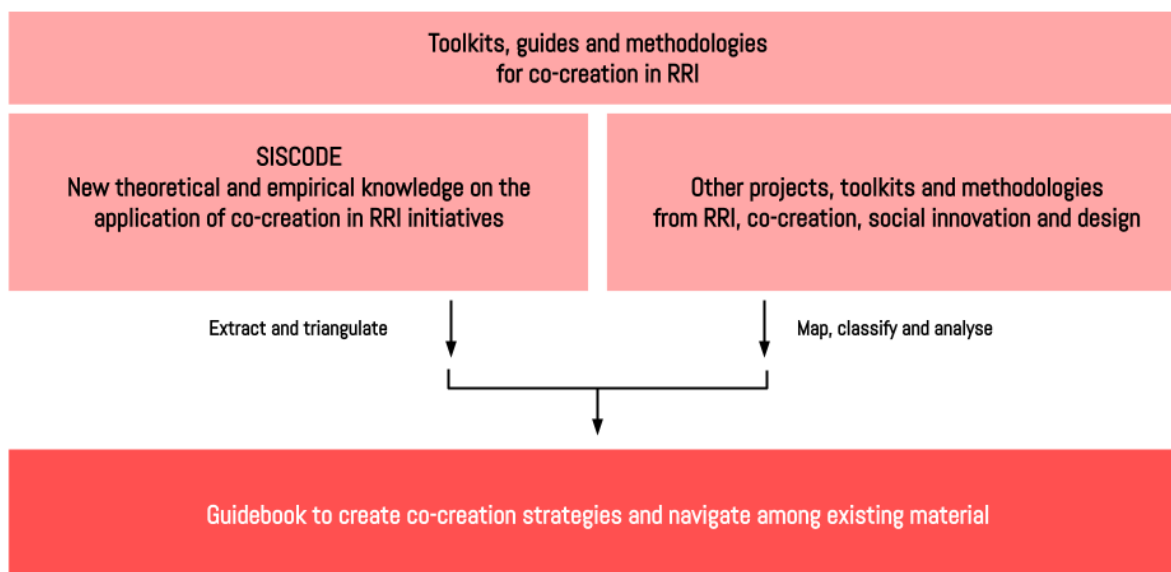


FIG 3 - RESOURCES OF THE GUIDEBOOK

2.2. Development process

The development of the Interactive Guidebook was carried out over the timespan of the final eight months of the SISCODE project starting from September 2020 until the conclusion of the project in April 2021. Fig. 4 outlines the overall development process through a Gantt chart.

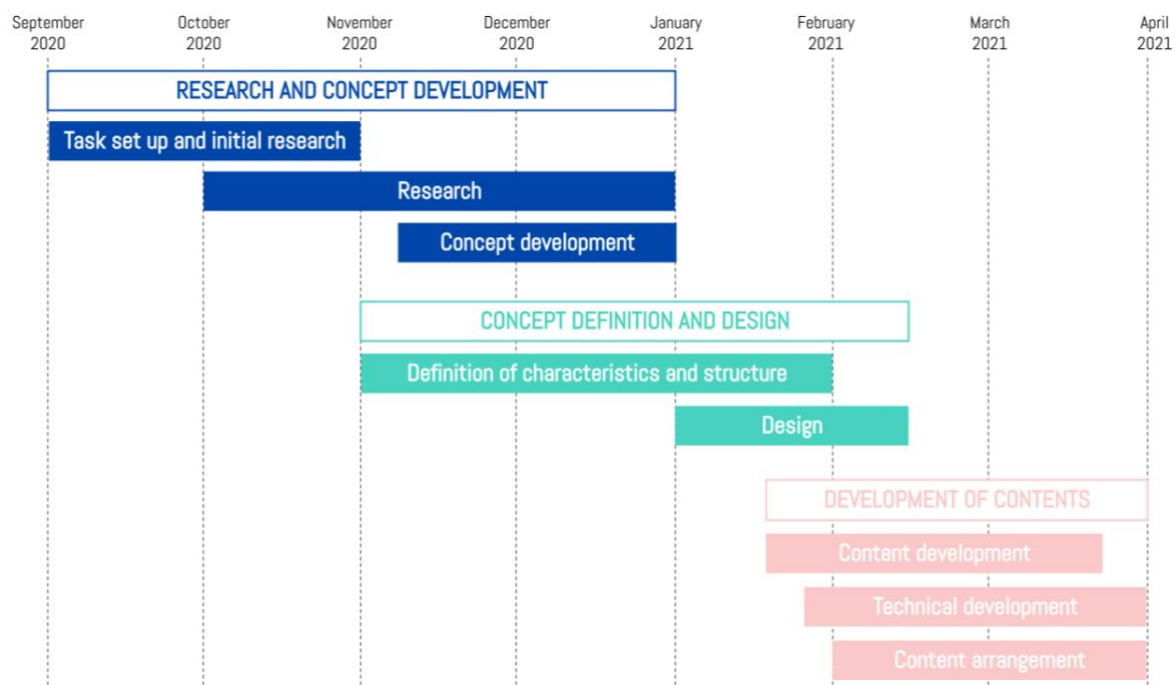


FIG 4 - GANTT CHART FOR THE DEVELOPMENT OF THE GUIDEBOOK

2.2.1 Task set-up and initial research

The initial phase of setting up the task and planning the research and activities was initiated with a meeting including all consortium members and partners involved in the task: IAAC, DDC, TRACES, SPI and APRE.

Starting from the Description of Action of SISCODE, a desk research on existing material and topics was carried out leading to the definition of some core aspects important for the overall Guidebook and the development process:

- Analysis of existing tools, toolboxes and guidebooks to identify issues and problems to then create a guide for the abundance of existing resources rather than create another, additional toolbox
- Collaborate with other projects that have addressed or are dealing with similar issues, especially a series of other SwafS projects (Science with and for Society⁷) had developed tools, entire toolkits or guidebooks throughout their process as well
- Take a specific focus on the topic of ‘Monitoring and assessment’ as a recurring issue in the field of RRI. This would not only allow synergies with other projects, but activate exchanges on the topic that has also been addressed during the pilot experimentation in SISCODE providing a series of indications and directions to be explored further⁸.

This aim to build synergies and investigate the current landscape has been addressed identifying a list of 62 relevant projects across Europe in total dealing with the topics of RRI, co-creation or the development of design toolkits.

2.2.2 Research and concept development

To obtain more specific insights from the identified projects, a questionnaire has been shared with the previously identified contact list of other projects and experts in the field of RRI and co-creation to obtain insights on needs as well as identify people that could be invited for an in-depth discussion elaborating on the central issue of the guidance needed for applied co-creation.

The questionnaire was aimed at the investigation of collaborative practices in general and consisted in:

⁷ see <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/science-and-society>

⁸ see SISCODE D3.5 Assessment report

- An initial part investigating the general previous experience in applying collaborative practices like the fields of application (co-creation, RRI, Social Innovation, Service Design, User-centred Design others) and the phases of the process where these collaborative practices have been applied following the general phases of the SISCODE project that may be generally applied to other projects and processes as well (Context analysis, Problem Definition, Ideation, Prototyping & Testing) and asking for general obstacles and difficulties that have been encountered when applying collaborative practices
- A second, non-mandatory part, going in depth on the previously mentioned issues asking for concrete examples of applied collaborative practices, allocating them in the overall project where they have been applied and detailing methods and tools used. Furthermore, specific shortcomings and benefits were to be stated as well as indicating particularly successful and helpful examples or best practices.

The questionnaire provided few new insights in respect to what was already familiar to the SISCODE partners, but on the basis of the respondents, their answers and other existing contact, a group discussion with people from the fields of co-creation and RRI was set up to verify and discuss the basic assumptions made for the development of the guidebook.

The discussion was set up as an open conversation and discussion among participants with a general division in three main topics: i) The collective discussion and mapping of the current landscape of material available to support co-creation from different fields, ii) The unsatisfied needs in this landscape discussing drivers and barriers, risks and opportunities and iii) Specific elements of support that would make a guide effective and reflections on how existing toolkits and handbooks could be connected and complemented.

The discussion involved external experts operating mainly in the field of RRI in a variety of SwafS projects as well as SISCODE consortium members from academia and co-creation labs. The fruitful discussion led to the confirmation of the previously made assumptions raising some key points:

- **Accessibility** of information and user-friendliness, the information and material exists already, but there's no order or guidance.
- **Context awareness and adaptability** are crucial when speaking about applied co-creation since every project is different and needs to apply co-creation in a different way.

- **Practice orientation** is often missing in existing toolkits and handbooks having been developed by researchers without direct empirical evidence.
- **Guidance, support and orientation** are fundamental since not all initiatives have internal experts of co-creation which requires the guidance to achieve a solid basis of knowledge and know-how.
- **The motivation for the application of co-creation** on the ground of the initiative is relevant to understand what kind of support is needed and if co-creation is being applied as a more responsible, inclusive approach or because the inclusion of co-creation is a project requirement.
- **Finding a common language** among project partners and stakeholders as well as alignment on commitments and benefits increasing transparency and communication making processes more clear and effective.

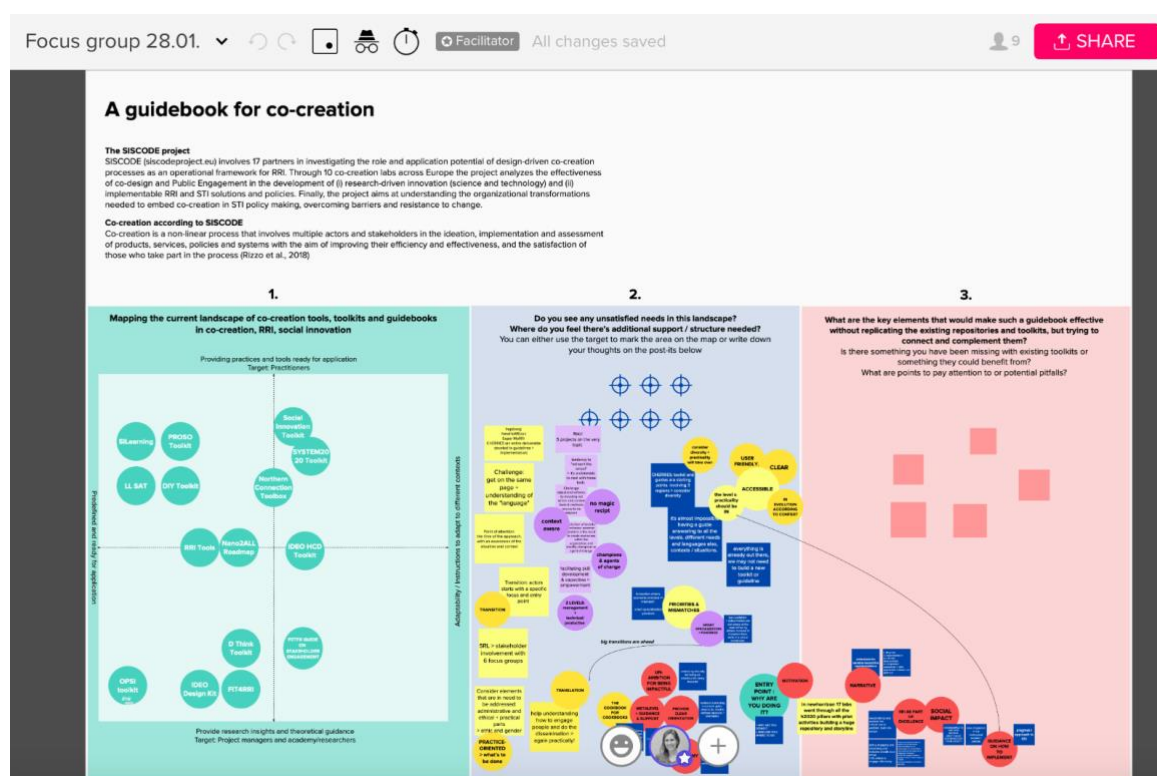


FIG 5 - THE MURAL BOARD DEVELOPED DURING THE GROUP DISCUSSION

2.2.3 Definition and design of the structure

Following the verification of the concept, the needs and issues identified and how they were to be addressed in the Guidebook are stated in the following table:

Issue / Need identified	Related aspects of the Guidebook
Overwhelming quantity of tools and toolkits available	Selection of the most relevant tools from different toolboxes
Different users/user groups have very different needs	Selection of two specific target groups to be addressed differently to better meet their needs
No one-size fits all - tools need to be selected and eventually adapted for each case	Additional section with instructions on why and how methods and tools can be and need to be modified
There is a need of basic understanding of the underlying topics	Introductory section giving an overview on the main topics and their backgrounds
The benefits of applying co-creation have to be made clear	Add specific methods to line out and analyse these benefits for the single actors
Communication of SISCODE findings and results	Add also the theoretical dimension addressed in SISCODE to strengthen the connection of theory and practice.
Contents should be personalised for the different profiles and scopes of application	Carefully chose the target to properly address needs as well as dividing the interactive part in two different profiles for the provision of more specific content.
Combination of theory and practice	Add also the theoretical dimension addressed in SISCODE to strengthen the connection of theory and practice.
Emphasis on the flexibility of the process	Make all elements of the interactive part modular and leave complete freedom to the user to address only single phases of the co-creation process proposed

TAB 1 - ISSUES IDENTIFIED AND RESULTING DIRECTIONS AND FEATURES OF THE GUIDEBOOK

Furthermore, it was decided to structure the Guidebook according to the process of designing solutions developed for the SISCODE project⁹ in order to provide a clear structure for the approaches, methods and tools to be inserted. In addition to the phases of the process for the *Design of Solutions*, a second dimension of *Monitoring & Assessment* was added deriving from the identified need of impact assessment¹⁰ deriving from the

⁹ see SISCODE D3.1 Co-creation journeys

¹⁰ see SISCODE D3.5 Assessment report

difficulties of placing co-creation in a given framework or scheme (Zhang & Chen, 2008). The impossibility to clearly define the methodologies and characteristics defining co-creation makes its evaluation a complex and variable task (Zhang & Chen, 2008; Frow et al., 2015).

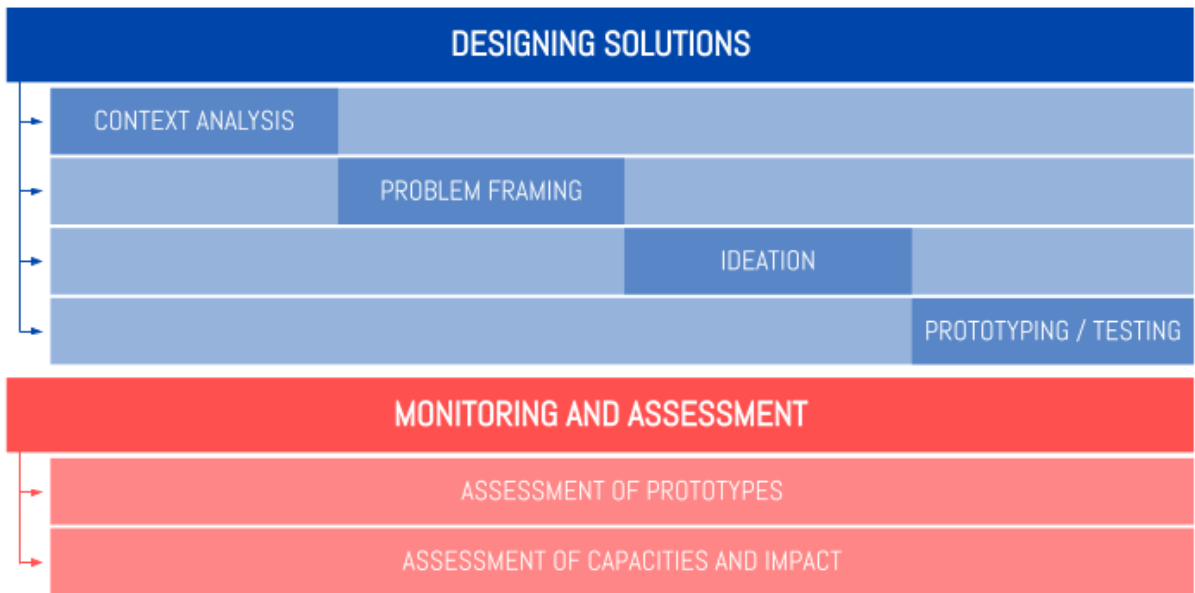


FIG 6 - PHASES AND DIMENSIONS DEFINING THE STRUCTURE OF THE INTERACTIVE GUIDEBOOK

First draft for the structure of the guidebook

Based on the directions and previously defined aspects for the Interactive Guidebook, an initial structure was developed to translate the single requirements in an overall solution to be further discussed (Fig.7)

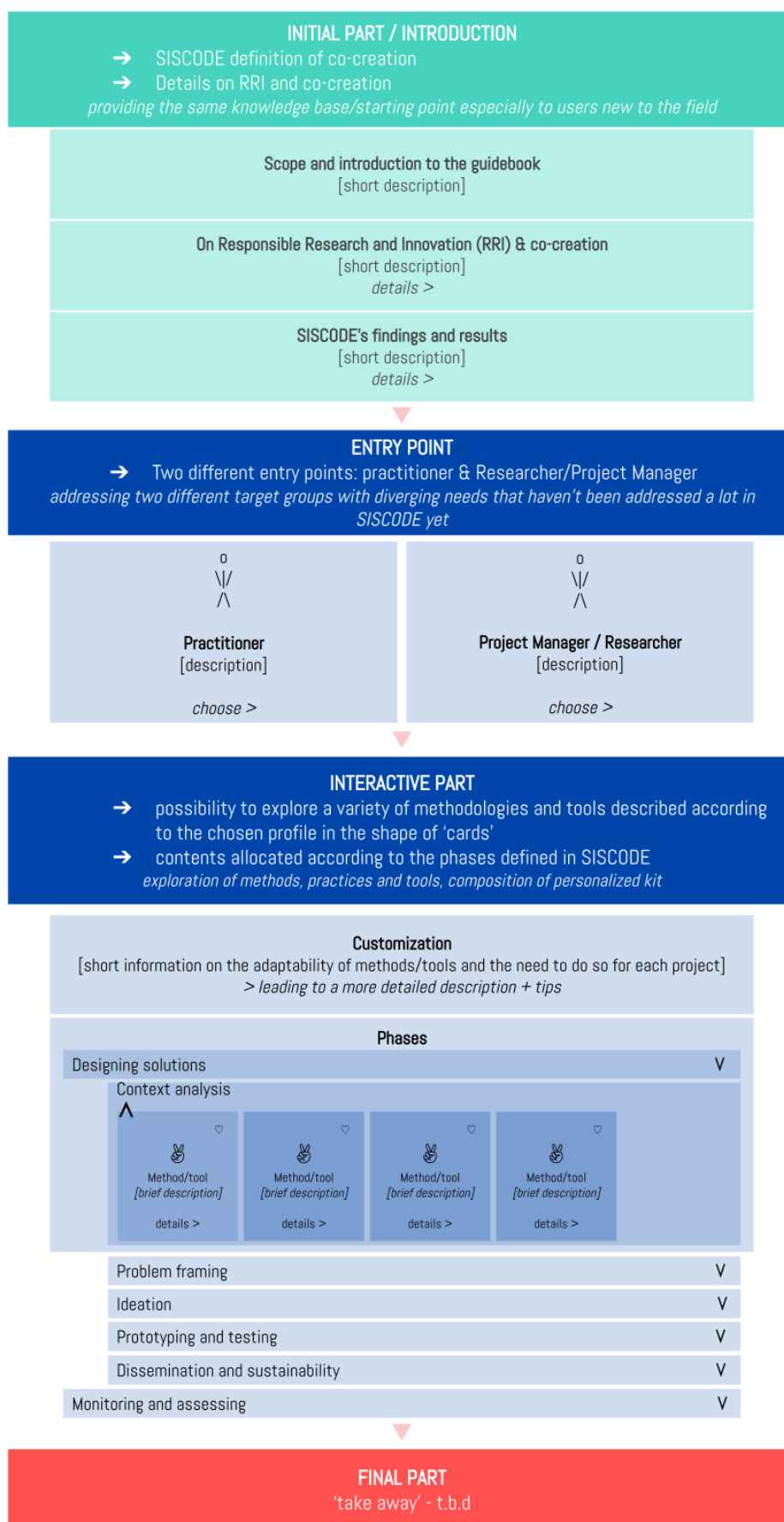


FIG 7 - INITIAL DRAFT FOR THE STRUCTURE OF THE GUIDEBOOK

Sharing and discussing this initial draft among SISCODE partners, some minor changes were made to refine the concept. They were related to the integration of results of SISCODE, the terminology and explanation for the two profiles, specifically:

- **Integration of the overall results of SISCODE** to connect the Guidebook further to the overall project and provide added value communicating the contribution of SISCODE to the topic of applying co-creation in RRI contexts
- **Naming and description of the two profiles** clearly distinguishing among practitioners taking operatively part in the application and organisers that are not actively carrying out co-creation but rather planning and organising activities of others
- **Adding an additional phase** in designing solutions related to the dissemination and sustainability of solutions that has not been considered previously, but was found to be fundamental for the further development, implementation and scaling of solutions.

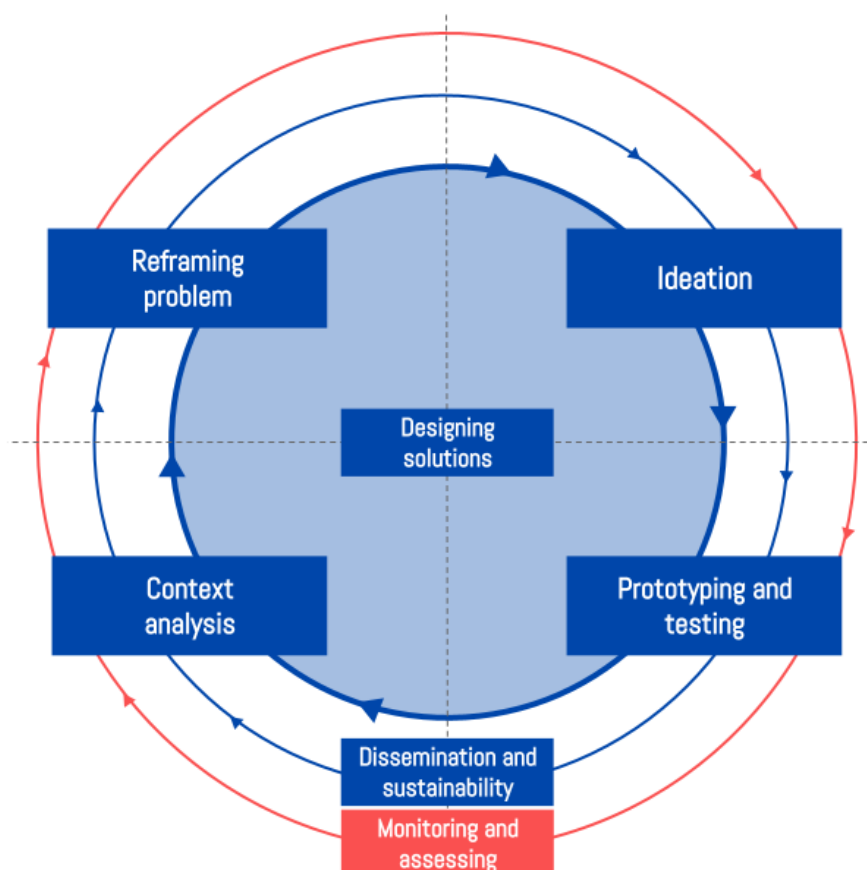


FIG 8 - PHASES OF THE CO-CREATION PROCESS PROPOSED



FIG 9 - INITIAL MOCK-UP OF THE WEBSITE

Following the definition of the overall structure, the list of toolkits and guides developed during the research phase was enriched with input from the SISCODE partners to be analysed for the content definition of the SISCODE Guidebook.

2.3. Content selection, adaptation and production

The content from the guidebooks, handbooks, manuals, toolkits and tools analysed during the initial phases has been examined in detail to select, extract and enrich the approaches, methods and tools to be inserted in the Guidebook.

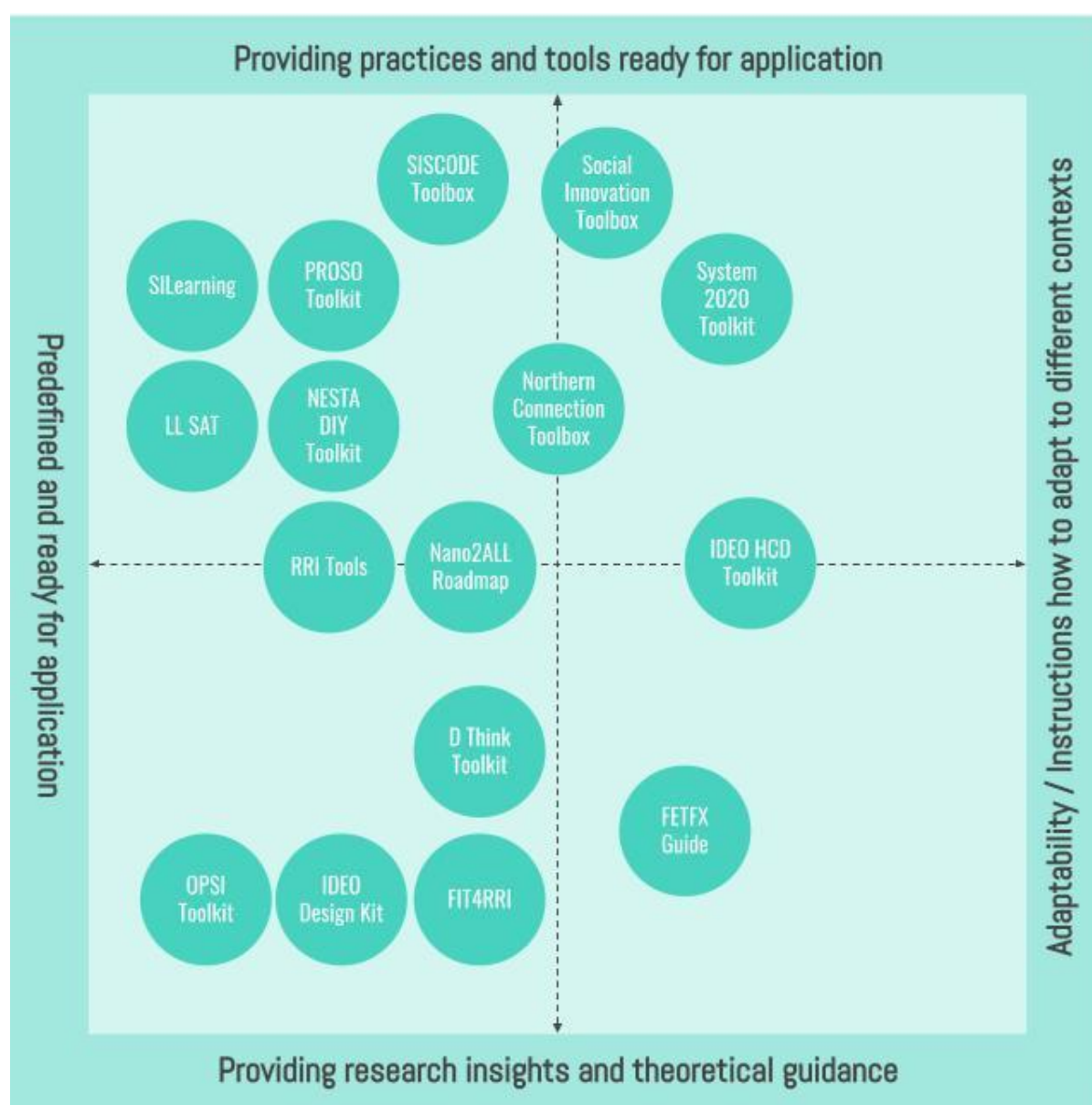


FIG 10 - MAP OF TOOLKITS, HANDBOOKS AND GUIDES TO BE INTEGRATED

These single elements, defined as cards, were allocated in the previously defined dimensions and phases elaborating the same aspects for each tool:

- **Type of content** choosing among approach, method or tool to provide a general classification of the cards
- **Synthetic description** detailing the scope and function of the approaches, methods and tools in one sentence.
- **Phase(s) of allocation** within the previously defined phases (Fig. 6, see chap. 2.2.3). Each card may be associated with one or more phases or subphases. Cards present in more than one phase have been described separately making direct reference to the phase of allocation in their description.
- **Profile** to which each card is associated. The association is possible either to one or both of the two profiles defined.
- **Template** or supporting material for the application or use. These can be PDF templates or interactive templates for the use on collaborative online platforms.
- **Reference** to the origins of the approach, method or tool in literature or relating to an online source.
- **Description for practitioners**, only present if the card is associated with the profile of practitioners, detailing the overall scope, the single functions and modes of application as well as practical tips.
- **Description for organisers**, only present if the card is associated to the profile of organisers, detailing the overall scope, the single functions and modes of application as well as general tips for its use.
- **Case studies / best practices** of use to support the application and eventual adaptation of the approach, method or tool in practice referring to case studies, blog posts or articles.
- **Related cards** listing other cards from the guidebook that are directly related, complementary or alternative to the approach, method or tool displayed

Table for mapping of existing content


PHASE	MATERIALS		TARGET		Case studies/B est practices	Related cards/tools
	Specific tools (even individual ones from toolkits), approaches, methods, and what's useful					
	SISCODE Name + specify if for Practitioner [P] or/and Researcher [R]	Others (projects/repositories)	Practitioner [P] --> later on it will bring to add a description = text that will be displayed in the interactive guidebook	Researcher/Project Manager [R] --> add description = text that will be displayed in the interactive guidebook		
Designing solutions [description] [P] [R]	Co-creation journey [P] [R]	-	[add description]	[add description]		
	-	Roadmap [P] [R] https://servicedesigntools.org/toolkit/service-roadmap Eg of template by MIRQ 	Planning of the process for the design of the solution dividing it in phases and allocating the different actions, activities and actors along those phases. Roadmaps help to previously structure a process and visualize at any point of the project the state of the art showcasing eventual needs to rethink or adapt the roadmap. TIPS:	Roadmaps serve for aligning multiple teams in the organization of a co-creation process, considering that multiple stakeholders and different goals and milestones will be achieved. From a project management perspective, they also allow different team members to have an overview of the entire process, a highlight on the most important tasks, and their relations. It gives a comprehensive picture that consents to make quick and aware decisions.		
Context analysis [description] [P] [R]	Stakeholder Map [P]		Identification of actors and stakeholders in the ecosystem to be involved in the development of a solution.	// Stakeholder		
Problem Framing [description] [P] [R]						
Ideation						

FIG 11 - DATA COLLECTION AND CONTENT CREATION FOR THE CARDS

2.4. Technological development

The Interactive Guidebook was developed as a website matching the visual identity and guidelines of the SISCODE project. As a digital resource it withholds the potential to be maintained and updated as well as enriched with additional contents.

To preserve the possibility to keep the Guidebook active beyond the duration of the project, it was developed on a separate website directly linked to the main website of SISCODE but not entirely integrating the two. In this way, the Interactive Guidebook can be sustained in case of the shutdown of the main website. This decision also results in benefits such as facilitating the maintenance and update of contents, but also the integration of further resources. Following this need of preventing obsolency, while favouring implementation, the artefact was developed as a Wordpress environment – a decision that grants a direct and easy access to the backend for modification, possible adjustment, and data entry. Although the use of plug-ins has been kept at the minimum, certain functionalities of the cards, such as their opening and modalities of selection, and the expandable sections required their implementation. This choice was made by being aware that in an environment using plug-ins, their updates or the update of the environment itself can cause compatibility issues that may produce temporary errors.

3. The Interactive Guidebook

The SISCODE Interactive Guidebook is an interactive webpage accessible directly at the domain <https://www.siscodeproject.eu/guidebook> as well as from SISCODE's main website as a direct outcome of the project.

3.1. Structure and information architecture

The Interactive Guidebook is divided into three main parts. The first one starts with the landing page that functions as an introduction to the Guidebook and the entry point to the interactive part as well as providing the theoretical background on the underlying concepts of RRI, co-creation and co-creation in RRI. An additional section takes a focus on the specific results of SISCODE reconnecting the Guidebook to the overall research conducted in the project.

The second section follows the choice of profile where the user is asked to select among two different profiles to access specifically chosen and adapted content in the interactive part. When entering this section for the first time, a brief onboarding provides the user with an overview of the process and main functions of designing their co-creation strategies. Following a disclaimer on the adaptation of methods and tools, the single phases and subphases are displayed and can be exploded singularly to reveal their specific description and the preview of all the cards contained in the related phase. The cards can be saved directly from the preview or may be exploded as a pop-up to access a detailed description, further information and external links as well as templates or other direct support for its application (see Chap. 2.3.).

In the final part, all saved cards can be exported as a takeaway in shape of a PDF file keeping the self-standing methods and tools within the overall process of co-creation proposed as an action plan and process to be followed.



FIG 12 - OVERALL STRUCTURE OF THE INTERACTIVE GUIDEBOOK

3.3 Contents

The contents of the Interactive Guidebook are divided in the textual contents providing an overview of the topics treated from the landing page, the basic structure and explanations of the phases following the choice of profile in the interactive part and the cards containing the approaches, methods and tools to be explored and selected.

3.3.1. Introduction and theoretical background

The content in this initial part of the Interactive Guidebook is mainly textual and provides an overview of the underlying topics of SISCODE. After the conclusion of the project, there is an additional section to be added that details SISCODE's results and contributions to the

overall landscape of co-creation in RRI linking the theoretical and practical part as well as connecting the Interactive Guidebook to the other outputs and outcomes of the project. This initial part has the twofold scope of aligning users on the theoretical background and the basics of RRI and co-creation as well as communicating and further disseminating the results of SISCODE.



FIG 13 - INTRODUCTION AND THEORETICAL BACKGROUND

3.3.2. Process of co-creation and phases

The overall process of co-creation proposed by SISCODE is detailed directly following the user's choice of the profile, as an entry point that provides the overall frame of the co-creation strategy proposed. Furthermore, recognising that co-creation has a high context-dependency and requires to be adjusted according to the ecosystem in which it takes place, a disclaimer points out the importance of adapting methods and tools to the context of

application. The user is given the possibility to expand the section for further information and instructions on how this adaptation can be performed.

The entire co-creation process is presented through two main phases – *Designing Solutions* and *Monitoring and Assessment* – and their subphases, which become repositories of the cards. Each phase and subphase is presented with a specific description, followed by the preview of all the cards related to that specific phase of the co-creation process.

In the following, the two main phases, *Designing Solutions* and *Monitoring and Assessment* and their respective sub-phases, are displayed with the possibility to be expanded, revealing a short description of the phase and a preview of all cards contained in the respective phase.

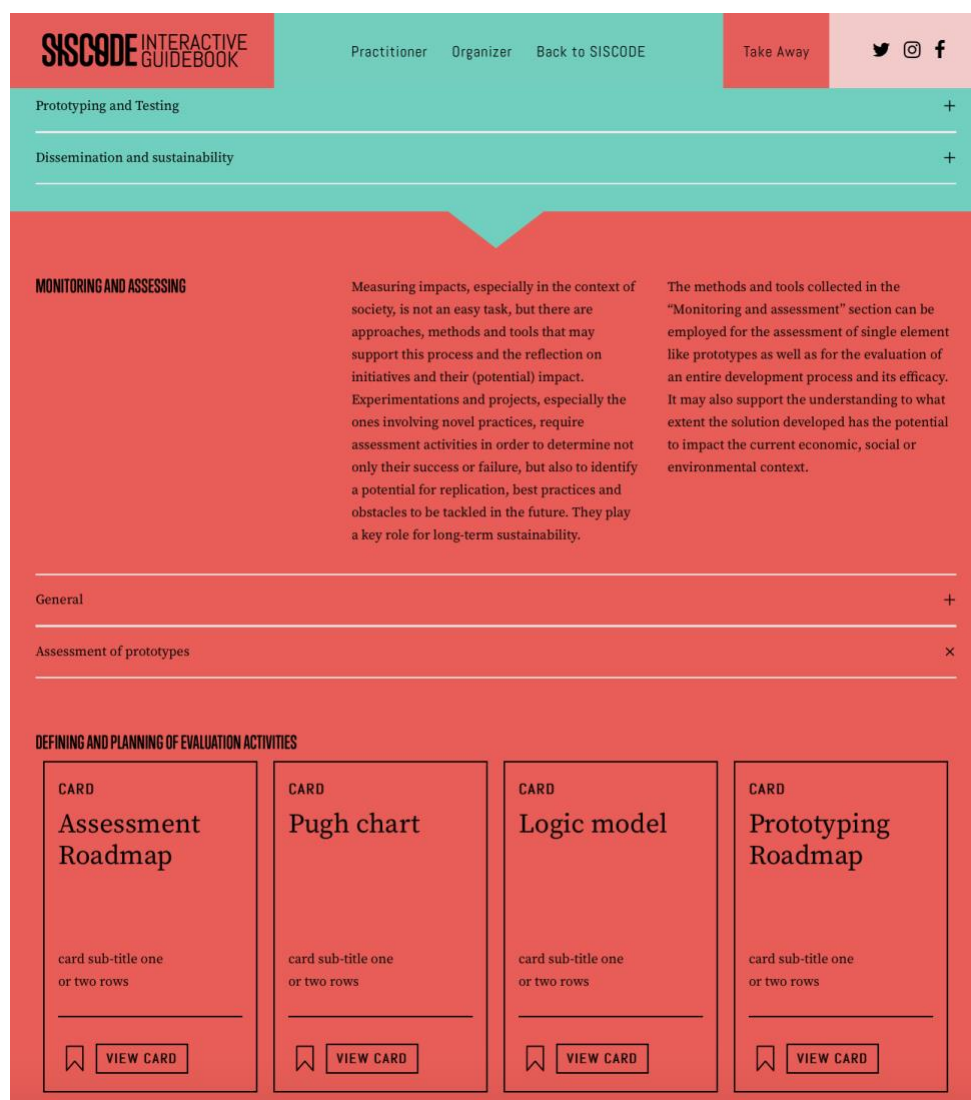


FIG 14 - PHASES AND CARDS

3.3.3. Cards

The cards are containers of possible methods, approaches, tools to be used in practice. The intent is to systematise, provide an overview and access to useful resources. Therefore, the cards allocated in the various phases contain each one approach, method or tool. The preview of the card is equipped with a one-phrase-description, a tag line marking their nature either as an approach, a method or a tool, and the possibility to save it for the takeaway. Moreover, each card can be expanded and explored in more detail. Expanding the card, a more extensive description of its features and possible application is available. Aiming at triggering learning and broader understanding, these information are accompanied by the original reference of the approach, method or tool, a template and external links to case studies and best practices as well as a series of other, related cards that might be helpful to the user in relation to the chosen one.



FIG 15 - CARD DETAILS

The contents of the Interactive Guidebook are to be considered a continuous work-in-progress, especially the cards required to be updated and fed with approaches, methods and tools newly developed or not considered yet. Nevertheless, at the date of its launch the Interactive Guidebook appears as a fully consistent and “finished” product, open to updates but fully usable as it is.

4. Expected impact, potential and future steps

The SISCODE Interactive Guidebook provides a concrete support in the main issue that the project tackles – the operationalization of co-creation. By providing a clear systematisation, guidance and instructions for the design of co-creation strategies it aims to contribute to closing the gap between theory and practices, while providing a series of specific approaches, methods and tools to facilitate and enhance such processes. In doing so, it answers a need clearly emerged during the SISCODE experimentation (WP3).

Building on the multi-level and transdisciplinary expertise and knowledge of the team involved in its design, the Interactive Guidebook gives direct access to suitable tools for the members of the two identified target groups and their specific needs. Together with the initial explanatory part it gives the opportunity to access a basic understanding of the underlying topics and achieve a preliminary alignment of users before entering the interactive part.

The mix-and-match aspect of the single approaches, methods and tools as well as the instructions for the customization of the single methods and tools stress co-creation as an adaptable, flexible approach for different contexts and situations.

Furthermore, both the research and the development process of the Interactive Guidebook provided a series of precious insights on the current landscape of co-creation in RRI that are briefly illustrated in the following. Even though all these insights have been taken in consideration it is worth mentioning them separately to eventually also assess the Guidebook for its functioning and effectiveness regarding these dimensions.

Initiators of co-creation and their specific needs

From the initial stages of the research, the very different needs of those who put co-creation in practice were highlighted. Being a versatile approach with potential for application on various levels and fields, the potential target for a guidebook dealing with co-creation is broad and representing a great number of user groups that need to be addressed

individually in order to enable the effective application of co-creation. Therefore, the artefact has been designed recognising that the knowledge required to address information often results in a barrier to access. As a result, the inclusion of the double entry points of the Practitioner and Organiser has been considered as a fundamental element to consider, as well as a lens through which contents should be delivered. Advancing the reasoning with external experts, the need became evident to be inclusive of the different levels of familiarity towards co-creation and its practices. The consequence of this reflection led to the necessity to develop an artefact that can be accessed by novices, while ensuring the interest of experts and lay-experts. Finally, this reflection also informed the definition of two different tones of voice, according to the target addressed.

Addressing practitioner's needs

As identified generally for the field of RRI, also in the area of available guides and toolboxes, a lack of practice orientation was found with these outputs often being produced by researchers and theory-oriented initiatives lacking a consideration of the very specific needs of practitioners. Addressing these needs is fundamental for the effective implementation and application of co-creation. Acknowledging this gap and divergence of needs, a specific profile of the Guidebook is dedicated to practitioners and those who want to actively run a co-creation-based initiative.

Agents of change, ambassadors and facilitators

The initiators of co-creation initiatives were identified as agents of change within their respective environment and organisation. This role leads them to developing capacities as facilitators both of the co-creation activities themselves and the development of new skills and capacities among other members of the organisation or actors within the ecosystem. This empowerment carried out by the ambassadors of co-creation has been addressed in the Interactive Guidebook in two ways. On one hand, the dimension of *Monitoring & Assessment* addressed the problem of proving impact and effectiveness of co-creation initiatives to support their scaling and further spreading. On the other hand, specific tools for the investigation of organisational skills and the identification of missing and necessary skills have been added to the range of available contents. The process of capacity building in a learning-by-doing process is generally supported with the general idea of a guide to autonomous application and the instructions on how to set up, plan, conduct and evaluate co-creation activities. Moreover, the presence of reference to sources, case studies and best practices encourage to gain new knowledge or extend previous ones, giving access to a range of perspectives or applications on the topic.

Align actors and find a common language

Being based on the idea of multi-stakeholder and multi-actor involvement, co-creation has to deal with completely different profiles and actors aligning all of them and finding a common language to allow collaborative working and hence, co-creation. The Guidebook addresses this need by pointing out the need to customize methods and tools according to the context of operation and by inserting specific tools related to empathy-building and changing points of view to understand and align with others' perspectives.

Make order among existing tools and toolkits

The initial assumption at the base of the creation of the Guidebook of the overwhelming number of existing toolkits and handbooks was confirmed throughout the research phase with the identification of a variety of effective and precious approaches, methods and tools already available. The amount of toolkits, handbooks and guides makes it difficult to choose, select and extract the relevant parts of the different resources and to navigate in the overall landscape of available material. As stated already in the initial phases of development, the SISCODE Guidebook aims to integrate and complement these resources instead of replacing them.

4.1 Current status and use

The Interactive Guidebook is to be disseminated starting from its launch in the end of April 2021 through the project's owned and earned media channels like the website and social media channels. The SISCODE Final Conference taking place from May 3rd to May 7th 2021 is to be mentioned as an extraordinary opportunity for dissemination. The conference consists in 5 days of keynote speeches, discussion panels, presentations, workshops and co-creation sessions. Due to the restrictions related to the COVID-19 pandemic all events will be held online. Furthermore, the Guidebook is planned to be used and further distributed by SISCODE partners throughout their activities and in synergising with other projects and stakeholders.

4.2 Exploitation and future opportunities of application

4.2.1 Potential for exploitation

The Guidebook has been included in the SISCODE exploitation plan¹¹ identifying a series of possibilities how the output can and will be exploited in the future reflecting on its potential.

- **Support for training and capacity building**

SISCODE partners may use the guidebook, its structure, instructions and approaches, methods and tools to train other members of their organisations, communities and beyond in practicing co-creation aiming at the achievement of a broader impact on the organisation and the surrounding ecosystem.

- **Source of approaches, methods and tools**

As a result of the extensive research, the most relevant approaches, methods and tools for co-creation in RRI have been identified and incorporated in the Guidebook.

- **Support and guidance for future projects**

The process of the design of the co-creation strategy is specific and unique to each project. The Guidebook may provide support also to SISCODE partners in their future experiences and projects to set up and design their strategies and processes and support the application of the knowledge and capacities acquired during SISCODE.

- **Point of reference building synergies**

When connecting with other projects and initiatives, the Guidebook can function as a tool of communication, exploration and a point of reference to identify potential collaborations and common points of interest.

- **Point of reference for other projects**

Not building direct synergies with other initiatives, the Interactive Guidebook can function as an independent point of orientation and a common resource or element for other projects. It can also function as a point of reference and starting point for those planning to develop similar guides or generally support material for initiatives in the fields of co-creation and RRI.

¹¹ See SISCODE D6.1 Exploitation Strategy

- **Starting point for collective reasoning**

Reflecting on future possibilities, the advantages and shortcomings of such guidebooks as well as the specific functions, strong points and issues identified in the Guidebook can be seen also as a potential and concrete starting point for further reasoning. Considerations on its effectiveness, fulfilled and unfulfilled needs and further developments can be made as a means for reflection on further developments.

- **Demonstration of application**

The concrete use of the Interactive Guidebook as a demonstration of applied co-creation could serve both as a communication of the co-creation process proposed by SISCODE and as a general demonstration of how co-creation can be put in practice in an RRI environment. This is done by indicating a specific and structured process and suggesting a series of methods and tools to be applied throughout this process giving a general framework and instructions to set up a process tailored to a specific initiative following the general frame proposed.

These concrete possibilities for exploitation can be initiated and implemented already with the current shape of the Guidebook, the following paragraph states both already planned and potential additional steps that could be considered in the future.

4.2.2 Plans for future development

A concrete development to be implemented after the conclusion of SISCODE is the integration of SISCODE's overall results as an additional section in the main page in addition to the current status of RRI, co-creation, and co-creation in RRI. Concretely, the results emerging from the other deliverable being developed for WP5, *D5.1 Models of co-creation ecosystems*, that are triangulating the whole research carried out in SISCODE will be elaborated in a comprehensive synthetic text. This text will help make these results accessible and connect them to the empirical evidence and results as presented in the Interactive Guidebook.

Moreover, the Guidebook could be further nurtured by analysing and adding other and new approaches, methods and tools to enrich or replace the existing contents adapting it further to its users' needs.

To prove its effectiveness and make further considerations on potential improvement, the guidebook needs to be actively tested both by SISCODE partners and externals being part of the specific target group to collect feedback on the overall structure, proposed process, contents and functions in order to evaluate the overall output.

References

- Eckhardt, J., Graetz, C., Kaletka, C., Klimek, T., Krüger, D., Maylandt, J., Schulz, A., Wascher, E. (2020) Comparative analysis. SISCODE deliverable D2.3, https://siscocodeproject.eu/wp-content/uploads/2020/11/Masterdokument_D2.3-Comparative-Analysis-Report.pdf, last accessed 2021/04/21
- Frow, P., Nenonen, S., Payne, A., & Storbacka, K. (2015). Managing Co-creation Design: A Strategic Approach to Innovation: Managing Co-creation Design. *British Journal of Management*, 26(3), 463–483. <https://doi.org/10.1111/1467-8551.12087>
- Mackeprang Bruhn, N., Hjort, J., Striegler, S., Ohland-Andersen, M. (2021) Design for policy making, SISCODE deliverable D4.1, https://siscocodeproject.eu/wp-content/uploads/2021/03/SISCODE_D4.1_Design-for-policy-making.pdf, last accessed 2021/03/12
- Real, M., Petsani, D., Ajdukovic, A., Praça, G., Bertrand, G., Köppchen, A., Machowska, M., Włodarczyk, A., Rasmussen, A., Christensen, S., Merzagora, M., Ghilbert, A., Crispell, J., Sadini, C., Bianchini, M. (2019) Co-creation journeys. SISCODE deliverable D3.1, <https://ec.europa.eu/research/participants/documents/downloadPublic?documentIds=080166e5c11f812a&appId=PPGMS>, last accessed 2021/04/21
- Schmittinger, F., Deserti, A., Rizzo, F., Crabu, S.: Assessment Report (2021). SISCODE deliverable D3.5, https://siscocodeproject.eu/wp-content/uploads/2021/03/SISCODE_D3.5_Assessment-report_small.pdf, last accessed 2021/03/21
- Zhang, X., & Chen, R. (2008). Examining the mechanism of the value co-creation with customers. *International Journal of Production Economics*, 116(2), 242–250. <https://doi.org/10.1016/j.ijpe.2008.09.004>

Annexes

Annex 1 - Analysis grid for case studies and biographies

SISCODE CO-DESIGN FOR SOCIETY IN INNOVATION AND SCIENCE

Grid for analysis of lab's case studies and biographies

Introduction

This document aims at providing guidance on the implementation of the analysis expected within TASK 5.2: Dynamics of co-creation ecosystem (WP5). The aim of this task is to describe the dynamics of **transformation that occur at the micro level of co-creation ecosystems** in terms of (i) the changes they require and imply in the networks of the stakeholders involved, in their internal processes, culture, and organisations; and (ii) the effective outcomes they co-produce. This task relies on the knowledge created in WP2 and WP3 by triangulating results from the 12 innovation biographies and from the experiments conducted in the 10 SISCODE co-creation labs. This focus allows us **to analyse and gain first-hand knowledge on the factors that affect co-creation at the micro level, i.e. primarily organizational processes.**

To do so, we identified three analytical domains concerning transformation that can occur at the micro level of co-creation processes, that is:

ANALYTICAL DOMAIN	DESCRIPTION
I - Engaging	Stakeholder engagement
II - Organizing	Internal processes, culture, and organisation: the co-creation mind-set
III - Scaling	Outcomes and value of co-creation processes beyond the project (scalability and replicability)

The major hypothesis under the identification of the three analytical domains mentioned above concerns the idea that adopting co-design approaches should support the operationalization of co-creation in RRI and STI policy making. An adoption meant to elicit both the implementation of novel engagement strategies and boosting a shift from an organizational culture based on top-down consultation to more participatory, bottom-up practices, where co-design and co-production are at stake.

Hence, the three macro-areas detailed below serve as analytical probes to explore the transformation occurring at the micro level of organization engaged in co-creation initiatives by triangulating evidences from the 12 innovation biographies (see deliverables 2.2 and 2.3) and the 10 experiments conducted in the 10 SISCODE co-creation labs (see deliverable 3.4).

1. The analytical grid

AUTHOR & EMAIL CONTACT OF THIS ANALYSIS	NAME OF THE “SICODE LAB” ANALYSED

1.1. Domain n. 1: Stakeholder engagement

Here, the aim is to capture stakeholders engagement process (i.e. of policy makers and regulatory bodies¹²; research community¹³; education community¹⁴; business and industry¹⁵; citizens and civil society organisations¹⁶), and to identify transformations (and the drivers of these transformations) in the organizational culture of engagement, that can be described as a shift towards the adoption of more intensive participatory engagement practices, as well as the embedding of those practices making them routines.

Guiding question / issue to be addressed	Description <i>[instructions in blue - to be deleted when answering]</i>
<ul style="list-style-type: none"> - Are the stakeholders simply mobilized as actors to collect information to back up or confirm decisions which have already been made? - Or are the engagement practices fully embedded within the organization and research culture and the aim of the engagement is really to capture and fulfil the needs? 	<ul style="list-style-type: none"> - Describe actions and procedures aimed at engaging stakeholders and relevant actors, to involve them during different stages of the co-creation process. In doing so, consider that engagement procedures should encourage stakeholders to engage with, discuss and scrutinize science, technology and innovation. - Identify the role played by external stakeholders engaged in the process of co-creation, in terms of: <ul style="list-style-type: none"> o i) “Knowledge providers”: i.e. individuals who can be considered as sources of knowledge; o ii) “Knowledge broker” with other relevant fields or communities not directly involved in the co-creation process: i.e. people who act as

¹² It refers to policy officers, research centre directors and funders. It includes anyone who makes decisions about the shape of research and innovation — whether locally, nationally or internationally.

¹³ This covers researchers, research managers and everyone involved in the research and innovation system, such as science communicators, research technicians and other support staff.

¹⁴ Those concerned with education — from primary school to university — including teachers, students, families, and science centres and museum staff.

¹⁵ RRI is relevant to any business with research and innovation at its foundation, from SMEs to transnational companies, including networks, incubator hubs, and other supporting organisations.

¹⁶ This diverse group includes individuals and organisations, such as trade unions, NGOs and the media.

	<p>intermediaries or linkage subject, using interpersonal contacts to stimulate knowledge exchange, the development of new solutions to face issues at stake in the co-creation processes, as well as the co-definition of (potential) application of solutions / outcomes of the co-creation processes.; iii) “Testers” of the solutions in a real-life settings (e.g. experts, individual citizens, end-users, practitioners, policymakers).</p> <p>[insert your answer of 150-250 words here]</p>
<ul style="list-style-type: none"> - <i>How is the engagement distributed along the co-creation journey?</i> - <i>How was the engagement initiated, and what has been done to keep actors engaged and motivated making them an active part of the project?</i> 	<ul style="list-style-type: none"> - Provide an account according to the following levels of co-creation: <ul style="list-style-type: none"> i) “Inclusive co-creation activities”: stakeholders are involved in almost all phases of the co-creation journey; ii) “Punctual co-creation activities”: external stakeholders are actively co-creating but rather in specific phases of the co-creation journey; iii) “Consultative co-creation activities”: external stakeholders are rather asked for their opinion on a certain aspect from single or across the development phases (e.g. end-users might only be consulted for their opinion on a prototype). <p>[insert your answer of 150-250 words here]</p>
<ul style="list-style-type: none"> - <i>In which ways pre-existing norms and routines of the organization hosting the co-creation activity influenced the practices of engagement?</i> 	<ul style="list-style-type: none"> - Provide an account on the organizational mind-set and conventions about engagement practices and what elements hindered/supported the co-creation activities. <p>[insert your answer of 150-250 words here]</p>
<ul style="list-style-type: none"> - <i>Have incentives and strategies been developed (e.g. symbolic, material, reputational incentives) to support the active and long-term participation of stakeholders in the co-creation process?</i> 	<ul style="list-style-type: none"> - Provide an account on strategies and resources to enhance the active and long-term participation of stakeholders in the co-creation process <p>[insert your answer of 150-250 words here]</p>
<ul style="list-style-type: none"> - <i>What did the engagement of external stakeholders provoke within the organization hosting the co-creation activity?</i> 	<ul style="list-style-type: none"> - Detect changes (and describe them) in the ways the organization as a whole address Science, Technology and Innovation issues due to the experience matured along the concerned co-creation initiative (e.g. the conclusive reflections of P4All in deliverable 3.4, see footnote¹⁷).

	[insert your answer of 150-250 words here]
- Which kind of novel and unusual stakeholders have been engaged through the concerned co-creation initiative?	- Detect if the co-creation process has enabled the engagement of stakeholders with whom the organization had not previously collaborated (e.g. policymakers, private research centers). [insert your answer of 150-250 words here]

1.2. Domain n. 2: Internal processes, culture, and organisation: the co-creation mind-set

Here, the aim is to capture the internal processes of organizing and carrying-out co-creation processes, as well as the organizational culture, norms and values that could orient, and hinder/boost co-creation processes in itself. Overall, this section should detail and address internal organizational dynamics occurring at the micro level, which can act as drivers/barriers for the adoption of co-creation methodologies to operationalize RRI within the concerned organization.

Guiding question / issue to be addressed	Description
<ul style="list-style-type: none"> - Analysis of the formal structure of the organization in which the co-creation initiative is developed/hosted. Is the application of co-creation “formal”, “informal”, based on a volunteering basis, and so on? - Which kind of governance practices and tools have been adopted? 	<ul style="list-style-type: none"> - Identify and describe which are the best governance tools and methods (e.g. internal policies and agreements, decision making platforms) for managing the co-creation initiative. Also describe what has been done to fine-tune the internal organization, to improve the resilience and to optimize the sustainability of the co-creation process. [insert your answer of 150-250 words here]
<ul style="list-style-type: none"> - Was there an overlapping or a clear differentiation of organizational roles detected within the co-creation initiative under scrutiny? 	<ul style="list-style-type: none"> - In analyzing this dimension, consider the organization roles listed below, the relationships between these roles in terms of interactions throughout the overall co-creation process, and how these roles are performed during the co-creation practices: <ul style="list-style-type: none"> o The role of initiator; o The role of funder/investor (see p. 11, deliverable 2.2 for the description of the co-creation roles mentioned above); o The role of participant. <p>[insert your answer of 150-250 words here]</p>

level co-creating can facilitate scientific research by providing precise directions and insights on a specific topic from an individual or organisation who is already involved in it. The flow of information is facilitated, lack of experiences does not impose a threat. On an organisational level, co-creating brings synergy, better organisational structure and deep engagement of the actors. PA4ALL understood that co-creating can bring together stakeholders from different levels of administration, therefore it could improve policies on city, region and even country level.”

<ul style="list-style-type: none"> - Have co-creation processes been shaped by a variety of interactions among different people, each with distinct motivations and interests? 	<ul style="list-style-type: none"> - Explore the relationships between motivations for initiating and for taking part in co-creation processes, problem identification, and purposes of co-creation with the overall mission of the organization in which the co-creation process is developed. <p>[insert your answer of 150-250 words here]</p>
<ul style="list-style-type: none"> - Is co-creation an overall working attitude within the organisation, or is it adopted more selectively and punctually, for instance within specific projects, or only for single stages of a development process? - Is the process of co-creation well-structured in clear phases, implying continuous “from-to” between such phases? Or is it conducted in a more open and serendipitous way? 	<ul style="list-style-type: none"> - Describe how the co-creation process is performed, also pointing out which tools and methods have been used and to which scope. - Describe if and how the application of co-creation has changed throughout the project e.g. from a more open towards a more structured, strategic application <p>[insert your answer of 150-250 words here]</p>
<ul style="list-style-type: none"> - Which kind of novel organizational arrangements have been enabled by means of implementing co-creation approaches? E.g. innovative ways for managing internal communication, internal agreement for facing conflicts and divergent visions over the same issue. 	<ul style="list-style-type: none"> - Describe any process of organizational learning, e.g. if tools adopted in the concerned co-creation process have become integral part of the organizational routines. - Describe dynamics of organizational change at the level of routines, procedures and organizational practices. <p>[insert your answer of 150-250 words here]</p>
<ul style="list-style-type: none"> - Has the co-creation strategy been able to ensure a progressive change in the way the overall organization addresses challenges concerning relationships between science, technology and society? 	<ul style="list-style-type: none"> - Describe the degree of “penetration” of co-creation within the overall organization. - Describe if co-creation developed within the initiative under scrutiny has had an impact on the organization beyond the project? This can be referred to daily organizational practices, practices applied in other projects, routines, strategies and planning or simply the way how specific tasks are carried out. <p>These aspects mainly refer to the “scaling deep” of co-creation, that is the magnitude of embeddedness of co-creation practices within the organization.</p> <p>[insert your answer of 150-250 words here]</p>

1.3. Domain n. 3: Outcomes and value of co-creation processes

Here the aim is to describe the specific outcomes (both in terms of tangible and intangible outcomes) emerging from co-creation processes, and to provide insights about the

effectiveness of the prototype/lessons learned from prototyping. In doing so, a special attention should be drawn to any considerations or effective implementation in terms of scaling or replication of the prototype / final solution toward other contexts, as well as on the assessment and self-assessment practices adopted within the co-creation initiative.

Guiding question / issue to be addressed	Description
<ul style="list-style-type: none"> - Which kind of specific outcomes are at stake in the co-creation process under scrutiny? 	<ul style="list-style-type: none"> - Describe for which purposes the concerned co-creation initiative has been developed: <ul style="list-style-type: none"> o Define/tackle societal issues; o Guide research orientation; o Create dialogue around policy making; o Crowdsource ideas; o Gather data for science projects; o Policy making; o Define and build a service, or a material / technological solution (even just in terms of prototype) <p>[insert your answer of 150-250 words here]</p>
<ul style="list-style-type: none"> - Which culture and practices of assessment, self-assessment and self-reflexive approaches for monitoring and evaluating processes and outcomes of co-creation were applied? 	<ul style="list-style-type: none"> - Describe evaluation of the co-creation phases and concerned tools for performing assessment (e.g. surveys, questionnaires, or more open methods like interviews or focus groups. - Describe if the evaluation framework for collecting feedback and measuring the projects' success is realized by team members (e.g. the lead partner), external experts, or if the evaluation is even co-created – at least to a limited extent <p>[insert your answer of 150-250 words here]</p>
<ul style="list-style-type: none"> - Has the prototype or final solution been scaled or replicated, migrating to contexts other than the one where it was developed through co-creation? 	<ul style="list-style-type: none"> - Describe if the prototype or the final solution triggered the interest of people, groups and communities not previously involved in the co-creation process - Describe if the prototype or final solution enabled the shaping of the novel partnerships - Describe if the initiative has reflected on or experimented with scaling or replicating their prototype or final solution <p>[insert your answer of 150-250 words here]</p>

VS CODE 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

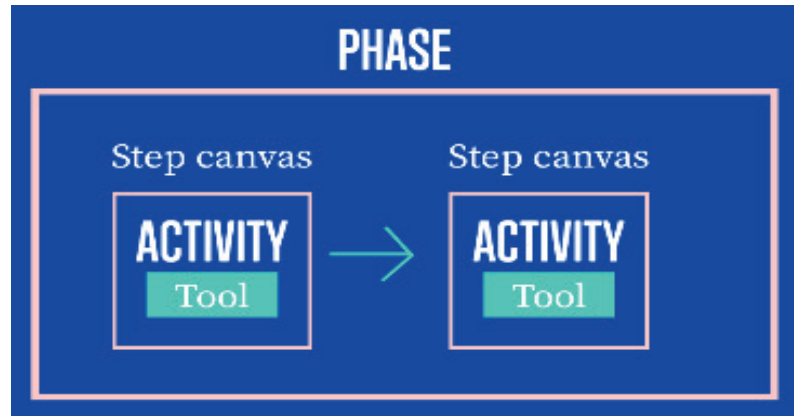
Elaboration of new ideas based on the previous reflection or conversations and insights into concepts. Clustering and synthesising concepts into coherent value proposition systems.

4

PROTOTYPE AND EXPERIMENT

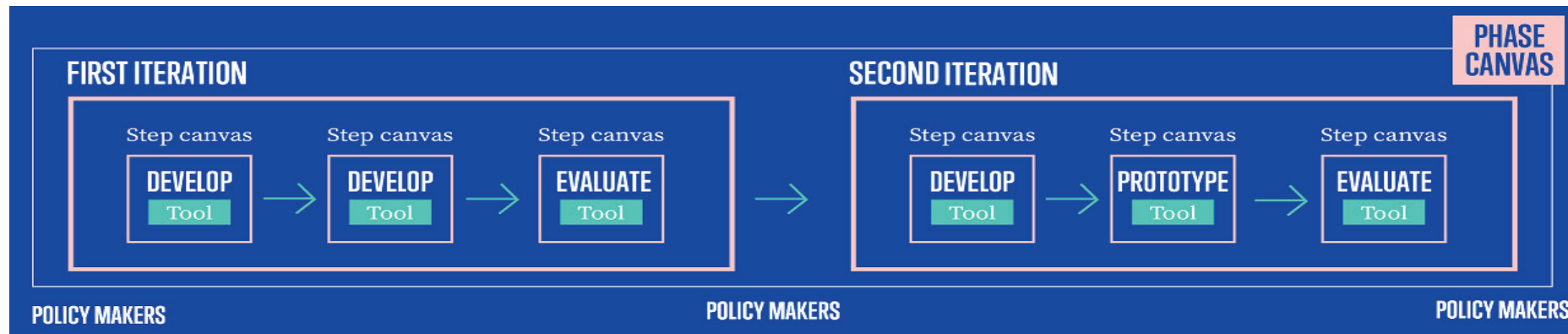
Apply the new visions ensuring that the solutions are purposefully built around peoples' experiences and can provide real value.

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?

--	--	--	--

Start
Date: ____/____/____

End
Date: ____/____/____

Comments:

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.



This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement n.788217



ACTIVITY

- ☐ 1. Analyse Context
- ☐ 2. Reframe Problems

- ☐ 3. Envision Alternatives
- ☐ 4. Develop and Prototype



OBJECTIVES

What are the objectives of this activity?



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?

Start
Date: ____/____/____

End
Date: ____/____/____

Comments:



This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement n.788217



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:



This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement n.788217



Icons by Gregor Cresnar from the Noun Project

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.



STAKEHOLDER ENGAGEMENT AND DISSEMINATION PLAN

REMINDER

PHASES

1. Analyse Context
2. Reframe Problems
3. Envision Alternatives
4. Develop and Prototype

[illegible]

This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement n.788217



Icons by Gregor Cresnar from the Noun Project

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:



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: Stompff, 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 questionning 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	
			CHALLENGES - Coherence, feasibility, originality, engagement, shared value	OPPORTUNITIES + Coherence, feasibility, originality, engagement, shared value



This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement n.788217



Icons by Gregor Cresnar from the Noun Project

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

 <p>Name:</p> <p>Type of Stakeholder:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Civil Society <input type="checkbox"/> Researchers & Consultants <input type="checkbox"/> Policy Makers <input type="checkbox"/> Economy Actors 	<p>Who am I?</p> 	<p>3 reasons for me to engage with the co-creation Lab</p> 	<p>3 reasons for me NOT to engage with the co-creation Lab</p> 	
<p>My interests</p> 	<p>My personality</p> 	<p>My skills</p> 	<p>My dreams</p> 	<p>My social environment</p> 

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/>



This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement n.788217



Icons by Gregor Cresnar from the Noun Project

STAKEHOLDER JOURNEY



STAKEHOLDER STORYBOARD

Draw the key steps from the stakeholder's perspective.

Explain the key steps to create a story.

--	--	--	--	--



NEEDS

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

--	--	--	--	--



TOUCHPOINTS

Identify or design the touchpoints according to the need.

--	--	--	--	--



This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement n.788217



Icons by Gregor Cresnar from the Noun Project

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.

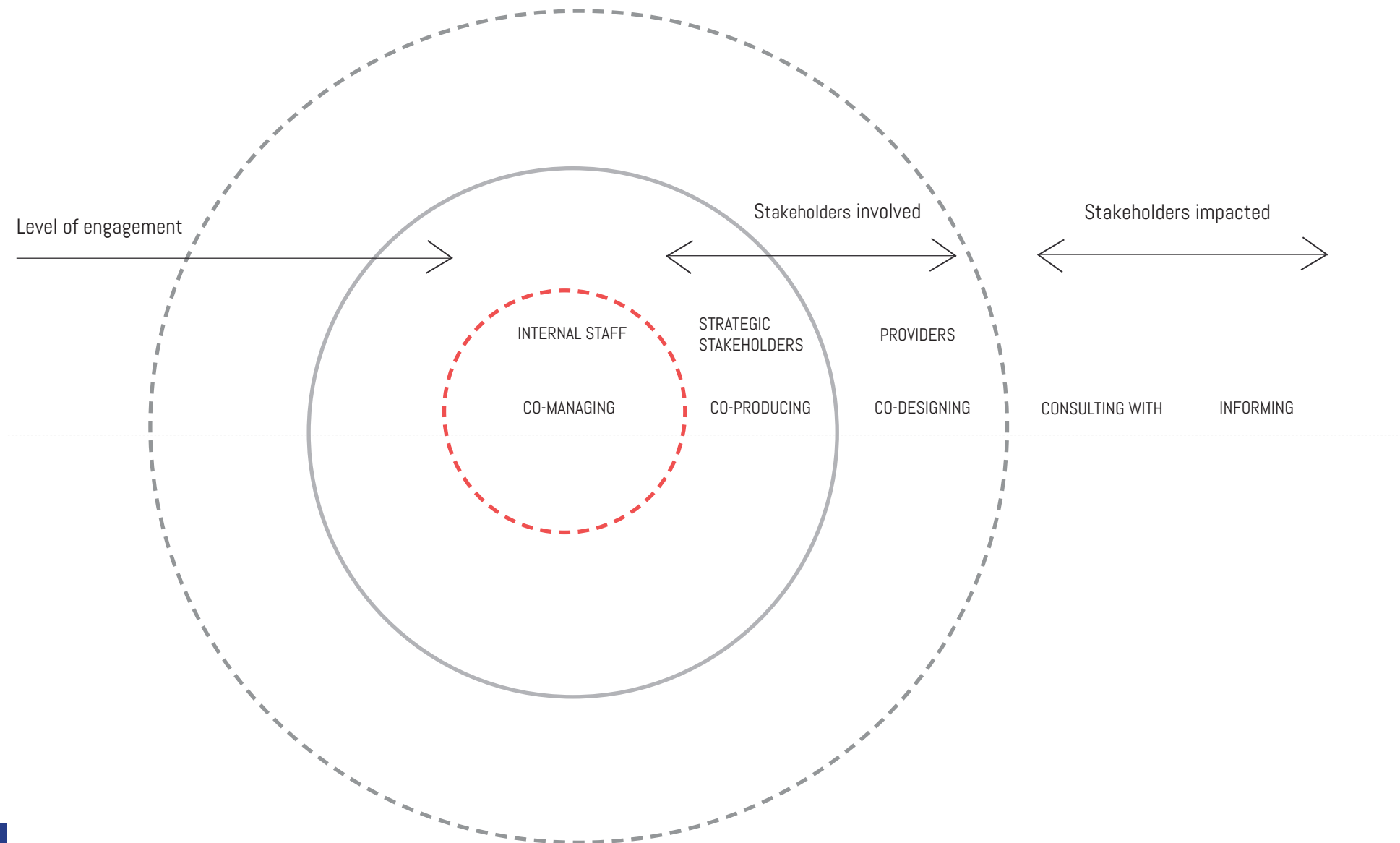
HOW TO USE IT ?

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



This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement n.788217



Icons by Gregor Cresnar from the Noun Project

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 BLUEPRINT

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, silearning.eu/



Icons by Gregor Cresnar from the Noun Project



This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement n.788217

SERVICE BLUEPRINT



STEPS

BEFORE USE

USING THE SERVICE

AFTER USE

USERS

ACTIVITY

What does the user do?

FRONT OFFICE

TOUCHPOINT

How does the user and the lab interact ? (with what?)

ACTIVITY

What happens here ? (What does the lab/interface do ?)

BEHIND THE SCENE

BACK OFFICE

INTERNAL PROCESSES

What does the lab do behind the scene ?

EXTERNAL PROCESSES

What happens in the ecosystem ?

TO DEVELOP



This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement n.788217



Icons by Gregor Cresnar from the Noun Project

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



SISCODE has received funding from the European Union's Horizon 2020 Framework Programme for Research and Innovation under grant agreement No. 788217

